

# **The Monthly PC/Mac News Archive**

Prepared & Distributed by: Baker Enterprises

Assorted press releases and news articles are available by subject heading in the topic areas shown below or use SEARCH to find articles listed by company names.

---

## **SOFTWARE:**

Business & Productivity  
Professional/Engineering  
Personal & Educational  
Games & Entertainment  
System Software & Utilities  
Macintosh Specific  
Miscellaneous Software

## **HARDWARE:**

PC Systems  
Expansion Products  
Peripherals  
Macintosh Specific  
Miscellaneous Hardware

## **GENERAL INTEREST:**

Books & Publications  
Miscellaneous News

---

**Ordering News Archives**

**Weekly New Product News for BBS Services**

**PC Industry Database**

## **Full Text Press Releases...**

Press Releases are distributed electronically with 100% of the entire text included as supplied by the company. All material is available via our online news areas on America Online and Delphi within several days of receipt, and via affiliated local BBS's the following week. News archives such as this are created at the end of every month. For additional information concerning any product or service mentioned in the news releases, please contact the company directly. Check the end of the article for the company's mailing address and/or telephone numbers.

Note that additional Backgrounder reports and reference material may be available for downloading from our Information Download Libraries on America Online and Delphi.

## Using **SEARCH** to Find Articles by Company Name...

- 1) Click on the **SEARCH** button to see a list of companies referenced within the various news articles included in the news archive.
- 2) Select the desired company from the list, then click on the **Show Topics** button (or double click on the company name) to see a list of relevant articles for that company.
- 3) Select an article of interest and click on the **Goto** button (or double click on the article title) to display the article text.

## **About Baker Enterprises...**

Baker Enterprises electronically distributes PC & Macintosh related news and full text press releases via our **New Product Information Service** on America Online (Keyword=New Product) and Delphi (GO BUSINESS PRODUCT), plus our **New Product News** via affiliated local BBS services.

Monthly news archives such as this are created at the end of each month and include all news processed during the previous month. Besides this Windows-compatible format, the same information is also available in a PKZIP collection of standard ASCII text files with a simple index, but requires your own text file utilities to read. News archive files are available from a download library on AOL, Delphi, and selected Internet archive sites, or direct via mail from Baker Enterprises.

Baker Enterprises also maintains a reference database listing companies and products from throughout the PC industry. The database appears as an online searchable database via America Online in the **PC Vendors Database** within our New Product Information area. The same data is also distributed monthly on diskette by EMS Professional Software.

**Ordering News Archives**

**Weekly New Product News for BBS Services**

**PC Industry Database**

## Ordering News Archives...

News archives are available in either this WinHelp format for Windows users, or optionally in a PKZIP collection of standard ASCII text files with a simple index that requires your own utilities to read. A one year subscription for either format, mailed on 3.5" 720K diskettes, is \$60 for first class mail within the USA, \$75 elsewhere via AirMail. Single copies are \$5 postpaid. NJ orders include 6% sales tax. This material MAY NOT be redistributed for profit without obtaining prior written permission from Baker Enterprises. Contact us direct for more information.

All correspondence, including news submissions for FREE distribution or orders for the monthly news archives, should be addressed to:

**BAKER ENTERPRISES**

20 Ferro Drive  
Sewell, NJ 08080 USA

(609) 582-9203    Voice  
(609) 582-9204    Fax

Electronic Mail (including news submissions) may be addressed to:

RBakerPC@delphi.com (Internet)  
RBakerPC (AOL/Delphi)

## **FREE News Distribution...**

Our services are provided at no cost to any companies or shareware authors wishing to have their press releases distributed, or their company and product information included in our database. All submissions should be Emailed, faxed or mailed directly to Baker Enterprises. Press releases are typically processed and available nationwide within one to three days of receipt!

## **Weekly New Product News for BBS Services...**

Baker Enterprises also provides news material to BBS Press Service for distribution to local BBS services and internal corporate networks. The weekly **New Product News** from BBS Press Service includes all PC and Macintosh related news distributed by Baker Enterprises via their New Product Information service on America Online and Delphi.

BBS operators and corporate network managers interested in offering the New Product News via their service can contact BBS Press Service for full details. A sample issue of the service is available via the BBS Press Service bulletin board at: 913-478-9239 along with information on their other products and services. Introductory subscription prices for the New Product News are: \$25 per month, \$65 for three months, or \$250 per year. All subscriptions are processed directly via BBS Press Service, with weekly news files available for downloading by subscribers from their BBS.

BBS Press Service has been publishing quality online news, information and features for the BBS community since 1984. They can be reached at:

**BBS Press Service**

8125 S.W. 21st St.

Topeka, KS 66615 USA

913/478-3157 Voice

913/478-9239 BBS

## **PC Industry Reference Database...**

Baker Enterprises produces a PC industry reference database that includes information on thousands of companies and authors, plus brief information on their products. More than just a software locator, the database also lists hardware, peripherals, publications, accessories, supplies, shareware and more -- just about anything and everything relating to the PC industry. Company information includes mailing addresses, telephone/fax/BBS numbers, Email addresses, Internet FTP/Gopher/WWW information and more. The database is available as an online searchable database in our New Product Information area on America Online. The same data is also licensed for monthly worldwide distribution on disk and CD-ROM as the **PC Products Database** sold by EMS Professional Software. Individual copies on diskette are \$25 plus \$5 shipping within the USA (contact EMS on foreign orders).

For information on ordering copies of the PC Products Database on disk and CD-ROM, or optional quarterly and monthly subscriptions, please contact:

### **EMS Professional Software**

4505 Buckhurst Cr. (301) 924-3594 Voice  
Olney, MD 20832 USA (301) 963-2708 Fax



## **Business & Productivity Software News:**

[IMR COMDEX Briefing](#)

[Newspapers Online Now Covers Online Services](#)

[Facility Master II for Windows Reservation Sys](#)

[Judy's TenKey Windows Calculator Gets Better](#)

[EIU Global Business Info from SilverPlatter](#)

[Sybase IQ Accelerator Support w/Forrest & Trees](#)

[Sybase IQ Accelerator for Data Warehousing](#)

[Warehouse Works Client/Server Data Warehousing](#)

[Inter-Tel Standardizes on Sybase](#)

[StepOne Digital Sales Interview Software](#)

[SQLASSIST ProReports Client/Server Rpt Writer](#)

[Internet Membership Kit Soaring Off Shelves](#)

[Paramind Brainstorming Program for Windows](#)

[Vivo320 Personal Videoconferencing](#)

[CDR Publisher Cross-Platform CD-ROM Recording](#)

[Info Select Express Low-Cost PIM](#)

[SilverPlatter Electronic Ref Library Technology](#)

[E-POS for DOS Point-of-Sale Software](#)

[Dharma Systems ODBC Integrator](#)

[Delrina Wins 1994 STAR Award Tech & Swr Support](#)

[Lexicus Claims Handwriting Breakthrough](#)

[Avery Announces LabelPro 2.0 for Windows](#)

[Construction Gold V2.0 Mgmt Accounting Applic.](#)

[Street Wizard May Software on CD-ROM](#)

[Trius Releases DraftChoice V2.15](#)

[Essential Tools 2.0a Lotus Notes System Admin](#)

[FaxMail for Windows Available as Shareware](#)

[PIMformation Integrates Wireless Comm & PIM](#)

[RIPterm 2.0 Prof. Orders Now Being Accepted](#)

[Versant ODBMS Object Database Mgmt Sys for OS/2](#)

[Illuminatus Entry-Level Multimedia Authoring](#)

[Delrina Intros Professional Partner Program](#)

[Arizona State Univ Standardizes on Sybase](#)

[AnswerSet Joins MS Solution Provider Program](#)

[iINNOVATION! Customer Management](#)

[Object Design & Dharma Systems Tech Partnership](#)

[WorkWise-Evaluations V2.0 Employee Evaluations](#)

## **Professional/Engineering Software News:**

[Accumulator Sizing for Fluid Power Systems](#)

[BBS for Pneumatic Cylinders](#)

[Environmental Network Server for Corp Networks](#)

[BSO/TASKING Migration Path to Intel MCS 251](#)

[2 New Databases for EMBASE Specialties Series](#)

[NetMerge for IEEE 1149.1 Interconnect Tests](#)

[BSDLMaker! for Boundary Scan Testing](#)

[SnapShot VIs Enhance LabVIEW Imaging](#)

[Mastercam Lathe Version 5 for Windows](#)

[Softdesk7 Next Gen. Applic. Swr for AutoCAD](#)

[COMPASS 8051 & Z8 Development Packages](#)

[LabWindows Used in Teradyne Z1800 Brd Test Sys](#)

[Radar Test System Using LabVIEW & Custom DSPs](#)

[West Publishing Materials Available on WWW](#)

[Fed & State Envir Health & Safety Regs on CD](#)

[SICSO MMS-EASE/AX-S4 MMS Plant Floor Info Mgmt](#)

[EDIF Delivers on PCB Standard](#)

## **Personal & Educational Software News:**

[BOWL-101 V14.0 Bowling League Management](#)

[Digital Campus: Multimedia Courseware](#)

[Niles Register Cumulative Index 1811-1849](#)

[Refs Bibliography Package on Internet Sites](#)

[Vocal CD V1.41 Audio CD Player for Windows](#)

[As You Like It - EBook Reader for Windows](#)

[Homebuyer's Guide from Books That Work & Hearst](#)

[Krazy-Christmas Holiday Pgm for Young Children](#)

[LabVIEW Student Edition Coming Jan'95](#)

[PG Music Updates & New Releases](#)

[Consumer Health Full Text Database](#)

[Nota Musica Music Notation Swr for OS/2](#)

[Optima Series - Investment Selection & Analysis](#)

[G-VOX Blender Multimedia Swr for Guitarists](#)

[Hartley Health Education Series](#)

[Electronic Arts' 3D Atlas](#)

[Sound Source Intros Interactive MovieBooks](#)

[Neurosoft Nihogo Sensei V1.1 to Learn Japanese](#)

[Expert Birthday Newsletters & Favorite Games](#)

## **Games & Entertainment Software News:**

[Softdisk Publishing IRONSEED Space Adventure](#)

[Epic Releases First CD-ROM Games](#)

[Noctropolis Adventure for Mature Audience](#)

[Air Combat Series - US Navy Fighters](#)

[Road & Track Presents The Need for Speed \(3DO\)](#)

[Syndicate for Sega Genesis](#)

[Nintendo Virtual Boy Virtual Reality Game Sys](#)

[Atari Signs Deal for Virtual Reality Games](#)

[Gaming Industry Short Takes, Lotsa News for '95](#)

[Juris Diction - Courtroom Game](#)

[Safari Software Releases Highway Hunter](#)

## **System Software & Utilities News:**

[Help Browser 2.0 WinHelp Search Utility](#)  
[DEC & Lotus Team with cc:Mail for Mailworks](#)  
[Screen Savior Displays Graphics & Scriptures](#)  
[LAN Intensive Care Utilities for LAN Server](#)  
[iFOR/LS for OS/2 Swr Licensing/Metering System](#)  
[Gradient Launches PC-DCE/32 for WinNT & Win95](#)  
[SoftArc FirstClass Server fro Windows](#)  
[OS/2 Warp Sales Exceed 800,000 Copies Worldwide](#)  
[GeeWiz 1.0 4 New Wizards for Visual Basic](#)  
[SofTouch FileStar/2 OS/2 Graphical File Manager](#)  
[HyperAct HLPDK/PA 12.5 Help Authoring Tool](#)  
[KnowledgeSEEKER V3.1 Market's Top Analysis Tool](#)  
[SoftArc FirstClass Server for Windows](#)  
[AimTech Intros IconAuthor 6.0 for Windows](#)  
[PowerBASIC Upgrades QuickBasic Customers](#)  
[FaxMail for Windows](#)  
[ERL Compliant INSPEC on SilverPlatter](#)  
[SuperCom Libraries for Custom Comm Applications](#)  
[Pegasus Resource Monitor for OS/2 Reduced](#)  
[HawkNet Intros NetReport for Network Planning](#)  
[Trinzic & Rational Swr - Rational Rose/ObjectPro](#)  
[New Menus for Windows V1.41 Released](#)  
[Visual Parse++ Visual Programming Tool for OS/2](#)  
[UZFuL Software Laptop Utilities Vendors Forgot](#)  
[ESL EXM/EDI Enabler/Interface to Most EDI Pckgs](#)  
[OnFile Helps Windows Users Organize/Find Files](#)  
[PASTERP Pascal-Like Interpreter](#)  
[GRAFFIX Screen Capture System for Windows & DOS](#)  
[QCDK - QuickCard Development Kit for MS-Windows](#)  
[InPerson Desktop Videoconferencing for Windows](#)  
[Phoenix Bootable CD-ROM BIOS](#)  
[Taligent Certification & Branding Program](#)  
[COMM-DRV/LIB V15.0 for Lightning Fast Comm.](#)  
[Help Browser Available for Developers](#)  
[InfoMagic CICA Windows CD-ROM Set \(3rd Update\)](#)  
[High C/C++ for OS/2 Offers DirectToSOM for OS/2](#)  
[IBM OS/2 for PowerPC Enters Beta Cycle](#)  
[TrueType Signature Fonts Introduced](#)  
[Emeri V1.3 For Viewing Windows Cardfiles in DOS](#)  
[XSoft TabWorks Notebook for Windows in Japan](#)  
[LANSource FAXport V5.0 for Windows NT Server 3.5](#)  
[WiT Visual Programming Environment for Windows](#)  
[BGI256 Driver V3.03 Now Available](#)  
[PrintForm Printout Format Tool for MFC Pgmrs](#)  
[Isn't It Time Your Devices Got Warped?](#)

IBM Network Performance Modeler for OS/2  
C2C Systems Redirection Server for MS Mail  
RhinoCom Industrial Strength OS/2 Comm.  
UTAH 1.1 C/C++ Application Development Tool  
WINGate Developer's Toolkit (Interprocess Comm)  
XoftWare/32 for Windows Kanji Version  
AGE XoftWare/32 for Windows & Windows NT EDA Ed

## **Macintosh Specific Software News:**

[The Way Things Work! Mac Version Shipping](#)  
[ASD Shipping DiskGuard & DiskGuard Remote](#)  
[Bijouplay 2.0 Mac QuickTime Movie Player](#)  
[Power MacForth Full Featured Forth Pgming Lang.](#)  
[PowerMerge V2.5 File Synchronization & Backup](#)  
[Synopsys Accord for Excel Chemical Spreadsheet](#)  
[Price of Remote Access MultiPort Server Reduced](#)  
[Newton Associates Program for Developers](#)  
[IPLab Gel Native for PowerMacintosh](#)  
[IPLab Spectrum Adds 3D Visualization](#)  
[Video VI & Video Companion Image Acq/Analysis](#)  
[AppleSearch V1.5 Information Search & Retrieval](#)  
[Enterprise Time Capture Network Scheduler](#)  
[Enterprise Time Capture Scheduling Tool](#)  
[CodeWarrior Integrated Development Environment](#)  
[MacSap - Stress Analysis of Structures Using FEA](#)  
[Kaleida Labs Ships First Products](#)  
[Aladdin Systems Upgrades Stuffit Shareware](#)  
[Stuffit InstallerMaker Updated V2.0.2 Released](#)  
[PacerShare & PacerPrint Trade Up Program](#)  
[Attain Acquires New Macintosh Contact Manager](#)  
[MathType 3.1 for the Macintosh Introduced](#)  
[Ontrack Releases Disk Manager Mac w/IDE Support](#)  
[Apple Intros Local Talk Bridge Software](#)

## **Miscellaneous Software News:**

[CD Publishing Six Pak CD-ROM Collections](#)

[Super Log Traffic V5 for Broadcast Stations](#)

[Music Log V5 for Broadcast Stations](#)

[WinZones Displays Time Anywhere in the World](#)

[Wayzata EXPLORER PACK of 10 CD-ROMs](#)

## **System Hardware News:**

[Added IBM Customer Protection for Pentiums](#)

[Feature Rich Amerigo Pentium Systems](#)

[Intelligent PC Products Ready for Windows 95](#)

[Intelesys 100MHz Dual Processor EISA Systems](#)

[Intelesys Chameleon GREEN State-of-Art Notebook](#)

[Micro Channel Gets New Life at IBM](#)

[DEC Expands PC Server Family w/Scalable Pentium](#)

[IBM Halts Shipments of Pentium-Based PCs](#)

[IBM Pentium Study Paper](#)

[Intergraph Reinforces Pentium Commitments](#)

[Flat Panel Computer w/Sunlight-Readable LCD](#)

[Intel Adopts Upon-Request Pentium Replacement](#)

[Intel Says IBM Shipment Halt Is Unwarranted](#)

[DEC OpenVMS Licensed for ALPINE Workstations](#)

[ZDS Drops Z-NOTEFLEX Prices, Expands Support](#)

[Updated Pentiums From Intergraph Jan 2nd](#)

[Compaq To Satisfy Demand for Pentium PCs](#)

[DEC Mobilized to Exchange Pentium Processors](#)

[Aspen Systems Ships Alpha AXP Alpine Line](#)

[Compaq Position Paper on Pentium FPU Flaw](#)

## **Expansion Hardware News:**

[ComputerEyes/LPT Video Frame Grabber](#)

[P.H.D. 16 Extended Diagnostics Card](#)

[1720 Series CentreCOM ethernet Adapter Cards](#)

[National DAQCard-DIO-24 PCMCIA Digital I/O Card](#)

[New ISDN Offerings/Enhancements for Waverunner](#)

[New Media PCMCIA Add-On Makes Notebooks Sing](#)

[Philips Releases CD-I Board for PCs](#)

[Jumperless IEEE 488.2 Controller Board](#)

[PC/104-GPIB Instrument Control for PC/104 PCs](#)

## **Peripheral Hardware News:**

[Mirus Ships Desktop Film Recorders for PowerMac](#)

[FARGO Intros PrimeraPro 600dpi Color Printer](#)

[Zypcom Z34-SX & Z34-SE 28.8Kbps V.34 Modems](#)

[FARGO Pictura 310 Thermal Color Printer](#)

[ComfyKeyboard for Young Children](#)

## **Macintosh Specific Hardware News:**

[Sonic IntelliStack 16 Stackable Hub w/SNMP Mgmt](#)

[PowerClip Accelerator Editor Choice Finalist](#)

[Cache SIMMs Enhance System Speed](#)

[PowerBook Tops JD Power Customer Satisfaction](#)

[MacQuire Data Acquisition Board & LabVIEW Kit](#)

[GPIB Instruments From Mac Printer/Modem Port](#)

## **Miscellaneous Hardware News:**

[Lind Elec. Design & Pilot Technologies Merge](#)

[Amiga Smart Port Plus Auto-Switching Game Port](#)

[PC Pedals Combo Flying/Driving Pedal Device](#)

[IDD PC Steering Wheel R/X](#)

[GPIB-ENET Ethernet-to-GPIB Interface Kit](#)

[Apple Pippin Multimedia CD-ROM Platform](#)

[XJ12 Multimedia Distribution Amplifier](#)

[Thermoelectric CPU Cooler Keeps CPU Cooler](#)

[Electronic Specialists' Data Bus Protection](#)

[GPIB-ENET External Ethernet to GPIB Interface](#)

[Revamped 2 Line Telephone Line Simulator](#)

[Idle-Off Poser Interrupter for Monitors](#)

## **Books & Publications:**

[Linux Sampler - Book About Linux Operating Sys](#)  
[Photoshop f/x, Mac Edition](#)  
[Looking Good with QuarkXPress](#)  
[Microsoft Visual C++ V2.0 for Win32 Doc Set](#)  
[Microsoft Windows NT Workstation Step by Step](#)  
[MS-DOS System Programming, 3rd Edition](#)  
[Linux Installation & Getting Started](#)  
[The PowerPC Revolution!](#)  
[Exploring the IBM RISC System/6000 Model 41](#)  
[OneOnOne Paradox 5 Training Audio Cassettes](#)  
[Ventana Publishes Mosaic Quick Tour for Windows](#)  
[Visual Basic Power Toolkit](#)  
[Visual Guide to Visual C++](#)  
[MS-DOS System Programming, 3rd Edition](#)  
[Microsoft Word Developer's Kit, 2nd Edition](#)  
[Hardware Design Guide for Microsoft Windows 95](#)  
[America Online's Internet, Windows/Mac Editions](#)  
[Programmer's Guide to EGA, VGA & SuperVGA Cards](#)  
[3D Graphics Programming in Windows](#)  
[Windows NT Network Programming, How To Survive](#)  
[Science & Engineering Network News \(Newsletter\)](#)  
[AutoLISP in Plain English](#)  
[Latest IDB Books Releases](#)  
[Interactive Television: Comprehensive Guide](#)  
[WordPerfect Certification Success Guide](#)  
[Professional Internet Resource Manuals](#)  
[Computing for Cheapskates](#)  
[KORN Shell Reference](#)  
[Internet Yellow Pages, Second Edition](#)  
[Open Computing Guide to Mosaic](#)  
[PowerBuilder Construction Kit](#)

## **Miscellaneous News:**

[OS/2 Puts a Spark in Genuine Parts](#)  
[Powerful New Search Tool Available on Internet](#)  
[Preview Tech. Assists Property Buyers & Sellers](#)  
[IBM Supports Versit Collaboration](#)  
[Sybase & Texas Instr. Strategic Relationship](#)  
[Sybase/Scientific-Atlanta PowerTV Set Top Box](#)  
[How To Submit Press Releases For Distribution](#)  
[SunSoft & AGE Logic Announce Strategic Alliance](#)  
[3-D Paper and Viewer Mailing Envelopes](#)  
[Ventana Online Opens on World Wide Web](#)  
[European Business Info Conference in Budapest](#)  
[Future Labs Acquires VIS-A-VIS Conferencing](#)  
[Upcoming Miller Freeman Conferences for 1995](#)  
[Artisoft Launches New Education Partner Program](#)  
[Artisoft Announces TechTalks Training Forum](#)  
[DEC Demos Internet Access Via Cable TV](#)  
[Financial Transactions Over Internet With Z-Mail](#)  
[DiskIndex Dividers For All Disk Storage Systems](#)  
[Networks Expo Boston w/Hands-on Internet Access](#)  
[BocaSoft Announces Software Solutions Division](#)  
[ESL Messaging Products Help Fight War on Drugs](#)  
[Galacticomm Network & Integrated Services Div](#)  
[IBM & Philips Cooperate on OS/2 Warp & CD-i/PC](#)  
[Speakers Needed for Int'l Conf on Object Tech](#)  
[Apple Q&A For Buying Multimedia Computers](#)  
[OS/2 Sources & Solutions New Edition Planned](#)  
[Third Quarter Software Sales \\$1.7 Billion](#)  
[IMC Awarded Patent for Interactivity Creation](#)  
[Autodesk University Gears up for 1995 Conf.](#)  
[W. Europe PC App Swr Sales Reach \\$307M Q3'94](#)  
[Japan is US Pub. Largest Swr Foreign Market](#)  
[Latin America Swr Sales Reach \\$41M in Q3'94](#)  
[SYBASE Establishes Subsidiaries in Australia/NZ](#)  
[IBM Offers Fiesta Bowl Home Page on Internet](#)  
[Basic Guide to FCC Compliance](#)  
[Microsoft Network Interactive Online Service](#)  
[IBM & Univ Alabama Win Real Ware Award](#)  
[OS/2 Wins Seal of Approval at RJR Packaging](#)  
[Software Development '95 Feb 14-16](#)  
[Ventana Press Diversifies & Restructures](#)

## OS/2 Puts a Spark in Genuine Parts

December 9, 1994 -- Who would have thought lowly spark plugs could cause so much trouble? Believe it or not, they can if you're supplying them to 6200 retail stores around the country...unless you are the Genuine Parts Company of Atlanta.

Genuine Parts uses a custom-designed OS/2 application that automatically keeps track of the plugs, along with tens of thousands of other parts kept in their Atlanta distribution center.

For 60 years Genuine Parts was a paper-oriented company, but no more. Now Genuine Parts uses a hand-held computer and scanner to fill their orders. An order is sent to someone's hand-held system via RF signals from an IBM PS/2 host. The person sees the incoming order, picks up as many of the plugs as specified, scans the parts and places them in an outbound package.

In the mean time, the entire transaction is automatically sent to the host. When the order is filled, a new "pick list" is sent to the person's computer, no matter where the person is, to pick more plugs off the shelf and place them in the outgoing packages. Because of OS/2's multitasking capabilities, as many as 50 employees can be filling orders at the same time.

The OS/2-based solution is so successful in Atlanta that GP officials plan on having it operational in 64 more centers by the end of 1995. In fact, Genuine Parts is adding two more OS/2 applications to its arsenal; one to log parts automatically as they are received and the other to track them after being shipped. Future plans also call for upgrading the current system to OS/2 Warp.

If you have an OS/2 success story to tell, write to:  
JTIESZEN@VNET.IBM.COM.

## IMR COMDEX Briefing

### IMR and Corel Join Forces to Promote CD Recorder Software

Corel Corporation announced that its new CD mastering software, CD Creator, will be bundled with IMR's Alchemy, the indexing and retrieval software for CD-R. This partnership will bring an affordable, easy to use software solution to business and government users who plan to archive and distribute data on CD-ROM.

### IMR Signs VAR Agreement with Random Access

Random Access, a leading systems integrator based in Denver, will offer IMR's software solutions for CD Recorders through its sales offices located in the Midwest and Rocky Mt. states. The products include Alchemy and DataGrabber software. Both will be available through the Advanced Technology Systems Imaging group.

### Alchemy Named #1 CD Archival Solution In University Test

In an extensive test of CD-ROM authoring software at the University of Illinois Chicago Business School, Alchemy won the recommendation as best archival software, over such industry stalwarts as Folio Views, ZyIndex and Dataware. The results of the test were published in the October issue of Inform Magazine, the publication of the Association for Information and Image Management (AIIM).

### PC Week, PC Magazine, Imaging & CD-ROM Professional Agree: Alchemy is the Key to Managing Information on CD-ROM

In recent reviews of Alchemy, each publication concluded that making your own CD-ROMs for archival and storage required much more than the mastering software that typically comes with a CD recorder. You need Alchemy to first index the files, and then retrieve them using intelligent full-text and image retrieval methods. (Review copies available on request)

For more information, please contact IMR at (303) 689-0022.

'Newspapers Online' Now Covers CompuServe, America Online and Prodigy

New Edition of Directory Expands Coverage to Include Consumer Online Services

BOSTON, MA (December 1, 1994)--Newspapers Online has been expanded to include information on CompuServe, America Online, Prodigy, Delphi, and Ziff's new Interchange service, with some Internet coverage. The new 1995 edition reference book contains information on searching consumer online services for 200 newspapers that are also found on professional online systems--Dialog, Nexis, Dow Jones News/Retrieval and DataTimes.

Newspapers Online is used by librarians and researchers who search for the kind of information newspapers can provide: breaking stories, public reactions to an issue or event, news about private companies and individuals, and local perspectives. With newspapers from the U.S., Canada, Europe, the Middle East and Asia and the Pacific, the book can help readers attain a global perspective as well.

The new edition of Newspapers Online shows the 48 newspapers which have launched electronic services, such as New York Times on America Online, Atlanta Journal and Constitution on Prodigy, Detroit Free Press on CompuServe, and Washington Post on Interchange. These electronic services go beyond the printed version of the paper, usually carrying unpublished stories (such as reports, press releases and newswires) and giving users the opportunity to "chat" electronically with each other and the newspaper staff.

Researchers, librarians and journalists use Newspapers Online because it tells them where they can find the newspaper archives online and on CD-ROM and how to search for articles. Librarians on staff at the newspapers have shared valuable search tips for accessing their newspapers. These tips are listed along with search tips for each of the vendors' online systems.

Newspapers Online contains demographic and geographic information about the area the newspaper serves as well as detailed information about each newspaper. Newspapers Online contains comprehensive and detailed information in an easy-to-use format, all in one book. This is the third edition of this popular reference book published by BiblioData and adds 50 new newspapers.

Susanne Bjorner, editor and compiler of Newspapers Online, searches newspapers regularly for her own information consulting company, Bjorner & Associates. Her articles have appeared in "Online", "LinkUp", "Searcher" and other industry publications. She has taught information courses in corporations, universities and for professional associations.

BiblioData is in its sixth year of publishing online directories and search

guides, including Fulltext Sources Online and CompuServe Companion:  
Finding Newspapers and Magazines Online.

Newspapers Online costs \$99 plus shipping and handling. Place orders for  
Newspapers Online by calling 617 444-1154 or faxing 617-449-4584; or write  
to BiblioData, PO Box 61 Needham Heights, MA 02194.

Title: Newspapers Online

Subtitle: A Guide to Searching Daily Newspapers  
Whose Articles are Online in Full Text

Editor: Susanne Bjorner

Edition: 1995

Publication date: January 31, 1995

ISBN: 1-879258-12-9

Price: \$99

Number of Pages: Not yet determined

## FACILITY MASTER II for Windows

December 1994 -- COMSEC is introducing a new version of its reservation system, Facility Master II for Windows. Introduced last spring, Facility Master has become the software of choice for firms requiring time reservations/appointments, whether reserving rooms, equipment, or making office appointments. Facility Master permits quick entry, update and retrieval of reservation information for up to 400 facilities (people, places or things). COMSEC actively solicited customer comments and suggestions for the new Version 1.01 enhancements.

In addition to basic appointment functions, you may attach a note, organizational service request and/or a facility configuration to a reservation. Administrators may define 2 categories of reservation options that may be selected. Services that are common to the organization and those common to a facility. This could include food & beverage, equipment, configurations, etc. The predefined items can be quickly viewed and selected when making an appointment. Version 1.01 includes the ability to perform searches for specific facility setups.

Multiple reservations are Facility Master II for Windows. Say you want to schedule the same reservation 3 days a week for 52 weeks. Just click on the day(s) of the week desired and enter the number of weeks. Version 1.01 has added the ability to make multiple reservations in 2, 3 or 4 week increments. This transaction driven option will automatically roll-out any changes if a conflict is encountered.

Database maintenance, reports, exports, defining facility descriptions, and services are just as easy with the password protected administration program. There is even a button to repair the database if corruption should occur.

A network version, to permit over 100 concurrent users, is also available.

Pricing: Stand alone Windows Version \$489      Network \$589

COMSEC  
68 Kelly Rd  
South Windsor, CT 06074  
203-644-1817, 800-305-3496

## Best Little Windows Calculator Gets Better

Santa Clara, CA--Do you travel with a notebook computer and a desktop calculator? Are you an accountant who swears by (or at!) your tenkey adding machine? Do you use the limited calculator that came with Windows? If so, perhaps you should take a look at version 3.0 of Judy's TenKey.

Judy's TenKey is a powerful Windows calculator that combines the best of traditional desktop calculators with the flexibility and ease of use of modern graphical software. In this day of multimedia, parallel computing, and object-oriented everything, Judy's Applications relentlessly continues to focus on perfecting the lowly calculator, and it shows ... the latest version provides breakthrough flexibility and effectiveness.

New features for version 3.0 include an editable tape that automatically recalculates when you make changes, right mouse button pop-up menus, support for Windows 3.1 common dialog boxes, and easy-to-use financial dialog boxes that record their calculations on the tape (which you can save for later review, print, or even edit directly to explore different options). Version 3.0 also includes a "Tip of the Day" to gradually introduce you to some of its less obvious, but very useful capabilities. For example, it tells you how to insert new lines into the tape in case you forgot something (highlight the line below and press the <Insert> key, of course).

Of course, Judy's TenKey original claim to fame is that it allows users to quickly configure their own "custom" calculator, choosing which buttons to show on the screen, how to interpret user typing (as an adding machine, RPN, or standard calculator), how to display numbers (decimal points, red negatives), and much more. While there are other calculator packages that support multiple modes, none allow you to use every feature in any combination ... except Judy's TenKey. For example, Judy's TenKey may be the only software that gives RPN users their own scrolling tape, or allows tenkey users to calculate logarithms.

In addition, with all the excitement about Windows 3.11, Windows for WorkGroups, Windows NT, and Windows '95, Judy's TenKey comes with both 16-bit and 32-bit executables, and the installation software helps you determine which is best for your system.

"Judy's TenKey enables you to work faster and more reliably," states Judy Lemos, President. "Once you can see (and reuse!) the numbers in your calculations, you will never return to the default Windows calculator." Judy's TenKey is primarily aimed at accountants, engineers, and laptop users in general, but can aid productivity for virtually any Windows user. Orders are \$19.95 plus \$2.95 shipping and handling, and can be placed by calling (800) 242-4775.

Judy's Applications is located at 2464 El Camino Real, Suite 125, Santa Clara, CA 95051. Interested parties should contact Mr. Dan Stickel via CompuServe at 70574,2247 or telephone at (408) 244-0744.

## BOWL-101 Version 14.0

Bowl 101 is a user friendly, totally configurable, yet powerful bowling league management program for the IBM and compatibles. This program will handle almost all of the scoring systems available.

Compatible. It will work on any IBM compatible computer with at least 640k of ram, any monitor and printer and a hard drive. It does require Dos 2.11 or above.

Registration fee is \$49.95 + \$3.35 for shipping and handling. This also includes a printed manual.

The program is designed to do all the work. About one minute per team is all the time it takes to enter the scores. A 16 team league can be done in 16 minutes including subs after the initial setup. All the user has to do is to enter the 1, 2, 3 or 4 games bowled

From 2 to 40 teams, 1 to 10 bowlers per team, 100 subs, 1, 2, 3 or 4 games bowled, swap subs and/or bowlers, powerful edit features allows you to scroll forward and backward through teams bowlers and subs while editing. Proper case function aids in data entry.

Split season, position rounds, match points, peterson points, difference between team averages, team averages, forfeits, auto lane assignments, mixed leagues, bantam, all male or all female leagues, separate handicaps for male and female, minimum and maximum handicaps for male and female, individual points or game and/or series, scratch or handicap leagues.

Keep entering averages for up to 21 games or have the computer calculate them from the start. Zero high games weekly or have the computer keep them for the entire year.

Add or remove teams or bowlers at any time. Prebowl or makeup games are easy to do with BOWL101.

Bowl101 will tell you if you have any awards pending by showing any bowler and score that are high enough to qualify.

Finds most improved bowler. Many printouts, Standing sheets, recap sheets, alternate standing sheets allow custom printouts.

Popup help screens makes it easy to set up the program, just pressing the F1 key on almost any function will bring up a help screen. F2 will bring up a calculator.

101 Computers (Bowl101)  
250 Annahy Dr, Fortuna, CA 95540  
Voice (707)-725-9750, BBS (707)-725-9745, Fax (707)-725-1334

## THE LINUX SAMPLER

November 22, 1994 -- Linux Journal and Specialized Systems Consultants, Inc. (SSC) announce publication of The Linux Sampler, a book about the Linux operating system. Linux is "the UNIX for personal computers"; it's a freely redistributable POSIX-compliant operating system that runs on ordinary personal computer hardware.

The Linux Sampler is a collection of articles, resources and general information about Linux. The book is especially useful for those new to Linux and those seeking an entertaining account of the rise and development of this operating system.

Chapters include the history and background of Linux, an introduction to Linux, interviews with contributors to Linux, politics, opinions, and future of Linux, technical articles, systems administration, and Linux resources.

The 252-page book is perfect bound 7" x 8 1/2". The retail price is \$18.95 and will be available December 1, 1994. ISBN: 0-916151-74-3.

Specialized Systems Consultants Inc  
PO Box 85867  
Seattle, WA 98145  
206-527-3385, fax 206-527-2806  
Internet: [linux@ssc.com](mailto:linux@ssc.com)

All I Want For Christmas Is... The Way Things Work!

DK Multimedia Will Ship Mac Version of The Way Things Work CD-ROM by December 6

Two months ahead of schedule, DK Multimedia announced they will ship the Mac version of their lead CD-ROM title, The Way Things Work (DK Multimedia, Mac, \$79.95), based on the best-selling book by David Macaulay, by December 6, making it available nation wide for the Christmas and post-Christmas consumer market. The Way Things Work CD-ROM for Windows PC shipped in October, coinciding with a national publicity tour by author David Macaulay, outstanding reviews and numerous industry awards. In addition to the Mac version, DK Multimedia is pressing another 25,000 copies of The Way Things Work for Windows PC to meet retail demand.

"The initial reaction to The Way Things Work has been so strong that we rushed the Mac version for Christmas." says Dorling Kindersley Publishing, Inc. CEO John Sargent. Explaining the time lag between the Windows and Mac releases of The Way Things Work and other DK software he says, "For one thing, we use our own proprietary runtime software, which has to be re-coded for the Mac. And our commitment to high-quality content and top-notch performance calls for intensive testing and debugging." Sargent notes that DK is committed to the Macintosh, and says that for future DK CDROM titles, the gap between when Windows versions are released and when Mac versions reach the consumer will narrow to a few weeks.

DK Multimedia's international office is headquartered in London, England, with US marketing, sales, and creative operations at Dorling Kindersley Publishing, Inc. in Manhattan. DK Multimedia employs a staff of 135, making it one of the largest multimedia production units in the world. Established in 1991, the company first developed Musical Instruments, an award-winning CD-ROM for Microsoft Corporation.

DK Multimedia is creating multimedia CD-ROM software for the emerging consumer and educational multimedia markets. Their first five titles, The Way Things Work, The Eyewitness Encyclopedia of Science, Stephen Biesty's Incredible Cross-Sections Stowaway!, My First Incredible, Amazing Dictionary and The Ultimate Human Body were released simultaneously in October 1994. The company will announce their upcoming spring titles at the Consumer Electronic Show in January, 1995.

DK Multimedia  
95 Madison Ave  
New York, NY 10016  
212-213-4800, fax 212-213-5240

## NEW PROGRAM MAKES WINDOWS HELP FILES EASIER TO USE

Cascadilla Press is now distributing the Help Browser 2.0, a Windows utility which makes it much easier to find answers in Windows 3.1 help files. The Help Browser allows users to search for any word or phrase in a help file (without being restricted to keywords), and adds an interactive map to the help file. The Help Browser has received rave reviews in England, where it was first released.

The Help Browser is priced at just \$89.00 including shipping. Site licenses are also available, starting at \$490.00 for up to 50 copies at a single site. For more information, write or call:

CASCADILLA PRESS  
PO Box 440355  
Somerville, MA 02144  
phone: (617) 776-2370, fax: (617) 776-2271  
e-mail: [info@cascadilla.com](mailto:info@cascadilla.com)

## Digital and Lotus Team To Deliver cc:mail For Mailworks

BOSTON, Mass. -- November 29, 1994 -- Digital Equipment Corporation and Lotus Development Corporation today announced Lotus cc:Mail for Windows clients will be able to use Digital's MailWorks server software as their post office and directory server, extending the performance and reliability of the mail environment. cc:Mail is the world's most popular LAN-based e-mail product; MailWorks is the leading client/server mail system with more than 1 million seats connected. The new capability was demonstrated today in Digital's booth at the EMAIL WORLD exposition held here.

Digital's cc:Mail Connection for MailWorks software provides the ability for cc:Mail users to work in a client/server messaging environment without requiring a change to the user interface. Lotus cc:Mail for Windows Version 2.0 users can connect to the MailWorks server using TCP/IP, DECnet, asynchronous and wireless communications protocols. MailWorks servers are available for the OpenVMS and DEC OSF/1 operating systems.

According to Nancy Strecker, vice president, Digital Software Products, "Digital is delighted to offer connectivity with Lotus cc:Mail as part of our MailWorks solution. Teaming with Lotus enables Digital to deliver a rich set of enterprise mail services to the cc:Mail user."

"We are pleased Digital MailWorks customers will be able to provide cc:Mail's award-winning and highly-rich feature set to enterprise messaging users," said Michael Zisman, vice president of Lotus Communications Business Group. "Today's announcement further demonstrates the rapid growth of cc:Mail as the PC LAN e-mail of choice for enterprise messaging."

The cc:Mail Connection for MailWorks software will be available from Digital in the first quarter of 1995.

A PC installation kit is priced at \$29 for unlimited use within an organization. Lotus cc:Mail for Windows is available now; the estimated retail price is \$56 per user in quantities of 10 or greater. All prices and terms are for the U.S. only.

With approximately 5.8 million licenses sold worldwide, award-winning features, and availability on all popular platforms, cc:Mail provides transparent connectivity to all major private and public electronic mail systems and facsimile machines worldwide. Lotus Development Corp. (NASDAQ:LOTS), founded in 1982, offers high quality software products and support services that reflect the company's unique understanding of the new ways in which individuals and business must work together to achieve success. The company markets its products in more than 80 countries worldwide and provides numerous support services, both from its consulting

division and its award-winning 24-hour support center.

Digital Equipment Corporation is the world's leader in open client/server solutions from personal computing to integrated worldwide information systems. Digital's scalable Alpha platforms, storage, networking, software and services, together with industry-focused solutions from business partners, help organizations compete and win in today's global marketplace.

## Broad Range of Global Business Information Now Available on CD-ROM from Economist Intelligence Unit and SilverPlatter Information

November 23, 1994 -- SilverPlatter Information, in conjunction with the Economist Intelligence Unit (EIU), has just released a series of CD-ROMs which provide valuable information about world market conditions from the EIU. These products provide practical business analysis, forecasts and advice on over 180 country markets. This unique CD-ROM series includes the complete versions of three of EIU's leading business services: EIU Country Reports, EIU Country Forecasts, and EIU International Business Newsletters.

Compiled by EIU's global network of analysts and relied on by business professionals for 40 years, EIU Country Reports on Disc provides a comprehensive review of the latest economic, political and market conditions for five major regions of the world: the Americas, Asia/Pacific, Eastern Europe, Middle East/Africa and Western Europe. Each 25-40 page report offers a summary of the previous quarter's major business events, analysis of recent political and economic developments, short-term political and economic projections and the latest economic and trade data. EIU Country Reports on Disc is updated bimonthly and includes both Country Reports and Country Profiles. Subscriptions are available for individual regions or for the complete five-disc set.

EIU Country Forecasts on Disc is ideal for professionals seeking a valuable global planning tool. This series provides EIU's latest forecasts of medium- and long-term political, economic and business trends. The service covers five regions: the Americas, Asia/Pacific, Eastern Europe, Middle East/Africa and Western Europe. Each country profile provides an in-depth analysis of the current and future political and business environment; comprehensive five-year projections of GDP growth, inflation, population, foreign indebtedness and many other important indicators; appraisals of the country's prospects over the next ten years; five-year summaries of historical data; special alerts to recent developments affecting forecasts; and executive summaries and fact sheets. The format of all reports is consistent to facilitate comparison between countries. Subscriptions are available for individual titles or for any combination. Each CD-ROM is updated bimonthly.

EIU International Business Newsletters on Disc has been designed as a dynamic decision-support tool for global executives. It offers the complete set of EIU's eight specialized newsletters covering the latest business developments in 180 major and emerging markets. It provides quick and easy access to practical information on all business fronts: economic and political developments, regulatory changes, financial markets, industry trends, labor conditions, corporate strategies and more. The eight newsletters covered are: Business Africa, Business Asia, Business China, Business Eastern Europe, Business Europe, Business Latin America, Business

Middle East, and Crossborder Monitor. The titles will be offered as a single collection on a monthly updated CD-ROM.

All of the EIU CD-ROM titles cover 1993 to the present.

For further information or to subscribe to the series or to any of the EIU on Disc CD-ROMs, contact:

SilverPlatter Information, Inc.  
100 River Ridge Drive  
Norwood, MA 02062-5043  
Tel: 1-800-343-0064 (U.S. and Canada) or 1-617-769-2599  
Fax: 1-617-769-8763  
Internet: [info@silverplatter.com](mailto:info@silverplatter.com)

-or-

The Economist Intelligence Unit  
The Economist Building  
111 West 57th Street  
New York, NY 10019  
Tel: 212-554-0600/800-938-4685  
Fax: 212-586-0248

## POWERFUL NEW SEARCH TOOL NOW AVAILABLE ON INTERNET

A powerful new software package designed to locate specific information on the Internet has been placed on the international web of computer networks by a team of U.S. researchers.

Named Harvest, the software enables users connected to the Internet to locate and summarize information stored in many different formats on machines around the world, said Michael Schwartz, a computer science professor at the University of Colorado at Boulder and team leader for the project. Users can create new collections of information in the process and then put them back out on the Internet for other users.

In addition to making information access easier on the Internet, the Harvest software is designed to ease the strain on servers, or host computers, as well as overall network traffic, said Schwartz.

"For some people, looking for information on the Internet is like being in a foreign country where the language and culture are constantly changing," he said. "Harvest can help people find the information they need in a confusing and ever-changing environment."

Harvest, which is being made available on the Internet at no charge, has been tested at 60 sites around the world for the past four months. Other team members include the University of Southern California's Peter Danzig, the University of Arizona's Udi Manber, Mic Bowman from Transarc Corp., a Pittsburgh software company and CU-Boulder researcher Darren Hardy.

One of the Harvest test projects involved building a server for the AT&T 800 numbers directory, said Schwartz. The information was collected and organized automatically by Harvest from data posted by AT&T on the Internet. The researchers added a powerful search tool to the server, allowing users to find names even if they were misspelled and locate complete 800 numbers by using only partial numbers as a reference.

Harvest now has the capability, for example, to locate thousands of technical reports from around the world on a particular topic and then summarize the contents of each report, he said. Such summaries can be customized to benefit employees of large corporations and companies collaborating with each other, for example, by helping users access only the most pertinent information.

Harvest is the first phase of a \$2 million, multi-year project funded by the Advanced Research Projects Agency, the Air Force Office of Scientific Research, the National Science Foundation, Hughes Aircraft Co. and Sun Microsystems of Mountain View, Calif.

Clifford Lynch, director of the University of California Library Automation Project, called it "one of the most interesting R&D projects" underway today.

"Up until now, the tools to gather data from the Internet have been very limited and relatively costly in terms of network resources," he said. "What Mike and his group have created is a clever and elegant marriage of research with practical technology important to all of us."

Before Harvest, online Navy users had to go manually to each of the Navy's 20 server sites in order to conduct searches, said Jim Glenn, the U.S. Navy's Internet manager who tested the software. "Now, we can do it all with one query from one site. It's one-stop shopping for information."

But Harvest is not a magic bullet, said the University of Arizona's Manber. "It's impossible to organize all the world's information in one way to fit everyone's needs," he said. "But it is possible to build collections of information on specific topics for specific uses and tie them loosely together so people can search and locate what they want."

Harvest was placed on the Internet in the United States, England, France, Australia and Japan on Nov 7. It can be accessed on the Internet through the World Wide Web at <http://harvest.cs.colorado.edu>.

Preview Technologies, Inc. of Seattle, Washington, announced their incorporation.

The company has developed interactive software and services to enhance the marketing of real estate, boats, aircraft, and other like products.

PTI's services include the video taping on interior and exterior of property features. From the tape, frame grabs are extracted and composited into panoramic views. These views are then incorporated into the interactive program along with descriptive information. On-screen buttons are used to shuttle forward and backward between featured views. Each interactive tour will be contained in an individual computer file. These files can then be delivered to customers via floppy disc or modem. Using PTI's software, the files are then extracted for viewing on the customers PC.

The primary advantage of the system, allows a selling agent to show multiple comprehensive views of properties. Buyers can then determine which properties warrant an on-site visit. Agents and buyers both enjoy the time saving benefits of previewing properties in an office setting. Sellers enjoy the fact that qualified, interested buyers are seperated from the "lookers"/"tire kickers".

In addition, PTI can provide hardware and/or technical support to customers who don't have compatible equipment.

Plans are set to include a BBS system, provided by PTI, through which buyers and sellers can access all property files prepared with the PTI system. Ideally, the company is poised to go national, offering franchises for specific area's, counties, and states. PTI will start setting-up franchises by mid to 1995.

The Chairman's vision is to allow people and corporation's the ability to see properties prior to relocating to a specific area of the country.

For more information contact Preview Technologies Inc.  
4619 Fenwick Crt.  
Kent, Wa. 98032  
(206)-850-9719 or 1-800-810-VIEW(8439)

## Screen Savior Displays Graphics & Scripture from the Bible.

Carlsbad, CA - December 1, 1994 -- Quantum Leap Systems (QLS) announces the immediate availability of Screen Savior Graphic Edition, a inspirational screen saver module that displays full-color biblical images and scripture from the New International Version of the Bible. Screen Savior is available for all computers running the Windows 3.1 or later operating system, and has a list price of only \$19.95.

Screen Savior differs from other Bible software because graphics and scripture appear automatically on the computer screen -- no separate program to run, or function keys to push. Screen Savior is inexpensive, informative, inspirational, and entertaining.

"PC" system requirements:

- \* IBM PC or compatible
- \* Windows 3.1x
- \* 1.4 megabytes of available hard disk space

Screen Savior Volume I and The Teachings are also available from QLS. Volume I displays scripture based on the topics: Love, Charity, Salvation, Children, Hope, Peace, Kindness, Suffering, Wealth, and Ability. The Teachings includes all of Christ's words from the Red Letter Edition of the Bible.

Screen Savior has a suggested retail price of \$19.95 and is available from Quantum Leap Systems @ 1-800-997-9975. Dealer inquiries are welcome.

## Pierian Spring Software Introduces The Digital Campus: Multimedia Courseware That Teachers and Students Can Customize

PORTLAND, Oregon - November 21, 1994 -- Pierian Spring Software is now shipping The Digital Campus, a new integrated multimedia software collection that developers say has revolutionized the way computers are used to deliver instruction.

The Digital Campus supports:

1. a virtual reality campus interface where users enter buildings and rooms to access content material
2. content material like the just released Interactive Geography with overviews, pre and post-tests, instruction, skill building, and activities centered around the application of skills and knowledge (future content includes math, science, language arts, and others)
3. The Digital Chisel, multimedia authoring software for the creation of custom, interactive lessons, reports, and tests, which can be seamlessly integrated into The Digital Campus
4. The Discovery Toolkit, a thematic multimedia resource, which provides lesson ideas and hundreds of pictures, sounds and movies
5. a powerful integrated relational database that tracks student progress and generates detailed reports.

According to Pierian Spring Software, "The Digital Campus is superior to other instructional software because it was designed, from the ground up, by educators for education. No other product provides interactive, multimedia instruction that can be easily customized by teachers and students."

Pierian Spring Software is a Portland-based educational software company dedicated to providing innovative, customizable, multimedia software. For more information call Pierian Spring Software at 503-222-2044 or toll-free at 1-800-472-8578.

Pierian Spring Software  
5200 S.W. Macadam Ave, Suite 250  
Portland, OR 97201  
503-222-2044, 800-472-8578, fax 503-222-0771, BBS 503-222-0620  
CIS: 74220,2446

## Mirus Ships New Desktop Film Recorders with PowerMac Support

Santa Clara, Calif., Oct. 31, 1994 -- Mirus Industries Corporation, award-winning manufacturer of desktop slidemakers, today announced that PowerMac support would be included as a standard component of its entire film recorder line, beginning with shipments after October 21, 1994. The inclusion of PowerMac support, which no other desktop film recorder vendor currently offers at no charge with shipping product, enables all new Mirus FilmPrinters, including the turbo II and GALLERIA, to work with PowerMacs right out of the box. PowerMac support is available in both native and emulation modes.

Customers who took delivery of a Mirus film recorder within the last 90 days should contact Mirus at 800-942-9770 to receive their free PowerMac Upgrade software. Those customers who purchased new units beyond the 90-day window can purchase the upgrade for \$195. Users of turbo II's and GALLERIA's currently running on a PC platform can obtain PowerMac support by purchasing the Mirus ImageMac package for \$595. This package includes all necessary drivers, fonts and customization software to operate a Mirus FilmPrinter on any Macintosh II computer and up.

"Customer service and satisfaction is a top priority for Mirus," said Bruce MacKay, president of Mirus Industries Corporation. "That includes staying current with market developments and enabling our users to make optimum use of the latest available technology. We believe the PowerMac will be a significant platform for our customer base: they tend to be early adopters, and rely on technology innovators who can provide them the best tools for getting the job done."

Mirus Industries Corporation, headquartered in Santa Clara, California, has manufactured more than 5,000 film recorders since its founding in 1987. Users include leading medical institutions, renowned universities, graphics design and advertising firms, government agencies and major corporations. Mirus is a Kodak business partner and is recognized as a developer by Apple Computer, Compaq Computers and by all major software providers. Mirus FilmPrinters are designed for ease of use with personal computers to produce professional quality 35-mm color slides. Each model weighs only 7.3 kilograms and takes up less space than a laser printer. Mirus FilmPrinters have received numerous awards for their speed and ease of use.

For more information, contact Bruce MacKay at Mirus at 800-942-9770, or 408-980-6600, or by fax at 408-980-6601

## Lind Electronic Design and Pilot Technologies Merge 12/2/94

Minneapolis, Minnesota, December 1, 1994; Lind Electronic Design, Inc. which produces a complete line of power accessories and Pilot Technologies, Inc., the manufacturer of BookEndz docking stations and other accessories for the PowerBook series notebooks, today announced their plans to merge the two companies.

LeRoy Lind, President of Lind Electronic Design, stated, "After working together informally in recent months, we have decided to join forces, since so many of our products, directions, and goals are complementary. This merger increases our capabilities and expands our existing product line. At the same time, it improves our abilities to explore additional new design opportunities which our customers frequently demand. Since both of us are Apple Developers, we intend to continue to provide unique solutions for Apple customers."

Bill Pederson, President of Pilot Technologies, stated, "Lind Electronic Design and Pilot Technologies share the same views on product direction, design, and customer support. It seems natural that we pool our knowledge and resources to provide even better products and support to our clients. Together, we intend to become the most responsive and innovative mobile computing accessory supplier in the world. While we will continue to offer specific products under our own labels, we also intend to be the first OEM choice for other mobile computing accessory suppliers."

### Merger Details

Lind and Pilot intend to merge all aspects of the companies in January, 1995. Lind Electronics, Inc., the new parent company, will continue to do business under both of the previous corporate names during the transition period. The companies intend to combine the employees, locations, and product offerings from both firms over the next few months. Clients of both firms should see no interruption in service, and phone and FAX numbers will remain the same. Mr. Lind will remain President and Chief Executive Officer, and Mr. Pederson will be Vice President and Chief Operating Officer.

The January 1995 MacWorld Expo in San Francisco will be the first public showing for the new company, and the first public showing of a number of new products. Users can expect to see new PowerBook 500 series products, including the PowerCenter multifunction charger, SingleCharger charger, auto power adaptors, IBUS battery management software, BookEndz 500 series docking stations and other accessory products for mobile computing. Special show prices will be in effect during the show. Both Mr. Lind and Mr. Pederson will be available for private client meetings.

Additional information on the entire family of Lind Electronic Design products can be obtained by contacting Lind Electronic Design, Inc., 6414 Cambridge St., St Louis Park MN 55426. Tel: (612) 927-6303, FAX On Demand (612) 927-4671, Sales and Technical Service Department (800) 897-8996

Additional information on the entire family of Pilot Technologies products can be obtained by contacting Pilot Technologies, Inc., 11012 Jackson Drive, Eden Prairie MN 55347. Tel: (612) 828-6002, FAX (612) 828-6806, Order Line (800) 682-4987

Lind Electronic Design was founded in 1975. Pilot Technologies, Inc. was founded in late 1991. Both companies are based in suburbs of Minneapolis, Minnesota where they design, manufacture, and market commercial products for computer users.

## GREER ACCUMULATOR SIZING FOR FLUID POWER SYSTEMS

Rockford, IL -- Greer Hydraulics has produced a user-friendly How to Size your accumulator needs software package for IBM compatible PCs. Available on 3-1/2" diskettes, the easy-to-follow instructions lead you through the necessary steps and calculations. You only need know your requirements. For more information contact Greer Hydraulics, Figgie Power Systems, 10711 N. Second St., Rockford, IL 61130, 1-800-548-2047 or Fax 1-815-633-4557

## BULLETIN BOARD FOR PNEUMATIC CYLINDERS

CAD libraries of FABCO AIR's pneumatic cylinders have been available on disc for some time. Going one step further, the company now offers the libraries on its new electronic bulletin board. Engineers needing a specific cylinder can download the latest drawing.

The bulletin board uses WILDCAT! by Mustang Software, Inc., and remains on-line 24 hours a day, 7 days a week. CAD drawing files are available in DXF format and in DWG format, which is compatible with AutoCAD release 9 and above. All files are compressed with PKZip to save the user download time.

Ten file areas contain the CAD drawings for the five cylinder lines. File area 11 contains new product information not included in the current catalog. Fabco updates this area as new features are developed.

File area 12 forms the utilities and shareware area and contains information related to fluid power and computers. Currently, it contains anti-virus software and PKWare files and documentation. It is also an area where users can upload information they feel would be helpful to other users.

BBS users needing special features or configurations can upload drawings of their needs. FABCO-AIR engineers can respond on the BBS.

Contact FABCO-AIR, Inc  
3716 N.E. 49 Rd  
Gainesville, FL 32609  
904-373-3578  
904-376-8089 -- BBS

## LAN Intensive Care Utilities Released for IBM LAN Server 3.0/4.0

"Finally, a comprehensive set of tools for IBM LAN Server Administrators"

Monday, November 28, 1994 -- BEVERLY HILLS, CA - Lieberman and Associates announce the immediate availability of the LAN Intensive Care Utilities (LANICU) for IBM LAN Server 3.0/4.0. This is the first product specifically designed to administrate, diagnose, and repair problems within IBM LAN Server.

The package includes an exporter, importer, analyzer, and conversion utilities. The exporter and importer programs allow users, groups, aliases, public applications, and access controls to be moved from domain to domain. The analyzer uses artificial intelligence rules to check all user accounts and repair problem accounts. The analyzer implements a corporate-wide security and resource assignment policy based on group memberships and operator privileges. The conversion utility allows Domain Definition Reports from LAN Server 1.0 and 2.0 to be used to build a new LAN Server 3.0 or 4.0 domains.

"When a LAN grows beyond a few dozen users, it becomes tedious doing the administration. If the administrator has 500 users, there is no practical way to check all of the accounts. Using our package, mass administration can be automated" says Philip Lieberman, owner of Lieberman and Associates. "By using artificial intelligence techniques, our package can perform the tedious checking and repair of accounts that no human could endure."

Lieberman goes on to explain that most users are shocked at the number of problems found in their domains when they first run the LAN ICU package. Fortunately, they find that the package normally and gracefully corrects the problems found. "We have found some domains with over 25% of their accounts containing corruption. The problems manifest themselves as missing logon assignments and spurious error messages that cannot be tracked down with any other tools." Lieberman said.

Once all of the problems on the LAN have been corrected, the batch exporter and importer take care of the day-to-day work of LAN administration. "We have gone back a step in user interfaces and created a simple ASCII file format that allows for the quick and easy creation of user accounts and network resources. While GUIs look great, they take longer to perform administration, and they are prone to mistakes. Our batch editing method allows hundreds of user accounts to be created or migrated in minutes--all created perfectly with all of their logon assignments and group permissions in place" said Lieberman. The batch editor is capable of doing mass edits on user accounts, aliases, groups, and access controls based on resource names (subdirectories) and user/group accounts.

The product sells for \$970.00 per copy and is licensed on a per domain basis. Lieberman and Associates offer site licensing and substantial discounts for quantity purchases. Product is immediately available from stock. Vendor provides demo copies of software on CompuServe (OS2DF2/Library 3/ICULAN.ZIP), IBMLINK (OS2BBS1/OS2VENDOR/LANICU), or Lieberman and Associates BBS (310-550-5980) ICUDEMO.ZIP (Area B). A free demo diskette can be also be requested from Lieberman and Associates.

The LANICU product has been certified as "Ready for LAN Server!" and "Available and Ready for OS/2!" by IBM. Lieberman and Associates is a member of IBM's "Team LAN Server" and "Premier DAP".

LIEBERMAN AND ASSOCIATES DESIGN AND ENGINEERING GROUP  
221 N. Robertson Blvd. Suite C  
Beverly Hills, CA 90211  
IBM MAIL: USMVHLVH  
CompuServe: 76426,363  
Internet: lanicu@ibm.net

## ASD Software Now Shipping DiskGuard and DiskGuard Remote

Montclair, California; October 12, 1994 -- ASD Software, the award-winning publisher of long-time security market leader FileGuard, today announced the release of DiskGuard and DiskGuard Remote. The two new products, which began shipping October 12, boast powerful hard disk protection and flexible user options at estimated street prices ranging from \$75.00 (single user) to \$459.95 (DiskGuard Remote 10-Pack).

### TARGET CUSTOMERS

DiskGuard and DiskGuard Remote expand ASD's presence in the Macintosh security market by offering business, education, and home users hard disk security that is easy-to-use, yet powerfully flexible.

"DiskGuard is really the direct result of listening to our customer," commented Wes Wasson, Sales & Marketing Manager of ASD Software. "Although the market for highly sophisticated access management security software like FileGuard remains strong, we have been seeing a growing need for straightforward, efficient hard disk protection at a reduced price."

According to General Manager, Francine DuBois, DiskGuard and DiskGuard Remote are part of an ongoing expansion effort at ASD. "We have several dynamic new security products set for release in the near future that we think are going to create a great deal of excitement in the Mac community," DuBois said. "ASD Software is committed to being the technology leader in Macintosh security, and we are very pleased to offer DiskGuard as the next phase toward that goal."

### KEY FEATURES OF DISKGUARD

- Protects all SCSI hard disks, including individual partitions and removable disks (SyQuests, flopticals, etc.)
- Access control with a smooth installation procedure and user-friendly interface
- Two levels of password protection (Master and User)
- User privileges may be restricted to certain days of the week or hours of the day.
- User password restrictions may also include features such as pre-defined expiration periods, forced changes, minimum password length, etc.
- Users may be restricted from inserting floppy disks. Protected hard disks or partitions may also be write protected.
- Optional automatic screen lock with integrated screen saver which activates after a user-defined period of inactivity or on user's command. Screen lock allows background tasking.

- Password requested at startup of the Macintosh and at wake-up of the PowerBook, even after a System error or power failure.
- Activity log keeps track of all valid and invalid access attempts.

## KEY FEATURES OF DISKGUARD REMOTE

DiskGuard Remote includes all of the features of DiskGuard, but adds the following remote access functions...

- Enhanced access control with the ability to install, modify, update, and monitor the software over the network
- Administrator may instantly lock any protected hard disk over the network.
- Activity log updated in real time with all access attempts on networked Macintoshes.

## SYSTEM REQUIREMENTS

DiskGuard and DiskGuard Remote require System 6.0.4 or later (including System 7.5), 2MB of RAM, and one or more SCSI hard disks. Both are compatible with all Macintoshes and with optimization/driver updater software.

## PRICING AND AVAILABILITY

DiskGuard is available at a suggested retail price of \$129. DiskGuard Remote is available in Office 5 and 10-pack versions at suggested list prices of \$449 and \$799 respectively.

Both products began shipping October 12, 1994 and are available through all major mail order houses and corporate resellers.

## ABOUT ASD SOFTWARE

ASD Software, Inc. is located in Montclair, California, about 30 miles East of Los Angeles. The company's other products include the following:

FileGuard - Total system security for the Macintosh, including folder, file, hard disk, and application protection, multiple user levels, and automatic encryption (5-mice, MacUser, 1991).

PB Guard - Complete PowerBook security package. Includes bonus utilities for ARA connectivity, file synchronization, battery optimization, and more...

FileDuo - Easy automatic backup software (4.5 mice, MacUser, 1993).

ThrashGuard - Automatic shredder utility.

WindoWatch - Transparent time tracking for easy automatic client billing.

ASD Software Inc

Montclair, CA

909-624-2594, fax 909-624-9574

Internet: [ask@applelink.apple.com](mailto:ask@applelink.apple.com)

## A SIX PAK WITH THE RIGHT SUBSTANCE!

December 1, 1994 CD Publishing, Inc. announced its intentions to compete head to head with Sirrus Publishing's CD-ROM 5' 10 Pak. CDP will release a new Six Pak series aimed specifically at vertical markets. CDP's Six Paks are cleverly designed with a carrying handle and the capability to view the front and back of each disc panel giving buyers even more information to view before purchasing. The 5' 10-Pak has been the number one CD-ROM product for the past several months. Market research has shown that many buyers purchase these packages for just one or two discs in the bundle. CDP will focus on the needs of specific vertical markets by placing that market's relevant discs in each package. The decision to include 6 titles instead of 10 allows CDP to include better titles. This increases the buyer's chance to get more titles relevant to their needs. The first 6 Six Paks CDP plans to release are:

The Business Six Pak	To Be Released: Mid January 1995
The Graphics Six Pak	To Be Released: February 1995
The Colligate Six Pak	To Be Released: March 1995
The Entertainment Six Pak	To Be Released March 1995
The Home/Family Six Pak	To Be Released April 1995
The Children's Education Six Pak	To Be Released April 1995

To keep pricing down, CDP choose to market directly to resellers. Expected retail pricing for the Six Paks will be \$30-\$40.

CD Publishing Inc  
4960 Wolf Creek Trail  
Flower Mound, TX 75028  
214-724-0023, 800-460-2371

## iFOR/LS for OS/2

Gradient is pleased to announce the beta release of iFOR/LS for OS/2! The iFOR/LS package consists of several components; the Application Developers Kit (ADK), used by software developers to license software products and the Administrator's Runtime Kit (ARK) which is used at end-user sites to administer products licensed with the ADK.

iFOR/LS for OS/2 supports a fully functional OS/2 License Server that allows clients to communicate over TCP/IP and NetBIOS. A new GUI administration tool allows a single logical view of all available license servers, statistical reporting on all license transactions and the ability to distribute concurrent licenses from one server to another.

The OS/2 administration tool interacts with the heterogeneous iFOR/LS platforms and can be used as a central administration tool for all servers. Many of these features will be incorporated into the upcoming iFOR/LS Version 3 product line.

iFOR/LS for OS/2 considerably extends the range of licensing options available to software vendors. Some of these options include:

- \* Nodelock Licensing
- \* Dynamic Nodelock, Concurrent and Use Once Licensing
- \* Concurrent Licensing
- \* Sample/Demonstration Use Once Licensing
- \* Compound Licensing
- \* Separate licensing of application components
- \* Sub licensing software products to distributors

iFOR/LS for OS/2 is simple to use! The end user can now decide where the licenses can be moved by reading the licensing file provided by the vendor and selecting "Distribute licenses".

Gradient Technologies, Inc  
5 Mt. Royal Ave  
Marlboro, MA 01752  
(508) 624-9600, Fax: (508) 229-0338

## Gradient Launches PC-DCE/32 for Windows NT and Windows 95

Gradient customers and active DCE developers who follow the OSF's DCE SIG got an early insight into exciting DCE news. On August 23 Gradient President Len Halio posted a message to the SIG informing readers of Gradient's commitment to bring DCE technology to Microsoft Windows NT. The overwhelming response to that news has been indicative of the importance of this platform and of the role Gradient performs in desktop DCE products.

Gradient's PC-DCE/32, targets Intel x86 based computers running Microsoft 32-bit Windows operating systems. With this release Gradient brings true DCE "secure core" client and server functionality, including Cell Directory Server and

Security Server to 32-bit Windows. As with all of Gradient's DCE products, 100% compliance with OSF standards and interoperability with other DCE compliant platforms are guaranteed.

Designed and optimized for Windows NT and Windows 95, PC-DCE/32 enables organizations to fully integrate 32-bit Windows PCs into their enterprise DCE environment. Applications developed in PC-DCE/32 are binary compatible in both Microsoft 32-bit operating systems. Developers benefit from the ability to use both DCE threads and native Windows threads within an application. PC-DCE/32 provides for exception mapping between the DCE and Windows environments. DCE services are also configurable as Windows NT services. By offering both connection-oriented and connectionless transport for RPCs, PD-DCE/32 provides organizations a significant advantage in efficiency and flexibility.

End users benefit from a single integrated login to both the OS and DCE. The CDS Clerk has been implemented as a DLL for enhanced performance on client systems, and CDS maintains a protected per-client cache for added security.

The PC-DCE/32 product line will include an Application Developers Kit, DCE Administrators Kit and Runtime Kit, for both Windows NT and Windows 95. PC-DCE/32 will also provide a Cell Directory Server and Security Server.

All components of PC-DCE/32 are fully OSF DCE compliant. There is no reliance on proprietary APIs. As with all Gradient DCE products, PC-DCE/32 will consistently track new releases in the OSF DCE standard.

Gradient Technologies, Inc  
5 Mt. Royal Ave  
Marlboro, MA 01752  
(508) 624-9600, Fax: (508) 229-0338



## Trinzic Announces Support For Sybase IQ Accelerator Through The Forest & Trees Decision Support System

Palo Alto, CA, November 29, 1994--Trinzic Corporation (NASDAQ:TRNZ) today announced that the award-winning Forest & Trees decision support tool will support Sybase's new IQ Accelerator query optimization software and Sybase's new data warehousing strategy.

### More Powerful and Efficient Access to the Data Warehouse

"Sybase has added an important dimension to the data warehouse implementation," said Frederick J. Lizza, vice president and general manager of the Trinzic Data Access and Connectivity Business Unit. "Storing vast amounts of information is necessary in today's enterprise, but an efficient engine for generating interactive and unplanned queries is critical to the warehouse success. The business people using our Forest & Trees software want data so they can effectively analyze their business--and they want it now. Integration with IQ Accelerator means Forest & Trees users can get the data they want as soon as they want it."

### Trinzic Endorses Sybase Client/Server Warehouse Framework

"Trinzic is in the business of connecting data from heterogeneous sources," added Lizza. "The Sybase Client/Server Warehouse Framework creates an environment that users can readily access. It also provides a place to accumulate important data from relevant sources within the corporation. For instance, data stored in a legacy database management system can be used to populate the data warehouse using Trinzic's InfoHub software working in conjunction with the Sybase MDI Gateway or the OmniSQL Gateway. In other situations, data stored in other server DBMS such as Lotus Notes may be required. In that situation, Trinzic's InfoPump could be used to replicate the data from the source database to the target data warehouse. Overall, I see Sybase's entry into this market as a real plus for any organization that accesses and analyzes data."

Trinzic products--InfoHub, ObjectPro, InfoPump, Forest & Trees, and the Aion Development System (AionDS)--enable customers to build, integrate and implement applications in a client/server architecture. Headquartered in Palo Alto, California, Trinzic Corporation has approximately 275 employees and a combined installed base of more than 5,200 customers representing more than 35,000 product licenses. Trinzic products are distributed by a direct sales force and key marketing partners, as well as distributors throughout North America, Europe, the Pacific Rim and South America.

Trinzic Corp  
101 University Ave

Palo Alto, CA 94301  
617-891-6500

## ENVIRONMENTAL NETWORK SERVER FOR CORPORATE NETWORKS

The Environmental Network Server (ENS) is linked to existing corporate computer networks and provides comprehensive world-wide regulatory and reference materials on demand.

Local, State, Federal, U.S., Canada, Mexico, E.U. and other Regulatory material is instantly available with powerful search and retrieve capability. In addition, the ENS contains numerous datafiles relating to innovative technologies, chemical safety data, TSCA Chemical Inventory, Federal Register, Environmental Publications and much more.

The Environmental Network Server is engineered to be an integral part of existing corporate networks AND a single source for ALL Environmental Data.

The Environmental Network Server (ENS) is operated by SOLUTIONS Software Corporation, one of the worlds leading electronic publishers, in cooperation with key environmental technology organizations. The objective is to provide corporate clients with a low cost, fully comprehensive, on-line environmental resource that replaces dozens of separate, and often incompatible, sources.

Free information packages are available upon request.

For more information, please contact:

SOLUTIONS Software Corp  
1795 Turtle Hill Rd  
Enterprise, FL 32725  
407-321-7912, FAX: 407-323-4898 or 407-321-3098

## Quark Users Get Looking Good Treatment

Ventana title delivers design sophistication and time-saving tips

CHAPEL HILL, N.C., November 21, 1994--"Part One of being a good graphic designer," advises master designer Joe Grossmann, "is to create alternatives." And creating alternatives to run-of-the-mill desktop publishing is what his new book, *Looking Good With QuarkXPress*, published by Ventana Press, excels in.

The latest addition to Ventana's acclaimed Looking Good Library, which also includes *Looking Good in Print* and *Looking Good With CorelDRAW!*, *Looking Good With QuarkXPress* shows Macintosh and Windows users how to combine the power of QuarkXPress with sound design concepts. The CD-ROM bundled with the book features examples from the book and DTP tools for Mac and Windows users.

A brief overview of XPress 3.3 tools and techniques, design fundamentals and the design development process leads into the heart of the book: an example-laden presentation that works readers through practice documents--such as newsletters, business cards, brochures and letterhead--from start to finish. Headlines, photo arrangements, color effects and page design receive thorough treatment. Grossmann also shows how to create useful templates to save time and effort.

More than just a how-to book, however, *Looking Good With QuarkXPress* inspires readers with 40 pages of full-color examples illustrating inside secrets on how many of them were created. A valuable reference section, organized in plain-English categories, featuring dozens of tricks of the trade for Mac and Windows users, completes the volume.

The *Looking Good With QuarkXPress* CD-ROM contains 45 original templates featuring formats for newsletters, brochures, letterhead, fax sheets and business cards, as discussed in the book; a grab bag of XPress goodies, including backgrounds, special picture boxes and graphics, designed by Joe Grossmann and David Doty; and a variety of fonts, clip art and Xtensions for both Mac and Windows.

Another unique feature of this book is its Online Companion, developed by Ventana Online and residing on Ventana's World Wide Web server. Providing access to an archive of free Quark Filters and extensions available on the Internet, it also links to desktop publishing archives and clip art available on the Internet. The URL for the *Looking Good With QuarkXPress* Online Companion is <http://www.vmedia.com/lgwquark.html>.

*Looking Good With QuarkXPress* is 544 pages, illustrated, with CD-ROM and

an Online Companion. ISBN: 1-56604-148-1. Suggested retail price: \$34.95. For orders in the U.S. only, call 800/743-5369.

Author Joe Grossmann is a graphic design consultant and former editor of ThePage, one of the longest running and most respected "how-to" journals for desktop publishers. Grossmann currently writes a QuarkXPress Tips & Techniques column for Mac/CHICAGO and is co-author of Newsletters From the Desktop (Ventana Press).

Ventana Press and Ventana Online are divisions of Ventana Communications Group, Inc., a diversified publisher of computer-related information tools. Ventana Online supports VCG products with Internet-based content and context. Ventana Press publishes books and other materials that help computer users become more productive, including Advertising From the Desktop, The Gray Book, The Presentation Design Book, Mosaic Quick Tour, The Internet Tour Guide series, Word for Windows Design Companion and Mac, Word & Excel Desktop Companion. All titles are available in bookstores and by writing Ventana Press, PO Box 2468, Chapel Hill, N.C. 27515; by calling Ventana's toll-free order line, 800/743-5369; by faxing Ventana at 919/942-1140; by email at [orders@vmedia.com](mailto:orders@vmedia.com); or via the World Wide Web at <http://www.vmedia.com/index.html>.

## A Fine-Photoshop-Art Collection

Ventana book/CD-ROM set guides today's most innovative artists

CHAPEL HILL, N.C., November 7, 1994--Ventana Press, publisher of the bestselling classic desktop design primer *Looking Good in Print* and the ground breaking *Gray Book*, is pleased to announce the release of an inspirational volume for computer artists. A new multimedia title, *Photoshop f/x, Mac Edition*, by Cathy Abes with a foreword by Kai Krause, is Ventana's most ambitious design project yet, featuring dozens of full-color case studies and two galleries of full-page images brilliantly displaying the broad range of computer-generated art produced in Adobe Photoshop.

The enclosed CD-ROM features a "virtual artist," an animation reenacting the creation of two pieces of art that appear in the book. In addition, the CD contains a free copy of popular tools, filters and image collections, as well as full-featured interactive demos of *Specular Collage*, *Infini-D* and *Andromeda 3D Filter* from Series II. Also included are discounts offering hundreds of dollars off the demonstrated products.

The book's Online Companion, located on Ventana Online's World Wide Web site, includes an archive of filters, tools and utilities that can be downloaded for use in Photoshop; a digest, searchable by keywords, of questions and answers posted on Internet-based mailing lists; and hot links to various pieces of art found on the Internet. The URL for the Online Companion is <http://www.vmedia.com/vvc/onlcomp/photoshopfx.html>.

*Photoshop f/x* is divided into three main sections: a software overview and two galleries. The overview's three chapters focus on exploiting Photoshop 3.0's new features, applying special effects with third-party filters that run within Photoshop and using stand-alone programs with Photoshop. Each chapter uses case studies to show the wide range of effects that can be produced with a little ingenuity and experimentation.

The Step-by-Step Gallery consists of images accompanied by extensive step-by-step tutorials showing the illustration in progress and describing specific techniques developed by each artist. Dramatizing the striking imagery that results from combining artistic vision with computer technology, the Gallery section showcases compositions from award-winning artists who have produced notable work for major movies, national magazines, and book and compact disk covers, and who have exhibited their work in galleries in Los Angeles, San Francisco, New York and elsewhere.

"Photoshop f/x contains examples of every style of image--from commercial illustration to fine art, from photo collages to digital paintings--representing over 30 top artists," said Abes. "Primarily an 'idea book,' Photoshop f/x

demonstrates a broad range of possibilities: it vividly shows what you can do with Photoshop by revealing the tricks and techniques behind these sophisticated real-world images

Photoshop f/x is 352 pages, illustrated in full color, with CD-ROM and an Online Companion. ISBN: 1-56604-179-1. Suggested retail price: \$39.95.

Cathy Abes writes Macworld magazine's Expert Graphics column and other graphics-related articles, and has interviewed and written about many of the most talented and recognized Macintosh artists working today. She also organized and directed the 1991 and 1992 Macworld World-Class Awards and has developed and moderated graphics-related panels for Macworld Expo in San Francisco and Boston.

Ventana Press and Ventana Online are divisions of Ventana Communications Group, Inc., a diversified publisher of computer-related information tools. Ventana Online supports VCG products with Internet-based content and context. Ventana Press publishes books and other materials that help computer users become more productive, including The System 7.5 Book, The Mac Internet Tour Guide, Mosaic Quick Tour, Voodoo Mac, Advertising From the Desktop and The Presentation Design Book. All titles are available in bookstores and by writing Ventana Press, PO Box 2468, Chapel Hill, N.C. 27515; by calling Ventana's toll-free order line, 800/743-5369; by faxing Ventana at 919/942-1140; by sending email to [orders@vmedia.com](mailto:orders@vmedia.com); or via the World Wide Web at <http://www.vmedia.com/index.html>.

## SoftArc Announces Windows Version of Leading Workgroup Communication Server

--FirstClass Server for Microsoft Windows to Offer Same E-Mail, Conferencing, Database and Remote Access Functions as Best-Selling Macintosh Product--

MARKHAM, Ontario, November 28, 1994--SoftArc Inc., a leading developer and manufacturer of enterprise-wide, cross-platform group communication software, today announced a version of its popular FirstClass enterprise communications server for Microsoft Windows. In conjunction with SoftArc's FirstClass client software--already available for Windows, Macintosh and terminal emulation environments--the new FirstClass Windows server will offer sites with PC servers the full power of FirstClass (previously Macintosh server-based).

SoftArc's president, Steven Asbury, acknowledged the influence of strong customer demand in the company's decision to release a Windows server version. "The installed base of FirstClass users has grown rapidly since the product's release three years ago--in fact doubling to over 2,000,000 user licenses in the last year. While this currently makes FirstClass the best-selling group communication software package, we believe there is an even greater pent up demand based on the number of customers requesting a Windows version of our plug-and-play FirstClass server. This new product will allow us to satisfy that demand."

The FirstClass Windows server will require a 386 or better CPU running at least Windows 3.1, and will recognize popular PC serial expansion hardware for support of multiple modems. When running under Windows NT, the FirstClass server will offer higher performance and support for additional simultaneous users. FirstClass servers optimized for Windows NT and Windows 95 will be made available following this initial product release.

Users of existing FirstClass client software will be able to transparently connect to either the new Windows server or existing Macintosh servers. The Windows server will seamlessly integrate with existing FirstClass servers by network, WAN or modem connection for e-mail exchange and discussion database replication. As with the Macintosh product, the new FirstClass server will accommodate modem and multiprotocol network connections (IPX, NetBIOS, TCP/IP and AppleTalk) as well as take advantage of asynchronous disk I/O and other advanced file system features supported by Windows.

While the FirstClass Windows server will work with existing FirstClass gateways, third party developers are working on Windows versions of their shipping FirstClass products. TGF Technologies of Burlington, Vermont; Delphic Software of Redlands, California and World Connect of Toronto all

plan to release Windows versions of their FirstClass gateways and extensions.

The FirstClass Windows server is now in beta testing and is scheduled for volume shipment in the second quarter of 1995. The price will be the same as SoftArc's current server for Macintosh, available for \$690 with licensing for 10 users. Additional platform and protocol options and user licenses will be sold separately.

FirstClass is the leading cross-platform, enterprise-wide group communication system, with 2.5 million user licenses sold worldwide. FirstClass integrates state-of-the-art e-mail with group conferencing, access to existing corporate databases, forms processing, real-time discussions and on-line communications functions. FirstClass offers the same ease of use, functionality and robust performance over network or modem, and operates in Macintosh, Windows, DOS, OS/2 and terminal emulation environments. The product is available in 12 languages and is used by businesses, educational institutions, governments and private individuals in more than 30 countries. SoftArc is headquartered in Markham, Ontario, Canada.

SoftArc Inc  
100 Allstate Parkway  
Markham, Ontario  
CANADA L3R 6H3  
905-415-7000, fax 905-415-7151

## IBM Offers Added Customer Protection for Systems with Pentium Microprocessors

SOMERS, N.Y., Nov. 30 . . . IBM today announced that it will implement a series of programs designed to assist customers who experience a problem with Intel Pentium microprocessors in IBM systems.

Intel last week acknowledged a defect in its Pentium microprocessor that can cause inaccurate results in some mathematical applications. Like Intel, IBM expects a very small number of customers to be affected. IBM is taking extra steps to ensure that all its customers are protected.

"IBM considers any problems with the systems to be our responsibility," said Bruce Claflin, general manager, product and brand management, IBM PC Company. "Our customers bought IBM personal computers. If they have problems, we're going to be there with solutions."

In addition to working closely with Intel to resolve the issue, IBM will for its customers and business partners:

- Establish telephone numbers worldwide to help customers determine if they have a problem, and work with them to implement an appropriate resolution.
- Upon customer need, provide for replacement of Pentium chips.
- Add an informational letter to all products shipped with a Pentium processor.

Effective December 1 at 9:00 a.m., customers in the U.S. can call 800-426-3389 for more information .

## SYBASE ANNOUNCES IQ ACCELERATOR, DELIVERING BREAKTHROUGH PERFORMANCE FOR DATA WAREHOUSING

Sybase's New Interactive Query Accelerator Features Patent-Pending Bit-Wise Indexing Technology For Fast, Flexible Data Access

EMERYVILLE, CA, November 29, 1994 -- Sybase, Inc., The Enterprise Client/Server Company, today announced SYBASE IQ Accelerator software for enhanced, interactive query performance. An optional extension to SQL Server 10, the IQ Accelerator uses patent-pending Bit-Wise indexing technology to deliver breakthrough performance for the complex, ad hoc queries that dominate data warehouse applications. It offers up to a 100-fold query performance improvement over standard relational databases running on the same hardware.

The IQ Accelerator is the result of a joint development effort between Sybase and Expressway Technologies, a data warehouse software supplier acquired by Sybase in October 1994. It is a key component of Warehouse WORKS, Sybase's comprehensive framework for client/server-based data warehousing, announced today. (See Sybase's Warehouse WORKS press release, dated November 29, for more information.)

"Client/server data warehouse applications hold the promise of enabling companies to provide a new level of information-based intelligence for strategic decision-making across their organizations. However, with that promise come complex, technology challenges," said Mark Hoffman, president and CEO of Sybase. "The combination of IQ Accelerator and SQL Server software plays a critical role in the data warehouse process by giving customers fast, interactive access to the information they need to make real-time, strategic decisions about their business."

"Indexing technology is the crucial missing piece for large-scale data warehousing solutions," said Richard Winter, president of Winter Consulting, a firm specializing in very large database environments. "A lot of people think that as long as you do things in parallel, you don't have to do them efficiently. However, as databases grow into terabytes, smart indexing will be crucial. In offering the IQ Accelerator, Sybase demonstrates that it understands the significance of advanced indexing technology for very large databases."

### IQ Accelerator

The IQ Accelerator is a transparent, optional extension of SQL Server that provides enhanced, interactive query performance through high-performance query indexing. Its patent-pending technology has demonstrated 10- to 100-fold performance improvements over standard relational databases - with no

change to the hardware.

In actual customer environments, IQ Accelerator has shown even greater performance gains. For example, a large Southeastern utility company recently compared IQ Accelerator on an AT&T 3500 Series computer to SQL Server running alone on the same system and DB2 on an IBM 3090 mainframe. Each testing sequence used complex queries designed by the utility company, which were run against real data from its databases. In executing the complex queries, the IQ Accelerator demonstrated performance gains of:

- \* Up to 516+ times faster than SQL Server alone.
- \* Up to 240+ times faster than DB2 running on the mainframe.

The key to the IQ Accelerator's performance is its unique Bit-Wise indexing technology. Based on the use of bit-maps, Bit-Wise technology allows all data and data types - including character and numeric fields not supported by other bit-map indexing schemes - to be represented as bits within indexes. Using these indexes, a query manipulates only the relevant fields of data. The IQ Accelerator also employs compression technology that, combined with Bit-Wise indexing, allows data to be stored in the index at 50% to 75% of its original size. As a result, most queries are resolved directly through the index, eliminating the need for time-consuming database table scans in which the system wades through massive amounts of non-relevant data. This reduces input/output (I/O), providing fast, predictable query response times and efficient support of large numbers of users.

The IQ Accelerator provides seamless integration with SQL Server through Sybase's Open Server application programming interface (API), allowing customers to leverage Bitwise technology while maintaining traditional relational database strengths. The IQ Accelerator shares the SQL Server database's administration facilities, including single log-in, security, catalog, and administrative interface, as well as a new built-in intelligent query manager. This query manager automatically invokes the optimal response by identifying and transparently passing database updates to SQL Server and decision-support queries to the IQ Accelerator. Additionally, the IQ Accelerator works with the broad range of industry-leading client/server tools that already support SQL Server 10, without requiring any modification of the tools.

### **IQ Accelerator Availability**

The core technology for IQ Accelerator is now in controlled release under the name "Expressway 111." The IQ Accelerator product is scheduled to enter beta testing in Spring 1995 with general availability in Summer 1995. Pricing for the IQ Accelerator product will be announced at the time of general

availability. Platforms supported by IQ Accelerator include AT&T, Data General, Hewlett-Packard, IBM, and Sun SPARC systems, as well as Intel-based computers running Windows NT.

Sybase, Inc.

Sybase, Inc. (NASDAQ: SYBS) is one of the fastest growing suppliers of client/server-based software products and services for on-line enterprise-wide applications. Sybase's integrated family of software includes database servers, tools, connectivity and systems management products, providing complete desktop-to-mainframe solutions. Headquartered in Emeryville, CA, Sybase markets its products worldwide through its direct sales force, telesales, distributors, OEMs, VARs and Systems Integrators.

Sybase Inc  
6475 Christie Ave  
Emeryville, CA 04608  
510-596-3500; Fax: 510-658-9441

## IBM Advances Ability of Telephones and Computers to Work Together Through Support of Versit Collaboration

NEW YORK, November 30, 1994 . . . IBM's initiatives towards openness and interoperability -- the ability of diverse computers, telephones, and other communications devices from different manufacturers to easily work together -- took another major step forward today with the announcement of Versit, the collaborative effort of IBM, Apple, AT&T and Siemens.

As one of the founding partners, IBM is playing an important role by contributing skills and technology to the development of Versit specifications and supporting the specifications in IBM products.

Versit is aimed at identifying, developing and promoting open technical specifications to advance the compatible exchange of information among a wide variety of devices, such as personal computers, Personal Digital Assistants (PDAs) and telephones. Versit specifications will help break down the barriers between the worlds of telecommunications and computing by enabling these devices to "speak the same language." This will make it easier for people at work, at home, or on the road to exchange information and communicate, no matter what device they may be using.

Versit furthers IBM's strategy of establishing leadership in the emerging network-centric computing market, in which people subscribe to applications and services on high-speed networks and access information anytime, anywhere, using any device and format they want.

"The revolution promised by the convergence of telecommunications and computing will not reach its full potential unless our industries agree to open, interoperable standards that make using a PDA, telephone and notebook computer together as easy as turning on the different components of a stereo system," said Ellen M. Hancock, IBM senior vice president and group executive. "IBM is committed to being a leader in making information accessible anywhere, in any form, at any time, for any user. Versit is uniquely positioned to help us get there because it is a small enough group of companies to get things done, but large and diverse enough to make an impact."

IBM is embracing the Versit specifications, which will be set forth this year and next in the areas of voice, video, data and networking. IBM today announced support for specific Versit efforts in the following areas:

### Collaboration

IBM's Person to Person desktop conferencing software enables real-time, multimedia collaboration that turns the desktop into an interactive meeting

tool. The next version of Person to Person will utilize IBM's Lakes Collaborative Networking Architecture, which allows video conferencing and other collaborative applications to work across multi-vendor platforms.

IBM announced that Person to Person and Lakes will support adapters utilizing the H.320 standard for ISDN-based video conferencing as is consistent with Versit's specification. Integrated Services Digital Network (ISDN) capabilities enable the digitized transmission of voice and video signals.

### Connecting and Exchanging Information

**Infrared Data Transport.** IBM today reaffirmed its commitment to the Infrared Data Association (IrDA) specifications for wireless data interchange as endorsed by Versit. Exchanging data through wireless connections with an infrared (IR) link provides users with a convenient and inexpensive method for "beaming" data between devices such as PDAs, notebook computers, telephones and other office equipment. Users can simply "point and shoot" to exchange electronic business cards, or they can use their phone directory stored in their PDA to place telephone calls without wire connections.

Currently, IBM provides an IrDA-compliant link on its recently-announced ThinkPad 755CE, and will provide IR capability on future mobile products, workstations and adapters.

IBM is already actively involved as a member of IrDA and will continue to work closely with IrDA and the Versit partners on future requirements for a wide range of devices.

**Structured Data Exchange.** Today, because of the lack of standards, people cannot transmit and exchange information with consistent formats across mobile devices, such as PDAs and laptop computers manufactured by different companies. Versit has developed a common format for interchange of personal information called Personal Data Interchange Specifications (PDIS). PDIS is based on Bento, a portable object storage library which is part of the OpenDoc component software architecture from Component Integration Laboratories (CI Labs). PDIS will be used by IBM and its Versit partners for business card exchange.

### Computer-Telephony Integration (CTI)

IBM will extend its CallPath product family to support a wider range of clients by adopting a Versit telephony services application programming interface (API), providing current and future CallPath customers with a wider application portfolio to select from.

CTI links telephone functions and business applications to enhance end-user productivity. IBM's CallPath family currently supports personal computers running OS/2 or Windows, and workstations running AIX or other versions of UNIX.

IBM will work with its Versit partners to simplify CTI application development and enhance CTI application portability. As part of this effort, Versit is incorporating IBM's CallPath Services Architecture normalization technology, which allows a single telephony application to be written for and work across a wide range of PBX switches.

#### Other IBM support

Many IBM divisions, such as the IBM Global Network, develop products and services that support network-centric computing, and will work to integrate Versit specifications into their offerings as those specifications become available.

The world of information exchange enhanced through the adoption of Versit specifications can be leveraged through other IBM networking and device technologies. These include networking technologies such as ATM, or Asynchronous Transfer Mode, which provides powerful transmission and bandwidth advantages; multimedia technologies; powerful PCMCIA chip technologies; wireless technologies; operating system software; and systems management software.

## SYBASE ANNOUNCES WAREHOUSE WORKS - FRAMEWORK TAILORED FOR CLIENT/SERVER DATA WAREHOUSING

EMERYVILLE, CA, November 29, 1994 -- Sybase, Inc., The Enterprise Client/Server Company, today announced Warehouse WORKS, a comprehensive framework for client/server-based data warehousing. Increasingly, customers are combining the benefits of a central data warehouse with those of local data warehouses or "data marts" distributed throughout the organization. Built on the open foundation of Sybase's Open Client and Open Server interfaces, Warehouse WORKS offers users:

- \* The industry's leading interoperability solutions for integrating heterogeneous data and platforms
- \* Exceptional high-speed access to data through a family of SYBASE server products.
- \* The ability to integrate of best-of-breed products, including 125+ certified tools.

Warehouse WORKS incorporates SYBASE products now successfully in use with customers' data warehouse applications. These include SQL Server, Navigation Server, Replication Server, and Enterprise CONNECT. Also part of this framework is Sybase's new IQ Accelerator software for enhanced query performance, announced today. (See Sybase's IQ Accelerator press release, dated November 29, for more information.)

"Client/server data warehousing is a highly effective means to give knowledge workers the information they need to make strategic business decisions. But it carries a major challenge in managing data across a range of heterogeneous databases, hardware, and software," said Mike Forster, president of MDI, a Sybase company. "With Warehouse WORKS, Sybase offers customers an integrated suite of data management and interoperability solutions, providing users the fast data access they need . . . when and where they need it."

### Warehouse WORKS Framework

Sybase's Warehouse WORKS framework is designed specifically to address four key elements of the data warehouse process for client/server environments: data assembly, data transformation, data distribution, and data access.

The area of data assembly requires a comprehensive interoperability solution to receive data distributed throughout the enterprise. This includes legacy data currently stored on mainframe systems in a variety of formats and databases as well as new data generated by client/server systems. The Enterprise CONNECT family of interoperability products from Sybase's MDI

subsidiary supports transparent heterogeneous access to more than 20 IBM Mainframe and non-IBM data sources. Sybase's leadership in this area is reflected by a recent Meta Group survey of 152 data warehouse users. Enterprise CONNECT was their number one choice - by a two-to-one ratio over the nearest competitor.

Data transformation, in which operational data is modified to support decision-making, is the most complex component of data warehousing and typically requires a variety of tailored approaches. To support customers' transformation requirements, Sybase is taking a three-pronged approach:

- \* Leverage the interoperability of Enterprise CONNECT.
- \* Work closely with partners who specialize in data extraction, transformation, cleansing, and data modeling.
- \* Provide consulting services to develop solutions that are customized to users' specific needs.

Sybase's Replication Server plays a key role in the area of data distribution. It delivers changes in operational information to both central and local data warehouses, also known as data marts. Sybase's Replication Server software is the industry's leading data replication solution with more than 550 customers. Today, Replication Server can distribute data from a SQL Server database to a range of other data sources. In 1995, Sybase is expected to roll out products that can replicate data from heterogeneous data sources, both local-area network and mainframe.

Together, the combination of SQL Server with the IQ Accelerator and/or Navigation Server addresses another critical component of a data warehouse system, data access. Many customers have already built data warehouse applications based on SQL Server 10. With the addition of IQ Accelerator, SQL Server's performance is enhanced further to support large numbers of users who want to interactively query the database - often defining and redefining their questions based on the last answer they received. Sybase's Navigation Server provides scalable parallel processing capabilities optimized to support both queries and large bulk operations such as reporting, list management, and data maintenance.

Sybase, Inc.

Sybase, Inc. (NASDAQ: SYBS) is one of the fastest growing suppliers of client/server-based software products and services for on-line enterprise-wide applications. Sybase's integrated family of software includes database servers, tools, connectivity and systems management products, providing complete desktop-to-mainframe solutions. Headquartered in Emeryville, CA, Sybase markets its products worldwide through its direct sales force, telesales, distributors, OEMs, VARs and Systems Integrators.

Sybase Inc  
6475 Christie Ave  
Emeryville, CA 04608  
510-596-3500; Fax: 510-658-9441

## SYBASE AND TEXAS INSTRUMENTS ANNOUNCE STRATEGIC RELATIONSHIP

### Companies Focus on Offering Customers Complete Solution for Enterprise-Wide Application Development

EMERYVILLE, Calif. and PLANO, Texas, November 30, 1994 -- Sybase, Inc., the Enterprise Client Server Company and Texas Instruments (TI) software division today announced a strategic relationship that will provide customers a complete solution for enterprise-wide application development. Under the terms of the relationship, TI's software division becomes a participant in Sybase's Open Solutions Program, the company's channel program for Independent Software Vendors. TI's Composer by IEF, which began shipping for the SYBASE SQL Server 10 last month, forms the foundation for the two companies' strategy to forge a leadership position in enterprise-wide application development software solutions.

TI's Composer by IEF is an application development software solution that allows users to develop applications on a single platform while deploying applications on multiple platforms. It provides a development and runtime environment for modeling, designing and implementing client/server software applications. The ability to use Composer to generate SQL Server-based applications means that customers can now take advantage of SQL Server features specifically designed for client/server environments.

"Our relationship with TI represents a significant investment in providing a complete, standard solution to developers who work in multiple environments," said Steve Fioretti, director of channels development at Sybase. "It will enable both Sybase and TI to provide a total solution to customers who are doing mission-critical, enterprise-wide application development. Because TI is a leader in this area, we are committed to working together to enable the timely delivery of the complete Composer product set on SYBASE."

"As more companies move mainframe applications to client/server environments, the combination of Composer and SQL Server will provide customers the ability to migrate existing applications to the SYBASE database without requiring programming changes," said Duncan McClain, director of marketing for TI's software division. "Additionally, as a participant in the Open Solutions program, we are able to provide a tightly integrated software solution to customers."

"Part of the focus in the Open Solutions program is to provide partners with the resources they need to deliver products to market quickly," said Fioretti. "We've outlined a roadmap with TI that involves working closely on delivering a complete solution to market and, in turn, TI has embraced Sybase as a strategic RDBMS provider whose customer base overlaps substantially with

theirs. It's a winning relationship for both companies and customers as well."

## A Complete Application Development Solution

TI's Composer is comprised of several software products:

**Implementation Toolset:** Supports the installation of remotely generated files onto a target platform, provides a test facility for Composer-generated applications, and provides Composer services for a specific platform. The Implementation Toolset is shipping now for SQL Server. It is also available for other databases supporting UNIX, MVS, Tandem, Digital and Windows NT platforms.

**Client/Server Encyclopedia:** Allows multiteam, multideveloper concurrent development on UNIX, Digital, MVS and OS/2 platforms. The servers manage encyclopedia and administrative information stored in a relational database. The Encyclopedia for SQL Server is scheduled to be available in the third quarter '95.

Composer for SYBASE is available through TI's direct sales force. Pricing begins at \$9000.

## The Open Solutions Program

Sybase views its Open Solutions partners as playing an integral role in bringing total client/server solutions to its customers. In 1993, the company significantly expanded its Open Solutions Program to include new, dedicated resources in technical, sales, and marketing areas. This year, Sybase has added a variety of programs to support its focus on helping partners deliver products to market quickly.

The Open Solutions Program is built upon a solid foundation of third-party relationships. It was founded in 1989 with independent software vendors (ISVs) - typically tools vendors who develop SYBASE compatible software but do not resell SYBASE products. In 1990, the program expanded to include value-added resellers (VARs) - typically application developers who embed SYBASE software in applications and resell these solutions to end users. In 1993, a systems integrator program was added; Sybase systems integrators typically resell SYBASE, adding value in network consulting, custom software development, and hardware integration and support. Currently, there are approximately 1600 Open Solutions partners participating in the program worldwide.

Sybase, Inc.

Sybase, Inc. (NASDAQ: SYBS) is one of the fastest growing suppliers of

client/server-based software products and services for on-line enterprise-wide applications. Sybase's integrated family of software includes database servers, tools, connectivity and systems management products, providing complete desktop-to-mainframe solutions. Headquartered in Emeryville, CA, Sybase reported 1993 sales of \$427 million, an increase of 61% over 1992. For the first nine months of 1994, revenues grew 66% to \$479 million. Sybase markets its products worldwide through its direct sales force, telesales, distributors, OEMs, VARs and Systems Integrators.

Sybase Inc  
6475 Christie Ave  
Emeryville, CA 04608  
510-596-3500; Fax: 510-658-9441

Texas Instruments, Inc.

Texas Instruments Incorporated (NYSE: TXN) headquartered in Dallas, Texas, is a high-technology company with sales or manufacturing operations in more than 30 countries. The TI software division, located in Plano, Texas, provides software application development tools and services for managing department and organization-wide implementation of information technology.

## INTER-TEL STANDARDIZES ON SYBASE

Telecommunications Provider Standardizes on SQL Server 10 To Facilitate Move From Proprietary to Open Systems and Supply Users with Improved Decision-Support Capabilities

EMERYVILLE, CA, November 30, 1994, -- Sybase, Inc., The Enterprise Client/Server Company, today announced that Inter-Tel, Incorporated has selected Sybase's SQL Server 10 client/server relational database as the standard to replace its existing proprietary database standard. Inter-Tel, a \$100+ million telecommunications systems and services provider, expects SQL Server 10 to play a central role in its move to a fully integrated, open client/server system supporting its 24 offices nationwide.

"The SQL Server 10 open architecture will support the integration of heterogeneous technologies, applications, and third-party tools, enabling us to integrate information from various divisions together and thereby drastically improve our users' ability to access information," stated Tom Berk, director of management information systems at Inter-Tel. "Further, the performance and scalability of SQL Server 10 will provide critical support for Inter-Tel's current operations, changing business requirements, and future growth."

### SQL Server 10 Facilitates Move to Open Systems

SQL Server 10 replaces a proprietary file system database that was cumbersome in processing pressing decision-support information required by users. Inter-Tel recognized that to remain competitive it needed to leverage its customer data more strategically. The SQL Server 10 database server is expected to provide timely, accurate customer data, such as demographics and purchasing patterns. Users will be able to view and analyze this information iteratively, spot trends, and recommend new products that better reflect customers' needs. The open architecture of SQL Server 10 facilitates the interoperability of Inter-Tel's heterogeneous software applications and data access tools, extending management's choice of systems and users' selection of desktop tools.

### Inter-Tel Extends Sybase Implementation Nationwide

Inter-Tel plans to implement SQL Server 10 as a central server that supports a 16-gigabyte mirrored database running on Hewlett-Packard hardware. A wide-area network will link desktop systems and HP 9000 workstations running on HP/UX. With the open architecture of SQL Server 10, Inter-Tel was able to take a "best-of-breed" approach for building its client/server environment. Manufacturing, distribution, and financial enterprise applications, provided by Avalon Software and Lawson, are being integrated

and will run concurrently at each remote office, accessing Sybase's SQL Server 10 via SQL protocols. Scopus Technology's customer support and quality systems handling software applications will also be utilized. Inter-Tel expects to complete its implementation in 1995.

"We're pleased by Inter-Tel's decision to standardize on SYBASE software," stated Richard Yanowitch, vice president of corporate marketing at Sybase. "Inter-Tel's decision exemplifies a common corporate need to implement best-of-breed technology in order to maximize competitive advantages. The openness and flexibility inherent in Sybase's SQL Server 10 provide the necessary strategic foundation to support the dynamic business requirements of companies such as Inter-Tel."

### Sybase Used Widely by Telecommunications Industry

Over the last several years, the telecommunications industry has been fueled by technological innovations, intensifying competition. Like Inter-Tel, many of the leading providers have turned to client/server technology as a way to gain competitive advantages through improvements in system performance, information access, data management, and customer service. SYBASE client/server software has become the standard of choice for many of the leading domestic and international telecommunications providers including TeleCommunications, Inc. (TCI), MCI, US West Marketing Resources Group, Bell Atlantic, The Swedish Telecom, Telekom South Africa, and Hutchinson Mobile Data Ltd. of Hong Kong. Additionally, Sybase has entered into strategic relationships with TCI and AT&T.

### Inter-Tel, Incorporated

Inter-Tel designs, produces, and markets business telephone systems, voice processing software, applications software, and services to businesses and other organizations requiring small- to medium-size telephone system installations. Inter-Tel's products and services include telephone switches and telephones, maintenance, leasing and support services; long distance calling services; and voice mail and other telecommunications applications. The Company's Common Stock is quoted on the NASDAQ National Market System under the symbol INTL.

### Sybase, Inc.

Sybase, Inc., (NASDAQ: SYBS) is one of the fastest growing suppliers of client/server-based software products and services for on-line, enterprise-wide applications. Sybase's integrated family of software includes database servers, tools, connectivity, and systems management products, providing complete desktop-to-mainframe solutions. Headquartered in Emeryville, CA, Sybase reported 1993 sales of \$427 million, an increase of 61% over 1992.

For the first nine months of 1994, revenues grew 66% to \$479 million. Sybase markets its products worldwide through its direct sales force, telesales, distributors, OEMs, VARs, and systems integrators.

Sybase Inc  
6475 Christie Ave  
Emeryville, CA 04608  
510-596-3500; Fax: 510-658-9441

## SYBASE TO PROVIDE MULTIMEDIA SOFTWARE FOR SCIENTIFIC-ATLANTA'S POWERTV SET TOP BOXES

Sybase's Gain Interplay To Support Delivery Of Interactive Consumer Services Including Video On Demand And Home Shopping

EMERYVILLE, CA, November 30, 1994 -- Sybase, Inc., The Enterprise Client/Server Company, today announced that Gain Interplay, Sybase's interactive multimedia delivery software will support PowerTV, Scientific-Atlanta's operating system for interactive home communications terminals. Scientific-Atlanta, Inc. is a world leader in broadband communications systems, cable television electronics, and satellite-based communications networks. With this announcement, Sybase demonstrates its commitment to make Gain Interplay a significant software component for the delivery of interactive consumer information services.

This technology will provide a low cost solution for the delivery of interactive information necessary to support upcoming interactive television (ITV) trials, achieving a price point acceptable to network providers and their customers. Gain Interplay and PowerTV, in combination with the SYBASE Intermedia product architecture, provide an open and cost-effective environment for businesses to deliver ITV consumer services. Intermedia is a highly scalable and interoperable software architecture for interactive multimedia systems on the market today. The SYBASE Intermedia products, Gain Momentum, Gain Interplay and Intermedia Server provide a modular end-to-end architecture for authoring, delivering and managing interactive television applications and services.

Sybase's Gain Interplay is a specialized software product for delivering interactive applications on inexpensive TV set top boxes and home PCs. It provides set top operating systems such as PowerTV the capability to send and receive multimedia data necessary for video on demand, home shopping, interactive learning and other consumer information services. The highly scalable design of Gain Interplay also allows it to take advantage of more powerful business platforms such as Microsoft Windows-based personal computers enabling the delivery of interactive commerce, remote tele-medicine and electronic publishing applications.

"The partnership with Sybase is yet another milestone in Scientific Atlanta's delivery of the next generation of interactive broadband services," said David Levitan, vice president and general manager of Scientific-Atlanta's Subscriber Systems Division. "Both companies are committed to creating open solutions for digital interactive television using a foundation of existing standards and widely available technologies."

Scientific-Atlanta's digital home communications terminal and supporting

architecture have won acceptance among leading telecommunications and cable firms, including Time Warner, U S West, Tele-Communications Inc., and Bell South. PowerTV, Scientific-Atlanta's open architecture operating system, will be optimized to handle the rich colors, video, audio, and data in multimedia applications authored with tools such as Sybase's Gain Momentum.

"Our SYBASE Intermedia product strategy integrates broadband network services, digital multimedia information, and client/server software architecture to facilitate interaction between businesses and their customers," said Noel Leca, vice president of Sybase's Intermedia Products Division. "The combination of Sybase and Scientific-Atlanta offers network and cable providers a high quality, low cost solution for delivering interactive services to consumers."

Scientific-Atlanta, Inc.

Scientific-Atlanta, Inc. (NYSE:SFA) is a world leader in broadband communications systems, cable television electronics, satellite-based communications networks, and instrumentation for industrial, government and telecommunications applications.

Sybase, Inc.

Sybase, Inc. (NASDAQ: SYBS) is one of the fastest growing suppliers of client/server-based software products and services for on-line enterprise-wide applications. Sybase's integrated family of software includes database servers, tools, connectivity and systems management products, providing complete desktop-to-mainframe solutions. Headquartered in Emeryville, CA, Sybase markets its products worldwide through its direct sales force, telesales, distributors, OEMs, VARs and Systems Integrators.

Sybase Inc  
6475 Christie Ave  
Emeryville, CA 04608  
510-596-3500; Fax: 510-658-9441

## Microsoft Press Publishes Microsoft Visual C++ Version 2.0 for Win32 Documentation Set

### Technical Data and Programming Tutorials Now Available Through Book and Software Stores

The official documentation for the Microsoft Visual C++ version 2.0 development system for Win32 is now available from Microsoft Press in convenient book form in book and software stores everywhere.

This six-volume collection is the complete printed product documentation that draws its information from the substantial online help system in Microsoft Visual C++. The information is portable and easy to access and browse. And although the six volumes are numbered as a set, programmers and developers can buy only the volumes they need when they need them.

Volume One, MICROSOFT VISUAL C++ USER'S GUIDE (ISBN 1-55615-800-9, \$24.95) is the first source of information about using the Visual C++ development environment and the rich visual and command-line tools in version 2.0.

Volume Two, PROGRAMMING WITH MFC AND WIN32 (ISBN 155615-802-5, \$29.95) is the comprehensive guide to programming techniques for using the Microsoft Foundation Class Library and Win32.

Volume Three, MICROSOFT FOUNDATION CLASS LIBRARY REFERENCE (ISBN 1-55615-801-7, \$44.95) is the Microsoft Visual C++ developer's bible. It is a complete listing and description of all the functions and parameters in Microsoft Foundation Class Library version 3.0 and includes helpful source code examples.

Volume Four, MICROSOFT VISUAL C++ RUN-TIME LIBRARY REFERENCE (ISBN 1-55615-803-3, \$22.95) contains complete descriptions of behavior and usage for routines in the Microsoft Visual C++ run-time library, plus a description of the C++ iostream class library.

Volume Five, MICROSOFT VISUAL C++ LANGUAGE REFERENCE (ISBN 1-55615-804-1, \$22.95) describes the Microsoft implementation of the C programming language and includes a preprocessor reference that documents preprocessor commands, macros, and error messages.

Volume Six, MICROSOFT OLE CONTROL DEVELOPER'S KIT: USER'S GUIDE AND REFERENCE (ISBN 1-55615-805-X, \$22.95) is the source for information on building controls in Microsoft Visual C++ versions 1.5 and 2.0.

Availability

All six volumes are available now in book and software stores, directly from Microsoft Press at 1-800-MSPRESS, and through the CompuServe Electronic Mall (GO MSP). In Canada, call 1 -800-667- 1115.

Microsoft Press is the independent book division of Microsoft Corporation and the leading publisher of quality computer books about Microsoft products. More than 10 million users at all skill levels rely on a complete line of Microsoft Press books to make learning, using, and programming software easier. Titles ranging from self-paced tutorials for first-time computer users to technical references for professional programmers are distributed to book and software retailers worldwide.

Founded in 1975, Microsoft Corporation (NASDAQ "MSFT") is the worldwide leader in software for personal computers. The company offers a wide range of products and services for business and personal use, each designed with the mission of making it easier and more enjoyable for people to take advantage of the full power of personal computing every day.

Microsoft Press, One Microsoft Way, Redmond, WA 98052-6399  
206-882-8080, 800-MSPRESS

Self-Paced Training from Microsoft Press

## Microsoft WindowsNT Workstation Step by Step

Learning to use Microsoft Windows NT Workstation just got easier with MICROSOFT WINDOWS NT WORKSTATION STEP BY STEP, self-paced training from Microsoft Press.

This newly updated book-and-disk training program is ideal for busy people who prefer to learn Microsoft Windows NT on their own. Whether readers are new to Microsoft Windows NT, are upgrading from a previous version of the Windows NT operating system, or are switching from another operating system, the easy-to-follow lessons in MICROSOFT WINDOWS NT WORKSTATION STEP BY STEP offer an ideal introduction.

MICROSOFT WINDOWS NT WORKSTATION STEP BY STEP provides 13 lessons that systematically teach users how to simplify work and increase productivity. Each lesson takes as little as 20 minutes to complete, is generously illustrated with real-world examples, and is fully integrated with the practice files on disk. Readers can compare their results and track their progress for each lesson.

The lessons progress in complexity, first presenting basic concepts and then moving toward more complex methods for using each tool to its full potential. Newcomers to Microsoft Windows NT start with the basics, such as organizing programs and files. Those familiar with version 3.1 can begin with more complex features, such as managing and securing data. This flexible training system helps readers find their best starting point and provides example-driven lessons so they can learn exactly what they need to know, at their own speed.

The useful glossary contains more than 100 terms, and the comprehensive index helps students and instructors quickly find information on any topic in the book. The appendixes provide instructions on how to install Windows NT Workstation and how to set up users and control user access.

MICROSOFT WINDOWS NT WORKSTATION STEP BY STEP joins the growing family of bestselling self-paced training products available from Microsoft Press. Other book-and-disk packages in the Step by Step series include books covering the individual applications in Microsoft Office for Windows and the Macintosh--Microsoft Excel, Microsoft Word, Microsoft Access, Microsoft PowerPoint, and Microsoft Mail--and Microsoft Office for Windows Step by Step, Microsoft Excel Visual Basic for Applications Step by Step, Microsoft MS-DOS Step by Step, Microsoft FoxPro for Windows Step by Step, Microsoft FoxPro for MS-DOS Step by Step, Microsoft Project 4 for Windows Step by Step, Microsoft Works 3 for Windows Step by Step, and Microsoft Windows

### 3.1 Step by Step.

Based in Bellevue, Washington, Catapult, Inc., is a national software training company dedicated to providing the highest-quality application software training. Catapult's contribution to the design of the Step by Step series from Microsoft Press is based on its proprietary Performance Based training system for adult learning.

Microsoft Press is the independent book division of Microsoft Corporation and the leading publisher of quality computer books about Microsoft products. More than 10 million users at all skill levels rely on a complete line of Microsoft Press books to make learning and using software easier. Titles ranging from self-paced tutorials for first-time computer users to technical references for professional programmers are distributed to book and software retailers worldwide. Consumers in the United States can also order directly from the publisher at 1-800MSPRESS, and through the CompuServe Electronic Mall (GO MSP).

Founded in 1975, Microsoft (NASDAQ "MSFT") is the worldwide leader in software for personal computers. The company offers a wide range of products and services for business and personal use, each designed with the mission of making it easier and more enjoyable for people to take advantage of the full power of personal computing every day.

Microsoft Windows NT Workstation Step by Step  
by Catapult, Inc.

360 pages, \$29.95 with one 3.5" disk

ISBN: 1-55615-695-2

Pub. Date: November 4, 1994

Microsoft Press, One Microsoft Way, Redmond, WA 98052-6399  
206-882-8080, 800-MSPRESS

## OS/2 Warp Worldwide Sales Exceed 800,000

AUSTIN, TX, Dec. 20, 1994 ... IBM today announced that since OS/2\* Warp's release in November, the product has sold more than 800,000 copies worldwide.

"We're very pleased with the pace of sales," said Dan Lautenbach, vice president of IBM's Personal Software Products division. "Particularly as it represents sales before the product is available in China, Japan, Korea and Taiwan, which represent sizable market opportunities.

The customers who are buying OS/2 Warp right now are new customers--we know this because the upgrade version to OS/2 2.11, the version of OS/2 that is predominant in the marketplace, becomes available in January. Our manufacturing facility is working around the clock to fill channel reorders and to help us build inventory."

OS/2 Warp is the third generation of IBM's award-winning 32-bit operating system. It features impressive new usability features, slimmed-down memory requirements and comes with a BonusPak of more than a dozen exploitive OS/2 applications, including easy access to Internet and CompuServe via the IBM Information Superhighway. OS/2 Warp comes preloaded on systems from the IBM PC Company, Toshiba, Vobis, Escom, CompuAdd. IBM also has distribution agreements with 200 other PC manufacturers.

## Fast, New Code Generators

November 25, 1994 -- Resolutions Now has released GeeWiz 1.0, new for Visual Basic for Windows. GeeWiz is four Wizards for generating Message Box, Input Box, and all Common Dialog code. You can also setup your List Boxes to display tables.

Our Wizards let you jump to any screen or option. Every argument for dialog commands are available. Your generated code can include supporting If..Then statements, beep commands, exit commands, and more.

You can view code as it's built. Also test and view the dialog or list box. GeeWiz dynamically links code to a Code Window.

GeeWiz costs \$99 and includes Visual Basic source code and 90 days free support. GeeWiz is available after 1/30/95. Call or fax Resolutions Now at 312-994-6450.

Resolutions Now  
7137 S. May St  
Chicago, IL 60621

---

Get 4 Visual Basic Wizards for \$99.

Quickly generate code for Message Boxes, Input Boxes, and all Common Dialogs. Also setup your list boxes to display tables. And when you order now you'll pay only \$99. That's \$50 off the \$149 retail price.

Resolutions Now introduces GeeWiz, four Wizards for generating your Visual Basic for Windows code. Our Wizards are better - jump to any screen or option, and view code as it's built. Order our Apps now and get all source code and 90 days free support. With our Wizards you can:

\* Quickly generate all MsgBox Code, while viewing your MsgBox - Making MsgBoxes is at times tedious. Run our MsgBox Wizard and generating code becomes easy. Choose and test every argument of the MsgBox command, including supporting If..Then statements and beep commands. See your MsgBox on-screen while building it.

\* Access and generate any Common Dialog code fast - if you have a difficult time figuring out the many arguments for each CommDig, you need our CommDig Wizard. Making CommDigs is now a breeze. Choose which dialog and which options you need. The layout is easy for fast choices. All generated code is always in plain sight. View your common dialog box while making it.

\* Blow away list box format limits and make tables like the pros - when you need to display listbox output in a table format, it just won't work using tab characters if some text is longer than other text. Our Wizard lets you test output to the formatted listbox. All code to format your listbox is then dynamically linked to a Code Window.

\* Get all source code in Visual Basic - GeeWiz is in VB forms. All source code is strictly Visual Basic. Edit GeeWiz in versions 3 and 4 of Visual Basic. Also get GeeWiz as an executable file.

For only \$99 you'll get the GeeWiz software, all source code, an instruction manual, and 90 days free support. Site licensing is available.

ACCESSIBLE ARCHIVES CD ROM EDITION OF THE NILES' REGISTER:  
CUMULATIVE INDEX, 1811-1849

INCLUDES 350,000 REFERENCES TO THE PEOPLE, PLACES, AND EVENTS OF  
FIRST HALF OF THE NINETEENTH CENTURY.

From its first issue in 1811 until it ceased publication in 1849, the Niles' Register was widely circulated in the United States and abroad. This weekly offered concise, comprehensive coverage of events in the nation, and many foreign countries. From the beginning Hezekiah Niles reported the news in an unbiased equitable style, which included all facets of most controversial issues.

The Register's freedom from partisan bias together with its comprehensive collection of official documents and statistical tables, led Hezekiah Niles' political and journalistic opponents to concede that this weekly serial was recognized as an impartial arbiter on matters of fact in any given debate. As a result, the Register was routinely cited in courtrooms, in legislatures, and in Congress, and its admirers included John Adams, Thomas Jefferson, James Madison, John Quincy Adams, and Andrew Jackson.

After it ceased publication, the Register assumed the role it plays today, as a rich resource of inestimable value to historians, students and genealogists. Widely held in libraries either in bound volumes or microform, the Register's more than 30,000 densely printed pages are routinely consulted by those seeking reliable information about the first half of the nineteenth century.

The lack of a comprehensive index has always limited the accessibility of the Register. Each of the seventy five volumes included six months of weekly issues and contained an incomplete, poorly prepared and noncumulative index. Subsequent efforts at indexing the material in the Register have been half-hearted at best. William Frederick Poole's attempt to incorporate Niles' Register into An Index to Periodical Literature, contained only an insignificant fraction of the contents of this work. No subsequent indexing effort has ever fully uncovered the richness of the material of the Register.

ACCESSIBLE ARCHIVES CD-ROM edition of Niles' Register. Cumulative Index, 1811-1849, permits instant accessibility to the vast storehouse of historical and genealogical material contained in this important work. This database contains approximately 350,000 references including all the material from the original volume-by-volume indices, together with tens of thousands of additional entries in a highly analytical and structured format. Ambiguous and idiosyncratic entries in the original six-month indices have been edited into meaningful entries under standardized, library-style headings and subheadings. References to personal names have been standardized--that is, references to "Mr. Smith" have been converted to references to Samuel

Smith or John Stanhope Smith or whatever--so that both historians and students can easily find references to precisely the individuals in whom they are interested Extensive cross-references have been added to steer searchers toward appropriate search strings. Examples of topical references include Railroad entries - 3485, War of 1812 entries - 2145, Napoleonic Wars entries - 2700, Andrew Jackson entries - 1500. The result is an immensely powerful resource that unlocks an entire era of the history of the world

Accessible Archives Inc  
697 Sugartown Rd  
Malvern, PA 19355  
215-296-7441, fax 215-692-9130

## HOW TO SUBMIT PRESS RELEASES & OTHER INFORMATION FOR DISTRIBUTION

There is **\*NO CHARGE\*** to anyone submitting material for distribution and we generally distribute everything submitted, with very little selection or re-editing on our part. All material is currently distributed electronically via our areas on America Online (keyword = NEW PRODUCTS) and Delphi (Go BUSINESS PRODUCT), with daily updates to both areas. Plus, we are now distributing our newswire via affiliated local BBS's in coordination with BBS Press Service on a weekly basis (see below for contact information).

At the end of every month we distribute a news archive containing all news articles distributed during that month. The news archives are available in two formats - ASCII text or a WinHelp hypertext format. The files are located in our download areas on both services, as well as in our BAKERNWS subdirectory on SIMTEL and all Internet mirror sites worldwide.

Submitting material for distribution is simple. Just add our name to your normal press release mailing list for paper input; or for faster processing, Email electronic input to:

[RBakerPC@delphi.com](mailto:RBakerPC@delphi.com)

or you can Email directly to our account: RBakerPC on either AOL or Delphi if you have access there. Alternately, material may also be faxed to us at: 609/582-9204, but be advised that fax input is generally the most time consuming input to process at our end and distribution may be slightly delayed. Just be sure submitted information is in the form of a press release suitable for the general public. Electronic input should be standard ASCII text, with no special characters, tabs, etc. and an absolute maximum size of 32K.

As an added benefit, all PC related company/author and product information from submitted news is cataloged in our PC industry reference database that currently appears as an online searchable database (the PC Vendor Database) on America Online. The same material is also distributed on disk and CD-ROM by EMS Prof. Software as their PC Products Database (\$25+S&H, see below for contact information). Our data currently includes over 23,300 companies/authors and over 66,200 product listings, covering the entire PC market - including shareware authors! Company/author information includes mailing addresses, telephone numbers, Email addresses and more. Product information is a brief 60 character record per product that simply lists the product name and a brief description or associated keywords. If you don't have any current news for distribution but want to be included in our database - feel free to write or Email us your company address, phone, Email and product information for free inclusion in the next monthly release.

We're constantly upgraded our tools and equipment locally to handle the increasing news volume and are always looking for additional news input. If you have a product release or upgrade announcement, let us help tell the world about it! Remember, there is no charge for submitting material for distribution.

Please address all news and database submissions, or inquiries concerning using our news or database information for other applications, directly to our attention:

BAKER ENTERPRISES  
20 Ferro Drive  
Sewell, NJ 08080 USA  
Voice: 609-582-9203 (evenings EST)  
Fax: 609-582-9204  
Internet: RBakerPC@delphi.com  
AOL/Delphi: RBakerPC

For more information on our New Product News for local BBS services and internal corporate networks, contact:

BBS Press Service Inc  
8125 S.W. 21st St  
Topeka, KS 66615 USA  
Voice: 913-478-3157  
BBS: 913-478-9239 (includes news service samples!)

For more information on our PC Products Database, contact:

EMS Professional Software  
4505 Buckhurst Ct.  
Olney, MD 20832-1830 USA  
Voice: 301-924-3594  
Fax: 301-963-2708  
Internet: eengelmann@worldbank.org

## Graphical File Manager for OS/2 Warp

### SOFTOUCH FILESTAR/2 VERSION 1.0 FOR OS/2 WARP

Oklahoma City, OK, November 23, 1994 -- SofTouch Systems announces the release of FileStar/2 version 1.0 for OS/2 Warp, a full featured PM file manager that enables users to gain control of their hard drives. Scheduled availability is January 1, 1995.

According to Rick Jones, President of SofTouch Systems, "FileStar/2 is a multithreaded file manager which fully exploits the graphical capabilities of the OS/2 Presentation Manager. Millions of DOS and Windows users migrating to WARP will appreciate the product's familiar, intuitive approach to file management, while experienced OS/2 users will find object oriented methods of file manipulation more powerful than ever in the multiple windowed environment of FileStar/2."

Multiple windows permit the FileStar/2 user to view at a glance available drives, disk directory trees and data files. Users can move conveniently between directories to copy, move, rename and delete files. Requested files are quickly located by filename or by text within the file by using generic filenames and "wild card" characters. Precious disk space is conserved by archiving files in the popular ZIP format using the InfoZIP archiving products included with this release. The components of archived files may be subsequently displayed in a ZipView window and selected for browsing or decompression. Users can browse through files using their favorite viewers and display text and graphical files with the click of a mouse button. Current information on file sizes, drive free space, and the OS/2 swap file is constantly displayed to keep the user informed of disk status.

FileStar/2 has been in beta testing as shareware for three months; the result is a stable, comprehensive, and user-friendly application. Current registered users will receive version 1.0 from SofTouch Systems in appreciation of their input in creating what will be the preferred file manager for OS/2, and will receive upgrades in accordance with the registered user upgrade policy.

FileStar/2 for OS/2 lists for \$99 for a single user license and \$799 for a ten user license. However, as a special introductory promotion, FileStar/2 is available for a limited time for \$79 for a single user license and \$599 for a ten user license.

SofTouch Systems, Inc  
405/947-8085

HyperAct, Inc. announces availability of HLPDK/PA 12.5, the multi-platform help authoring tool.

The Hypertext and Hypermedia generation products from HyperAct, Inc. include a set of tools that can generate to and convert from several popular hypertext and hypermedia formats on different operating systems and operating environments.

## HLPDK/PA - Cross-platform hypertext generation

---

### HLPDK Professional Author

The next generation of HLPDK, based on the proven HLPDK HDF language with an improved compiler. Includes the new HLPDK Editor - A Fast HLPDK Sensitive editor, that allows you to create and manage your HLPDK databases with a multiple window editor, fast search and replace, built in spell checker, quick topic verification, integrated database generator, built-in help compiler and hypermedia file management.

You have never been able to create HLPDK documents that easy!

A hyper-text help database development kit that includes 2 royalty free help engines, and a help compiler with a built in cross reference tool, supports creation of DOS help databases, popular source files, Windows (winHelp & Multimedia Viewer), OS/2 (IPF), WWW and DESQview/X help source files! Creates text and word processors documents with automatic table of contents, glossary and index from the same source. Now with Multimedia support! Write once, help many!

### Features :

Topics, PopUps, Links, Keywords, Text Formats, Navigational and Structural facilities, Target Code insertion, Multiple module files, Automatic Pascal/C/C++/VB reference generation, Exception handling, Multiple file target databases, Graphics, Sound, Groups, Application Launch, Automatic exports creation, user defined link templates and more.

### Targets :

Native(PX), Native(MEM), winHelp 3.0, winHelp 3.1, Multimedia Viewer, THELP, QuickHelp, TVHC, PopHelp, DESQview/X, OS/2, Text, Word Processors Documentation (Via RTF), Sony MM Player (Via MM Viewer), World Wide Web HTML supported readers (Windows, Macintosh, UNIX-Motif, VMS and more).

Platforms: Help Compilers are available for DOS, DPMS, Windows, and OS/2 platforms.

SRP: \$299, Until Dec. 31 1994 - \$149 only.

HLPDK/PA includes the following additional tools :

NewsDB - Usenet article database generator

-----  
NewsDB - News Hypertext Database generator

The tool that allows you to enjoy "Other People's Wizdom" - Create sophisticated hypertext databases from Usenet News articles. A companion to HLPDK, allows you to store the news articles that are of value to you, with smart news groups directories, automatic keywords generation for fast search, user defined groups, automatic article association from articles textual information to user groups, Author directories and references, article references to other (previous) and from other (later) articles and more. Database can be compiled to all the targets supported by HLPDK, including Windows, OS/2, DOS (several targets), DESQview/X and documents. Can even handle non Usenet text articles, with user groups links as well.

Currently at version 1.1. (Included with HLPDK/PA).

RC -> HLPDK, Resource to Help template generator

-----  
RC2HDK - Help Template Generator from Resource files.

Generate Help Templates for Windows Programs from RC resource description files. User's interaction with your application is done through the resources described in the RC file. With this tool, Your RC files are parsed, and a help template for your project is created.

All you need to do is feel in your application options specific help, compile, and go!

Currently at version 3.0. (Included with HLPDK/PA).

WinHelp -> HLPDK Conversion product

-----  
WH2HDK - winHelp -> HLPDK Conversion Tool.

With WH2HDK you can port your Windows Help Databases to other platforms such as OS/2, World Wide Web, DOS, DESQview/X and more. Use WH2HDK (with HLPDK) to save the additional investment required for multiple target development!

Now you can create your Help Databases in your favorite winHelp authoring

tool, and still benefit from HLPDK cross-platform portability, and enhanced navigation and code generation tools.

WinHelp -> HLPDK will automatically create a HLPDK document from your HPJ and RTF sources, keeping the topic, paragraph, link and referenced bitmap graphics structure. Most of the times all you need to do is to compile the document using the HLPDK compiler, and your hypertext database is available on additional targets!

Currently at version 2.4. (Included with HLPDK/PA).

Additional conversion tools included with HLPDK/PA are:

NG2HDK - Norton Guides -> HLPDK  
IL2HDK - Interrupt List -> HLPDK  
HPCHDK - HelpPC -> HLPDK  
POPHDK - PopHelp -> HLPDK  
TPFHDK - Pascal FAQ -> HLPDK

Contact information :

HyperAct, Inc.  
P.O.Box 5517  
Coralville IA 52241  
U.S.A

E-Mail : CompuServe - 76350,333  
Internet - rloewy@panix.com  
Phone/Fax : (319) 351-8413

## SALES INTERVIEW SOFTWARE

StepOne Digital Sales Interview software effectively and objectively identifies those sales candidates who have the greatest potential for success in competitive sales positions.

StepOne accurately and reliably measures the following important sales attributes:

Achievement Motivation  
Initiative and Work Ethic

Reasoning Skills  
Assertiveness/Responsiveness

Over fifteen years of research contributed to the development of this advanced behavioral science software, including a two year market test with thousands of actual sales interviews.

Although StepOne Digital Sales Interview software is designed to identify the most aggressive salespeople, it may be customized to best represent a specific company, products or services, and market. StepOne may be easily adjusted in seconds to represent any sales company's unique pattern of success.

StepOne requires approximately 45 minutes to complete, and can be easily administered by office personnel on any IBM compatible PC. StepOne immediately provides a comprehensive six page report for management, including management guidelines for the new hires. Responding candidates are evaluated on a Potential Performance Index indicating those with the greatest potential for success and risk factors for employment. Although human judgement is important, behavioral science evaluations are essential in determining whether or not sales candidates are suitable to successfully perform in specific sales positions.

StepOne Digital Sales Interview software is available in packages from three to forty-eight interview assessments, priced from \$19.50 per assessment. Customer satisfaction is guaranteed!

StepOne Digital Sales Interview Software  
Human Resource Concepts, Inc.  
7720B El Camino Real, Suite 300  
Carlsbad, CA 92009-8508  
1-800-462-5406

Lawrence, KS: The revised and expanded 3rd edition of MS-DOS System Programming is now available. This edition, edited by David Burki and Robert Ward, has been completely revised for MS-DOS 5 & 6. It is published by R&D Technical Books and distributed exclusively worldwide by Prentice Hall.

MS-DOS System Programming, 3rd Ed. provides the serious DOS programmer with 29 chapters of valuable tools and routines. This edition includes 20 completely new chapters, such as: writing for the PC speaker; interfacing a Windows program with a real-mode device driver; executing high-speed file transfers using the eight-bit bandwidth of the parallel port; and much more. David Burki and Robert Ward have picked some of the best programmers around - including Matt Pietrek, Karen Hazzah, and Scott Robert Ladd - to focus on the problems that bedevil DOS developers. All source code is included on an accompanying disk.

R&D Technical Books is a division of R&D Publications, Inc., publishers of C/C++ Users Journal, Windows/DOS Developer's Journal, Network Administrator, and Sys Admin.

FOR REVIEW COPIES, CONTACT:

Berney Williams  
phone:(913) 841-1631  
FAX: (913) 841-2624  
email:berney@rdpub.com

Product Information:

MS-DOS System Programming, 3rd Ed.  
812 pp., \$39.95 (includes disk)  
ISBN: 0-13-207382-X

Sales Information:

Prentice Hall  
Order Processing Center  
P.O. Box 11073  
Des Moines, IA 50381-1073  
phone:(515) 284-6751  
FAX: (515) 284-2607

Corporate:800-223-1360  
Government:800-933-0688

T J R Cutts has uploaded a new version of the Refs bibliography package to the following sites:

[cyclin.zoo.cam.ac.uk:/pub/refs/refs752.zip](ftp://cyclin.zoo.cam.ac.uk:/pub/refs/refs752.zip)

and it should also appear, once it gets moved from the uploads directory, at:

[ftp.cica.indiana.edu:/pub/pc/win3/util/refs752.zip](ftp://cica.indiana.edu:/pub/pc/win3/util/refs752.zip)

There is a World Wide Web page for Refs, from which you can obtain screenshots, and of course the program itself:

<http://cyclin.zoo.cam.ac.uk/pub/refs/>

Refs is a program for creating browsing and maintaining academic reference databases. The program uses the common ASCII Unix refer file format and so is compatible with Unix refer, and also bibliography programs such as WinRefer.

Refs can also import data files in other formats, in an easily expandable way. Modules are supplied to read ISI, Chemical Abstracts, Current Contents and Medline files, and the help file includes details for writing your own modules.

Refs is shareware and will work with Windows 3.1 or higher.

Helpful suggestions, registrations and/or bug reports should be sent to:  
[tjrc1@cus.cam.ac.uk](mailto:tjrc1@cus.cam.ac.uk)

T J R Cutts  
194, Vinery Rd  
Cambridge  
CB1 3DS  
UK

The registration fee is 30 pounds sterling, with discounts for multiple registrations. More details can be found in the help file with the package.

## INTRODUCING BIJOUPLAY 2.0, A POWERFUL MOVIE THEATRE FOR YOUR MACINTOSH

November 25, 1994 -- MUSI Computer Products today announced the availability of BijouPlay 2.0, a major upgrade to the acclaimed movie player. With over twenty enhancements to the previous version including extensive support for Macintosh System 7.5, this release of BijouPlay is the most feature complete QuickTime movie player available for Macintosh.

This enhanced version of BijouPlay provides support for many key components of System 7.5, including AppleScript, AppleGuide, Macintosh Drag & Drop, Thread Manager and QuickTime 2.0. AppleScript support includes scripting and recording of basic functions in BijouPlay, including opening and playing of movies. An AppleGuide help database is included to guide users through the process of creating, editing, playing, and saving a QuickTime movie. The extensive QuickTime support in BijouPlay includes functions for changing instrument arrangements in QuickTime Music movies, finding text in a movie with a Text track, and multiple movie playback.

In addition to these great new enhancements, there have been extensive modifications to the core functionality of BijouPlay. Among these are :

- multiple simultaneous movie playback with the Thread Manager
- ability to create and save slide shows of movies
- a greatly improved movie info window
- a new Find feature for finding text in a movie
- integrated Note Pad for adding Text Tracks to movies
- new Print To Video function for saving movies to tape
- and many other improvements...

### System Requirements

BijouPlay 2.0 requires a Macintosh with a 68020, 68030, 68040, or PowerPC processor with at least 8MB of RAM (2.0 MB of application RAM), and System 7.1 or newer version of Macintosh system software. It is recommended that users wanting to take advantage of new features upgrade to System 7.5.

### Availability

BijouPlay 2.0 is freely available worldwide on the Internet at leading Macintosh archive sites, and will be available shortly on eWorld and AppleLink, or by contacting MUSI Computer Products via electronic mail at MUSI.COMP@Applelink.Apple.COM, or MUSI@eWorld.com.

## NEW KnowledgeSEEKER V 3.1 IS MARKET'S TOP ANALYSIS TOOL

TORONTO, Ont. (December 1, 1994) -- ANGOSS Software today announced release of KnowledgeSEEKER Version 3.1, a faster, more powerful upgrade with superb graphical and editing capabilities. The new version will be available to existing KnowledgeSEEKER and ANGOSS SmartWare users at special introductory prices.

"KnowledgeSEEKER is the only data analysis tool in today's market that finds answers to your problems, then presents them with report capabilities," says Andrew Burans, ANGOSS Vice-President Marketing and Sales.

The new Windows V3.1 features include:

- \* Graphics -- Produce graphic displays of selected relationships. Works with built-in ANGOSS Graphics or MSGRAPH.
- \* Multiple Document Interface (MDI) -- Open multiple files simultaneously.
- \* Profit Maximizer -- Automatically calculate profits based on revenue and costs.
- \* Increased Speed
- \* Improved Interface -- Tool Bar Icons activate common operations.
- \* Global Edit -- Change field parameters all at once.
- \* Leverage (Gains Chart) -- Hierarchical display of the proportional percentage in a given dependant category.
- \* Tree Map -- Helps navigate larger trees.

KnowledgeSEEKER 3.1 is available in Windows only. It has a suggested retail price of \$899. It can be ordered directly from any ANGOSS Software office, through Authorized ANGOSS Developers or major software resellers.

ANGOSS Software Corporation is a Toronto-based company with offices in the U.S., France, and the U.K. plus agencies covering Africa and the Pacific Rim. Its shares are traded on the Alberta Stock Exchange. The Symbol is ANC.

ANGOSS Software International  
Suite 201, 430 King Street West  
Toronto, Ontario, CANADA M5V 1J5  
416-593-1122, fax 416-593-5077  
CIS: 71333,3661

Creative Solutions, Inc. Rockville, MD (December 1994) is very pleased to announce a new version of our popular Macintosh programming language MacForth - Power MacForth. MacForth is a "full featured" Forth programming language for the Macintosh that has been available since the earliest days of the Macintosh... February 1984.

PowerMacForth features the following:

- \* User-extensive, easily customized programming language
- \* Fully interactive development environment
- \* Compiles branch threaded, optimized native RISC assembly code
- \* ANSI standard Forth dialect
- \* Blindingly Fast! - Speed improvements from 20-200 times faster than 68K MacForth
- \* Integrated RISC assembler, disassembler, and decompiler
- \* Integrated multi-window text editor, with source code
- \* Versatile built-in multitasking Integral on-line glossary
- \* Extensive library of sample code
- \* Complete, builtin Mac Toolbox access

The new Power MacForth retails for 5199. Upgrades for existing registered MacForth users are \$129 . The current MacForth Plus 4.2 also sells for \$199, will remain available for non-Power Macintosh users, and runs on the Power Macs in emulation mode.

Other Creative Solutions products include:

- \* Hurdler SCSI External Quad Serial Peripheral - \$495
- \* Hurdler 4 Port Serial NuBus Board - \$379
- \* Hustler 2 Port Serial Accelerator NuBus Board - \$299
- \* Centronics Parallel Interface NuBus Board - \$199
- \* Hurdler Smart Prototyping NuBus Board - \$199

For more information or to obtain a review copy contact our business office at:

Creative Solutions Inc  
4701 Randolph Road, Suite 12  
Rockville, MD 20852  
301-984-0262 or 800-367-8465.

## Software Interfaces Announces Breakthrough in Report Writing Technology

\* A True Client/Server Report Writer \*

Houston, Texas - Software Interfaces has set a new pace in report writing for client/server environments with the introduction of SQLASSIST ProReports for MS Windows and X/Motif. SQLASSIST ProReports allows a report to be created on a client and run on any client or server retaining the identical formatting attributes. This report writer incorporates all of the features of both ad hoc and production report writers and is easy to use for the novice to the expert. It also allows access and reporting on heterogeneous database data plus other data, all in the same report.

"SQLASSIST ProReports is one of the most comprehensive tools available today for production reporting. Unlike many competing products, it combines true host-based batch reporting capabilities necessary for production systems with the ease-of-use and full graphical and font support that users expect from Windows and GUI-based reporting tools. In addition, it provides data manipulation capabilities that are matched only by much more expensive executive information and analysis systems," says Mark Hanner of The Meta Group.

"This report writer sets a whole new pace for the 90s," says Rahul Mehta, President of Software Interfaces. "It is not only optimized to take advantage of the resource utilization benefits of client/server computing (i.e., processing load redistribution), but also offers direct business operations' benefits. With the ability to design a report on any client and run it on any server and retain the identical fonts and images, organizations will have unprecedented flexibility and power for all of their report writing. For example, customized telephone billing reports can be created on a PC using ProReports for Windows, and sent to any server attached to a heavy duty printer that can print out the thousands and thousands of pieces of correspondence required overnight. This new report writer technology enables all levels of users to create simple to complex reports like general ledger with the ease of use of a GUI."

ProReports has all of the advanced features of ad hoc and production report writing systems, yet is still easy to use for the novice to the expert. It is designed so that everybody in an organization from a simple end user to a corporate developer can use the same tool to develop reports. ProReports' intuitive method for building reports shields the beginning user from ever having to know SQL, and walks the user through the querying and report generating processes.

Also, ProReports' advanced AI-based rules facility shields the user from having to know database design. Its sophisticated querying and reporting

capabilities and its object-oriented design allow the user to slice and dice the report data in innumerable ways.

"ProReports allows all levels of users to do many long desired, but previously impossible operations without heavy 4GL programming," says Mehta.

"ProReports will make languages like COBOL obsolete for developing production reports. Now, with the click of a mouse, users can work with data from different data sources in one report. For example, a user could combine manufacturing data from ORACLE, purchasing information from DB2, and forecasting information from Microsoft Access all in a single report. This technological breakthrough effectively ends the 'inaccessible islands of information' problem. Data sources can include all of the major RDBMs through native APIs, plus flat files, text, and images."

Another major feature of ProReports is that it allows the user to perform multiple queries in the same report. Plus, operations can be performed on the results of those queries, and these results can then also be incorporated in the same report. This gives the user an unlimited variety of ways to easily access, view, analyze, and present information.

"While ProReports sets many new technological standards for report writing in the 90s, the overlying business advantage is that it offers the organization the freedom of choice to best match its computing resources to its business needs," says Mehta. "ProReports is the only report writer that can offer this level of flexibility and power, now or even in the next few years."

Data sources accessible natively in this first release include: DB2 (all members), INFORMIX, INGRES, ORACLE, Rdb/VMS, and SYBASE. Middleware access will be offered through EDA/SQL, SequeLink, and any ODBC source to databases such as Paradox, Microsoft Access, dBASE, and more. Initial client platforms will include: Microsoft Windows 3.1 and NT, and X/Motif on SunOS, Solaris, HP, and RS/6000. Initial server support will include SunOS, Solaris, HP, RS/6000, and VAX/VMS. Over the next six months, support will be added for an expansive variety of desktop servers to large IBM mainframes.

Software Interfaces, founded in 1985, is headquartered in Houston, Texas, with offices in The Netherlands and Singapore. Its software solutions are currently in use by thousands of users in the Fortune 500. SQLASSIST, Software Interfaces' flagship product, is the leading technology in ad hoc query and report writing that was recently judged by Dr. Paul Dorsey, President of the International Ad Hoc Query SIG, to be the best ad hoc query tool available, "SQLASSIST is a highly polished, well-planned product... The great number of advanced features made it a winner for novice and power users," -- Client/Server edition of Information Week, May 1994.

Software Interfaces Inc

1400 Broadfield, Suite 600, Park 10  
Houston, TX 77084  
713-492-0707, fax 713-492-0725

## SoftArc Announces Windows Version of Leading Workgroup Communication Server

FirstClass Server for Microsoft Windows to Offer Same E-Mail, Conferencing, Database and Remote Access Functions as Best-Selling Macintosh Product

MARKHAM, Ontario -- SoftArc Inc., a leading developer and manufacturer of enterprise-wide, cross-platform group communication software, today announced a version of its popular FirstClass enterprise communications server for Microsoft Windows. In conjunction with SoftArc's FirstClass client software -- already available for Windows, Macintosh and terminal emulation environments -- the new FirstClass Windows server will offer sites with PC servers the full power of FirstClass (previously Macintosh server-based).

SoftArc's president, Steven Asbury, acknowledged the influence of strong customer demand in the company's decision to release a Windows server version. "The installed base of FirstClass users has grown rapidly since the product's release three years ago -- in fact doubling to over 2,000,000 user licenses in the last year. While this currently makes FirstClass the best-selling group communication software package, we believe there is an even greater pent up demand based on the number of customers requesting a Windows version of our plug-and-play FirstClass server. This new product will allow us to satisfy that demand."

The FirstClass Windows server will require a 386 or better CPU running at least Windows 3.1, and will recognize popular PC serial expansion hardware for support of multiple modems. When running under Windows NT, the FirstClass server will offer higher performance and support for additional simultaneous users. FirstClass servers optimized for Windows NT and Windows 95 will be made available following this initial product release.

Users of existing FirstClass client software will be able to transparently connect to either the new Windows server or existing Macintosh servers. The Windows server will seamlessly integrate with existing FirstClass servers by network, WAN or modem connection for e-mail exchange and discussion database replication. As with the Macintosh product, the new FirstClass server will accommodate modem and multiprotocol network connections (IPX, NetBIOS, TCP/IP and AppleTalk) as well as take advantage of asynchronous disk I/O and other advanced file system features supported by Windows.

While the FirstClass Windows server will work with existing FirstClass gateways, third party developers are working on Windows versions of their shipping FirstClass products. TGF Technologies of Burlington, Vermont, Delphic Software of Redlands, California and World Connect of Toronto all plan to release Windows versions of their FirstClass gateways and

extensions.

The FirstClass Windows server is now in beta testing and is scheduled for volume shipment in the second quarter of 1995. The price will be the same as SoftArc's current server for Macintosh, available for \$690 with licensing for 10 users. Additional platform and protocol options and user licenses will be sold separately.

FirstClass is the leading cross-platform, enterprise-wide group communication system, with 2.5 million user licenses sold worldwide. FirstClass integrates state-of-the-art e-mail with group conferencing, access to existing corporate databases, forms processing, real-time discussions and on-line communications functions. FirstClass offers the same ease of use, functionality and robust performance over network or modem, and operates in Macintosh, Windows, DOS, OS/2 and terminal emulation environments. The product is available in 12 languages and is used by businesses, educational institutions, governments and private individuals in more than 30 countries. SoftArc is headquartered in Markham, Ontario, Canada.

---

SoftArc Inc. Global Area Communications

100 Allstate Parkway, Markham, Ontario, CANADA, L3R 6H3  
1902 Ridge Road, #325, West Seneca, New York, USA, 14224

Tel: 905-415-7000 Fax: 905-415-7151 FirstClass: 905-415-7070  
Internet: sales@softarc.com

---

FirstClass Server for Windows Q&A

The following are answers to common questions on the forthcoming FirstClass Windows server. Full information will be available upon product release. While this information is accurate at this time, specifications are subject to change.

Q: How will the FirstClass Windows server be different from the existing server?

A: The Windows server will offer the same feature set as the current FirstClass server for Macintosh... and more. All of the existing mail functionality and workgroup features of the Macintosh FirstClass server will be available on the Windows server. The Windows server will expand upon the Macintosh feature set by offering enhanced backup procedures and

expanded network protocol support.

Q: Will users on Windows servers be able to exchange messages with users on Macintosh servers?

A: FirstClass servers for Windows and Macintosh will communicate seamlessly over LAN, WAN or periodic dial-up connection. Neither server makes assumptions about the platform of the other in its communications; both will replicate discussion databases, exchange private mail and synchronize directories as in current Macintosh server-to-server connections.

Q: What version of Windows is the FirstClass server written for?

A: The initial FirstClass server for Windows will be a 16 bit application written for Windows 3.1. Even under 3.1, the FirstClass server will surpass the performance and capacities of most other PC communication servers.

Soon after the release of the server for Windows 3.1, SoftArc will release FirstClass servers for Windows NT and Windows 95. These versions will offer better disk I/O, larger capacities and other improvements.

Q: How will the capacities of the FirstClass Windows server compare with the existing Macintosh server?

A: Like the Macintosh server, the Windows server -- even under 3.1 -- will be a high performance communications engine capable of serving many thousands of people. The base server for Windows 3.1 and the server for Windows NT are expected to compare as follows:

	Macintosh	Windows 3.1	Windows NT
Maximum Number of Users:	10,000+	10,000+	
100,000+			
Maximum Simultaneous Users:	100	70	250
Modems Per Server:	48	70	250
Files Per Volume:	64,000	64,000	Unlimited
Network Protocol Options:	TCP/IP	TCP/IP	TCP/IP
	IPX	IPX	IPX
	AppleTalk	AppleTalk	AppleTalk
		NetBIOS	NetBIOS

(Specifications of the Windows 95 server will be available upon the release of Windows 95.)

Q: Will the Windows server be a "version 1.0" product written from the ground up?

A: No. The FirstClass Windows server is a port of SoftArc's existing Macintosh server, the same solid, proven code currently accommodating 2.5 million users worldwide. The initial Macintosh server was written with few assumptions as to the hardware it would run on, making the Windows conversion process reasonably straightforward. Only a small percentage of the server code, primarily comprised of links to the OS, needed to be changed in order to produce the Windows version.

Q: How will administration of the FirstClass Windows server compare with the existing Macintosh product?

A: Both products are similarly easy to administer. The true FirstClass client/server architecture facilitates all administration through the graphical FirstClass client software for Windows or Macintosh, regardless of the platform of the server. None of the administration forms will change with the Windows server (save a substitution of "C:" for "Hard Disk," etc. where applicable.) Current FirstClass clients will work identically with the Windows server.

The backup and restore process of Windows server-based FirstClass Post Offices is significantly quicker and easier than the process for Macintosh. A Macintosh backup procedure called Post Office Map, for instance, is not required on Windows.

Q: What hardware requirements will the FirstClass Windows server have?

A: The FirstClass server for Windows 3.1 will require a 386 or better CPU, running Windows 3.1 or better, with at least 8 MB RAM and as much hard drive space as possible.

The FirstClass server for Windows NT will require a 386 or better, running Windows NT 3.5 or later, with at least 16 MB RAM and as much hard drive space as possible.

Q: What serial expansion hardware will the Windows server recognize?

A: The Windows server will support the market-leading DigiBoard serial expansion hardware and may support other manufacturers' hardware upon its release. Because PC serial expansion is more scalable than Macintosh, the Windows server -- particularly the version for NT -- will be able to accommodate many more simultaneous modems than the current Macintosh server.

Q: Will the Windows server work with existing FirstClass gateways?

A: The FirstClass Windows server will work with existing Macintosh-based FirstClass gateways. Third party developers, on the other hand, are working on Windows versions of their shipping FirstClass products. TGF Technologies of Burlington, Vermont, Delphic Software of Redlands, California and World Connect of Toronto all plan to release Windows versions of their FirstClass gateways and extensions.

Q: How much will the FirstClass Windows server cost?

A: The FirstClass server for Windows 3.1 will be priced at \$95, the same as SoftArc's server for Macintosh. The server will include a license for two users and will also include Windows platform licensing and IPX protocol licensing. Additional user licenses (starting at \$395 for five users) and additional platform and protocol options will be sold separately.

Q: When will the FirstClass Windows server begin shipping?

A: The FirstClass Windows server is currently in beta testing and is scheduled to ship in the second quarter of 1995.

SoftArc Inc.  
Global Area Communications

100 Allstate Parkway, Markham, Ontario, CANADA, L3R 6H3  
1902 Ridge Road, #325, West Seneca, New York, USA, 14224

Tel: 905-415-7000 Fax: 905-415-7151 FirstClass: 905-415-7070  
Internet: [sales@softarc.com](mailto:sales@softarc.com)

## FARGO Introduces 600x300 DPI Wax Thermal/Dye-Sublimation Color Printer

EDEN PRAIRIE, MN - FARGO Electronics, Incorporated, is introducing the PrimeraPro Color Printer, an affordable dual-function dye-sublimation and wax thermal transfer color printer for the Macintosh or Windows. PrimeraPro delivers photo-realistic, 24-bit color dye-sublimation prints and fast, inexpensive wax thermal transfer proofs at 600 x 300 dots-per-inch (dpi). Adobe Postscript Level 2 is optional.

"We recognized that LocalTalk, Ethernet and Adobe Postscript Level 2 are important to our users," said Mark D. Strobel, FARGO's Vice President of Sales and Marketing. "These features have been requested often since the introduction of our popular entry-level printer, the Primera Color Printer."

### Low Price and Innovative Features

Priced at \$1,895.00 (U.S. suggested retail), PrimeraPro is particularly well-suited for artists, designers, illustrators, CAD users, ad agencies and other graphics professionals who need to produce color output for proofing and client presentation. Its dye-sublimation and wax thermal print modes produce vastly superior print quality compared to other low-cost color printers. Despite its low price, PrimeraPro is the world's first desk-top dye-sublimation color printer at any price to offer 600x300 dpi resolution.

"Until now, serious graphics users had very few choices for printing high-quality proofs of their work. They usually had to send out to expensive service bureaus. Or, they had to be content with ink jet print quality," says . "PrimeraPro delivers professional, continuous-tone output that previously was available only from high-end dye-sublimation color printers costing \$8,000 or more."

PrimeraPro includes two different print modes: Highest Quality at 600x300 dpi and Regular at 300x300 dpi. Dye-sublimation, wax thermal transfer and monochrome (black) inks are supported in both resolutions. The printer will image on A or A4-size pages with a maximum printable area of 8.5" x 11" (210 x 297mm) on plain laser paper, transparency film, dye-sublimation media and even T-shirt transfer paper.

"PrimeraPro's color output, in either dye-sublimation or wax thermal transfer, is stunning," says Strobel. "You've really got to see it to believe it. But besides color printing, PrimeraPro is also ideal for standard monochrome text output. With this level of resolution, and with our new flat black monochrome ribbon along with plain laser paper, it's also a great printer for desktop publishing, word processing, or virtually any other task you give it."

Multi-Platform Support, Optional Adobe Postscript Level 2

PrimeraPro is available for Macintosh or Windows. The Macintosh version ships with an Apple LocalTalk/RS-422 serial interface. The Windows version has a Centronics-type parallel interface. An Ethernet interface is optional. In addition to the drivers for Macintosh (PowerPC compatible) and Windows 3.1, there is also a driver available for Amiga. The Macintosh driver supports Apple's ColorSync color matching software. Genuine Adobe Postscript level 2 is available as an option for \$399.95 (U.S. suggested retail).

PrimeraPro is now shipping through FARGO's worldwide network of Authorized Resellers. For further information, contact FARGO at 1-800-327-4622. Outside the USA and Canada, call (612) 941-9470 or FAX (612) 941-7836.

Headquartered in Eden Prairie, MN, FARGO Electronics, is a leading developer and manufacturer of wax thermal transfer and dye-sublimation color page printers. FARGO does business in more than 80 countries and maintains one of the largest reseller networks in the color printer business today.

FARGO Electronics, Inc  
7901 Flying Cloud Dr  
Eden Prairie, MN 55344  
Phone: (612) 941-9470, 1-800-327-4622, FAX: (612) 941-7836

## LINUX INSTALLATION AND GETTING STARTED

November 25, 1994 -- Specialized Systems Consultants, Inc. (SSC) announces publication of Linux Installation and Getting Started, a manual applicable to any distribution of the Linux system. Linux Installation and Getting Started, written by Matt Welsh, Coordinator of the Linux Documentation Project, is useful for Unix novices and gurus alike.

Linux is a freely redistributable POSIX-compliant operating system that runs on ordinary Personal Computer hardware. A cooperative effort over the Internet has produced this Unix-like system that compares favorably with commercial Unix distributions.

The book includes the history of Linux, software features, design philosophy, hardware requirements to run Linux, obtaining and installing Linux, and system maintenance. New to Version 2.2.1 of this manual is an update which includes the specifics of installing a Slackware-based distribution.

Perfect Bound, 6 3/4" x 9" 262 pages. Retail: \$12.95 with quantity discounts available. ISBN: 0-916151 -78-6. Available January 2, 1995.

Specialized Systems Consultants Inc.  
P.O. Box 55549  
Seattle WA 98155  
(206) 527-3385, Fax: (206) 527-2806  
Email: sales@sc.com

## Best-selling Author Assesses the Promise of the PowerPC

Gulf Breeze, FL -- In *The PowerPC Revolution!* best-selling author Jim Hoskins documents the introduction by Apple, IBM, and Motorola of the new PowerPC family of microprocessors, one of the most important and far-reaching developments in the history of personal computers. Hoskins presents the historical, technical, and business dimensions of the PowerPC breakthrough in a well-organized, fully illustrated, and easy-to-read volume that will help technicians and laypeople alike plot their course in the new age of the PowerPC.

In October 1991, Apple, IBM, and Motorola joined forces to develop the PowerPC family of microprocessors based on the RISC reduced instruction set computing architecture, launching what Hoskins considers "the first credible assault on the dominance of Intel-based hardware and software in personal computers." (The chips of both Intel and Motorola, which remain dominant because of their use, respectively, in IBM PCs and clones and in Apple Computer's popular Macintosh systems, are based on CISC complex instruction set computing architectures.)

*The Power PC Revolution!* briefly traces the history of the personal computer and the evolution of the Apple/IBM/Motorola alliance. As Hoskins points out, while each partner seeks to harness the improved performance of the RISC architecture to such applications as text-to-speech, speech recognition, multimedia, and teleconferencing, they have different strategies for doing so. IBM will launch a line of personal computers to compete head-on with Intel-based machines but will nonetheless continue to make Intel-based personal computers. Apple, on the other hand, has "bet its entire personal computer business on the PowerPC chips," says Hoskins.

*The PowerPC Revolution!* provides a detailed analysis of the characteristics, capabilities, and performance of the PowerPC architecture and of the first four PowerPC microprocessors: PowerPC 601; PowerPC 603; PowerPC 604; and PowerPC 620. Hoskins provides a step-by-step description of how the PowerPC chips function, using block diagrams, clear illustrations, and concise definitions.

A section on "The PowerPC and Software" reviews how the PowerPC alliance has addressed the issue of how to make the RISC systems compatible with widely used software and explores the limitations of their strategy to emulate existing applications. Hoskins reviews the PowerOpen Environment, an attempt to create a UNIX-based software specification based on the PowerPC architecture.

The last three sections of the report outline what each partner in the alliance brought to the project and what each sought to gain from it, reviewing the

existing product lines and often surprising business strategies of the three companies. Hoskins offers forecasts and previews forthcoming PowerPC products, including IBM's PowerPC Personal Systems line and Apple's new Power Macintosh family. IBM, Apple, and Motorola each reviewed the report for technical accuracy.

About the Author... Jim Hoskins, President of Maximum Press, is author of the best-selling Business Perspective series, which cover IBM's four primary product lines: Personal Systems; AS/400; RISC System/6000; and ES/9000, which have sold over 200,000 copies worldwide and have been published in eleven foreign languages. During a ten-year career at IBM, he was a design engineer and a member of the original development team for the Personal System/2.

About Maximum Press... Maximum Press specializes in publishing books that help businesses reduce the risks associated with selecting and applying computer technology to solve business problems. Written by technical experts in a well-organized and easy-to-read format, Maximum Press books take non-technical readers through a step-by-step evaluation of hardware and software in order to help them make intelligent computer purchasing decisions. The timely and fully illustrated MaxFacts series examines the hottest IBM products and technological issues. Maximum Press (originally H-Tech), was founded in 1985 by Jim Hoskins.

The Power PC Revolution! by Jim Hoskins

MaxFacts Special Report. 51 pages. 8" x 11 inches. ISBN 0-9633214-9-8. Pub. date August 15, 1994. \$26.95 plus shipping (\$3 for United States; \$5 for Canada). Add state and local sales tax in FL and TN.

## New Report Explores Power PC Based IBM RISC System/6000 Model 41

Gulf Breeze, FL -- Maximum Press has released *Exploring the IBM RISC System/6000 Model 41*, a highly readable and succinct overview of the history, architecture, capability, and performance of the new IBM RISC System/6000 Model 41. Written by best-selling author Jim Hoskins and published to coincide with the product release by IBM, this report guides the potential user through the changes and improvements to IBM's venerable RS/6000 family of servers and workstations embodied in the Model 41, which utilizes the new PowerPC Architecture developed jointly by IBM, Apple, and Motorola.

*Exploring the IBM RISC System/6000 Model 41* begins with an executive summary and an introduction to the RS/6000 family and to the new Model 41W and 41T workstations. RS/6000 workstations are widely used for applications that use complex, computer-generated graphics and extensive mathematical calculations, including computer-aided design, mathematical modeling, advanced desktop publishing, and statistical analysis.

The new Model 41, while compatible with the existing UNIX-based RS/6000 System systems, uses the first PowerPC microprocessor, the PowerPC 601. Hoskins assesses the overall performance of the Model 41, reviewing IBM benchmark tests of various RS/6000 models. He also provides a helpful comparison of RISC (Reduced Instruction Set Computing) architecture, used in the new PowerPC Architecture, with the more traditional CISC (Complex Instruction Set Computing) architectures used in Intel 80X86 and Motorola 680X0 microprocessors.

The bulk of the report is devoted to exploring the components, features, and capabilities of the Model 41. Hoskins reviews the PowerPC Architecture, introduces the new PowerPC family of microprocessors, and examines in detail the PowerPC 601 microprocessor, used in the Model 41. He examines how the Model 41 manages memory and highlights the benefits (and costs) of its 52-bit virtual memory addressing scheme. He evaluates the graphics capabilities of the Model 41, offering an introduction to the basic hardware, software, and price-performance aspects of computer graphics. Finally, Hoskins examines the four types of storage commonly used with the Model 41: diskette, hard disk, tape, and optical.

*Exploring the IBM RISC System/6000 Model 41* has been extensively reviewed for technical accuracy by IBM and will be invaluable to current and potential RS/6000 users assessing their hardware options.

About the Author... Jim Hoskins, President of Maximum Press, is author of the best-selling Business Perspective series, which cover IBM's four primary product lines: Personal Systems; AS/400; RISC System/6000; and ES/9000,

which have sold over 200,000 copies worldwide and have been published in eleven foreign languages. During a ten-year career at IBM, he was a design engineer and a member of the original development team for the Personal System/2.

About Maximum Press... Maximum Press specializes in publishing books that help businesses reduce the risks associated with selecting and applying computer technology to solve business problems. Written by technical experts in a well-organized and easy-to-read format, Maximum Press books take non-technical readers through a step-by-step evaluation of hardware and software in order to help them make intelligent computer purchasing decisions. The timely and fully illustrated MaxFacts series examines the hottest IBM products and technological issues. Maximum Press (originally H-Tech), was founded in 1985 by Jim Hoskins.

Exploring the IBM RISC System/6000 Model 41 (41W & 41T) by Jim Hoskins. MaxFacts Special Report. 47 pages. 8" x 11 inches. ISBN 0-9633214-8-X. Pub. date May 24, 1994. \$19.95 plus shipping (\$3 for United States; \$5 for Canada). Add state and local sales tax in FL and TN.

## LEADER TECHNOLOGIES ANNOUNCES POWERMERGE 2.5 RELEASE DATE

October 15, 1994 -- Newport Beach, California - Leader Technologies Inc. announced today the features that will be included with the release of version 2.5 of PowerMerge, its industry leading file synchronization and online backup program for the Macintosh. PowerMerge 2.5 is expected to be available to the end user and reseller channel by the first week of January, 1995.

Nelson Greenwood, Vice President of Marketing for Leader Technologies said, " we have had a very large number of requests for certain features that we have incorporated into this upcoming release, two of which are the native PowerPC version, and the ability to schedule synchronization. We think these new features will make PowerMerge more versatile and will utilize the power of the new Macintoshes." New features of PowerMerge 2.5 include:

**Native Mode for Power PC-** PowerMerge 2.5 will be a native version for the Power Macintosh.

**Automatic Time Operation-** With its new scheduling features, users can set PowerMerge to automatically synchronize designated Macs at a desired time. These features allow the user to schedule updates one time, on a repeating schedule, or at repeating intervals throughout the day.

**Automatic Synchronization and Backup Upon Volume Mount-** PowerMerge 2.5 can be set to automatically synchronize and backup preselected files, folders, or disks upon mounting of a particular disk volume. Users with transportable disk drives will find this invaluable when carrying data from one location to another.

**Multiple Document Selection For Deletes-** Users can select any number of files for the purpose of deleting them directly from the PowerMerge window.

**Multiple Root Documents in a Single PowerMerge Setup Document-** Multiple Macs can be synchronized across a network in a single step. This will allow system managers to select a single folder or disk on the server, and have its contents synchronized with multiple Macs on the network. This is very useful when multiple Macs need to be updated at once, such as when a new version of a software program is released.

Other features in this release include:

- \* Drag and Drop Operations From the Finder to PowerMerge Windows
- \* Increased Support for Archiving
- \* Increased Status Information

The suggested retail price of PowerMerge 2.5 is \$149.00. Upgrades to the new version are available to registered users for \$34.95. Leader Technologies is headquartered in Newport Beach, California, 714-757-1787, and is dedicated to producing superior software for the Macintosh.

Leader Technologies Inc  
4590 MacArthur Blvd, Ste 550  
Newport Beach, CA 92660  
714-757-1787, fax 714-757-1777

PO Box 91241  
Albuquerque, NM 87199  
505-822-0700, fax 505-822-1241

## ONE-ON-ONE OFFERS PARADOX 5 TRAINING ON STEP-BY-STEP AUDIO CASSETTES

Addison, IL -- New users of Paradox 5 software can now learn database management by listening to self-study tapes from OneOnOne Computer Training.

Long the leader in audio-based instruction for personal computers, OneOnOne has updated its best-selling Paradox course to cover Borland's newest Windows version. OneOnOne's new hands-on course is presented on 4 audiocassettes with a data disk and quick reference guide.

"What we've provided is like an intensive 2-day seminar in a box," OneOnOne president Lee McFadden said, "with the advantage that more than one person can benefit. With our unique FlipTrack tape format, optional material is available at a flip of the tape, so a single course can meet a variety of individual needs."

Step-by-step, the user will learn to add, edit, sort and delete records; use queries; use the Experts; attach graphics files; create and customize forms and reports; create and link tables; create calculated fields; write and run scripts; and much more.

How to Use Paradox 5 for Windows sells for \$ 175 (Canadian \$255) and is available directly from the publisher. For more information, contact OneOnOne Computer Training, 2055 Army Trail Road, Addison, IL 60101, or call (800) 424-8668.

OneOnOne Computer Training is a division of Mosaic Media, Inc., publisher of software training bulletins and more than 60 audio-based courses that teach popular DOS, Windows and Macintosh software.

## AIMTECH CORPORATION INTRODUCES ICONAUTHOR 6.0

### Major Upgrade Provides Cross-Platform Multimedia Compatibility and Relational Database Access using SQL

NASHUA, NH, December 1, 1994 -- AimTech Corporation, a leading developer of cross-platform multimedia products, today introduced IconAuthor 6.0 for Windows, the latest release of the company's flagship solution for creating interactive enterprise-wide multimedia applications.

IconAuthor 6.0, a full-featured, icon-based authoring system, adds cross-platform file format compatibility, improved animation capabilities, and database accessibility using Structured Query Language (SQL). Using IconAuthor, non-programming multimedia professionals can create interactive multimedia applications or enhance existing enterprise applications by incorporating text, graphics, animation, audio, video, and databases into such applications as computer-based training, performance support systems, and self-service kiosks.

"AimTech was the first multimedia software company to offer cross-platform multimedia authoring development and playback. Now, IconAuthor 6.0 is the first authoring system that allows an application created on one platform to be played on another without a conversion process," said Usman Ismail, president and CEO of AimTech. "By eliminating the conversion process, applications can be developed once and easily moved to other enterprise systems. IconAuthor 6.0 is the only tool to provide this capability across Windows, UNIX/Motif, OS/2, and Macintosh."

With database connectivity using SQL, IconAuthor becomes a powerful environment for developing client/server applications that integrate enterprise data and applications. "IconAuthor now has the ability to access powerful relational databases like Oracle, Informix, Ingres, Sybase, and Microsoft Access, in a straight-forward and easy manner," said Ismail.

IconAuthor 6.0 also improves IconAnimate, the animation editor that comes with IconAuthor. Outfitted with a new user interface in this release, IconAnimate is the only cross-platform (Windows/Motif) animation solution available today.

New objects for system management, variable usage and distributed security, and several new properties added to existing objects increase the types and scope of applications that can be created with IconAuthor. In addition, IconAuthor now supports fractal images, contains a new text editor, and offers improved printing capabilities.

Available in December, 1994, IconAuthor 6.0 for Windows includes editors for

creating text/objects, video and animation; free internal run-time licenses, and 90 days of technical support. Priced at \$4995, IconAuthor is available directly from AimTech Corporation. Special pricing is available for educators, course developers, and resellers. The cost to upgrade from IconAuthor 5.1 to IconAuthor 6.0 is \$695. A discounted upgrade price of \$495 is available through December 31, 1994, for existing IconAuthor 5.1 customers.

AimTech Corporation, a privately held company with offices in Nashua, N.H., Chicago, Denver, London, Los Angeles, and Washington, D.C., develops and markets multi-platform software products for creating interactive multimedia applications.

AimTech Corp  
20 Trafalgar Square, Suite 300  
Nashua, NH 03063-1987  
603-883-0220, fax 603-883-5582

## SONIC ANNOUNCES INTELLISTACK 16, STACKABLE HUB WITH SNMP MANAGEMENT

Sunnyvale, CA, November 28, 1994 - Sonic Systems today announced the IntelliStack family of SNMP manageable, stackable Ethernet hubs with proprietary ESP technology. The IntelliStack is available in two versions: a Base version which contains the SNMP architecture and an Expansion version which stacks on top of the Base unit. Up to 4 IntelliStack 16 Expansion hubs can be stacked on top of the IntelliStack 16i Base hub to create one logical hub with 85 ports, all of which can be managed via SNMP. Sonic Systems' LANscape Lite SNMP console for the Macintosh is included with each IntelliStack 16i Base hub for complete SNMP management.

Each IntelliStack hub has sixteen 10Base-T ports and an AUI backbone port. Sonic offers Thin Coax (10Base-2) and Fiber Optic (10Base-F) backbone modules which can be attached to the AUI port to connect the IntelliStack to the network backbone. A Bridge module is also available from Sonic to segment Ethernet traffic from the IntelliStack workgroup to the network backbone for increased performance.

IntelliStack hubs utilize Sonic's proprietary Ethernet Stacking Protocol, or ESP, to quickly and easily stack up to five hubs to create one logical hub with 85 ports. IntelliStack hubs simply snap together with mating connectors similar to the NuBus or PDS connectors found in many Macs.

The IntelliStack 16i Base hub, which contains the SNMP architecture, comes complete with all necessary hardware and software to effectively manage all of the devices connected to the hub. Up to four IntelliStack Expansion hubs can be stacked on top of the Base hub to increase the number of devices connected to the hub. All devices connected to any of the 85 ports on the IntelliStack can then be managed via the Base hub.

The IntelliStack supports MIB II, the 802.3K Repeater MIB, and a private Sonic MIB for SNMP management. This allows the IntelliStack to be managed from any network management application which supports MIB compiling (such as Sun Microsystems' SunNet Manager or Hewlett Packard's OpenView). A feature reduced version of Sonic's LANscape SNMP is included with the IntelliStack Base hub. LANscape Lite SNMP allows the IntelliStack to be managed from any Macintosh on the network with an easy to use graphical interface. LANscape's graphical interface can also be used to manage remote IntelliStack units connected via a modem. LANscape presents a Topology window of the network and allows the administrator to enable/disable ports, configure the hub, view and set MIB variables, set alarms for notification of significant network events, and track MIB variables to optimize network performance. Users can upgrade to the full featured version of LANscape SNMP, which can manage any SNMP device via TCP/IP

or AppleTalk, by contacting Sonic.

"The IntelliStack is yet another example of how Sonic can take a complex product and make it easy to use without sacrificing functionality," said Sudhakar Ravi, Vice President of Engineering at Sonic. Mr. Ravi continued, "With features such as ESP and LANscape SNMP, the IntelliStack offers an easy way to grow and manage any Ethernet network."

The retail price of the IntelliStack 16i Base hub is \$1,299 and the IntelliStack 16 Expansion hub is \$999. The retail price of the backbone modules are \$69 for Thin Coax and \$299 for Fiber Optic. The retail price of the Bridge module is \$599. Users can upgrade to the full featured version of LANscape SNMP for \$499 by contacting Sonic directly.

The IntelliStack comes with a Lifetime Warranty and unlimited technical support. All Sonic Systems products are available to end-users from Authorized Apple Dealers, MacWarehouse, MacConnection, Fry's Electronics, Mac's Place, MacZone, LLB, and MacMall. Resellers can purchase Sonic Systems' products from Ingram Micro, Tech Data and Merisel.

Founded in January, 1991, Sonic Systems, Inc. is one of the original suppliers of high performance networking products for Apple's Macintosh computer, and is dedicated to supplying the best values in high performance networking technology to end users. Sonic's product offerings include microPrint, a line of LocalTalk to Ethernet hardware bridges; LANscape SNMP, an SNMP console for the Macintosh; The Diskless Mac, remote booting software for the Macintosh; a complete line of Ethernet cards; The AAUI Series, a comprehensive line of Ethernet transceivers; The Bridge Series, software to bridge LocalTalk to Ethernet, TokenRing, FDDI or ISDN networks; Server Sentry, software for remote management/administration of AppleShare; and Print Juggler, software for monitoring printing on networked printers; Radar, a comprehensive network management package.

For more information on Sonic Systems or its line of Macintosh networking products, please call (408) 736-1900, fax at (408) 736-7228, or E-mail to [sales@sonicsys.com](mailto:sales@sonicsys.com).

Sonic Systems, Inc  
1150 Kifer Road, #201  
Sunnyvale, CA 94086

## SunSoft and AGE Logic Announce Strategic Alliance

### Partnership Provides New Solutions for Customers Needing PC-to-UNIX Connectivity

Mountain View, CA, December 6, 1994 - SunSoft, Inc., a leading provider of PC-to-enterprise networking software and AGE Logic Inc., a leading developer of X Windows software, today announced that they have entered into a long-term strategic alliance.

Under terms of the agreement, SunSoft will develop and market PC-to-UNIX connectivity products based on AGE's advanced PC X server technology. In return, AGE will leverage SunSoft's industry knowledge and technical expertise gained from its large user base of Solaris customers, many of whom are currently integrating heterogeneous PC LANs and UNIX networks.

According to Jim Billmaier, vice president and general manager of SunSoft's Network Products Business, "Providing customers with a complete solution for integrating their PC and enterprise networks is a top priority for SunSoft. AGE's superior technology and industry experience will significantly strengthen our product offering in this area. We look forward to a long and mutually beneficial relationship."

Peter J. Shaw, president and CEO of AGE Logic and member of the X Consortium's Board of Directors, echoes Billmaier's enthusiasm. "SunSoft's commitment to delivering PC-to-UNIX solutions uniquely complements AGE's strength in providing our technology partners with leading edge X window and connectivity software for the PC. Equally important, SunSoft's leadership position in the UNIX market will assist greatly in the widespread adoption of PC X server software."

The first tangible result of the alliance is the SolarNet(r) PC-X product from SunSoft, introduced today. SolarNet PC-X is an X server package that allows MS Windows users to easily and transparently access Solaris(r)/UNIX-based graphical and text applications.

SolarNet PC-X is the latest member of SunSoft's SolarNet family of PC networking products, the most complete and powerful network solution for integrating and administering PCs heterogeneous environments.

SunSoft Inc.

SunSoft, Inc., headquartered in Mountain View, CA, is a subsidiary of Sun Microsystems, Inc., with offices worldwide. SunSoft's charter is to design, market, sell and support the industry's highest-quality software environment for enabling businesses to gain a competitive advantage through information

systems. SunSoft delivers a suite of solutions that easily and cost-effectively connect, integrate and manage large enterprise environments. The products are licensed by SunSoft and distributed through major computer manufacturers and resellers worldwide.

AGE Logic, Inc.

AGE Logic, Inc., headquartered in San Diego, Calif., is a leading developer and supplier of X Window System software, and provides a full family of high-performance X server products for PCs and embedded systems designed to enhance PC-to-UNIX and Macintosh-to-UNIX connectivity. Offered under the XoftWare(r) brand name, AGE's X server software products are available for Microsoft Windows, Windows NT, Macintosh, Power Macintosh, PowerPC, OS/2 and DOS-based PCs. AGE's embedded products include ATX, a multi-tasking kernel for X based graphical environments, and are available on a wide variety of 32 and 64 bit RISC microprocessors. AGE was selected by the X Consortium to develop the sample implementation of the X Image Extension (XIE) for UNIX-based imaging.

Why just listen to your music when you can watch it too? Vocal CD v1.41 is an audio CD player for Windows 3.1 that allows you to enter the words to the songs on your CDs, time them to the performer, and it will scroll the words across the screen as the CD plays.

Vocal CD has all the usual features, such as shuffle, program, and repeat play, plus CD/Track names, track delete, and resume and auto play.

New features in Version 1.41 includes...

- \* New on-line database...
  - expanded size capability (virtually unlimited)
  - search for track feature (using fuzzy logic)
- \* Smaller screen footprint (some buttons moved off the main window into an automatically opening drawer)
- \* Autoplay
- \* Enhanced window-size management

Plus, new in 1.4X...

- \* Programmable playlists, plus a powerful fit-to-tape feature.
- \* File compression, offering 57% and better file size reduction over the old song file format.
- \* Online Help via <F1>

Special requirements: Mouse and CD-ROM drive.

ShareWare. Uploaded by the author to SimTel and other Internet sites.

Robert Ray  
particle@ix.netcom.com

## CREATE MAIL THAT CANNOT BE IGNORED with 3-D PAPER AND VIEWER MAILING ENVELOPES

Wheeling, IL -- Micro Format, Inc., a manufacturer of specialty paper products, has introduced VIRTUAL 3-D PAPER and VIEWER MAILING ENVELOPE KITS.

Designed for those looking for "something unusual" in a stationery paper product, VIRTUAL 3-D Paper is available in 3 different designs -- Tri-fold, Background and Drapes. Kits include 3-D Paper, Viewer Mailing Envelopes, a pair of 3-D Viewing Glasses plus an Instruction Pamphlet. Suggested Retail is \$19.95 per kit.

"I guarantee that hit envelope gets opened," claims Steve Singer, President of Micro Format, Inc. "Because a 3-D VIEWER has been manufactured as part of the mailing envelope, anyone who receives this envelope in the mail is sure to want to see what is inside." "Once opened," Singer continues, "the viewer can be easily removed and used to read the contents." All of the information printed on VIRTUAL REALITY/3-D Paper appears to float above the sheet."

Watch your promotional material come alive. This exciting new product is great for New Product Announcements, Advertising Flyers, Newsletters, Invitations, Presentations, letters. Write, Draw, or Print with a Pen, Marker, Crayons, or Laser/Ink Jet Printer. When viewed thru the special 3-D viewer, words and illustrations appear to float above the sheet.

Each kit contains 50 sheets of 3-D Paper, 25 Viewer Mailing Envelopes, a pair of 3-D Viewing Glasses plus instructions.

VIRTUAL REALITY PAPER and VIEWER ENVELOPE KITS are available direct from the manufacturer. For additional information, contact Micro Format at 1-800-333-0549.

MICRO FORMAT, INC. is a leader in the specialty computer paper business, manufacturing products such as BANNER BAND, Pageless Computer Paper on rolls, LASER PARCHMENT, LASER GRANITE, LASER MARBLE and SUPER COLOR Ink Jet Paper.

Now, enter the world of Virtual 3-D ... and you won't believe your eyes!

Micro Format Inc  
830-3 Seton Court  
Wheeling, IL 60090-5772  
708-520-4699, fax 708-520-0197

## Synopsys Launches Its Accord for Microsoft Excel Chemical Spreadsheet on the Macintosh and Power Macintosh

1st December 1994 -- Synopsys Scientific Systems Ltd. today launched its innovative chemical spreadsheet, Accord for Microsoft Excel, on the Macintosh and Power Macintosh platforms. Now Macintosh users can begin to benefit from the same powerful chemical spreadsheet capabilities as the thousands of users of the Microsoft Windows version of Accord for Excel.

Accord is unique in providing scientists with a full range of chemical facilities to manage, analyse and search chemical structures and associated data within Microsoft's popular spreadsheet environment. With Accord for Excel users can store chemical structures and other chemical objects, such as substituents, directly in spreadsheet cells with retained "chemical awareness". This allows chemically-meaningful functions to be linked to chemical cells for calculating derived properties, such as molecular weight, percentage composition or Log P. In essence, Accord transforms Excel into a fully functional chemical spreadsheet - something that chemists have long been demanding.

Accord for Excel offers a wealth of chemical data analysis and manipulation facilities to assist research scientists in correlating and assimilating property trends and structure-activity relationships. Access to Accord facilities is via an additional Chemistry menu in Excel and an Accord toolbar. Context-sensitive help is seamlessly integrated into Excel's industry standard spreadsheet environment, as are all other Accord facilities. This means low training & support costs as compared to other chemical software packages with proprietary user interfaces.

Chemical tables in the spreadsheet can be sorted based on structural similarity and filtered by chemical substructure. Users can create R-group tables that contain chemical substituent designations for a given core structure. Included with the package is a library of over 250 common substituents and associated physicochemical properties. New substituents and property fields can be defined by users. Similarly, users can define their own chemical functions thanks to Accord's open architecture.

Dr. Glen Hopkinson, Managing Director at Synopsys, commented: "The Accord for Excel chemical spreadsheet complements and extends the native capabilities of Microsoft Excel and works seamlessly with other chemical drawing and database packages. On the PC, Accord for Excel has already become an indispensable aid to discovery scientists focused on turning research data into useful information. Now Macintosh and Power Macintosh users can begin to benefit from its unique chemical spreadsheet capabilities."

Development of the Macintosh version of Accord for Excel has been facilitated by Synopsys' status as a Microsoft Solution Provider and as an Associate of the Apple Developer Program. Gary Hunt, Business Development Manager of Microsoft's Solution Developers Group, commented: "Microsoft's Solution Provider initiative is all about working closely with our strategic partners to enable superior customer solutions, that utilise Microsoft core technology, to be brought to market. Our relationship with Synopsys is fundamental to providing Microsoft Excel users with the functionality that is required to manage, analyse and manipulate chemical data."

Standard chemical editors, such as ChemDraw and ISIS/Draw, can be used to enter and modify structures or queries. And chemical data, stored in database systems such as MACCS and ISIS, can easily be imported into an Accord-enabled Excel spreadsheet with retained chemical awareness. Similarly, individual structures or whole chemical data tables can be exported in a variety of standard formats, such as SD, SMD and SMILES. Using Excel's macro language or Visual Basic for Applications advanced applications can be developed that seamlessly access data stored in other chemical packages from within the Accord for Excel environment.

#### Accord for Excel - Compatibility, Pricing and Availability

Accord for Excel is compatible with both Microsoft Excel 4.0 or higher and is available for the Microsoft Windows, Macintosh and Power Macintosh platforms at an introductory price of 495 Pounds (\$695 in the USA). A 40% discount is available to academics.

Synopsys Scientific Systems is a leading provider of computerised scientific information products and services to the Fine Chemical and Pharmaceutical Industry. Synopsys flagship Accord software range is used worldwide by scientists to transform raw chemical data into useful information.

Synopsys Scientific Systems Ltd  
116 Village Blvd, Suite 200  
Princeton, NJ 08540  
609-734-7431

175 Woodhouse Lane  
Leeds LS2 3AR  
United Kingdom  
+44(0)113 245 3339, fax +44(0)113 243 8733  
Internet: sales@synopsys.co.uk

## BSO/TASKING PROVIDES MIGRATION PATH TO NEW INTEL MCS 251 MICROCONTROLLER

Dedham, Mass., December 2, 1995 -- Today BSO/TASKING announced it is providing an instant path for 8051 users to migrate to the MCS 251, Intel's new microcontroller featuring significant performance improvements over the 8051 architecture.

BSO/TASKING will deliver an ANSI C based tool kit called the 'Starter Pack' which includes a binary mode compiler and a simulator debugger for direct migration of 8051 applications to the faster MCS 251 architecture. No C or assembly language changes are necessary to take advantage of the 5 times performance improvement of the MCS 251 in binary mode over the standard Intel 8051 architectures.

Stephen Whalley, Manager of US Operations, 8 bit Products, for Intel Corporation, comments, "The tools from BSO/TASKING will enable Intel users to take advantage of the significant performance improvements of the MCS 251 architecture without changing their existing code. This ability adds tremendous value to a customer's existing investment in hardware and software."

BSO/TASKING will also deliver the 'Power Pack' source mode compiler which produces code for the full 251 architecture providing up to a 30 times performance improvement over the Intel 8051 architectures, allowing users to take full advantage of both the MCS 251's increased speed and complete instruction set, with only minimal rewriting of existing code. The 'Power Pack' features an efficient ANSI C source mode compiler with powerful 251 extensions, supporting the full instruction set and 16Mb address space of the new MCS 251 microcontroller.

Both the 'Starter Pack' and the 'Power Pack' will feature the new CrossView Windows 251 Simulator Debugger for high level language debugging in C and assembly. CrossView offers a cost-effective way of providing engineers with debugging stations for software testing and evaluation, allowing them to test software in a known and repeatable environment before hardware is available. Engineers running binary code in the debugger can review the performance advantages they would gain by switching from binary mode to source mode.

Peter Hoogenboom, 251 Project Manager for BSO/TASKING, adds, "Our CrossView debugger provides engineers with a powerful tool that will indicate exactly at what point it would benefit them to change to MCS 251 source mode and/or switch to the Power Pack compiler."

The 'Starter Pack' is available on PC only, pricing starts at \$395. The 'Power

Pack' will be available on PC, SUN SPARC and SUN Solaris and HP9000 HPUX. Pricing and release date to be announced.

BSO/TASKING is a leading developer and supplier of integrated software development tools for the embedded systems market, supporting a wide range of CISC, RISC and DSP semiconductor technologies. Headquartered in Dedham, Mass., BSO/TASKING has offices worldwide, located in the Netherlands, London, Milan, Stuttgart, Paris and Tokyo.

For more information contact BSO/TASKING at 617-320-9400, 333 Elm Street, Dedham, MA 02026; FAX 617-320-9212.

## PowerBASIC Upgrades QuickBasic Customers

Las Vegas, Nev. ----November 14, 1994 ---- As Comdex opened, PowerBASIC, Inc. today announced the release of PowerBASIC 3.1, designed as an upgrade for all QuickBasic and PowerBASIC owners. With this release, PowerBASIC offers improved compatibility with the QuickBasic dialect. QB programmers can easily move up to this advanced compiler, one which promises continued development for DOS, Windows, and other platforms. At the same time, existing PowerBASIC customers will enjoy wider access to the large base of existing QB source code.

From a technical perspective, programmers will benefit from the advancements in version 3.1. Until now, BASIC programmers were confined to strict coding conventions, with no flexibility in the number nor type of function parameters. Beginning with this release, PowerBASIC programmers have total control to define C-style functions, both within their BASIC code, and in external libraries. Any or all parameters may be declared as optional by enclosing them in square brackets, while parameter types may even be loosely defined as "ANY". Other enhancements include improved code optimization, 64-bit equates, 64-bit radix numerics (binary, hex, and octal), larger source files, expanded online help, and many free source code libraries and utilities.

"Ever since this product was introduced by Borland as Turbo Basic, programmers have come to expect new technologies from us", explained Bob Zale, President of PowerBASIC, Inc. and creator of the compiler. "But there are still thousands of programmers using QuickBasic who feel abandoned, with no upgrade available for their aging compiler. One of our primary goals with version 3.1 is to provide an easy path to a state-of-the-art programming tool".

While version 3.1 is far more compatible with QB syntax than any prior release, some differences can not be fully reconciled due to the extensions already implemented in PowerBASIC. A QB upgrade utility is provided to identify most of the remaining differences in dialect. Once they have been identified, programmers can easily resolve the few remaining conflicts. The QB upgrade utility is one of many written in PowerBASIC and provided in source code format, so programmers can customize it to suit their personal taste.

Another utility included with PowerBASIC 3.1 allows immediate formatting of source code in a consistent, more readable fashion. Spacing, indenting, keyword casing, and more, can all be controlled by the programmer. Other free code with this version offers complete runtime mouse support, advanced math formulas, and high-level serial port communication. Likewise, all of this code is provided in source format to allow quick and easy

modification.

PowerBASIC 3.1, with a suggested retail price of \$ 149, is available to registered owners of PowerBASIC 3.0 for \$19.95. QuickBasic customers can upgrade to PowerBASIC for \$99 by calling (800) 780-7707 or (408) 659-8000, or by FAX at (408) 659-8008 with proof of QB ownership. PowerBASIC 3.1 is also available from selected programming retailers and direct marketers.. PowerBASIC, Inc. is a privately help corporation based in Carmel, California.

PowerBASIC Inc  
235 Oak St, #21  
Brentwood, CA 94513

## IDD's Amiga Smart Port - Plus & SmartPortCal Program

The Amiga Smart Port - Plus is an auto-switching game port interface system. Three connectors provide for mouse, digital joystick, and fully compatible IBM PC dual analog joystick game port. Simply press the button on the device to be used and automatic electronic switching does the rest. Two sets of X- and Y-axes trim adjustments are provided to set analog ports for maximum performance. Includes SmartPortCal software which allows the user to view all digital and analog system values, making adjustment of the four analog channels a snap. Two switches are provided to adjust between high, medium and low analog gain controls. For all Amigas with any version of Workbench. Includes selected analog upgrades, two 9-pin computer cables and a one year warranty. \$59.95

InterACTIVE Digital Devices, Inc  
6730 West Chicago Street, Ste. 5  
Chandler, AZ 85226  
(602) 940-0340

## IDDs' PC Pedals

The PC Pedals is a combination flying/driving pedal device and switching center for multiple game products. It is designed to be used with any game card equipped PC compatible computer. When used with the Amiga Smart Port, it is Commodore Amiga compatible. Although originally designed for professional applications, PC Pedals can be used to play most any driving or flying game. All of the major components of this product are constructed of steel for years of trouble-free operation. Dimensions are 17.5 X 10 X 12 in. with a net weight of approx. 22 lbs. In the drive mode, the pedals function independently as clutch, brake and accelerator. A steady four (4) inch range of motion produces true accelerator and clutch pedal response. Progressive stiffening produces true brake pedal response. In the fly mode, the outside pedals function dependently as rudder pedals. They are spring-centered, with a full travel of four (4) inches for precision flying maneuvers. The Mode Switch makes connecting and disconnecting wires and cables from your game port unnecessary. Simply press the Mode Switch and the solid state electronics will connect the required lines to your computer. A Resume Mode feature allows the user to continue the last mode of play. PC Pedals incorporates an expansion port to allow adaptation to future software packages. The pedal angle can be adjusted at the front corners. Includes a molded computer cable and a one year warranty. Also available in fly- and drive-only models. \$149.95 - \$249.95

InterACTIVE Digital Devices, Inc  
6730 West Chicago Street, Ste. 5  
Chandler, AZ 85226  
(602) 940-0340

## IDD's PC Steering Wheel R/X

The PC Steering Wheel R/X is a realistic reproduction of a race/sports car steering wheel. It is designed to be used with any game card equipped PC compatible computer. When used with the Amiga Smart Port, it is Commodore Amiga compatible. Although originally designed for professional drive training, the PC Steering Wheel R/X can be used to play most any driving game. All of the major components of this product are constructed of steel for years of trouble-free operation. The wheel measures 11.5 in. in diameter with a solid 1.2 in. cushioned grip. The housing is 6 X 4 X 6 in. with an overall net weight of approx. 5 Lbs. The PC Steering Wheel R/X can be used via IDD's Wheel-Single Clamping System (WSCS) or Universal Mounting Stand (UMS). The standard mounting angle of the WSCS is a comfortable 24 degrees. The wheel tilt can be adjusted to any angle using the UMS mounting plate. An 80 degree each-way full travel and spring centering make for realistic sport driving. The adjustable clamping system allows the "heaviness" of the drive to be changed. Two reversible switch modules are located on the ten and two o'clock spokes. Includes a molded computer cable and a one year warranty. \$129.95

InterACTIVE Digital Devices, Inc  
6730 West Chicago Street, Ste. 5  
Chandler, AZ 85226  
(602) 940-0340

## Internet Membership Kit Soaring off Shelves Ventana Media product tops Ingram Micro bestseller list

Chapel Hill, NC; November 2, 1994--Ventana Communications Group, Inc. announced that its Internet Membership Kit, Windows edition has landed as the number one bestselling personal productivity software on Ingram Micro's October bestseller list.

Complete with software that provides a graphical interface for common Internet tasks, the Internet Membership Kit includes a trial account with free online time via a toll-free number from CERFnet, along with clear, readable documentation from the bestselling Internet Tour Guide by Michael Fraase and The Internet Yellow Pages by Harley Hahn and Rick Stout. At street prices of around \$50, the result is an affordable, all-in-one set of Internet tools, access and guidance for any Mac or Windows user with a 9600 bps or faster modem.

"The Internet Membership Kit has performed far beyond the expectations of our retailers," said Fran Quigg, Ventana's director of sales. "Sales will climb even further over the holidays and as product rolls into additional channels."

Sales of the Internet Membership Kit have netted thousands of new customers for CERFnet, the Internet service provider that offers a trial Internet account with the purchase of the Kit. "It used to be expensive and difficult for people to try the Internet," said Kent England, executive director of network services at CERFnet. "Ventana Media's Internet Membership Kit is an easy way for people to get a real Internet account and try it for themselves."

Ventana Media is a division of Ventana Communications Group, Inc., a diversified publisher of computer-related information tools.

Ventana Media, PO Box 2468, Chapel Hill, NC 27515  
919-942-0220; 800-743-5369, Fax: 919-942-1140

## Ventana Publishes Mosaic Book with Online Companion

New book helps Internet users explore the World Wide Web

CHAPEL HILL, N.C., September 1, 1994 -- Mosaic, the Internet's 'killer app,' allows Internet users to move seamlessly between documents joined by hypertext links among far-flung computers that make up the Internet's World Wide Web. Ventana Press presents Mosaic Quick Tour, the first book to feature integrated print and online components.

Mosaic Quick Tour gives users a fundamental understanding of Mosaic and the Web, as well as hands-on instruction for locating, downloading, installing and using the software to explore both Web and non-Web sites, such as FTP sites and newsgroups. Mosaic software and related materials are accessible via the Ventana Media Visitors' Center on the Net.

The book also contains a section on beginning HTML programming, the "language the Web speaks," and teaches users how to create their own customized 'Home Page,' adding to the fun and convenience of using the Web. A comprehensive glossary explains Mosaic and Web terms.

Mosaic Quick Tour concludes with 'Site Seeing,' a guided tour through the practical and cool places to visit via Mosaic. The Online Companion is hyperlinked to all of these sites. In addition, Ventana Online maintains an archive of all of the software mentioned in the book. The URL is <http://www.vmedia.com/vvc/onlcomp/mosaicqt.html>.

Mosaic is a free software program that provides a visually appealing interface to the Internet's World Wide Web and allows the user to navigate the Web. It turns ordinary, computer-bland text into attractive, multimedia pages for viewing on the computer, with graphic images, fonts, sounds and, in some cases, video. The World Wide Web is an online hypertext system that spans the Internet. Hypertext, a non-linear publishing method, allows users to browse through passages of text, expanding items of interest on related topics with a simple mouse click. When expanding an item, users traverse a link to a new item which more than likely is stored on a different computer, perhaps thousands of miles away.

Mosaic Quick Tour is 175 pages, illustrated. Mac edition ISBN: 1-56604-195-3. Windows edition ISBN: 1-56604-194-5. List price: \$12.00. For orders in the U.S. only, call 800/743-5369.

Gareth Branwyn is a writer and multimedia designer. He is a regular contributor to Wired magazine, the senior editor of bOING bOING (a cyberculture humor rag) and the former Street Tech editor of Mondo 2000. He contributed to Flame Wars (Duke University Press, 1994) and the

forthcoming The Multimedia Home Companion (Warner Books). He is currently co-editing bOING bOING's Happy Mutant Handbook (Putnam Berkeley).

Ventana Online maintains an Internet presence for Ventana Communications Group, Inc. Ventana Press publishes books and other materials that help computer users become more productive, including The Mac Internet Tour Guide, The Windows Internet Tour Guide, The Mac Shareware 500, Voodoo NetWare and The Presentation Design Book. All titles are available in bookstores and by writing Ventana Press.

Ventana Press, PO Box 2468, Chapel Hill, NC 27515  
919-942-0220; 800-743-5369, Fax: 919-942-1140

## Ventana Online Open for Business on the World Wide Web

Chapel Hill, NC; November 2, 1994 -- Ventana Online, a new division of Ventana Communications Group, Inc., now provides information, software and support for computer users via the World Wide Web. Ventana Online furnishes the online components of the books and software developed by the other VCG divisions, Ventana Press and Ventana Media, as well as an opportunity to purchase VCG products. The Ventana Online home pages can be accessed via the World Wide Web at <http://www.vmedia.com>.

Ventana Online offerings currently include the Ventana Library and the Ventana Visitor's Center. The Ventana Library is an online catalog where viewers can learn about VCG products, create accounts and place orders. The Ventana Visitor's Center offers regularly updated information, software and support for computer users, with new publications and software added continually. Services at the Visitor's Center include:

- \* VENTANA'S NIFTY NET RESOURCE OF THE WEEK - showcasing innovative sites from the resources available throughout the Internet.

- \* VENTANA ONLINE COMPANION ARCHIVES - furnishing online elements of Ventana Press and Ventana Media products, including hyperlinked excerpts from books.

- \* VENTANA ONLINE SOFTWARE ARCHIVES housing annotated references to and downloadable copies of a variety of Internet freeware and shareware.

"The future of publishing and information distribution is inexorably linked to digital communications," Ventana Online Vice President Hiram Dixon "Dykki" Settle, III, said. "With our Online Companion to the Mosaic Quick Tour book and our Ventana Online site, VCG is taking advantage of the technology now to expand consumer services and enhance our products."

Ventana Online is a division of Ventana Communications Group, Inc., a diversified publisher of computer-related information tools.

Ventana Online, PO Box 2468, Chapel Hill, NC 27515  
919-942-0220; 800-743-5369, Fax: 919-942-1140

## Cutting-Edge Tools for Visual Basic

### Ventana Power Toolkit unlocks VB's most advanced capabilities

CHAPEL HILL, N.C., November 28, 1994 -- Visual Basic's thriving supply of custom controls, along with a host of other important and valuable, but often ignored, programming topics receives thorough treatment in Visual Basic Power Toolkit, Ventana Press's new guide for Windows applications developers. Written by Richard Mansfield, author of the acclaimed Visual Guide to Visual Basic, and Evangelos Petroutsos, the new Power Toolkit comes with a CD-ROM and an Online Companion.

"Visual Basic Power Toolkit covers sophisticated, advanced topics, but explains them so simply and clearly that anyone who programs in Visual Basic can easily add these impressive techniques to their own applications," said Mansfield. Hundreds of sample routines and practical examples make the step-by-step tutorials come to life. Visual Basic Power Toolkit demonstrates how to

- \* Optimize programs for speed, create custom DLLs, use the new Visual Basic for Applications, OLE automate and exploit the best, most useful built-in Windows APIs.
- \* Create database applications and understand the principles of VB's database management language.
- \* Make programs look good with professional visual transitions, image processing and user-friendly interfaces.
- \* Add voice, sound effects, music, animation and video to VB programs with no specialized hardware or authoring tools.
- \* Harness the Windows for Workgroups electronic mail engine to establish communication not only between users, but between applications as well.
- \* Put recursive programming to use and write a math parser.
- \* Demystify the math behind fractals and learn to create, and even animate, these often stunning images.
- \* Develop data security with a technique so airtight that the authors offer a \$1,000 prize to the first person to send in the solution to the encrypted message in Chapter 15!

The Visual Basic Power Toolkit CD-ROM contains all the program examples from the book; a variety of never-before released utilities developed by the authors; sounds, animations and images using programs from the book; and sample tools and demos from select third-party VB developers.

Another unique feature of this book is its Online Companion, developed by Ventana Online and residing on Ventana's World Wide Web server. Offering access to an archive of free VB programs available on the Internet, it also

provides hot links to other Internet VB resources. The URL for the Visual Basic Power Toolkit Online Companion is <http://www.vmedia.com/vbtoolkit.html>.

Visual Basic Power Toolkit is 950 pages, illustrated, with CD-ROM and an Online Companion. ISBN: 1-56604-190-2. Suggested retail price: \$39.95. For orders in the U.S. only, call 800/743-5369.

Ventana Press and Ventana Online are divisions of Ventana Communications Group, Inc., a diversified publisher of computer-related information tools. Ventana Online supports VCG products with Internet-based content and context. Ventana Press publishes books and other materials that help computer users become more productive, including The Visual Guide to Visual C++, The Visual Guide to Visual Basic for Applications, The Visual Guide to Microsoft Access, The Windows Internet Tour Guide, Mosaic Quick Tour, Voodoo Windows and Windows, Word & Excel Office Companion. All titles are available in bookstores and by writing Ventana Press, PO Box 2468, Chapel Hill, NC 27515; by calling Ventana's toll-free order line, 800/743-5369; by faxing Ventana at 919/942-1140; by sending email to [orders@vmedia.com](mailto:orders@vmedia.com); or via the World Wide Web at <http://www.vmedia.com/index.html>.

## New Handbook for 32-bit Programming

Ventana Visual Guide covers Visual C++ essentials

CHAPEL HILL, N.C., November 28, 1994 -- Ventana Press announces the publication of an essential guide to developing applications for new 32-bit programming environments: *The Visual Guide to Visual C++*. This new 900-page volume includes a Companion Disk and features an introduction to AppWizard, a tour of the resource editors, a cookbook of code examples and an encyclopedic reference to Microsoft Foundation Classes (MFCs).

As in Ventana's best-selling *Visual Guide to Visual Basic*, *The Visual Guide to Visual C++* employs extensive screen shots and step-by-step examples to steer users through the enhanced tools and features of Visual C++ 2.0. The book offers newcomers and veterans alike key insights and information into

- \* Distinguishing classes with an in-depth, A-to-Z examination of MFC 3.0, including useful examples.
- \* Attaining functional literacy through a complete description of the member functions within each class complete with tips on when to use them, traps to watch for and code examples to demonstrate their use.
- \* Understanding data member status from explanations that include meaning, appropriate use and possible values for all public data members.

*The Visual Guide to Visual C++* is the latest addition to Ventana Press's best-selling *Visual Guide* series, which includes *The Visual Guide to Visual Basic for Applications*, *The Visual Guide to Microsoft Access*, *The Visual Guide to Paradox for Windows* and *The Visual Guide to dBASE for Windows*.

*The Visual Guide to Visual C++ Companion Disk* contains all the programming examples from the book--saving users time and typos keying in useful tools.

Another unique feature of this book is its Online Companion, developed by Ventana Online and residing on Ventana's World Wide Web server. Providing access to an archive of free Visual C++ code on the Internet, it also links to other Internet Visual C++ references. The URL for the *Visual Guide to Visual C++ Online Companion* is <http://www.vmedia.com/vgvc.html>.

*The Visual Guide to Visual C++* is 900 pages, illustrated, with disk and an Internet-based Online Companion. ISBN: 1-56604-079-5. Suggested retail price: \$29.95. For orders in the U.S. only, call 800/743-5369.

Author Nancy Nicolaisen is an experienced programmer, author and teacher. She is editor and contributor to numerous publications, including Windows Sources, Dr. Dobbs Journal, McGraw Hill/Data Pro, Object Magazine, Computer Shopper and C++ Journal.

Ventana Press and Ventana Online are divisions of Ventana Communications Group, Inc., a diversified publisher of computer-related information tools. Ventana Online supports VCG products with Internet-based content and context. Ventana Press publishes books and other materials that help computer users become more productive, including The Visual Basic Power Toolkit, The System 7.5 Book, The Windows Internet Tour Guide, Mosaic Quick Tour, Voodoo UNIX and Windows, Word & Excel Office Companion. All titles are available in bookstores and by writing Ventana Press, PO Box 2468, Chapel Hill, NC 27515; by calling Ventana's toll-free order line, 800/743-5369; by faxing Ventana at 919/942-1140; by sending email to [orders@vmedia.com](mailto:orders@vmedia.com); or via the World Wide Web at <http://www.vmedia.com/index.html>.

Paramind is a unique brainstorming program for Windows that operates on the principle of the "exhaustion of the interactions of words." It is totally configurable and can be used to logically expand any idea from that needed by research institutes to advertising. It comes with a database of 200 related word chains, and you can add as many of your own as you like. You can type or paste in text from any Windows program into its editor to logically expand in any way. It works with the "merge" routine used in such products as word processors to do mail merges. It has several features using this routine and querying the database for words related to your sentence.

There is a new version of the Paramind Brainstorming program out which now includes features that were only in registered versions. With registration one will get 300 more word chains and some editing features not in shareware release. You can get Paramind from /pub/micro/pc-stuff/ms-windows/writing at sunsite.unc.edu, or at ftp.demon.co.uk in the pub/ibmpc/windows/editors or by webbing to my site listed below. The file is called paramd15.zip

Paramind Software  
P.O. Box 1006  
Seattle, WA 98106  
206-767-7663

FaxMail for Windows lets you load any Windows program that has printing capabilities, write a note, add some graphic if you want, choose the FaxMail for Windows <CONVERT TO FAX>, use your mouse to sign the FAX, and send it to any FAX-Machine or Fax/Modem in the world. You can receive a FAX and use the Zoom/Edit to add more text and graphics, sign your name using your mouse, and send it to any FAX-Machine or Fax/Modem in the world. FaxMail for Windows lets you print on Fax/Modems and FAX-Machines anywhere in the world as if they were your own printers. The Optical Character Recognition (OCR), will convert FAX into text that can be read by all editors and Word Processors; yet retains the original unchanged FAX. FaxMail for Windows attaches itself to and becomes a part of the actual Microsoft Windows environment, thereby appending itself to all system menus and adds its features to all Windows Applications. The quality of the output is laser quality. You can import up to 1000 name and phone numbers into each FaxBook (Phone Book) at a time from any xBase data base program, and you can have as many FaxBooks as you want. It's a great tool for users who want to send an occasional FAX or large numbers of high quality faxes from the background while they work on other tasks -- whether in DOS or Windows. FaxMail for Windows bundles the most useful FAX features, and it is fast!

The simplicity of information transfer via FaxMail for Windows is unequaled from any other system. FaxMail for Windows is a FaxMail Management System, integrating Fax/Modem technologies into computer document generation.

In July 1994, Windows Magazine did a review of FaxMail for Windows.

FaxMail for Windows is a Shareware program. Upload it to bulletin boards (BBS). Give it to your friends and relatives. Tell your business associates about it. Don't let anyone miss out.

REQUIREMENTS: Requires Microsoft Windows v3.1 or higher

FEATURES: Main Features

- timed sends, -broadcast queue holds 32,000, -option to auto-print on receive, -uses a real-time Fax/Modem-Driver for TOTALLY background send/receive Fax while you work in DOS or Windows, -easy management of FAXes, -GOOD help system, -fastest FAX viewer around, -full log of all past and future FAX events, -Notepad for quick typed notes with variable fields, -FAX any document you can print (send amazingly clean resumes), -real-time FAX event monitor, -add FAX numbers on-the-fly, -audible complete/fail FAX transaction notification, -easy FAX rescheduling, -up to 1000 entries per FaxBook, -easily create custom cover pages, -background printing

## Enhancement Features

-OCR, -Zoom Fax, -Edit Outgoing and Incoming Fax, -DCX to PCX BreakUp  
-Import into FaxBook (PhoneBook), -supports "Silent-Answer", -you select which ring the Fax/Modem answers on, -you select number of re-dials, -you select length of time between re-dials, -you select volume, -you select "Scale to printer" or "Print actual FAX size", -includes a COM-Port/Fax/Modem-tester (COMTEST1.COM and COMTEST2.COM)

Since the last version there have been upgrades to:

Addition of the FaxMail for Windows Dynamic All Class Fax/Modem-Driver.

No TSR, DOS, or Real-Time-Drivers required.

Automatically switches from Fax to Printer Mode.

No longer needs a TSR to hook INT 64h.

Optical Character Recognition (OCR).

Fax to PCX BreakUp, and Zoom in and Edit Fax.

Major upgrade of the Fax/Modem-Drivers.

Many improvements to the FaxBook(Phone-Books) program including Import.

The Fax/Modem-Driver now loads into upper memory.

Automatically calibrates the "FAX QUEUE" when you reinstall or upgrade.

Improved operation with Microsoft Word for Windows and Windows Write.

COM-IRQ, Serial-Port, Fax/Modem, Class 1, and 2 tester included.

Full-support for COM1-COM4 on IRQ00-IRQ15.

SendFax, full-support for "Data2400/SendFax9600/ReceiveFax4800" Modems.

You can get FaxMail for Windows from many BBSs and most FTP Internet Sites around the world. Here are a few.

```
+-----+-----+
| - Location or Site -           | Frequency of Updates   |
|-----+-----|
| Computer Tech Support (713) 499-5939 - > Major and Minor versions |
| FREQ from FidoNet: FaxMail 1:106/10000 > Major and Minor versions |
| Longhorn BBS (713) 937-8636  - - - - - > Major and Minor versions |
| SimTel, OAK.Oakland.Edu  - - - - - > Major versions                |
| FTP.CICA.INDIANA.EDU  - - - - - > Major versions                    |
| wuarchive.wustl.edu  - - - - - > Major versions                    |
| America Online (AOL)  - - - - - > Major versions                    |
| CompuServe  - - - - - > Major versions                             |
+-----+-----+
```

If you can not locate the latest version or need tech-support, contact:

ElectraSoft, 3207 Carmel Valley Drive, Missouri City, TX 77459-3068

Voice:(713)261-0307, BBS:(713)499-5939, FAX:(713)499-5939,11,11,11,11

Internet: [Jon.Krahmer@f10000.n106.z1.fidonet.org](mailto:Jon.Krahmer@f10000.n106.z1.fidonet.org)

FidoNet: Jon Krahmer on 1:106/10000

## ANNOUNCING - As You Like It

A completely configurable offline E-book reader for Windows

INTERNET: [ftp.cica.indiana.edu/pub/pc/win3/desktop/ayli.zip](ftp:cica.indiana.edu/pub/pc/win3/desktop/ayli.zip)  
[ftp.garbo.uwasa.fi/windows/misc/ayli.zip](ftp:garbo.uwasa.fi/windows/misc/ayli.zip)

WWW: <http://www.portal.com/~skip/ayli.html>

COMPUSERVE: LITFORUM Library 16 ayli.zip

### What we did

We took the great (copyright-expired) books from the Internet, cleaned them up, marked them up, compressed them, and wrote a reader that let's you change almost everything about how they are displayed OFFLINE on your Windows PC.

### What it's like

Like Mosaic, you just click on a hyper-text link to go to a particular book or chapter within a book.

Like Mosaic, if you resize the window, the text re-flows to fit.

Like Mosaic, you can change fonts. Our marked-up versions of the literature include distinguishing Titles from Foreign Phrases from As Such from Authors from Chapter Headings.

Like Mosaic, you can change the point size of the type. (Of course, we let you do it by hitting the PLUS and MINUS keys.)

### What it's not like

Unlike Mosaic, you can have a one-page or two-page presentation (just like a real book).

Unlike Mosaic, you can adjust Paragraph Indent, Paragraph Spacing, Line Spacing, Margins, Tab Stops and Quoted Paragraph Indent.

Unlike Mosaic, you have your choice of justified or ragged-right text. (Oh, yeah, did we mention that you can actually CENTER text?)

Unlike Mosaic, you don't need a network, at all. We ship you the text on Neanderthal floppy disks (rather compressed, though: the Bible fits on one floppy).

Unlike Mosaic, you can buy one of these to give as a present, and we'll include a custom Dedication page so the recipient won't be able to forget you.

More details

It's got real open and close quotes, em-dashes, and typesetter-like punctuation spacing. And you can pick your own color scheme, if black-on-white doesn't suit you.

You can go forward or back a page or a chapter, increase or decrease font size, pick a new book, go to the beginning, or back to the Library with one click/keystroke (EACH!).

The player plays the compressed format, so the books don't expand to unmanageable size on your system.

Gosh, where can I get one of these?

Please try the shareware version. It's got Sir Arthur Conan Doyle's first Sherlock Holmes mystery, *A Study in Scarlet*. It's an easy 190K download. We're pretty sure if you try it, you'll consider registering.

It's available now, on:

INTERNET: [ftp.cica.indiana.edu/pub/pc/win3/desktop/ayli.zip](ftp://cica.indiana.edu/pub/pc/win3/desktop/ayli.zip)  
[ftp.garbo.uwasa.fi/windows/misc/ayli.zip](ftp://garbo.uwasa.fi/windows/misc/ayli.zip)

WWW: <http://www.portal.com/~skip/ayli.html>

COMPUSERVE: LITFORUM Library 16

Questions?

Contact:

INTERNET: [skip@shell.portal.com](mailto:skip@shell.portal.com)

WWW: <http://www.portal.com/~skip/ayli.html>

COMPUSERVE: 75260,2077

PRODIGY: JKKD88A

The Ars Longa Group, Ltd.

PO Box 10085  
Trenton, NJ 08650  
(609) 586-1995

## SilverPlatter Information and Elsevier Science Publishers Announce Two Additional Databases to the EMBASE Specialties Series

December 2, 1994 -- EMBASE CD: Pediatrics and EMBASE CD: Rehabilitation and Physical Medicine join the EMBASE Specialties Series from Elsevier, published on SilverPlatter CD-ROM. Each title contains a rolling 10-year file of citations and abstracts drawn from EMBASE, the Excerpta Medica database, focusing on a specific medical discipline. Records are culled from approximately 3,500 international biomedical and pharmaceutical journals. A significant percentage of these records, many containing critical drug information, is unique to EMBASE. Subscribers will receive quarterly updates consisting of approximately 10,000 records.

These products feature access through chemical compound, drug trade or generic name or manufacturer name. In addition more than 75% of records contain the full author abstract. Comprehensive coverage and thorough indexing of these databases, coupled with the full functionality of SPIRS (SilverPlatter Information Retrieval System) enable searchers to explore broad subjects or locate specific articles; monitor developing trends; check on recently reported therapies or drug adverse reactions or interactions; or confirm statistical information.

EMBASE CD: Pediatrics covers all aspects of child development as well as diagnosis, treatment (including surgical procedures), and prevention of organic disease in infants, children and adolescents. Topics include nutrition, feeding and fluid balance, somatic and mental development, hereditary and congenital disorders, immunology and allergy, infectious diseases, neoplasms, and accidents, poisoning and sudden death.

EMBASE CD: Rehabilitation and Physical Medicine focuses on all aspects of the rehabilitation of somatic and mental disorders using physiotherapy and other therapeutic modalities. In addition, this database covers diagnosis, function tests and evaluation, as well as the social, vocational and educational aspects of rehabilitation.

For further information about these new Elsevier products, or to subscribe, contact:

SilverPlatter Information, Inc.  
100 River Ridge Drive  
Norwood, MA 02062-5043  
Tel: 1-800-343-0064 (U.S. and Canada) or 1-617-769-2599  
Fax: 1-617-769-8763  
Internet: [info@silverplatter.com](mailto:info@silverplatter.com)

## The Institution of Electrical Engineers and SilverPlatter Information Announce ERL Compliant INSPEC

December 2, 1994 -- The Institution of Electrical Engineers (IEE) and SilverPlatter Information announce the launch of INSPEC on SilverPlatter. The database, to be released in January 1995 will be available as a hard disc subscription from SilverPlatter Information.

INSPEC is one of the world's most respected databases in the fields of Physics, Electronics, Electrical Engineering, Computing and Information Technology, containing some 4.75 million records drawn from over 4, 200 journals and more than 2,000 conference proceedings, books and reports.

INSPEC on SilverPlatter will be available as a site licence subscription. Subscribers will be able to load INSPEC on hard disc and access it locally over their network using SilverPlatter PC-SPIRS, WinSPIRS or MacSPIRS retrieval clients. In a media independent ERL (Electronic Reference Library) environment, INSPEC on SilverPlatter will allow users to cross database search INSPEC and related SilverPlatter databases using their interface of choice, without having to change retrieval software.

Commenting on the announcement, Eva Kiwiet, SilverPlatter's Director Europe-Publisher Relations said, "The availability of INSPEC on SilverPlatter is a major addition for us. For some time SilverPlatter subscribers have been asking us to make this product available to them with the familiar SPIRS interface. We are pleased that together with the IEE we are able to meet these requests and enable greater access to this prestigious database."

Jim Ashling, Director of Sales and Marketing at the IEE added, "We are pleased to be involved in this collaboration with SilverPlatter. We recognise that providing access to INSPEC using ERL technology with its choice of servers and retrieval clients for DOS, Windows, Macintosh and UNIX will enhance access to our database."

INSPEC on SilverPlatter will be available as of January 1995. Information coverage will be from 1969 to the present.

For further information about INSPEC on SilverPlatter or to subscribe, contact:

SilverPlatter Information, Inc.  
100 River Ridge Drive  
Norwood, MA 02062-5043  
Tel: 1-800-343-0064 (U.S. and Canada) or 1-617-769-2599  
Fax: 1-617-769-8763  
Internet: [info@silverplatter.com](mailto:info@silverplatter.com)



SuperCom is a development tool to aid programmers in the development of multi-platform communications applications. The SuperCom libraries allow programmers to easily develop custom communications applications between computer systems using multiple serial ports in a multitasking environment under DOS, Windows, OS/2, and Windows NT.

Features include direct register programming; interrupt driven transmission and reception; line status, modem status; buffering up to 64K; baud rates up to 115 Kbaud; UART support for 8250, 16450, and 16550; simultaneous COM1..COM 36 use; Flow control RTS/CTS, DTR/DSR, XON/OFF and user defined. Protocols and emulation include: ASCII, XMODEM, XMODEM/CRC, YMODEM, YMODEM/BATCH, ZMODEM: Terminal emulation: ANSII, TTY, and VT52.

Serial communications support is included for multitasking, Hayes modems, RS422 and RS485; non-intelligent multi-serial boards from AST, ARNET, DigiBoard, Hostess, and Stargate. There is also support for the DigiBoard intelligent PC/Xe, Xi, Xem series of multi-serial boards.

The same programming interface is used throughout the different operating systems and languages. SuperCom is available for C, C++ and Visual Basic. Full source code comes with the product and no royalties are charged. The product also includes Protected Mode Interface for Windows and SuperCom+ +.

SuperCom is available worldwide from Fine Line International.

Fine Line International  
TEL: 707-887-3400  
FAX: 707-887-1015  
Email:lavallie@netcom.com

Vivo Software, Inc., of Waltham, MA, has introduced Vivo320, the industry's first personal videoconferencing application based on standards-compliant all-software video codec and communications technology. Vivo320 complies with the H.320 series of standards, allowing interoperability with videoconferencing room systems, rollabout systems, desktop systems, and multipoint bridges from multiple vendors worldwide.

#### Product Facts:

- Vivo320's software-based codec and communications offer cost-effective high-quality audiovisual communications well-integrated with the PC.
- Vivo320 runs on Microsoft Windows 3.1 and later platforms.
- Vivo320 runs on 66MHz 486 PCs and Pentium PCs with 8 meg of memory and local bus graphics.
- Vivo320 can communicate over basic rate ISDN at 112kbps or 128kbps.

#### Product Features:

- Vivo320 transmits QCIF (176x144) video images at up to 15 frames/second.
- Vivo320 receives CIF (352x288) video images at up to 30 frames/second.
- Vivo320 offers hands-free speakerphone audio and a privacy earpiece.
- Document Sharing: Vivo320 accommodates each user's preference, interoperating with all major third-party document sharing applications. Initially, Vivo will bundle DataBeam's FarSite 2.0 collaboration software with the Vivo320 convenience kit.
- ScreenView Presentation Tool: The ScreenView Presentation Tool turns room-based and roll-about videoconferencing systems into high-quality audio visual platforms, allowing individuals to conduct live, dynamic graphics-intensive presentations.
- Video Business Cards: In order to emulate a person-to-person introduction, Vivo320 first transmits an electronic image of the caller's business card to the receiver. For convenience sake, the accepted video business card is automatically included in the receiver's business card directory and can be used for automatic dialing at a later date.

Vivo320 is offered as a complete convenience kit. The kit includes:

- The Vivo320 software application
- The Logitech VideoMan digital video camera and microphone.

- Monitor-top and desktop stands for the VideoMan camera
- A speaker for hands-free operation and an earpiece for privacy
- The Logitech MovieMan ISA-bus video capture card
- The IBM WaveRunner ISA-bus ISDN terminal adapter card
- An integrated software installation kit including all device drivers
- Documentation and technical support

Vivo320 is certified by National Software Test Labs for PC compatibility, and by the Corporation for Open Systems for H.320 interoperability. Vivo320 connects to all common North American ISDN basic rate services.

Vivo320 is available now and can be purchased directly from Vivo Software, Inc. for US \$1995.

To order, or for further information, please contact:

Vivo Software, Inc.	info@vivo.com
411 Waverley Oaks Rd	+1.617.899.8900
Waltham, MA 02154-8414	800.VIVO-411 (800.848.6411)
USA	fax +1.617.899.1400

## Apple Reduces Price of Remote Access MultiPort Server

CUPERTINO, California--December 5, 1994--Apple Computer, Inc. today announced U.S. price reductions of up to 30 percent on its Apple Remote Access MultiPort Server software products. These reductions are part of the company's ongoing strategy to offer superior solutions at competitive prices.

The Apple Remote Access MultiPort Server has been reduced from an Apple price of \$1,799 to \$1,259, while the Apple Remote Access 4-Port Expansion Kit has been reduced from \$1,499 to \$1,159. The price reductions are effective immediately.

The Apple Remote Access MultiPort Server is designed to provide customers with a low cost, high performance software solution. It provides a flexible and secure way to offer remote network access to workgroups or entire organizations. It includes a four-port remote access serial card and cable, and runs on any Macintosh computer or Workgroup Server from Apple with one or more NuBus slots. More ports can be easily added to Macintosh-based systems utilizing Motorola's 68000 processor by installing additional serial cards and cables included with the Apple Remote Access 4-Port Expansion Kit, allowing a single 68000 processor-based Macintosh computer to support up to 16 simultaneous dial-up connections.

The Apple Remote Access MultiPort Server offers a host of sophisticated security features, making it one of the most secure remote access servers available. It is also designed to streamline administrative tasks, while maximizing administrator productivity and control. It installs in minutes and offers sophisticated management capabilities, including support for the industry-standard Simple Network Management Protocol (SNMP).

### Price Change

	Previous Apple Price*	New Apple Price*	Percentage Change
Apple Remote Access MultiPort Server	\$1,799	\$1,259	30.0%
Apple Remote Access MultiPort Server 4-Port Expansion Kit	\$1,499	\$1,159	22.7%

Apple Computer, Inc., a recognized pioneer and innovator in the information industry, creates powerful solutions based on easy to use personal computers, servers, peripherals, software, online services, and personal digital assistants. Headquartered in Cupertino, CA, Apple (NASDAQ:AAPL) develops, manufactures, licenses and markets products, technologies and services for the business, education, consumer, scientific & engineering and government markets in over 140 countries.

Apple Computer Inc  
20525 Mariana Ave  
Cupertino, CA 95014  
408-996-1010

## Newton Associates Program Offers High Quality, Low Cost Support for Developers

CUPERTINO, California--December 5, 1994--In a further show of its ongoing commitment to the developer community, Apple Computer, Inc. announced today the formation of the Newton Associates Program for Newton MessagePad and Newton platform developers. The Newton Associates Program complements the already established Newton Partners Program, giving the Newton developer a range of support services from which to choose.

"Answering the developers' call for affordable, quality support, the establishment of the Newton Associates Program further reinforces Apple's ongoing commitment to the Newton platform and its developers," said Shane Robison, vice president and general manager of Apple's Personal Interactive Electronics Division. "Developers are crucial to the platform's success and viability and we are very pleased to be able to expand support to a broader developer community."

Whereas the current Newton Partners Program is designed for developers who require more expert-level development support, the Newton Associates Program is a low cost, high quality, self-help development support program. The Newton Associates Program is available for a US\$400 annual fee and includes the following features:

- Support services from Apple's Developer Support Center
- Discounted rates for online technical information
- Access to a technical Q&A reference library
- Discounts on Newton and Macintosh hardware
- Receipt of a monthly Newton developer mailing, which includes the Newton Developer CD and the Newton Technology Journal
- Use of Apple third party compatibility lab
- Discount on a Newton development class
- Automatic invitation to the Newton and Worldwide Developer Conferences
- Eligibility to participate in the StarCore Affiliate Label Program
- Receipt of the Newton orientation kit

The Newton Partners Program includes all the features of the Newton Associates Program plus services such as expert-level programming support via e-mail, free updates to Newton development tools and participation in select Apple marketing and PR opportunities. The price has been reduced from US\$2850 to US\$2500 annually. In addition, the Newton Partners Program has been enhanced with new features such as a Newton-focused

monthly mailing, a Newton orientation kit, regular delivery of the Newton Developer CD and the Newton Technology Journal, a new technical publication for Newton developers.

Apple developer programs provide a broad mix of industry-leading technical information and services for diverse developer needs with a goal of helping developers succeed in their development endeavors. The expanded Newton programs are just two examples of the enhanced level of support that Apple has implemented for its overall developer community.

For more information, please contact the Apple Developer Support Center at (408) 974-4897, AppleLink : DEVSUPPORT or Internet: [devsupport@applelink.apple.com](mailto:devsupport@applelink.apple.com).

Apple Computer, Inc., a recognized pioneer and innovator in the information industry, creates powerful solutions based on easy to use personal computers, servers, peripherals, software, online services, and personal digital assistants. Headquartered in Cupertino, CA, Apple (NASDAQ:AAPL) develops, manufactures, licenses and markets products, technologies and services for the business, education, consumer, scientific & engineering and government markets in over 140 countries.

Apple Computer Inc  
20525 Mariana Ave  
Cupertino, CA 95014  
408-996-1010

C.O.L. Systems Inc. is proud to announce that the Pegasus Resource Monitor is lifting it's wings and lowering the price. Happy Holidays! A full product description is found following this important news:

Having recently terminated our sales and marketing agreement with OnDemand Software and Services, C.O.L. Systems Inc. has brought the pricing in line with user expectations by lowering the MSP from \$129.00 to \$89.00 !!!

There are a number of ways you can purchase either the Pegasus Resource Monitor Version 2.x for single processor versions of OS/2 (2.1, 2.11, Warp) or Pegasus Resource Monitor Version 2.x for multiprocessor versions of OS/2 (SMP).

Peter Norloffs OS/2 BBS at (703) 385-4325

Peter is offering the electronic version starting at \$65.00 with an additional charge for hardcopy documentation. The OS/2 BBS is also offering the Pegasus/SMP version. Dial in for current prices.

Indelible Blue at 1-800-776-8284.

Indelible Blue has also been offered a reduced reseller discount for both single and multiple processor versions. All versions include hardcopy documentation. Call for details.

At this time C.O.L. Systems Inc. does not offer direct sales.

C.O.L. Systems Inc. continues to provide support for all products.

C.O.L. Systems Inc. is busy getting the next version of a single machine performance and capacity management toolset ready for the 1Q95 timeframe: Osrn2 Lite Version 3.0. This is the same product in body and functionality as Pegasus Resource Monitor but we are changing the name to bring it in line with our multimachine central performance and capacity management system : Osrn2 Version 2.0.

Product Descriptions:

=====

Pegasus Resource Monitor

-----

The Pegasus Resource Monitor is a kernel level, real time, Presentation

Manager monitoring tool for system and application resource usage under OS/2 2.x. Including a configurable sample rate, performance threshold setting and alarms, working set, thread detail display, kill process options, as well as real time graphical indicators and long term data logging for post processing analysis, the Pegasus Resource Monitor provides the most comprehensive monitoring tool for OS/2 2.x systems.

Unlike other monitors, the Pegasus Resource Monitor, Pegasus AppMon, Pegasus FileMon, and Pegasus CacheMon utilities work with information retrieved directly from the OS/2 kernel. This is superior to the idle-thread and DosQProcStatus approximation used by other commercial products, and is less resource consumptive as well.

The product was designed to provide the hobbyist, small business owner, developer, corporate user, and network OS/2 analyst with informative performance and resource usage displays and reporting capability.

### Configuration

-----

The Pegasus Resource Monitor provides password protection, configuration control over all displays and process refresh timing, graph colors, save and restore window position and sizes, data logging file threshold control, and much more.

### Displays

-----

The Pegasus Resource Monitor provides a number of displays to monitor all facets of system and application activity. Following is a brief description of each:

- System View - Cpu , Irq , dispatch counts, complete paging subsystem information, memory information, and cache activity (FAT and HPFS).
- IO View - All logical partition (including floppy and CD-ROM drives) Read/Write Count/Response/Bytes as well as hard-disk storage available and used indicators. Communication ports 1-4 and printer ports 1-2 are also monitored.
- App View - For each process, a summary of CPU, Dispatch, Page Faults, Fault Wait time, File Wait time and Read/Write activity.
- Threads - From a selected process in Application View, display each thread of the application.

Displayed are: CPU Utilization, Dispatch Counts, Page Faults, Page Fault resolution time, and File wait time.

RealTime - Displays CPU Busy, Memory Used, and Swap Storage used percentage in line chart running for five minutes of five (5) second refresh records. When data line reaches end of X-axis, 20 percent of the display is scrolled back. When graph is icon, data is still visible and the icon text displays the most recent records data values.

## Processes

-----

The Pegasus Resource Monitor provides a number of processes that operate in the background during the monitoring session. Following is a brief description of each:

Logging - During the Pegasus Resource Monitor session, data records can be stored to binary files. C.O.L. Systems Inc. has provided a REXX extension DLL for allowing REXX procedures to read and process the data for reports and analysis.

Threshold - Configurable performance thresholds are tested against the data samples during the Pegasus Resource Monitor session. A dialog will popup when any threshold has been met or exceeded to alert the user.

## Reporting

-----

C.O.L. Systems Inc. has developed a OS/2 REXX extension DLL which is loaded by a REXX procedures (CMD file) to read the log file output from the Pegasus Resource Monitor, Pegasus AppMon, Pegasus FileMon, and Pegasus CacheMon utilities.

## Pegasus AppMon Utility

A subset of the Pegasus Resource Monitor which allows the performance analyst to monitor any application thread and file measurements at intervals from 1 second to 45 minutes. By creating a output log, the user can utilize the Pegasus REXX extension interface to create reports of all measurements.

## Pegasus FileMon Utility

A subset of the Pegasus Resource Monitor which allows the performance analyst to monitor any and all physical disk and logical file measurements at intervals from 1 second to 45 minutes. By creating a output log, the user can utilize the Pegasus Rexx extension interface to create reports of all measurements.

#### Pegasus CacheMon Utility

A subset of the Pegasus Resource Monitor which allows the performance analyst to monitor FAT and HPFS Cache as well as Memory and Paging subsystems at intervals from 1 second to 45 minutes. By creating a output log, the user can utilize the Pegasus Rexx extension interface to create reports of all measurements.

#### Pegasus Rexx Extension

C.O.L. Systems Inc. has standardized it's post processing utility for the Pegasus System on IBM REXX/2. This is achieved by including a few controls in the REXX/2 procedure which load the C.O.L. Systems Inc. PegRexx ( Pegasus Rexx Extension ) to open, read, and parse a Pegasus log file from any of the above mentioned tools.

Through REXX/2, which is included free with every copy of OS/2, the user can run any number of "canned" sample reports or create new reports for post processing analysis. These reports can be used to tune your OS/2 system as well as provide meaningful insight into your machines effectiveness.

C.O.L. Systems Inc.

Voice: (914) 245-0442, Fax: (914) 245-0452

## Intellitech Corporation Announces NetMerge

Extends board level 1149.1 based ATPG tools for use with Systems and MCMs

October 3, 1994 ITC Washington, DC -- Intellitech Corporation, developer of IEEE 1149.1 compatible hardware and software, announced the immediate availability of NetMerge, software for intelligently merging netlists for 1149.1 interconnect tests. Current 1149.1 interconnect test ATPG software (such as Teradyne's Victory and the Texas Instruments' ASSET Interconnect Test product) create tests at the board level only. Test patterns are generated for a single board using the board's netlist and the appropriate BSDL (Boundary Scan Description Language) files for the devices on the board. NetMerge extends the capability of the ATPG software by creating the merged netlist needed when the UUT (Unit Under Test) contains schematic designs from multiple sources, such as Systems, boards with MCMs, boards with daughter cards and boards tested with scan based fixtures. NetMerge has multiple merging capabilities including a full merge, physical connections only, or physical interface and UUT (unit under test) only.

"We have identified three major areas that need merged netlists to create 1149.1 interconnect test vectors" said Adam Cron, Director of Engineering at Intellitech. "First, for system level interconnect testing, in a multi-slot backplane, for instance, it is desirable to perform interconnect tests from one board in one slot, through the connector and backplane to the board in the next slot. Typically, there isn't a system level schematic. The board netlists are all separate and need to be intelligently merged at their physical connection points to create a single netlist for use with the ATPG tool. Secondly, the same is true for boards incorporating daughter cards or MCM's (Multi-Chip Modules). The netlists are separate, and need to be merged at the points where the daughter card or MCM meets the board. And finally, scan-based features (designed to apply parallel patterns to the edge of a UUT in conjunction with scan operations) which contain a netlist separate from the UUT". Cron concluded with "In all three scenarios, the NetMerge user can just point and click at the appropriate connections and a merged netlist will be generated".

Prices start at \$2495.00 for MS-Windows based platforms and includes a license, media, documentation and support services. The Sparc compatible version will be available in 1Q95. For additional information, contact Intellitech.

Intellitech Corporation  
66 Route 25  
Meredith, NH 03253  
603-279-6308, FAX 603-279-5135, BBS 603-279-4177  
Internet: [info@intellitech.com](mailto:info@intellitech.com)



## Intellitech Corporation Announces BSDLMaker!

BSDLMaker unveiled at ITC 1994, Washington, DC.

October 3, 1994 ITC Washington, DC -- Intellitech Corporation, developer of IEEE 1149.1 compatible hardware and software, announced the immediate availability of BSDLMaker, a design-for-test tool for creating BSDL (Boundary Scan Description Language) files from Verilog netlists. BSDLMaker will compile your structural Verilog netlist (including flattening of hierarchical designs) and silicon package pin file, perform a number of 1149.1 design compliance checks, generate a BSDL file and produce a design warning/error message file. It supports libraries from multiple silicon vendors, multiple synthesis vendors and user defined 1149.1 designs. BSDLMaker prices start at \$6,750.00 and include a license, product support service, and media for either PC or Sun Sparc platforms. Support for the VHDL language is planned for 1Q95.

"There are already some tools out there that produce BSDL, but they're locked into a particular silicon vendor or a particular synthesis tool" said CJ Clark, president of Intellitech Corp. "When a customer migrated to a different synthesis tool or a different silicon vendor they were forced to buy a new tool. What makes BSDLMaker stand out is it's flexible, programmable nature, that allows it to read verilog netlists using any silicon vendor's primitives and 1149.1 Logic as well as netlists containing boundary scan logic inserted by other tools or even the user. Since most of the tools we sell (such as TI's ASSET and Teradyne's VICTORY need BSDL files, this product fits well in the development cycle for our customers' and our own 1149.1 program development."

On a limited basis, Intellitech will provide BSDL creation services for those customers new to verilog and/or BSDL using customer supplied verilog netlists. Intellitech's BSDL creation and verification services are quoted individually for each job. To discuss your requirements or place an order call (603) 279-6308.

Intellitech Corporation has been incorporated in the State of New Hampshire since 1988 with the primary business of selling software tools and services for design and test. In February, 1992, Intellitech became an authorized Value-Added Reseller for Texas Instruments' ASSET. They now resell the ASSET Diagnostic System along with their products and services.

Intellitech Corporation  
66 Route 25  
Meredith, NH 03253  
603-279-6308, FAX 603-279-5135, BBS 603-279-4177  
Internet: info@intellitech.com



## EBIC Goes East for 1995

November 7, 1994 -- TFPL's fifth annual European Business Information Conference will be held in Budapest next March. Having been in Amsterdam, Brussels, Barcelona and Paris this is the first time the conference will be held in Central Europe.

"We chose Budapest for several reasons" said Nigel Oxbrow TFPL's Managing Director "it is a city in the midst of transition, in a part of Europe that is playing an increasingly important role in the European economy and one that our delegates are particularly interested in - and it is a beautiful city!"

The conference program itself picks up on many of the international issues currently effecting business information, but also includes sessions explaining the rapidly changing situation in Hungary. David Bell, Chief Executive of the Financial Times Group will present the keynote address on the 'Shape of the Business Information Industry in the Year 2001' and this will be followed by a debate by three key players from different parts of the industry. Other sessions include Desktop Applications for End Users, Negotiating Global Contracts, Researching Capital Markets and International Stock Broker Research. Delegates will be welcomed in an Opening Address by Prof. Marton Tardos, Hungarian MP and President of the Committee for Economics in Parliament, and there will also be an afternoon session on Hungary's Economy and Information Infrastructure.

Social events during the conference include a visit to the Opera House to see the ballet 'Othello', a reception with a melee of poetry, prose and music at the famous New York Cafe, and the conference dinner at the beautiful Gundel restaurant.

EBIC'95 will be held in the Grand Hotel Corvinus, Kempinski, Budapest 21st-24th March 1995.

Full program available from:

TFPL Incorporated  
1301 Twentieth St. NW., Suite#702  
Washington DC 20036  
Tel: (202) 296-6009 Fax: (202) 296-6343  
CIS: 74044.3166

## INTELLIGENT INTRODUCES THREE FEATURE RICH PENTIUM SYSTEMS WITH MULTIMEDIA AND TELEPHONY FOR ITS AMERIGO RETAIL LINE

Fremont, CA. December 2, 1994 - Amerigo by Intelligent Computers and Technologies has added three feature rich Pentium systems to its existing retail line of 486-based PCs. With the addition of the Amerigo P60, P75, and P90, Intelligent hopes to meet the growing demand in the retail market for high-end multimedia systems. The Amerigo systems include Microsoft's MS-DOS, Windows for Workgroups, Money, Works, Publisher and Encarta -- a software package valued at over \$700. All Amerigo PCs will ship with Windows 95 when it is available. Standard features are 8MB or 16MB RAM; 256K cache memory; a PCI-IDE bus and a PCI video local bus; and 420, 540, 720 MB or 1GB hard drive. The Amerigo PCs also feature advanced telephony capabilities, including voice mail with 10 mailboxes expandable to 999 mailboxes, remote paging and answering machine; full duplexing and 14.400 bps FAX/modem; 15-inch digitally-controlled flat screen monitors and Microsoft's two-button serial ergonomic mouse. Multimedia features include a 16-bit MIDI hi-fi sound synthesizer, double speed photo CD-ROM, speakers and a microphone. Full tower, mini-tower and desktop cases are available. All Intelligent products carry a three-year limited warranty.

Intelligent takes a leading position in the computer industry as one of the first companies to offer a full product line of Pentium systems into the retail channel that satisfy user performance needs. The Amerigo P60, and P90 are currently shipping, and the P75 systems will be available January 1995. Prices for the new systems range from \$1999 to \$2799.

"We've responded to the needs of the marketplace for sophisticated product at affordable, aggressive pricing," said Babar Hamirani, President and CEO of Intelligent. "Consumers are demanding a system that will do it all, that will add convenience without the high price tag. We have responded to this demand with the Amerigo Pentium line. Our customers want products that pack enough punch, run all of the latest multimedia software, and deliver the best solutions for office use."

Each system is packaged with the company's unique Computer Care Kit, containing how-to cards with instructions for simple installations, troubleshooting, and providing an easy out should the user get stuck. The kit contains the Rescue Disk, which simply re-sets the computer to its original factory settings in case of a misconfiguration. Further help is available through a technical support hotline.

Intelligent Computers and Technologies is a privately held company specializing in PC systems integration. Intelligent offers two product lines: the Intelesys line, which is marketed directly to small and medium-sized businesses; and the Amerigo line, which is sold in retail stores only, and is

currently available in over 400 retail outlets throughout the United States.  
Headquartered in Fremont, California, the company can be reached at (510)  
226-6300

Intelligent Computers & Technologies  
46231 Landing Parkway  
Fremont, CA 94538  
(510) 226-6300 Tel.  
(510) 226-9363 Fax

## INTELLIGENT PC PRODUCTS GET READY FOR WINDOWS 95

### PC Product Lines Adapted for Full Plug and Play Benefits

Fremont, CA, November 30, 1994 - Intelligent Computers and Technologies announced that it has been working very closely with Microsoft Corporation to enable its PCs to take full advantage of the "Plug and Play" architecture required to run the new Windows 95 operating system.

"Intelligent is committed to providing customer satisfaction. We want our customers to be able to enjoy the numerous benefits of the Windows 95 operating system as soon as it is available." said Babar Hamirani, President and CEO of Intelligent. "With Windows 95, customers of our Intelesys and Amerigo PCs can experience improved system integration, which allows applications to run faster and more efficiently. Better integration also means that the system can run without being configured by the user, translating into substantial customer support cost savings as well."

The Plug and Play architecture of the Windows 95 system will make PCs more appealing and easier to use, offering more hardware features without the need for additional customer support.

Plug and Play specifications define how the various hardware pieces, software drivers, and operating systems interact. No longer will the user be required to manually set jumpers and switches to redirect IRQs, DMA channels, or I/O port addresses.

Plug and Play is designed so that adding a device, whether permanently or dynamically, requires nothing more than taking it out of the box and plugging it in. The PC seamlessly adjusts to the new configuration --that is, the system software automatically adjusts to the changes and invisibly changes its configuration to comply with the new hardware.

Plug and Play offers an economically feasible way to identify and configure devices, while reducing hardware complexity and increasing hardware flexibility for the user. To fully implement a Plug and Play PC system, changes must be made to the BIOS, the hardware, the device drivers, and the operating system. "We are in the process of optimizing our PC product lines to comply with the Plug and Play Association's Plug and Play BIOS 1.0A specification," said Hamirani. "Since all of our PC products are either 486 or Pentium-based machines, they already meet most of the minimum requirements for Windows 95. The only changes that need to be made are to the system BIOS, which are being enhanced to provide the necessary boot device configuration and dynamic event notification services."

All of Intelligent's PCs come bundled with a Microsoft suite of products

including the latest versions of MS-DOS, Windows for Workgroups, Works, Money, Publisher and Encarta. All Intelligent PCs will ship with Windows 95 when it is available. Intelligent customers who have purchased PCs with Windows for Workgroups may be eligible for a special Windows 95 upgrade price.

Intelligent Computers and Technologies is a privately held company specializing in PC systems integration. Intelligent offers two product lines: the Intelesys line, which is marketed directly to small and medium-sized businesses; and the Amerigo line, which is sold in retail stores only, and is currently available in over 400 retail outlets throughout the United States. Headquartered in Fremont, California, the company can be reached at (510) 226-6300.

Intelligent Computers & Technologies  
46231 Landing Parkway  
Fremont, CA 94538  
(510) 226-6300 Tel.  
(510) 226-9363 Fax

## INTELLIGENT IS AN INDUSTRY FRONT-RUNNER WITH ITS NEW INTELESYS 100MHZ DUAL PROCESSOR EISA SYSTEM FOR NETWORK SERVERS AND WORKSTATIONS

Fremont, CA. November 29, 1994 - Intelligent Computers and Technologies has announced the availability of its Intelesys 100MHz Pentium dual processor-based system, the P54C100D EISA, will be available for January delivery. With an already established market base in the personal computer and small office/home office markets, the Fremont, California-based PC system integrator expects to make significant inroads in the corporate marketplace with their new system, providing performance capabilities that accommodate servers and workstations with ease.

The performance of the dual 100MHz processors increases productive processing throughput up to 80 percent faster than a single processor unit. Intelesys has engineered this system to fulfill the needs of enterprise computing and workstation users requiring CAD/CAM, 2D/3D graphics and database modeling applications.

The Pentium P54C100D dual processor EISA architecture with PCI local bus technology utilizes a Neptune chipset from Intel. The well simulated design process has high speed transmission lines to improve system performance and reliability. The EISA PCI motherboard design supports a 16KB on-chip cache, 256/512KB external writeback cache, six 72-pin SIMM sockets supporting up to 192MB RAM, AMI MegaKey keyboard controller with Powersave and Green PC features and the Baby AT size footprint.

The system is available in both server and workstation configurations featuring hardware and software such as Microsoft's OfficePro, 1 or 2 GB hard disk drives and, a RAID 5 disk array. Standard features include Microsoft's DOS and Windows NT, 16MB RAM, 256K cache memory, a PCI-IDE bus, SCSI-2 optional, and a PCI video local bus, advanced telephony capabilities with voicemail, remote paging and answering, full duplex phone, 14.4 fax/modem, 15-inch digitally-controlled flat screen monitors, and Microsoft's ergonomic mouse. Full tower, mini tower and desktop cases are available. Multimedia features include a 16-bit MIDI hi-fi sound synthesizer, double speed photo CD-ROM, speakers and a microphone. Prices for the new systems start at \$4799

"The Intelesys dual processor configuration is superior for network servers, particularly with the high speed data transfers," said Babar Hamirani, President of Intelligent. "We also see this system used as a high-end workstation for database development, and the significant number crunching required for complex engineering and scientific calculations."

Intelligent Computers and Technologies is a privately held company

specializing in PC systems integration. Intelligent offers two product lines: the Intelesys line, which is marketed directly to small and medium-sized businesses; and the Amerigo line, which is sold in retail stores only, and is currently available in over 400 retail outlets throughout the United States. Headquartered in Fremont, California, the company can be reached at (510) 226-6300

Intelligent Computers & Technologies  
46231 Landing Parkway  
Fremont, CA 94538  
(510) 226-6300 Tel.  
(510) 226-9363 Fax

## INTELLIGENT ADDS "GREEN" STATE-OF-THE-ART NOTEBOOK, 'Chameleon-TO ITS INTELESYS PRODUCT LINE CHAMELEON OFFERS VERSATILITY AND DESKTOP CAPABILITIES ON THE GO

Las Vegas, NV. COMDEX, November 14, 1994 - Intelligent Computers and Technologies announced the addition of the Chameleon, an Intel-based upgradeable 486SL enhanced notebook computer, to its established family of PC products designed for the small-to-medium sized business and home office markets. The Chameleon is the first notebook product offered by Intelligent and is designed to complement its Intelesys product line.

"We added the Chameleon to our Intelesys product line because it has a flexible, economic design, allowing it to meet a wide range of user needs, while complying with environmental standards said Babar Hamirani, President and CEO of Intelligent. "Its standard features provide the same power and reliability of other notebooks on the market, while its various options give the user the extended capabilities of a desktop system on the go."

Designed and manufactured in accordance with EPA "Green" requirements, the Chameleon offers a wide variety of features and options. Standard features include a 486DX2-50/66MHz processor, upgradeable to DX4/75 and 100MHz; a 340MB removable hard drive; 4MB or 8MB of RAM, upgradeable to 16MB or 20MB; a 32-bit VESA local bus VGA with 1MB RAM; an interchangeable monochrome LCD panel; simultaneous CRT and LCD display with external CRT resolution of up to 1024 x 768 x 256 and fax/modem, capability.

Light and portable, the standard version weighs 6.2 lbs. and is 11" x 9" x 1 7/8" in dimension. It has a built-in 3/4" trackball with two buttons and a palm rest area; and 85-key low profile keyboard with inverse "T" layout; a Ni-MH, 8-hour battery pack with A/C adapter; a 3.5" 1.44MB floppy disk drive; and a specialized card slot designed to accommodate removable cards for sound, pen-based computing, LAN adaptability and SCSI interface, and a 14.4 fax/modem, all of which can be purchased separately from Intelligent. It supports System-Level-Zero-Volt suspension so that the battery can be removed without any data loss, and has a 200-pin connector for optional Intelligent I/O box docking station.

Additional options include interchangeable dual-scan STN color or active matrix TFT color LCD display panels; a pen-based display panel; and a PCMCIA slot that supports Type-II or Type-III cards. The active matrix TFT color display panel is state-of-the-art and offers the best full color screen available in a notebook.

The Intelligent I/O box is included with the docking station or can be

purchased separately. It has two serial ports, one parallel/external FDD port, an external keyboard/keypad port, one external video port, one PS/2 mouse port and connector, which allows the Chameleon to be setup in a simple desktop configuration and/or integrated with an existing system or network.

The docking station, with its four 16-bit ISA expansion slots, a 3.5" SCSI HDD bay and a CDROM bay, allows the Chameleon to be transformed into a complete desktop system.

"The Chameleon is ideal for today's user. More and more people are on the go, yet are not willing to sacrifice the performance and capabilities of their desktops," said Hamirani. It is a portable office."

Intelligent will be demonstrating the Chameleon in its private viewing suite at Caesar's Palace, in conjunction with COMDEX. It will be available for purchase directly from Intelligent in early January.

As with Intelligent's other PCs, the Chameleon comes bundled with a Microsoft suite of products including the latest versions of MS-DOS, Windows for Workgroups, Works, Money and Publisher, a software value of over \$600. It also comes with the company's unique Computer Care Kit, containing how-to cards with instructions for simple installations, troubleshooting; and easy ways out, should the user get stuck. The kit contains a "Rescue Disk" which simply re-sets the computer to its original factory settings in case of misconfiguration. Additional help is available through a 24-hour toll-free Technical Support Hotline.

The Chameleon is priced from \$1795 for a Monochrome, 4MB based system to \$3195 for the TFT 8MB version.

Intelligent Computers and Technologies is a privately held company specializing in PC systems integration. Intelligent offers two product lines: the Intelesys line, which is marketed directly to small and medium-sized businesses; and the Amerigo line, which is sold in retail stores only, and is currently available in over 400 retail outlets throughout the United States. Headquartered in Fremont, California, the company can be reached at (510) 226-6300.

Intelligent Computers & Technologies  
46231 Landing Parkway  
Fremont, CA 94538  
(510) 226-6300 Tel.  
(510) 226-9363 Fax

## HawkNet Introduces NetReport Software For Enterprise-Wide Network Capacity Planning and Troubleshooting

CARLSBAD, CALIF.--December 5, 1994--HawkNet, Inc., a pioneer and leader in network performance software solutions, has introduced NetReport, a new software product designed to assist network managers with capacity planning and troubleshooting through the use of extensive monitoring, reporting and analysis capabilities.

Immediately upon installation, NetReport begins monitoring over 110 NetWare internals for proper settings, more than twice the number of functions observed by any other product on the market. NetReport provides network managers with an in-depth view of every file server on the network, offering instant access to real-time data and historical data which can be viewed in vivid, Windows-based displays.

"Never before has so much file server and network operating system-level information been available in one place, or on a single screen, for that matter," said Michael Price, HawkNet's director of software research and development. "As networks grow and user needs fluctuate, network managers can use this valuable information to perform daily troubleshooting, capacity planning and real-time monitoring tasks."

### A Window to the Inner Workings of the Network

To analyze network activity, network managers simply select from 12 NetReport categories including NetWare, LAN, network interface card (NIC), connections, disk, memory, volumes and NetWare Loadable Modules (NLMs). Each category offers detailed information in seconds, enabling the network manager to avoid the time-consuming task of searching through multiple software programs or NetWare's MONITOR.NLM in order to monitor activity or track down problems.

NetReport allows network administrators to easily locate suspicious trends that negatively impact the network. Large NLMs, for example, can degrade NetWare performance due to their abundant memory requirements. It is therefore important for the network manager to be able to instantly view and track memory allocation -- a process that is easily performed using NetReport.

Complete information on each NLM loaded and a memory map of the server is also offered, allowing the network manager to quickly determine version numbers, dates, RAM footprints, memory usage and other data on every server in the enterprise.

Detailed statistics on NetWare internals gives a quick summary of NetWare

revision numbers and licensing levels. In addition, NetReport can poll individual NICs for throughput data, error codes, network addresses and other information that can indicate potential problems. As a result, the network manager can track segment congestion levels quickly and easily, making adjustments accordingly before load balancing problems occur.

And because the software tracks activity all the way down to the connection level, data throughput for each user connected to the server is available. This assists with capacity planning, allowing the manager to determine where and when new and additional resources are needed.

### Tangible Historical Evidence to Analyze, Respond and Plan

NetReport continuously analyzes file server activity and compiles a valuable user-defined database of historical information. Unlike other products that can accommodate only hours of historical data, NetReport permits users to specify a historical time frame of up to 90 days. Such data is ideal for troubleshooting, providing detailed records for investigating the critical factors that precipitated a file server ABEND--and avoiding future problems. The historical database also serves as a trend analysis tool for reporting and expansion planning. As a result, the network manager can plan quarter-by-quarter or month-by-month for the equipment requirements brought on by new users and ever-increasing amounts of network data.

With NetReport, single-button control and quick, "point and click" techniques rival leading commercial packages for creating high quality reports. While other monitoring packages offer limited (or no) options for customized reports, NetReport includes twelve custom graphing and reporting alternatives (including 2-D, 3-D, bar and Gantt). By combining the features of a monitoring package with a superior graphing functionality and Dynamic Data Exchange (DDE) support, NetReport equips users with the means to create thorough reports faster than any other tool on the market, according to Price.

NetReport runs on the server as a NetWare Loadable Module and on the client as a Windows application. Suggested list pricing is \$495 for the primary service license.

HawkNet, Inc. is a privately held company dedicated to developing and publishing software that optimizes and enhances network performance in Novell NetWare and Microsoft Windows operating environments. In addition to NetReport, HawkNet also offers NetTune PRO, the industry's first NLM to incorporate artificial intelligence for Novell network performance tuning. For more information, contact HawkNet, Inc., 5950 La Place Court, Carlsbad, CA 92008. Telephone: 1-800-HAWKNET (429-5638). Fax: 619/929-9969

## Trinzic Corporation and Rational Software Corporation Announce Object Analysis and Design Tool for Client/Server Application Development

### Integration of Rational Rose and ObjectPro Provides A Comprehensive Development Environment

Palo Alto, CA, and Santa Clara, CA, December 6, 1994--Trinzic Corporation (NASDAQ:TRNZ) and Rational Software Corporation (NASDAQ:RATL) today announced the availability of Rational Rose/ObjectPro, a new product that provides the benefits of object-oriented technology to client/server application development. Rational Rose/ObjectPro is a fully graphical, object-oriented, software-engineering tool for analysis and design of client/server applications. It spans the full development cycle from analysis through implementation by allowing developers to graphically define and model their applications, and automatically generate source code and database schemas from their client/server systems.

The Rational Rose/ObjectPro tool is designed to help organizations manage the [complex] development of client/server applications. Developers of client/server systems have historically divided applications development into two domains: the user interface and the database [interaction]. As applications become more complex and sophisticated, developers are expanding those domains into three parts: the user interface, the business object, and the database interaction.

"Many organizations are adopting object-oriented technology for developing new client/server applications," said Marc Goldberg, marketing manager at Rational. "These new tools enable developers to use object-oriented technology to increase productivity, cut development costs, and reduce time-to-market of new client/server applications. With object technology and Rational Rose, developers can focus on solving the business issues rather than worrying about implementation."

### Rational Rose/ObjectPro

Rational Rose/ObjectPro automates the production of ObjectPro code. ObjectPro is Trinzic's new object-oriented development environment that combines the best aspects of C++ and Smalltalk in a new-generation tool. Using information in the Rational Rose/ObjectPro class diagrams, developers can generate ObjectPro source-code files. These files contain ObjectPro code constructs that correspond to the notation items, classes, relationships, and adornments that have been defined in the model with Rose diagrams and specifications. Rational Rose/ObjectPro generates ObjectPro class, instance, attribute and method structures that define an ObjectPro application.

"The integration of Rational Rose and ObjectPro yields a joint

modeling/construction environment that makes object developers the clear winners in adopting and deploying object-oriented solutions," said Frederick W. Rook, Ph.D., chief technical officer at Trinzic. "We expect the primary benefit of Rational Rose/ObjectPro to be in the modeling, development and reuse of business objects."

ObjectPro is a powerful object-oriented development tool for building robust client/server applications. ObjectPro is an object-oriented system that provides the productivity and flexibility developers need to build client/server applications with significant business logic. All application components are stored as objects so developers can readily take advantage of the benefits of inheritance and specialization throughout their applications.

The ObjectPro Object System is fully integrated with ObjectPro libraries, making it easy to share and reuse all application components--even complex business models--built in ObjectPro. The ObjectPro Object Language contains built-in constructs for iteration, assignment, evaluation and basic operations, and is extensible with libraries. This increases ease-of-use and decreases the developer's learning curve. ObjectPro also supports full graphical user interface development, as well as access and update to a wide variety of databases.

#### Pricing and Availability

Rational Rose/ObjectPro is available for PCs running Windows or OS/2 for \$1,495 (U.S.). The product is available from both Trinzic at (800) 234-7724 and Rational Software at (800) RAT-1212, and their authorized distributors. The ObjectPro application development system is also available from both Trinzic and Rational Software for \$2,995 (U.S.).

Rational Rose/ObjectPro complements Trinzic's family of client/server software tools, which includes ObjectPro for methodology-independent development, Aion Development System (AionDS), Forest & Trees, InfoPump and InfoHub. The new product also joins Rational's family of object-oriented products, including Rational Rose for language-independent analysis and design, Rational Rose/Ada and Rational Rose/C++, which generate and reverse engineer Ada and C++ code.

-----  
Rational Software Corporation provides software engineering solutions to ensure the success of customers in developing and maintaining complex software systems that are strategically important to their businesses. Rational Software Corporation (NASDAQ symbol: RATL) has headquarters in Santa Clara, CA, and regional sales and support offices worldwide.

Trinzic products--ObjectPro, InfoHub, InfoPump, Forest & Trees, and the Aion Development System (AionDS)--enable customers to build, integrate and

implement applications in a client/server architecture. Headquartered in Palo Alto, California, Trinzic Corporation has more than 275 employees and a combined installed base of more than 5,200 customers representing more than 35,000 product licenses. Trinzic products are distributed by a direct sales force and key marketing partners, as well as distributors throughout North America, Europe, the Pacific Rim and South America.

Trinzic Corp  
101 University Ave  
Palo Alto, CA 94301

## IPLab Gel Now Native for PowerMacintosh, Major New Capabilities Added

(Vienna, Virginia -- November 15, 1994) Signal Analytics has announced a major update to IPLab Gel, its densitometry and gel analysis software for the Macintosh. IPLab Gel version 1.5 contains powerful, easy-to-use commands specifically designed for performing densitometry and component sizing on electrophoretic gel images, and with This update, adds major new functional capabilities as well as the ability to run in native mode on the PowerMacintosh.

### PowerMacintosh Support

In addition to compatibility with the Macintosh II, Centris, and Quadra computer families, IPLab Gel v1.5 also features a native version which supports the PowerMacintosh 6100, 7100 and 8100. This new PowerMac version of IPLab Gel is able to fully exploit the new computers' power by markedly increasing the speed of computationally intensive operations.

### Molecular Weight Calibration

In addition to its previous capabilities for one- and two-dimensional density analysis on electrophoretic gel images, IPLab Gel can determine molecular weights associated with bands within a gel image. Molecular weights are determined by matching band positions against user-defined standards.

### New Drawing Tools

IPLab Gel now features special tools for drawing moveable objects into color overlays. The objects can be used to define bands of interest for analysis, and to annotate gel images for publication and documentation. A new Export command saves annotated images as PICT files that preserve the high resolution overlay drawings.

### Enhanced Capabilities

The software also has enhanced support for large image files, now requiring 40% less memory to open some images. IPLab Gel reads standard PICT and TIFF files as well as Molecular Dynamics' PhosphorImager data files. IPLab Gel performs all processing and analysis on images with 8 bits per pixel, as well as 12-16 bits per pixel images. This feature allows users to take full advantage of the additional density information which is provided by the latest 12-bit scanners.

IPLab Gel version 1.5 is now shipping at a price of \$850. Free updates are available to registered users of previous versions.

Signal Analytics, founded in 1988, is an imaging company which specializes in developing imaging-based solutions for scientific professionals. Its products and systems are used in imaging applications ranging from video and electron microscopy to medical imaging, remote sensing and astronomy.

Signal Analytics Corporation  
440 Maple Avenue East, Suite 201  
Vienna, Virginia 22180  
703-281-3277, fax 703-281-2509

## IPLab Spectrum Adds 3-D Visualization for Scientific Users

(Vienna, Virginia -- November 14, 1994) Signal Analytics has just begun shipping one of the most powerful IPLab Spectrum Extension modules yet, called 3D. 3D contains powerful, easy-to-use commands designed specifically for displaying and analyzing three-dimensional data structures, such as those acquired from serial sections of a microscopic specimen. The package consists of several modules which operate on both grayscale and 24-bit color image data. The modules in 3D have been optimized for use in optical fluorescence microscopy. Combining 3D with IPLab's optional microscope focusing control, makes a powerful automated three-dimensional image capture and visualization system.

### Three-Dimensional Visualization

Users can create a movie-loop of image projections from various points in space. Playing back the movie-loop gives the impression of a rotating solid, allowing users to view spatial relationships among different components of a three-dimensional specimen. A Mosaic View command places images in a two-dimensional array to simplify publication of three-dimensional image data. Time sequences of multispectral images, such as fluorescence in situ hybridization data, can be merged into full-color image sequences and be displayed in a movie-loop.

### Sequence Enhancement

3D offers image sequence enhancement capabilities including a user-controllable three-dimensional sharpening filter, brightness equalization, and three-dimensional image background subtraction.

### Tracing

A powerful 3-D tracing tool allows users to outline objects in three dimensions. Outlined information is saved in an overlay which can be stored separately and used for particle sizing, or can be stamped onto the image to highlight specific volumes.

### PowerMacintosh Compatibility

The 3D Extension is available in native code for the PowerMacintosh, allowing it to fully exploit the new computers' power by markedly increasing the speed of computationally intense operations. The 3D extension with IPLab Spectrum running on a PowerMacintosh allows scientists to perform operations with three-dimensional data that previously could be done only on workstations.

The 3D extension to IPLab Spectrum is available now for \$1,200. IPLab Spectrum version 2.5 is required to run 3D and is priced separately, starting at \$1,200. Both IPLab Spectrum and 3D are for the Macintosh and PowerMacintosh computers.

Signal Analytics Corporation  
440 Maple Avenue East, Suite 201  
Vienna, Virginia 22180  
703-281-3277, fax 703-281-2509

## FUTURE LABS Acquires VIS-A-VIS Conferencing Product Line from WorldLinx

VARs see FUTURELABS as best choice

Los Altos, CA, December 7, 1994 -- Future Labs, Inc., together with key value added resellers (VARs) and service providers, confirmed today that they have completed an agreement for the transfer of the VIS-A-VIS conferencing product line from WorldLinx Telecommunications, Inc., of Toronto, Canada. This announcement is a culmination of efforts by Future Labs and these key industry participants to see that technology inherent in the VIS-A-VIS product line is developed to its furthest possible extent. With Future Labs already a leader in the document conferencing industry, they were viewed by VARs as an obvious strategic fit to acquire VIS-A-VIS.

In the acquisition, Future Labs acquires the following four key components, a Data Bridge that provides for multi-point conferencing among heterogeneous communication links (asynchronous modems, ISDN, X25, TCP/IP), a T-120 compliant MCS Development Kit for software developers who wish to add multi-point communication capability to their applications, several thousand customers who were the early adopters of document conferencing, and additional quality VARs with successful track records in selling and supporting document conferencing software.

"We fully expect dynamic synergies from the assimilation of the VIS-A-VIS product line and technologies with TALKShow," stated John Chua, president of Future Labs, Inc. "This includes our work to fully support the T.120 standard, and our commitment to offer the next generation of feature rich conferencing software products," he concluded.

Essential to the acquisition are the following VARs and developers who represent numerous domestic and international markets:

- ADCOM Electronics, Ltd. of Toronto, Canada
- Advanced Technology Integration (ATI) of Arlington, VA
- Business and Industrial Electronic Consultants Ltd. (BIEC)  
of Wellington, NZ
- Microsystem Telecomputing, Inc. of Milwaukee, WI
- Overlook Communications International (OCI) of Atlanta, GA
- Teleconferencing Technologies, Inc. (TTI), of Woodstock, IL
- Xenex Oy of Vantaa, Finland.

Each of these companies view the acquisition as being critical in their efforts to continue to provide the highest possible degree of service and support to their customers.

"As VARs, delivering expertise and customer service is our business. Thus,

customers will continue to receive the same high level of support as they have in the past. But in addition, they will now also be backed by the full technological and management support of the industry's document conferencing leader, Future Labs. In our minds, the announced agreement represents value added for both our customers and ourselves", stated Mr. Daryl Braun, President & CEO of TTI.

"This announcement satisfies the objective of our parent company, Bell Canada, to exit from the desktop document conferencing business, while assuring that our loyal customers and resellers are fully supported. Future Labs is positioned to provide the type of leadership and direction that will prove beneficial to all concerned parties," offered Ms. Lib Gibson, Vice President of Marketing for WorldLinx.

Future Labs will assume all sales and support functions for the complete VISA-VIS product line, working in conjunction with VIS-A-VIS VARs. As of December 1st, orders are already being processed.

Future Labs, Inc. develops and markets real-time communication software for multi-party collaboration and remote meetings. The company focuses on the needs of individuals in different locations who must communicate ideas clearly and review information quickly. The company's product, TALKShow, facilitates timely document reviews and decision making. End users are applying TALKShow in engineering design, project reviews, legal document review, medical consultation, advertising design reviews, financial reporting, training and support. The company also markets a high-end CAD Edition and Distance Training Edition of the TALKShow product.

For more information on Future Labs or TALKShow, contact Future Labs, Inc. 5150-E21 El Camino Real, Los Altos, CA 94022. Telephone (415) 254-9000, Fax: (415) 254-9010.

-----  
Future Labs/WorldLinx Acquisition

#### Participating Company Information

ADCOM Electronics Ltd. is one of Canada's largest suppliers of electronic communications products and services. With offices throughout Canada, the company is well-positioned to meet the audio, data and video communication needs of the corporate, commercial, government and educational markets.

ADCOM is a value-added reseller of PictureTel video codec, a collaborative computing solutions provider for Microsoft and a master distributor for the Future Labs products in Canada. Certain products are designed in the company's own multimedia products group such as the iVue multimedia

communications controller. iVue is used for control of room environment as well as teleconferencing communication needs as it is presented to the manager, teacher or student.

Advanced Technology Integration (ATI) since 1987 has successfully delivered a variety of customized conferencing solutions to government, corporate, and telecommunications clients. ATI's continuing relationships with these clients can be attributed to our commitment to providing the most effective communications system for each client's specific application and our ongoing support of these installations. Services are offered in the following areas: Audio Teleconferencing, Desktop Conferencing, System Design and Implementation, and Service and Maintenance.

Business and Industrial Electronic Consultants Ltd. (BIEC) Formed in 1992 as part of the B&I group of companies within its infrastructure of leading electronics, telecommunications, and broadcast expertise, to service the public and government sectors of New Zealand. BIEC's main objective is to maintain its leading edge in all areas of Graphics Teleconferencing in New Zealand both from the educational and corporate perspective.

With the adoption by Telecom NZ of VIS-A-VIS into the New Zealand Telelearning Network, and the overall market share by BIEC of VIS-A-VIS products, it is expected that VIS-A-VIS will maintain operations until TalkShow is incorporated into the system as a joint venture. TalkShow has been given priority by BIEC with the advent of Future Labs, and its future is seen as the solution for BIEC in graphics teleconferencing to both the corporate and educational sectors.

Microsystem Telecomputing, Inc was established in 1987 and up until 1991 provided computer system integration services to its customer base. Services included networking, programming, and software application training. In 1991, MicroTel's marketing interest shifted to distance education and training. Subsequently, the company has been developing computer hardware interface for various multimedia communication facilities, and has several VAR relationships with multimedia developers and manufactures.

Overlook Communications International (OCI) is a multi-service telecommunications company corporately based in Atlanta, Georgia. OCI provides a full range of interactive call processing and support services that enhance the fast growing telepromotions industry. The company's well seasoned senior management and technical staff offers in excess of 75 years in all aspects of the telecommunication business. The success of this multifaceted telecom company has been accomplished through its leading edge technology in offering their client/customer base, custom services that include 800 database management, prepaid long distance calling cards, dealer locators, product sampling, and "live operator" call center services.

In January 1995, as an active partner of the ICCO, OCI will provide the bridging facilities and administrative support necessary for customers to utilize multi-point audio, data, and video conferencing services with a minimum of overhead expense and capital investment. Access to these services will be via an 800 number from anywhere in North America.

Teleconferencing Technologies, Inc. (TTI) designs, manufactures, and distributes teleconferencing products. The Chameleon represents the latest in a series of award winning products introduced by TTI. This all digital conference bridge serves audio requirements today and audiographics in 1995. The association with Future Labs, Inc. provides TTI the software tools required to incorporate and optimize the T.120 standards for conferencing in the Chameleon's OS/2 environment. Other TTI products, the InterAct and InTellect, facilitate audio interaction in broadcast television programs. Polycom's SoundStation line leads TTI's distribution products with aggressive sales in the US and Canada.

WorldLinx Telecommunications, Inc. develops and markets connectivity and electronic commerce services to the Canadian business community. This includes dedicated network services, messaging, EDI, and information services.

VIS-A-VIS and its parent company, Bell Canada, were major contributors in defining international standards for multipoint conferencing. Since the first release, VIS-A-VIS products have been built on the multipoint technology on which the T.120 ITU standards are based.

Xenex Oy is the leading supplier of distance learning technology, data security as well as the market leader in SDH transmission equipment providing country-wide networks for telecommunications. Xenex is marketing tools for distance learning via reseller network covering the northern part of Europe. Xenex is headquartered near Helsinki Airport in Finland.

## Build Better Programs With MS-DOS System Programming, 3rd Edition

December 2, 1994 -- Lawrence, KS -- The revised and expanded 3rd edition of MS-DOS System Programming is now available. This edition, edited by David Burki and Robert Ward, has been completely revised for MS-DOS 5 & 6. It is published by R&D Technical Books and distributed exclusively worldwide by Prentice Hall.

MS-DOS System Programming, 3rd Ed. provides the serious DOS programmer with 29 chapters of valuable tools and routines. This edition includes 20 completely new chapters, such as: writing for the PC speaker; interfacing a Windows program with a real-mode device driver; executing high-speed file transfers using the eight-bit bandwidth of the parallel port; and much more. David Burki and Robert Ward have picked some of the best programmers around - including Matt Pietrek, Karen Hazzah, and Scott Robert Ladd - to focus on the problems that bedevil DOS developers. All source code is included on an accompanying disk.

R&D Technical Books is a division of R&D Publications, Inc., publishers of C/C++ Users Journal, Windows/DOS Developer's Journal, Network Administrator, and Sys Admin.

### Product Information:

MS-DOS System Programming, 3rd Ed.  
812 pp., \$39.95 (includes disk)  
ISBN: 0-13-207382-X

### Sales Information:

Prentice Hall Order Processing Center  
P.O. Box 11073  
Des Moines, IA 50381-1073  
phone: (515) 284-6751, FAX: (515) 284-2607

Corporate: 800-223-1360  
Government: 800-933-0688

## DIGITAL VISION ANNOUNCES NEW ENHANCED COMPUTEREYES/LPT PARALLEL PORT VIDEO FRAME GRABBER

December 1, 1994 -- DEDHAM, MA -- Digital Vision, Inc., manufacturer of video frame grabbers and video scan converters, announces the release of a new and improved version of its popular parallel port video frame grabber, ComputerEyes/LPT. The new hardware is now shipping and sells for \$399.95, the same price as the original hardware version.

Like the original model introduced last year, the new ComputerEyes/LPT design distinguishes itself from other video capture devices by the way it interfaces to the computer, attaching to a standard printer parallel port. This external-hardware approach brings full-color video frame grabbing capabilities to all PC compatible machines - laptops, portables, and full-sized desktop computers. The parallel port design offers simple plug-and-go installation and operation with no special hardware requirements or limitations.

ComputerEyes/LPT is an accurate full 24-bit color capture device that allows users to easily bring images into the computer from any video camera, camcorder, VCR, or still video source. It features instantaneous (1/30th of a second) image grab for capturing even fast moving subjects without distortion, and both composite and S-video inputs for high-quality captures.

The new /LPT design includes features and enhancements to benefit both the portable computer market for in-the-field capture applications, and for applications where a video capture device must be easily shared between several different machines (such as in schools or home/offices).

Enhancements and improvements of the new design include:

- \* New truly-portable design (no external power supply required); Low-power design is powered directly from computer parallel port or from internal batteries for low-energy laptops (3 "AAA" cells provide 500 or more image captures)
- \* New compact hardware module is half the size of the original design smaller than a standard PC mouse
- \* New faster preview modes provide for live action previews up to 15 fps over standard parallel port for improved framing and focusing
- \* Comes with easy-to-use Windows capture application supporting all standard image formats - TIFF, PCX, BMP, JPEG, and others
- \* New Twain driver included for captures directly from within any Twain compatible application (PhotoStyler, PhotoFinish, ImagePals, Photoshop, etc.)

Digital Vision manufactures the complete ComputerEyes line of low cost video frame grabbers and the TelevEyes family of computer-to-TV converters for both IBM PC and Macintosh computers. The company recently celebrated its ten year anniversary in manufacturing computer/video products. Digital Vision products are available through the normal distribution channels.

Digital Vision Inc  
270 Bridge St  
Dedham, MA 02026  
617-329-5400, fax 617-329-6286

Zypcom's New V.34 Modems exceeds 200 kilobits/sec.

- \* Supports V.34, V.32terbo, V.32bis, V.32, V.22bis standards for data and V.17 and V.29 for fax
- \* Uses ACS (Adaptive Connect Speed) technology to boost uncompressed line rate to 33.6Kbps
- \* Accesses flash memory to download new features instantaneously
- \* Provides V.42 and enhanced (8:1) V.42bis error control and data compression for up to 230.4Kbps throughput
- \* Supports AT, V.25bis, 801ACU and EIA 578/592 Classes 1 and 2 autodialing
- \* Transmits on dial-up and leased lines with automatic dial backup and restoral
- \* Provides network management interrace and full security capabilities

Hayward, California, December 1994 -- Zypcom, Inc. announces two new V.34 (28.8Kbps) high-speed modems: the top-or-the-line Z34-SX and the lower-cost Z34-SE. The Z34-SX is a flash EPROM-based design That simplifies updates or enhancements with on-line downloads of new modem operating software. It operates on dial-up and 2- or 4-wire leased lines. The Z34-SE is a PROM-based design and offers a lower price point. The Z34-SE operates on dial-up lines only. Both modems can transfer data as fast as 230.4Kbps with compression and as fast as 28.8Kbps without compression (33.6Kbps with ACS). Zypcom's "corporate-class" modems are designed for data communication professionals worldwide and can be used across MS-DOS- and Windows-based PCs, Apple Macintosh systems, UNIX workstations, AS/400 minicomputers and LAN communication servers and routers.

The Z34-SX targets buyers who need 28.8Kbps (V.34) and raster data transfer speeds with simple upgradeability for both dial-up and leased-line applications. Zypcom's Z34SX and its downloadable modem software technology eases the expected interoperability difficulties associated with deployment of the new ITU-T V.34 modem standard. The Z34-SE targets buyers who need a dial-up modem with 28.8Kbps (V.34) and raster data transfer speeds and corporate-class features. The Z34-SE, with remote configuration features, a full complement of security options, V.25bis autodialing and a Z960NM management system interface, provides data communication managers with the required features.

Both modems offer compatibility with all applicable ITU-T and Bell standards, including V.34, V.32bis, V.32, V.22bis, V.23, V.22, V.21, 212A, and 103 for data transfers. Both modems also include compatibility with the public domain's V.32terbo modulation scheme. Error correction and data compression support cover MNP Classes 2-5, as well as V.42 and enhanced (8: 1) V.42bis. Facsimile support includes Group 111, V.17, V.29, V.27ter and V.33. And from a software interrace point Or view, the modems support V.25bis and Hayes-

AT-compatible autodialer commands and EIA-578/592 Classes 1 and 2 for fax software compatibility. The Z34-SX also has an integral Bell 801ACI-compatible automatic calling unit for mainframe RS-366 dialing applications.

The Z34-SX and Z34-SE support fixed-speed and autobaud data transfers at speeds ranging from 300 bps to 230.4Kbps. Line rates range from 300 bps to 28.8Kbps (33.6Kbps with ACS) and offer autorate fallback/fall-forward capabilities. With enhanced V.42bis data compression for 8-to- 1 throughput gains, effective throughput speeds can reach 230.4Kbps.

Both modems include features that data communications professionals demand-features not typically found on value-priced modems. For example, the Z34-SX and Z34-SE support network management, callback and password security for asynchronous communications, as well as link security for synchronous communications. They also provide network managers with the flexibility needed to deal with large IS installations where it is important to be able to run diagnostics remotely, change modem options, and pull down modem and line performance statistics.

The Z34-SX, which operates on both dial-up and 2-/4-wire leased lines, also performs the automatic dial backup and call restoral functions required in mission-critical, leased-line applications. When a leased line is severed, the modem will automatically reconnect at the same speed via a single dial-up line. The Z34-SX can also automatically restore the dedicated leased-line connection when the line is repaired.

The Z34-SX modem includes one of the most generous warranties in all of the computer business. For two full years after purchase, Zypcom will provide a new unit in exchange for a faulty one within 24 hours of their product's failure, with shipping prepaid by Zypcom.

The Z34-SX and Z34-SE are available now. The Z34-SX sells for \$749. Fax and communications software is available for Windows (Z34-SXW), DOS (Z34-SXD) or Macintosh Z34-SXM) environments. New versions of Z34-SX modem control software with all improvements and enhancements will be FREE. Registered users can download new versions Or modem software in minutes from Zypcom's bulletin board. The Z34-SE sells for \$499. Fax and communications software is available for Windows (Z34-SEW), DOS (Z34-SED) or Macintosh (Z34-SEM) environments.

More on Zypcom

Zypcom was rounded in 1991 to develop, manufacture, and market hardware and software for wide-area-network data-communication applications. In 1991, Zypcom purchased Racal-Vadic product Lines from Racal-Datacom and has since developed a wide range of high-performance products. The

company offers 4-, 8-, 12-, and 16-channel asynchronous statistical multiplexers; standalone and rackmount analog modems; modem accessories; and communications software. Zypcom markets products worldwide through distributors, OEMs, and systems integrators.

For more information, contact Zypcom Inc., 2301 Industrial Parkway West, Building 7, Hayward, CA 94545-5029, (510) 783-2501, FAX (510) 783-2414.

## Microsoft Word Developer's Kit, Second Edition

Completely Updated to Cover Microsoft Windows NT, Apple Macintosh and Microsoft Windows

Redmond, WA--December 8, 1994 - Microsoft Press announces the second edition of the resource for developers building solutions around Microsoft Word 6.0, the MICROSOFT WORD DEVELOPER'S KIT book-and-software package. The kit makes application development across platforms easy, with coverage of Microsoft Word 6 for the Macintosh or Power Macintosh and Microsoft Word 6 for Windows NT, as well as Microsoft Word 6 for Windows.

With the help of this comprehensive source, developers can extend the capabilities of Word by creating custom applications, macros that streamline routine tasks, wizards, and dialog boxes, and by building cross-application solutions. For professionals working with cross-platform installations, the MICROSOFT WORD DEVELOPER'S KIT is a must. Readers will find the detailed technical information they need on using WordBasic, Workgroup MAPI and ODBC extensions, AppleScript, and the Word API. The kit includes introductory and advanced material about programming macros in WordBasic and complete reference information about the WordBasic language in Microsoft Word version 6.0.

The MICROSOFT WORD DEVELOPER'S KIT is divided into three sections: "Learning WordBasic" is an introduction to programming in WordBasic, "WordBasic Reference" lists all the statements and functions in the WordBasic language, and an "Appendixes" section provides information about the workgroup and ODBC extensions for WordBasic and a guide to the Word API and Word API programming tools.

The 3.5-inch disk includes sample WordBasic macros, templates, and dynamic-link libraries for putting MAPI and ODBC to work. Also included are valuable source files and development tools for programming with the Word API.

### Availability

The MICROSOFT WORD DEVELOPER'S KIT (ISBN: 1-55615-681-2) is available now in book and software stores, directly from Microsoft Press at 1-800MSPRESS, and through the CompuServe Electronic Mall (GO MSP). In Canada, call 800-667-1115. Suggested retail price is \$39.95 (\$53.95 in Canada).

### Microsoft Professional Editions

Microsoft Professional Editions are the comprehensive source of the latest

high-performance programming and technical information about Microsoft products. Developers and support professionals at all levels can choose from a full line of in-depth "how-to" guides and advanced technical resources.

Also available in the Microsoft Professional Editions series is the Microsoft Word 6 for Windows Resource Kit (ISBN 1-55615-720-7, \$39.95), which provides technical information, training ideas and materials, and installation and customization techniques for Microsoft Word 6 for Windows

Microsoft Press is the independent book division of Microsoft Corporation and the leading publisher of quality computer books about Microsoft products. More than 10 million users at all skill levels rely on a complete line of Microsoft Press books to make learning, using, and programming software easier. Titles ranging from self-paced tutorials for first-time computer users to technical references for professional programmers are distributed to book and software retailers worldwide.

Founded in 1975, Microsoft Corporation (NASDAQ "MSFT") is the worldwide leader in software for personal computers. The company offers a wide range of products and services for business and personal use, each designed with the mission of making it easier and more enjoyable for people to take advantage of the full power of personal computing every day.

Microsoft Press, One Microsoft Way, Redmond, WA 98052-6399  
206-882-8080, 800-MSPRESS

Microsoft Press Publishes Hardware Design Guide for Microsoft Windows 95

A Practical Guide for Developing Plug and Play PCs and Peripherals

HARDWARE DESIGN GUIDE FOR MICROSOFT WINDOWS 95--the official Microsoft guidelines and recommendations for developing Plug and Play PCs and peripherals--is now available from Microsoft Press as part of the Microsoft Professional Editions series.

Plug and Play is one of the most exciting technological advances in Microsoft Windows 95. This industry-wide initiative will make it infinitely easier to choose and install peripheral devices in a new generation of machines known as PC 95 computers. For the first time, end users will be able to easily set up and configure printers, modems, scanners, sound systems, and other peripheral devices.

HARDWARE DESIGN GUIDE FOR MICROSOFT WINDOWS 95 is a comprehensive discussion of the Plug and Play specification that explores the PC 95 concept in detail for those developing--and developing applications for--a PC 95 computer. This 352-page book outlines the design criteria for Plug and Play systems, devices, buses, and peripherals and examines the rationale for improving on the present standards. It also covers the full technical details for a PC 95, including internal and external peripherals, the BIOS used in a PC 95, and the new services performed by the BIOS as the go-between for the operating system and the system hardware.

Availability and Pricing

HARDWARE DESIGN GUIDE FOR MICROSOFT WINDOWS 95 (ISBN 155615-642-1) is available now in book and software stores, directly from Microsoft Press at 1-800-MSPRESS, and through the CompuServe Electronic Mall (GO MSP). In Canada, call 1-800-667-1115. Suggested price is \$29.95 (\$39.95 in Canada).

Microsoft Professional Editions

Microsoft Professional Editions are a comprehensive source of the latest high-performance programming and technical information about Microsoft products. Advanced users, developers, and support professionals can choose from a full line of in-depth "how-to" guides and advanced technical resources. A free catalog is available by calling 1-800-MSPRESS.

Microsoft Press is the independent book division of Microsoft Corporation and the leading publisher of quality computer books about Microsoft products. More than 10 million users at all skill levels rely on a complete line of Microsoft Press books to make learning, using, and programming software

easier. Titles ranging from self-paced tutorials for first-time computer users to technical references for professional programmers are distributed to book and software retailers worldwide.

Founded in 1975, Microsoft Corporation (NASDAQ "MSFT") is the worldwide leader in software for personal computers. The company offers a wide range of products and services for business and personal use, each designed with the mission of making it easier and more enjoyable for people to take advantage of the full power of personal computing every day.

Microsoft Press, One Microsoft Way, Redmond, WA 98052-6399  
206-882-8080, 800-MSPRESS

## New Ventana Title Introduces America Online Users to the Internet

CHAPEL HILL, N.C. and VIENNA, Va., December 12, 1991 New from Ventana Press, America Online's Internet, Macintosh Edition and America Online's Internet, Windows Edition, provide complete descriptions of AOL's Internet Connection. A listing of the best the Internet has to offer highlights this introduction to the information superhighway.

In a jaunty style well known to readers of Ventana's Official America Online Tour Guide, author Tom Lichty points out top Internet attractions and leads his audience through the process of accessing them. America Online's Internet starts with an AOL QuickStart for new members, and continues with insightful advice on "Netiquette" and the culture of the Internet. Explanations and exercises for sending and receiving e-mail, subscribing to mailing lists, participating in newsgroups, searching with WAIS and Gopher, and downloading files with FTP. A comprehensive glossary translates Internet and telecommunications terms into everyday language.

"We continue to increase the visibility and availability of America Online with direct marketing programs, OEM bundling, software trials, media partnerships, and the America Online's Internet books" said Steve Case, President and CEO of America Online.

America Online's Internet includes a companion disk with the AOL software, ready to install, and ten hours of free online time for new members.

America Online's Internet Connection features graphical icons and menus, which provide simple navigation through the Internet. The Internet services available from AOL include online publications and support forums designed to educate users about the Internet, an Internet mail gateway, and access to Internet Mailing Lists, Usenet News Groups, FTP file transfer, and Gopher and WAIS databases.

America Online's Internet, Macintosh Edition and America Online's Internet, Windows Edition are distributed by Ventana Press. The books are 400 pages, illustrated, with disk and 10 hours of free online time for new users. ISBN, Macintosh Edition: 1-56604-175-9. ISBN, Windows Edition: 1-56604-176-7. List price: \$24.95. For U.S. orders only, call 800/743-5369.

Author Tom Lichty is the retired director of the University of Oregon's microcomputer program. He has written a number of popular computer books including Mac, Word & Excel Desktop Companion and Desktop Publishing With Word for Windows, both from Ventana Press.

Ventana Press is a division of Ventana Communications Group, Inc., a diversified publisher of computer-related information tools. Ventana Press publishes books and other materials that help computer users become more productive, including Mosaic Quick Tour; The Windows Internet Tour Guide; The Mac Internet Tour Guide; The Mac Shareware 500; Windows, Word & Excel Office Companion and Looking Good in Print. All titles are available in bookstores and by writing Ventana Press, PO Box 2468, Chapel Hill, NC 27515; by calling Ventana's toll-free order line, 800/743-5369; by faxing Ventana at 919/942-1140; by sending email to [orders@vmedia.com](mailto:orders@vmedia.com) or via the World Wide Web at <http://www.vmedia.com/index.html>.

America Online, Inc., based in Vienna, VA is the nation's fastest-growing provider of online services. The Company offers its more than 1.25 million subscribers a wide variety of services, including electronic mail, conferencing, software, computing support, interactive magazines and newspapers, and online classes, as well as easy and affordable access to services of the Internet. Founded in 1985, the Company has established strategic alliances with dozens of companies including Time Warner, ABC, NBC, Knight-Ridder, Tribune, Hachette, IBM and Apple.

## Super Log Traffic V5

### New Release - New Manual - New Features

Since 1985, Super Log has been the favorite of thousands of around the world. Super Log has proved itself as a powerful, low cost traffic, billing, accounts receivable, sales staff tracker and reporting system. Now, a brand new edition of Super Log has just been released with many new features and improvements at no increase in cost.

- \* Traffic: Multilevel event scheduling including wheel plans, tap plans, named program scheduling, fixed position, satellite fill, special events, multi-line, cart, & audio cut rotations.
- \* Accounts receivable includes affidavits, invoices, special invoices, statements, debits, credits, order confirmations.
- \* Reports include Avails, 6 month sales, 5 year client and sales staff history, database, labels and many more.
- \* Creates and tracks live copy. Handles sports schedules. International dates, tax and currency handling included.
- \* Special features for small TV, LPTV, non-com/PBR, religious, instructional and alternate format operations.
- \* Options for interface with over 20 traditional, cart replacement and digital automation systems including Music Log, Digital DJ, DCM & AXS.
- \* Runs on any 386/486 computer with 80 meg+ hard drive & VGA monitor. LAN and multi-station versions available.
- \* Call or Fax for 60 page brochure and detailed pricing
- \* Still only \$3,000.00 US including 1 year support and updates. Time payment options for qualified customers.

The Management/Electric Works Corp  
Box 1-36457  
Ft. Worth, TX 76136  
800-334-7823, 817-625-9761, fax 817-624-9741

## Music Log V5

### New Release - New Manual - New Features

This new Music Log release is perfect for any station using digital live assist or automation programming as well as live operations. Best of all, there has been no increase in price.

- \* One time price, no endless monthly payments, no renewals .
- \* Up to 10,000 songs in 16 categories. Exclusive flow programming eliminates clumsy hour clocks. Handles special events and multi-formats in one day.
- \* Schedules for most CD jukeboxes and for consumer magazine type players. Also, singles, albums and tape.
- \* Define each song with title, artist, daypart, tempo, media ID, day & daypart separation, CD or HD address and memo. Multiple separation codes & depth search included.
- \* When used with Super Log traffic, produces precision fill for precise music placement with no hourly overflow.
- \* Runs on any 386/486 computer with 80 meg hard disk and VGA monitor. LAN & multi-station versions available.
- \* Options for interface to traffic Log or to digital automation Logs, including database export.
- \* Call or Fax for Demo disk and detailed pricing.
- \* Still only \$2000.00 US including 1 year support and updates. Time payment options for qualified customers.

The Management/Electric Works Corp

Box 1-36457

Ft. Worth, TX 76136

800-334-7823, 817-625-9761, fax 817-624-9741

## TRUE CROSS-PLATFORM AND MULTI-PLATFORM CD-ROM RECORDING

December 9, 1994 -- San Jose, California -- Creative Digital Research is pleased to announce the successful launch of their new CDR Publisher -- A Desktop CD-ROM Publishing Software. CDR Publisher currently supports cross-platform recording between PC and UNIX based discs. Already unique in the industry, by First Quarter 1995 CDR Publisher will have true cross-platform capability; supporting PC (ISO 9660), UNIX (ISO 9660 with Rock Ridge Extension) and Macintosh (HFS) format integrated on a single CD-ROM. This makes CDR Publisher the first truly cross-platform, multi-platform CD-ROM publishing software available.

CDR Publisher currently runs on PC Windows 3.1, SUN SPARC System (Solaris and SunOS), and Silicon Graphics Systems. Capabilities include: Image-on-the-Fly, optimized CD layout, Profile System Speed, automatic file name conversion, and outputting to multiple output media.

Best of all CDR Publisher is affordable, starting at \$495.

Creative Digital Research  
7291 Coronado Drive  
San Jose, CA 95129  
408-255-0999

PCB DESIGN CONFERENCE  
March 20-24, 1995  
Santa Clara Convention Center  
Santa Clara, CA

Exhibitor Contact: Megan Forrester  
Miller Freeman, Inc.  
415-905-4998

The PCB Design Conference is the Spring showcase for emerging technologies used in the design and manufacture of printed circuit boards. Running from March 20-24, the conference includes educational sessions for PCB engineers along with new product and service exhibits. Now in its third year, the PCB Design Conference is presented by Miller Freeman, Inc., the nation's third largest trade show producer.

---

EMBEDDED SYSTEMS CONFERENCE EAST  
April 18-20, 1995  
Inforum  
Atlanta, Georgia

Exhibitor Contact: Megan Forrester  
Miller Freeman, Inc.  
415/905-4998

Meredith Hahn  
Miller Freeman, Inc.  
415/905-2586

Embedded Systems Conference East is the only East Coast educational forum dedicated to embedded systems products and services. Exhibits cover the full spectrum of development tools, hardware products and services for embedded design. Now in its third year, Embedded Systems Conference East is presented by Miller Freeman, Inc., the publisher of Embedded Systems Programming and the nation's third largest trade show producer.

---

MECHANCAD  
May 1-3, 1995  
The Drake Hotel  
Chicago, Illinois

Exhibitor Contact: Lisa Arasteh  
Miller Freeman, Inc.  
415/905-2476

MechanCAD is the first conference designed specifically to address the

important changes occurring in the mechanical design industry. The educational program focuses on both basic skills and new technologies for computer-aided mechanical design, including subjects like document management and network integration. MechanCAD is presented by Miller Freeman, Inc., the nation's third largest trade show producer.

---

#### OS/2 WORLD CONFERENCE & EXHIBITION

July 18-21, 1995

Hynes Convention Center  
Boston, MA

Exhibitor Contacts: Maryann Kearns  
Miller Freeman, Inc.  
415/905-4927

Ryan Kam  
Miller Freeman, Inc.  
415/905-2486

OS/2 World Conference & Exhibition, devoted exclusively to IBM's OS/2 operating system, combines an exhibition of OS/2 products and services with technical courses and workshops designed to help attendees maximize their productivity using the OS/2 operating system. Presented by Miller Freeman, Inc., the nation's third largest trade show producer, OS/2 World is sponsored by OS/2 Magazine, OS/2 Developer, LAN Magazine and Stacks: The Network Journal.

---

#### EMBEDDED SYSTEMS CONFERENCE

September 12-15, 1995

San Jose Convention Center  
San Jose, CA

Exhibitor Contact: Megan Forrester  
Miller Freeman, Inc.  
415/905 4998

Meredith Hahn  
Miller Freeman, Inc.  
415/905-2586

The Embedded Systems Conference is the premier industry event for software developers and engineers involved in embedded design. It combines the largest exhibition of products and services for the design and implementation of embedded products with a comprehensive educational program including lectures and tutorials by recognized industry experts. Now in its seventh year, Embedded Systems Conference is presented by Miller Freeman, Inc., the publisher of Embedded Systems Programming and the nation's third largest trade show producer.

---

#### AUTODESK UNIVERSITY CONFERENCE & EXHIBITION

October 29 - November 2, 1995  
Moscone Convention Center  
San Francisco, CA

Exhibitor Contact: Lisa Arasteh  
Miller Freeman, Inc.  
415/905-2476

Autodesk University is the industry's leading gathering of computer-aided design professionals working with AutoCAD and related products. The program includes in-depth technical courses and workshops and an exhibition of hardware, software, peripherals, and add-ons for design and engineering professionals. Now in its third year, the five-day conference is presented by Miller Freeman, Inc., the nation's third largest trade show producer.

Miller Freeman Inc  
600 Harrison Street  
San Francisco, CA 94107  
Phone (415) 905-2354, Fax (415) 905-2220

--end----end----end----end----end----end----end----end----end--

## Books That Work and Hearst New Media Introduce The Homebuyer's Guide

### New Software Guide Helps Prospective Homebuyers Through Each Step of the Purchase Process

PALO ALTO, California, Nov. 21, 1994 -- Books that Work and Hearst New Media today released The Homebuyer's Guide, a software package that enables consumers to make one of the biggest decisions of their lives - buying a home -- with confidence. Using an intuitive interface, The Homebuyer's Guide provides prospective homeowners with a comprehensive five step approach to the purchase process: Preparation, Home Hunt, Financing, Offer, and Closing. The program manages the complexity of the home purchase process by providing informative articles, powerful specialized calculators, database comparison tools, and legal and financial document preparation. The Homebuyer's Guide is a Windows application available for around \$30.00.

**Powerful Tools for Each Step of the Process** The Preparation section is a clear-cut guide to real estate basics. It shows you how to assess your finances, evaluate neighborhoods, and work with real estate agents. Built-in software calculators help you evaluate your personal finances and answer questions such as Rent vs. Buy and How Much Can I Afford?

The Home Hunt section offers another set of useful software tools, including the Housing Needs Analyzer that helps you define your ideal home. The analyzer helps you select everything from price, square footage, landscaping, and neighborhood, to the best architectural style for your tastes. This section also features a Prospective Homes database, already formatted to help you track and compare all of the houses you visit.

The Financing section provides essential information on different mortgage types, lending sources, legal policies, and tax implications. The Loan Tracker compares mortgage options, (both fixed and variable rate), by analyzing key details such as rates, fees, introductory periods, caps, and steps. On your computer screen, the Homebuyer's Guide graphically portrays the lifetime cost of each option for several scenarios. This makes it incredibly simple for you to choose the loan that best fits your finances. At this point the program provides an electronic version of the Uniform Residential Loan Application, which you can complete on-screen, print out, and submit to your bank.

The Offer section arms you with information on valuing your house, negotiating your deal, and framing the offer. You can print out a Sales Contract and use an intelligent worksheet to write provisions to the standard sales contract, based on your particular situation.

The Closing section helps you track and manage the critical details of

entering escrow and taking possession of your new home. The Move-in-Cost calculator provides a line-by-line estimate of closing costs. The Closing Checklist takes you through the final steps. It notes every single due date, tracks who is responsible for each document, and provides detailed instructions for getting each task done. The section also alerts you about critical contingencies that may crop up, and helps you prepare for each one.

With over 5 million homes bought last year, The Homebuyer's Guide is a valuable tool not only to individual consumers but also to real estate professionals who assist them in the purchase process. Real Estate agents and loan brokers can use the program to guide their customers and track their financial options and home preferences.

### System Requirements

The Homebuyer's Guide comes on 3 1/2" diskettes and requires an IBM PC or 100% compatible with a 386 or higher processor, 2 MB RAM minimum, VGA or Super VGA monitor, and Windows 3.1. It does not require a CDROM drive. The product is available for around \$30.

Books That Work is an award-winning developer and publisher of interactive software devoted to the home how-to market. Books That Work is based in Palo Alto, CA. For product ordering information, contact Books That Work, 2300 Geng Road, Bldg. 3, Suite 100, Palo Alto, CA 94303; 415-843-4400.

The Hearst Corporation is one of the nation's largest diversified communications companies. It publishes 14 consumer magazines, 12 daily and five non-daily newspapers, and numerous business publications. It operates six radio and six television stations and the Hearst Book Group. The Hearst Corporation also syndicates newspaper comics and features, produces and distributes television programming, and is a joint venture in the Lifetime, Arts & Entertainment, and ESPN cable networks. To contact Hearst New Media, write to 959 Eighth Avenue, New York, NY 10019, or call (212) 649-2315.

Tetra Solutions, the primary software developer for The Homebuyer's Guide, specializes in providing interactive, easy-to-use software for personal productivity and adult education. To contact Tetra Solutions, write to 821 Alameda, Belmont, CA 94002, call (415) 802-9896, or email [tetra@shell.portal.com](mailto:tetra@shell.portal.com).

## "Info Select Express" Now Available for Windows PCs

### New Version of Info Select for Windows is Fast and Low-Cost

December 1, 1994 - (Hackensack, N.J.) - Software publisher Micro Logic Corp. today announced a low-cost PIM at just \$19.95. Called INFO SELECT EXPRESS Micro Logic aims to attract new users to its award-winning product line. According to James Lewis, president: "We engineered the package to sell at the very low price point by using a box the size of a CD and using an on-line manual." Neil Lubin, sales director for Micro Logic Corp., said: "INFO SELECT EXPRESS is geared for users who have lots of miscellaneous or unstructured information."

INFO SELECT EXPRESS is the least expensive and fastest way to manage "random" information such as notes, ideas, contacts, plans, lists, etc. Users include administrators, lawyers, doctors, writers, sales personnel, secretaries, buyers, project managers and those who have lots of assorted information flying across their desks.

INFO SELECT EXPRESS uses a stack of free-form information windows and a high-speed search engine as its methods of storing and retrieving information. In contrast, most other Personal Information Managers (PIMs) are based on structured systems which take time to learn and use.

"INFO SELECT EXPRESS gives the user the equivalent of a photographic memory and is ideal for people who are very busy," said Micro Logic Corp. president James Lewis. INFO SELECT EXPRESS is based on Info Select, winner of two PC Magazine Editor's Choice Awards, a Perfect Report Card from PC World, and five other major acclaims.

Users of the low cost PIM can upgrade to Info Select, the comprehensive version. INFO SELECT EXPRESS operates on any Windows 3.1-compatible PC.

INFO SELECT EXPRESS is available at \$19.95 plus \$4.50 shipping directly from Micro Logic Corp., POB 70, Hackensack, NJ 07602. For more information call (800) 342-5930 or (201) 342-6518. Editors and writers can contact Richard Leeds at Computer Product Introductions Corp. at (206) 451-7000.

## NEW VERSION OF BEST-SELLING SUPER VGA BOOK RELEASED !

"I've found this book useful when I've reached for it, and I've found myself reaching for it increasingly often, and that's the real test of any reference." -- Michael Abrash, Dr. Dobb's Journal

October 26, 1994 -- Reading, MA--Richard F. Ferraro just revised his best-selling Programmer's Guide to focus on the Super VGA standard that dominates the industry today. Recently published by Addison-Wesley, this is the definitive source book on graphics hardware and software. Graphics programmers will uncover the knowledge and skill necessary to understand PC graphics environments.

Programmer's Guide to the EGA, VGA, and Super VGA Cards, Third Edition details the features and functions of the standards and covers the latest cards from all major manufacturers. It also includes a set of optimized programming examples in protected mode in C and assembly language that illustrate techniques for programming features of the major industry chip sets. Finally, the power of the graphics accelerators is within programmers' reach!

Richard F. Ferraro is a consultant in computer graphics, image processing, and pattern recognition. He designed the popular Coolscan 35mm film scanner for Nikon, Inc., and recently created an interactive multimedia kiosk for home hardware design used in hundreds of retail stores.

Addison-Wesley is a worldwide publishing company based in Reading, Massachusetts, and a recognized leader in the fields of computer science, engineering, mathematics, and physics.

Programmer's Guide to the EGA, VGA, and Super VGA Cards, Third Edition is available from your local bookstore at a suggested retail price of \$44.95. ISBN 0-20162490-7, paperback, 1632 pages.

Addison-Wesley Publishing Company  
1 Jacob Way, Reading, MA 01867  
617-944-3700

## NEW WINDOWS PROGRAMMER'S BIBLE FOR BUILDING 3D GRAPHICS APPLICATIONS

Reading, MA--With Addison Wesley's recent publication of 3D Graphics Programming in Windows by Philip H. Taylor, new and experienced developers will come away designing and building powerful 3D graphics applications for Microsoft Windows. This is the first book dedicated to Windows 3D graphics, and it definitively teaches readers how to create the full range of 3D applications--from simple spinning cube demonstrations to sophisticated modelers.

Readers will gain hundreds of innovative programming tips for reconciling the heavy demands of 3D graphics while quickly adapting to the ins and outs of the Windows programming environment. Using an example of the development of a professional quality application, the book teaches how to build the support libraries and components necessary for 3D graphics work in Windows. A creative blend of theory and practice, this is the new comprehensive bible for Windows programmers serious about graphics and graphics programmers serious about Windows.

The bonus disk accompanying 3D Graphics Programming in Windows includes an entire, professional-quality set of 3D graphics libraries for Windows, enabling readers to more easily create his or her own applications.

Philip H. Taylor, Jr. is a staff engineer at Kaleida Labs, Inc. where he develops platform-independent multimedia and 3D graphics programming tools. He was previously a Senior Software Engineer at Borland International and a Manager of Special Projects at Softview, Inc.

Addison-Wesley is a worldwide publishing company based in Reading, Massachusetts, and is a recognized leader in the fields of computer science, engineering, mathematics, and physics.

3D Graphics Programming in Windows is available from your local bookstore at a suggested retail price of \$49.95 with disk. ISBN 0-201-60882-0, paperback, 640 pages.

Addison-Wesley Publishing Company  
1 Jacob Way, Reading, MA 01867  
617-944-3700

## AUTHOR RALPH DAVIS ENLIGHTENS WINDOWS NT PROGRAMMERS

November 8, 1994 -- Reading, MA--As operating systems move into the 32-bit universe of Microsoft's Windows NT, so must network programmers. Ralph Davis provides an excellent guide for this complicated task. Windows NT Network Programming: How to Survive in a 32-Bit Networking World, a new book published by Addison-Wesley, helps readers create powerful, multitasking network applications for high-end personal computers.

NT programmers will learn to untangle the sophisticated and complex web of new technologies and networking standards with this hands-on guide. The bonus disk contains a valuable network independent API example for Windows NT applications. Some of the topics include: Named Pipes, Windows Sockets, Remote Procedure Calls, and NetBIOS.

Ralph Davis is a professional programmer, instructor, and writer. He is the author of Windows Network Programming, NetWare Programmer's Guide, and Netware 386 Programmer's Guide, all from Addison-Wesley.

Addison-Wesley is a worldwide publishing company based in Reading, Massachusetts, and a recognized leader in the fields of computer science, engineering, mathematics, and physics.

Windows NT Network Programming is available from your local bookstore at a suggested retail price of \$39.95. ISBN 0-201-62278-5, paperback, 592 pages includes disk.

Addison-Wesley Publishing Company  
1 Jacob Way, Reading, MA 01867  
617-944-3700

## ARTISOFT LAUNCHES NEW EDUCATION PARTNER PROGRAM

### Certifies Third-Party Training Facilities Nationwide

(TUCSON, AZ--Nov. 28, 1994)--Artisoft, Inc. announced today its Artisoft Education Partner Program, designed to train Artisoft customers and resellers on the company's award-winning networking products. The program certifies nationwide independent training firms to conduct Artisoft Approved classes and the company is presently working to partner with professional training organizations to offer its technical courses through the program.

"By working with leading training firms, we will have the opportunity to effectively provide affordable product education and award-winning support to our growing base of customers and resellers," commented Artisoft Vice President of Sales and Support Joel A. Davis. "The Artisoft Education Partner Program will help us to expand our training capacity while ensuring that our customers learn how to optimize their Artisoft software for a high return on their technology tool investment."

Artisoft's first Education Partner, Compumax, Inc. in Denver, Colo., is managed by Artisoft Certified Instructor D. Roger Maves and serves both Artisoft customers and resellers. Maves, who is President of Compumax and also an Artisoft Advantage Partner, has been teaching the Artisoft courseware for more than a year. "Such a cooperative training program has been long overdue," said Maves. "End users will now have convenient training options. Having the Artisoft stamp of approval has been an advantage because potential customers can now recognize us as an official training center. Even though Artisoft products are very easy-to-use, the classes help customers and resellers to expand their technical knowledge in order to better optimize and grow their network. Participants have been very surprised by how much they learn and leave the training with many practical ideas that can be applied to their networks."

### Education Partner Program Support

Artisoft's Educational Services division has developed the courseware and class content that will be offered through the Education Partner Program. Artisoft Approved courses include "Install, Configure and Troubleshoot LANtastic v6.0 Networks" and "Optimize Your LANtastic Network." Classes are available to all Artisoft customers and resellers.

Artisoft will support its Education Partners through ongoing technical and marketing training sessions, annual meetings and cooperative marketing support. Marketing cooperative funds based on the amount of courseware purchased by each partner will be applied toward advertising and marketing activities. Partners will have the opportunity to use the Artisoft Education

Services logo to promote Artisoft Approved training courses.

Education Partners will also benefit from education referrals. Artisoft will refer students to partners based on dates of courses and locations. In addition, Artisoft will offer significant discounts on courseware and will provide, at no cost, the course-required software. Artisoft products will be offered at a discount for display and demonstration purposes. Education Partners can also access a special forum in Artisoft's BBS to receive the company's award-winning technical support.

#### Education Partner Program Eligibility

Third-party companies that wish to become an Education Partner must have dedicated training classrooms in place and have at least two years of experience in the technical training business. Fees include \$2,500 for the first training site and \$1,000 for each additional site, with annual renewal fees of \$1,000 per site.

"Compared to other industry vendors that offer nationwide training centers, our Education Partners receive significant savings on their start-up costs for this program," Davis said.

Those interested in becoming an Artisoft Education Partner should contact Artisoft at 800/846-9726, ext. 111.

Artisoft (Nasdaq "ASFT") is one of the world's leading suppliers of scalable, cost-effective networking solutions to small and growing businesses. The company offers the award-winning LANtastic network operating system as well as network management, backup and multiplatform connectivity systems. Under the combined Artisoft and Eagle Technology brand names, the company is also one of the world's leading providers of Ethernet adapters. Artisoft maintains 12 international offices and distributes the LANtastic network and its other connectivity products in more than 100 countries worldwide.

For more information about Artisoft or its product line, contact Artisoft, Inc. at 2202 N. Forbes Blvd., Tucson, AZ 85745. Sales 800/233-5564.

## ARTISOFT ANNOUNCES TECHTALKS TRAINING FORUM

Dec. 10-11 Conference in Tucson Offers Sales, Marketing, Technical Training for Customers and Resellers

(TUCSON, AZ--Nov. 28, 1994)--Artisoft, Inc. announced today its TechTalks conference, to be held Dec. 10-11, 1994, at the Sheraton El Conquistador Resort and Country Club in Tucson, Ariz. This second annual forum will offer customers and resellers technical training on the award-winning Artisoft and Eagle Technology product lines. Executives from the CMP Channel Group and Soleil Seminars will present sales and marketing sessions, and editor and industry speaker David Brambert will discuss channel issues. Third-party vendors will also present key product presentations. Attendees will have the opportunity to talk first-hand with the product managers and engineers who design and support Artisoft products.

"This forum is highly valuable for the customer and reseller, as well as for Artisoft," said Artisoft Chief Operating Officer Joel J. Kocher. "We view our resellers as an extension of our award-winning support and we want to provide them with high-quality training in order to help them better support and service our products."

Keynote addresses during the conference include Artisoft President and CEO William C. Keiper and LAN Magazine Executive Editor and STACKS magazine Editor-in-Chief David Brambert. Keiper will present "Playing to Win," an overview of Artisoft's corporate and product direction and Brambert will share his vision on "The Changing Channel." Hour-long question-and-answer sessions with Artisoft executives and engineers will provide attendees with interactive corporate and product discussions.

### TechTalks Sessions

TechTalks participants can choose from 26 one- and two-hour sessions and hands-on labs covering topics such as CorStream server optimization and installation, Eagle Technology hardware, connecting to the Internet using Artisoft products, LANtastic v6.0 network NCP and SMB interoperability, and wide area networking with the LANtastic v6.0 network.

Customers and resellers will also explore the award-winning functionality of Artisoft's full line of software products, including:

- \* LANtastic for OS/2 network
- \* Simply LANtastic network
- \* LANtastic for TCP/IP software
- \* LANtastic Management Services software
- \* ArtiSave backup series
- \* Central Station connectivity processor

In addition, Artisoft will offer attendees the opportunity to provide feedback on Artisoft reseller programs and marketing strategies.

Director of Channel Programs for the CMP Channel Group Charles Humphrey will examine the emerging VAR business model with an interactive discussion on product customization and expansion of the channel. Humphrey will show attendees today's key industry dynamics and how to manage change.

Carole Waldron from Soleil Seminars will offer marketing seminars to teach resellers how to maximize their product positioning, formulate marketing strategies, satisfy growing customer needs, convert sales relationships from short- to long-term, plan future value-added services, and learn techniques to leverage support to expand reseller client bases. Nationally recognized, Soleil Seminars specializes in providing solutions that simplify the complexities of selling and installing advanced technology products.

Third party-vendors including Mountain Network Solutions, Inc., The Wollongong Group, Inc., Trio Information Systems, Inc., and Peachtree Software, Inc. will present sessions on the effective use of their products with the Artisoft and Eagle Technology product line.

#### Additional Training Opportunities

Artisoft is also offering attendees supplementary training courses before and after the TechTalks conference. The one-day "Optimize Your LANtastic Network" class will be held Dec. 9 at the Sheraton El Conquistador conference site, and the three-day "Install, Configure and Troubleshoot LANtastic v6.0" will be held Dec. 12-14 at Artisoft's corporate headquarters in Tucson.

Those interested in more information or who need to register for the TechTalks conference and the supplementary training should contact Artisoft at 800/809-1255.

Artisoft (Nasdaq "ASFT") is one of the world's leading suppliers of scalable, cost-effective networking solutions to small and growing businesses. The company offers the award-winning LANtastic network operating system as well as network management, backup and multiplatform connectivity systems. Under the combined Artisoft and Eagle Technology brand names, the company is also one of the world's leading providers of Ethernet adapters. Artisoft maintains 12 international offices and distributes the LANtastic network and its other connectivity products in more than 100 countries worldwide.

For more information about Artisoft or its product line, contact Artisoft, Inc. at

2202 N. Forbes Blvd., Tucson, AZ 85745. Sales 800/233-5564. Corporate  
602/670-7100. Fax 602/670-7101.

## P.H.D. 16 Extended Diagnostics Core-Level Diagnostic Firmware

Clearwater Florida -- November 14, 1994 -- MicroData Corp., the leader of specialized PC diagnostic hardware and software products for computer professional, announces the release of Extended Diagnostics for its highly successful P.H.D. 16 (Professional Hardware Diagnostic 16-bit) card.

P.H.D. 16 is a 16-bit card for component level testing of AT 286, 386, 486 and Pentium systems. This unique test equipment provides the user with a comprehensive range of circuitry diagnostic for system RAM, ROM, DMA controllers, Page registers, 8042 keyboard controllers, interrupt controllers. Timers, CMOS clock, and support chips.

The Extended Diagnostics ROM which plugs into the available socket on the P.H.D. 16 card will allow the user to test base, extended (to 1 gigabyte), cache and video memory, hard and floppy drives, keyboards, I/O ports (serial and parallel), monitors, and more without the need for disk based software.

Many software diagnostic programs are run from a floppy disk or a hard drive. These programs are at the mercy of the drive hardware and disk media - if the drive malfunctions or there are media errors, diagnostics cannot be performed. Also, such programs conduct their tests after the operating system and any TSR's have been loaded. Often, DOS and TSRs, even the system BIOS, can conflict with and compromise diagnostic testing causing unreliable test results and even preventing certain core-level testing altogether. Extended Diagnostic does not suffer from these limitations because it is run from an EPROM installed onboard P.H.D. 16. The convenience and reliability of an EPROM also means that technicians do not have to be concerned with the caring for floppy disks and, unlike diskettes which have a limited lifespan, Extended Diagnostic will continue to perform accurately and reliably year after year.

A key feature is the Cache memory test. ROM based testing may be the best method of testing cache memory. Since the Extended Diagnostics ROM does not allow the system to boot completely, the systems' Cache can be tested without the interference of DOS. Once the Extended Diagnostics ROM has initialized, the user can run the cache memory test and locate cache memory failures. The same is true with base and extended memory. The ROM has a unique method of displaying failing memory chip via its memory mapping diagram.

This ROM will also provide complete diagnostics for your monitor, keyboards, I/O cards and more. The monitor test will allow the user to run multiple screen test to ensure the monitor colors are correct. Other test will ensure that the monitor is properly aligned. Also a sleuth of tests will provide video mode testing for VESA compliant video cards. The keyboard test exercises

every key on the keyboard, making sure no keys are stuck or inactive. The I/O port testing sends data through both serial and parallel ports. Further more it allows the user to control the speed that the data is transmitted. This feature allows the user to conduct tests which simulate real world port usage.

The comprehensive motherboard testing of the P.H.D. 16 card combined with the outstanding peripheral testing of the Extended Diagnostics ROM, makes the P.H.D. 16 one of the best values on the market. The complete range of diagnostic capability of the P.H.D. 16 provides the user with a large number of testing options, eliminating the need for multiple products and/or large monetary investment.

Retail price \$149. To receive more information, write or call MicroData Corp

MicroData Corp  
3001 Executive Dr, Ste 270  
Clearwater, FL 34622  
813-573-5900, fax 813-572-5085

## SOFTDISK PUBLISHING ANNOUNCES SPACE-ADVENTURE GAME RELEASE

SHREVEPORT, LA, December 8, 1994 - Softdisk Publishing today announced the release of IRONSEED, a vast space-adventure game developed by Channel VII for IBM-PC computers. A unique mixture of sci-fi, strategy and role-playing, IRONSEED has been described by Softdisk Publishing President Al Vekovius as "a galactic-scale puzzle that hooks you and won't let go--without the kind of ultra-violence we've come to associate with games of this size and scope."

Visually and audibly seductive, thanks to futuristic, 256-color graphics and a CD-quality custom soundtrack, IRONSEED is also mentally addictive. The IRONSEED player is immediately thrust into the role of captain of a ship that carries the last survivors of the human race to its destiny. The captain's job is deceptively simple: select a crew; guide the ship; probe distant worlds and suns; locate and talk with alien life forms; collect building materials then create weapons, shields and fuel; and find the dozens of clues needed to reunite The Kendar, an ancient alliance of free worlds. Only The Kendar, with the player's help of course, will be able to defeat the alien scavenger armada which threatens the civilized universe.

"Game players who think they can 'solve' IRONSEED in a couple of hours--or even a day--are welcomed to try," said Vekovius. "You've got to develop an exploration strategy and stick with it, and you've got to be sharp enough to recognize and act on clues when you run across them."

IRONSEED players will:

- \* Command the ship's six main control panels--Astrogation, Engineering, Medical, Psychometry, Science, and Security.
- \* Probe and explore up to 1,000 planets and 200 suns.
- \* Trade for or build needed items, and modify the ship for the coming battle.
- \* Have interactive keyboard "conversations" with crew members and aliens.
- \* Enjoy stunning, 256-color VGA graphics and animations.
- \* Listen to a powerful, CD-quality, soundtrack of all-original music.

A demo of IRONSEED is currently available on America Online (keyword: softdisk) and Software Creations BBS (1-508-368-7036). The full game, which comes compressed on three high density 3.5-inch disks, is available directly from Softdisk Publishing at 1-800-831-2694 or 1-318-221-8718. A 46-page paper manual is included.

Minimum system requirements for IRONSEED are: 386-33 MHz PC compatible

with VGA card and monitor, 530K of RAM, a Microsoft compatible mouse, and MS-DOS 4.0. Minimum sound requirements are: Sound Blaster, Aria, ProAudio Spectrum, or Gravis Ultra Sound card or compatible; and 600K of RAM (conventional memory) plus 1MB of enhanced or expanded memory.

In addition to publishing "stand-alone" programs like IRONSEED, Softdisk Publishing, based in Shreveport, LA, is the world's leading publisher of software subscriptions for home computer owners. The company publishes the following monthly software subscriptions on disk: SOFTDISK for Windows (for IBM-PC compatibles with Windows), SOFTDISK PC (for MS-DOS-based IBM-PC compatibles), SOFTDISK for Mac (for Macintosh), SOFTDISK (for Apple II), SOFTDISK G-S (for Apple IIgs), and LOADSTAR (for Commodore 64).

IRONSEED Orders: 1-800-831-2694

## Micro Channel Gets New Life

Citing the need to dispel confusion in the market, IBM has announced that it is consolidating its Personal Computer offerings. Now called the IBM PC line, both the ValuePoint and PS/2 lines have been combined into one brand.

The new brand is designed to simplify the offerings into two series. The 300 series will be the lower-end with the 700 series being marketed to businesses. Micro Channel architecture is available in the 700 series machines which run on Intel's premier Pentium microprocessor and include a PCMCIA slot for ease of portable downloading. Both series feature "Rapid Resume" which allows the PC to be turned off via software and restarted to return to the application running when turned off. Another feature available allows the PC to turn itself on when the phone rings, receive a message through an internal answering system or accept a fax, and then turn itself off when finished.

Richard Thoman, IBM's senior vice president of the IBM PC Co., has been credited with putting the company in a position to revitalize itself through the streamlining of its product offerings. Additional products in the mix are Enterprise class PC servers with 60/90-MHz Pentium processors and up to eight slots and 22 bays, and new high-end ThinkPad 755 notebooks which will include a built-in CD-ROM drive, speaker phone and enhanced display.

## Krazy-Christmas -- A Holiday Software Program for Young Children

Paso Robles, Ca. December 9, 1994- Progressive Products announces a software program for children ages three to nine to enjoy this Christmas season. Krazy-Christmas uses attractive graphics and music to give children hours of holiday fun decorating a Christmas tree or filling in any of the other nine different Christmas pictures included with this art program.

For those who would like to receive the shareware version of Krazy-Christmas, it can be downloaded from America Online or CompuServe (search for Krazy). It can also be found on the Internet by FTPing to: wuarchive.wustl.edu and retrieving KXMAS15.ZIP from: /pub/MSDOS\_UPLOADS/games.

Krazy-Christmas requires an IBM PC or Compatible 386 or greater, VGA display, mouse, and supports Adlib compatible sound cards.

Progressive Products  
800-254-0769  
805-239-7672

Allied Telesync's 1720 Series of CentreCOM Adapter Cards offer a high performance, reliable and cost effective jumperless 16-bit solution for desktop PC Ethernet connectivity that is both easy to install and maintain. The 1720 Series of adapters features a 16-bit Micro Channel interface to the workstation internal bus and a lifetime warranty.

The AT-1720 Series is shipped with a complete set of software drivers. Novell IPX and ODI, Microsoft NDIS and native Packet Drivers support the popular LAN network operating systems including Novell NetWare as well as Microsoft's Windows 3.x and Windows for Workgroups. In addition, software provides an optional TSC/IP transport together with an SNMP agent and industry standard NetBIOS and Windows Socket interfaces. Third party software compatible with these industry-standard drivers and API interfaces support today's networking environments such as Banyan Vines, DEC Pathworks and PC-NFS.

Four different versions of the cards are available, each supporting 10BASE-T as a common media interface. 10BASE-2 and 10BASE-FL are also supported. The 1720 Series includes diagnostics and Remote Boot capability for Novell and IBM RPL.

#### Features:

- 16-bit Micro Channel Bus
- NDIS, ODI, IPX and Packet Drivers compliant to Microsoft and Novell specifications
- CardAssist installation/diagnostic software
- MIB II compliant SNMP agent with full TCP/IP transport
- NetBIOS and Windows Socket API support
- Compatible with Streaming Data Transfer
- Four LEDs for installation and problem diagnosis
- Boot ROM socket
- Lifetime warranty

Allied Telesyn  
19015 North Creek Parkway, Suite 200  
Bothell, WA 98011

800-424-4284, 206-481-3702, fax 206-489-9191

## GPIB-ENET Now Available for Windows Users

The GPIB-ENET Ethernet-to-GPIB interface kit from National Instruments is now available for Windows 3.1 systems. You can use the GPIB-ENET/Win kit to connect Windows-based computers to IEEE 488 (GPIB) instruments through TCP/IP Ethernet networks. Using the GPIB-ENET, you can share GPIB peripherals between many networked users or control several GPIB systems from a single networked computer. The GPIB-ENET is also a convenient instrument control interface for computers with no available plug-in slots. The compact GPIB-ENET includes high-level NI-488.2 software for Windows, so you can easily run existing NI-488.2 applications in a networked environment. NI-488.2 driver software for GPIB-ENET is also available for the Hewlett-Packard Series 700 workstation, Sun SPARCstation, and Apple Macintosh. Thus, you can control the same GPIB-ENET hardware over a TCP/IP network from several types of computers. NI-488.2 software-only packages are available for existing GPIB-ENET users. You can also use the GPIB libraries built in to the LabWindows/CVI for Windows and LabVIEW for Windows application software packages to write GPIB-ENET application programs.

National Instruments  
6504 Bridge Point Parkway  
Austin, TX 78730

## Digital I/O PCMCIA Card Now Available

The DAQCard-DIO-24 is a low-power, low-cost parallel digital I/O card for computers with a PCMCIA slot. It can connect notebook computers to peripherals with parallel digital I/O capabilities; BCD-compatible panel meters and test equipment; SC-206X Series optically isolated digital I/O and electromechanical relay boards; and SSR Series solid-state relay boards.

The DAQCard-DIO-24 uses a 24-bit programmable peripheral interface (PPI), which can be further divided into three 8-bit ports. It features high-speed transfer rates up to 250 kbytes/s. The DAQCard-DIO-24 is very flexible when interfacing to peripherals or other computers. It can operate in either a unidirectional or bidirectional mode, generate interrupt requests, and handshake with peripheral equipment. All functions of the card are software configurable. The PCMCIA bus interface has 16-bit data paths with interrupt-generation circuitry. Because the DAQCard-DIO-24 uses very little power, it can easily operate in battery-powered PCs. The DAQCard-DIO-24 is shipped with Socket and Card Services software, along with NI-DAQ.

National Instruments  
6504 Bridge Point Parkway  
Austin, TX 78730

## New LabVIEW Student Edition Coming Soon

The LabVIEW Student Edition will be available from university bookstores in January 1995. National Instruments has teamed up with Prentice Hall, a major publisher of engineering and scientific textbooks, to produce the student edition of LabVIEW, which will make it easier to incorporate LabVIEW into the academic laboratory.

The LabVIEW Student Edition is a reduced functionality version that students can use to develop and run VIs for their laboratory exercises. The price of the student edition will be comparable to the price of a typical engineering textbook. All VIs developed in the student edition will run in the professional edition. The LabVIEW Student Edition works with most National Instruments data acquisition and instrument control hardware.

National Instruments  
6504 Bridge Point Parkway  
Austin, TX 78730

Prentice Hall Faculty Services  
201-592-2000 or 800-526-0485  
Internet: [books@prehall.com](mailto:books@prehall.com)

## SnapShot VIs Enhance LabVIEW Imaging

Viewpoint Software Solutions recently introduced SnapShot, a low-cost Windows-based, add-on LabVIEW package for integrating imaging into DAQ applications such as process monitoring and inspection.

SnapShot bundles a frame-grabber with image acquisition and analysis VIs at close to the cost of a low-end DAQ board. SnapShot is used in applications ranging from motion analysis and intensity measurements to quality control.

SnapShot VIs include all the basic tools required to make intensity, distance, and area measurements. VIs are also offered for a variety of grayscale mappings, histograms, and both standard and custom image filters. Users can even make region-of-interest (ROI) measurements by performing these operations on a subset of the image array. Finally, users can acquire images from both NTSC and PAL video.

Viewpoint Software Solutions will work with users who need custom imaging integration into their LabVIEW applications. The company also offers other LabVIEW add-on products, including capability for up to 64 COM ports (either RS-232 or RS-422), interfacing to third-party hardware through VIs that link to DLL drivers, and VIs for reading and writing to memory mapped devices.

Viewpoint Software Solutions Inc  
2320 Brighton TL Road  
Rochester, NY 14623  
716-475-9555, fax 716-475-9645

## Video VI and Video Companion for Image Acquisition and Analysis

Stellar Solutions announces the enhanced Video VI, a Macintosh-based add on to LabVIEW, and Video Companion, a product that works with Video VI.

With Video VI, LabVIEW users build instrumentation and process control systems that integrate image visualization and image measurement capabilities. Video VI applications can interpret an image combined with reading sensor data, record area and length measurements of regions select graphically or programmatically, and compare intensity readings in identical regions in a series of images. Application fields include medical and biological research, radiology, material science, astronomy, and engineering.

Video VI contains its own command language, so that all image capture, display, storage and analysis functions can be controlled by LabVIEW. A control panel in Video Companion, a stand-alone application that works with Video VI to acquire, display, and analyze images in applications created with LabVIEW, gives the user a simple method for quickly capturing images.

New features include definable frame size and location within a 640x480 video frame, summation and frame averaging using a 32 bit-per-pixel buffer. NTSC or PAL video format capability, multiple simultaneous or sequential image capture, and external trigger support.

Stellar Solutions  
415-738-1139

GTFS Inc  
2455 Bennett Valley Rd, Ste 100C  
Santa Rosa, CA 95404  
707-579-1733, fax 707-578-3195

PG Music has been busy and have a lot of brand new Windows programs & upgrades to offer!

---

New! Band-in-a-Box version 6.0 for Windows

- Upgrade \$49 (includes styles disk #5 and harmonics disk #1)
- first time purchase \$88

This major upgrade includes over 50 new features. You can now enter and view the melody, chords and lyrics in standard notation, and print a standard "fakebook style" leadsheet with chords, melody & lyrics! There is also automatic harmonization, allowing you to select from over 100 harmonies to harmonize the melody track, or harmonize what you play along in real time. Play along in "SuperSax" harmony, or harmonize the Melody with "Shearing Quintet". Create your own harmonies or edit our harmonies. Over 50 new features in all.

---

New! PowerTracks Pro for Windows version 2.2

- Upgrade \$10
- first time purchase \$29

In version 2.15, we added major new features like music notation, and printout. Now, we've added many new features. You can now type in chords symbols, or read in chord symbols from Band-in-a-Box version 6.0 MIDI files. PowerTracks can make Automatic drum tracks - just choose from over 100 included drum patterns and fill a track with that pattern -- this saves a lot of time! The notation mode is now editable. There are over 30 new features.

---

New! The Pianist for Windows Volume II

- Volume II upgrade \$49 (requires The Pianist)
- first time purchase: Volume I and II = \$98

At popular request, we've recorded 200 more fabulous pieces for The Pianist program - many titles were suggested by our customers on registration cards. This Volume 2 upgrade includes a new version of the program, plus the 200 pieces. It adds to your existing program, doubling the number of pieces to over 400! All played by world-class concert pianists. Including new pieces such as... Chopin's Ballads 2, 3 & 4; Chopin Preludes, Etudes, Waltzes, Nocturnes & Scherzo No. 2; Chaminade's Scarf Dance; Field's Nocturnes; Brahms' Intermezzi; Dvorak Humoresque; Handel's Harmonious Blacksmith; Joplin's Maple Leaf Rag; Liszt's Paganini Etude No. 6; Mendelssohn's Variations Serieuse; Sonatas by Mozart, Haydn & Clementi; Ravel's Valse nobles et sentimentales; Rubenstein's Melodies; Strauss' Blue Danube Waltz; more favorites by Schumann, Rachmaninov, Debussy, Bach, Scriabin,

Schubert, Bartok, Shostakovich, Satie, Prokofiev, Paderewski, Lecuona, Kabalevsky, Ireland, Granados, Grieg, Faure and more!

---

New! The New Orleans Pianist for Windows \$49

In a theme similar to "The Pianist" and "The Jazz Pianist", we have now created "The New Orleans Pianist". This has a huge library of over 60 "New Orleans Style" Piano music standards, played on MIDI keyboard by top New Orleans Pianists Henry Butler, Jon Cleary, Tom McDermott, Joel Simpson, and David Torcanowsky. This is the wonderful 'rolling', 'bluesy' New Orleans piano style made famous by Professor Longhair and Dr. John. Includes on-screen music notation and printout ability so that you may learn every nuance of the pieces! Plus we've included music trivia questions, a "Guess the Song" game, program notes, pianist biographies (all on disk) and much more!

---

New! The Ragtime Pianist for Windows \$49

The Ragtime Pianist is a music program with a huge library of over 90 Ragtime Piano music standards, played on MIDI keyboard by top Ragtime Pianists. These were performed by Top Ragtime Pianists using a MIDI keyboard, and features John Arpin. John Arpin is a world-renowned performer of Ragtime and Ragtime Era music. He is one of the most recorded performers of Scott Joplin's Music. He's included virtuoso performances of every Scott Joplin rag in this program, as well as lots of other rags, cakewalks, waltzes and other tunes from the Ragtime Era.

---

PG Music Inc  
266 Elmwood Ave, Suite 111  
Buffalo, NY 14222

29 Cadillac Ave  
Victoria, BC V8Z 1T3 CANADA  
604-475-2874, 800-268-6272, fax 604-658-8444  
CIS: 75300,2750

## Digital Expands PC Server Family With Reliable, Scalable Pentium Application Servers

### Launches Prioris Brand Name And New Power Scale Architecture

MAYNARD, Mass. -- December 5, 1994 -- Digital Equipment Corporation today announced its Prioris HX family of highly-scalable PC servers. The first two systems in a new class of Pentium symmetric multi-processing applications servers from Digital, the Prioris HX systems feature the company's new Power Scale architecture and are the first PC servers in the industry to integrate a PCI-to-PCI bridge, unleashing the full performance of the PCI bus. Digital also announced that it is shipping Remote Server Manager, which allows system and network administrators to remotely manage servers worldwide. At the same time, the company said its existing DECpc MTE and DECpc XL Server lines will now carry the family name, Prioris MTE and Prioris XL Server.

The Prioris HX introduction rounds out a series of major new product announcements this fall from Digital's Personal Computer Business Unit. Like the other new lines, the Prioris HX family features a new naming convention and new "Getting Started" software that helps users become more productive, more quickly.

"Digital now is a full-line supplier of competitively priced PC products," said Bernhard Auer, vice president and general manager of Digital's PC Business Unit. "With this announcement, we now have a full range of feature-rich servers, desktops and notebook systems."

The Prioris HX systems are optimized to meet customers' needs today and in the future with processor, disk and memory scalability. Digital's rackmount option, available on all Prioris servers, helps minimize the amount of floor space required in IS environments. The Prioris HX systems are targeted at IS managers running network operating systems, industry-standard databases and business-critical applications. The systems are available through Digital's channel partners, including master resellers, wholesalers, distributors, dealers, VARs and system integrators, as well as Digital's direct sales organization.

### Unique Power Scale Architecture Affords Flexibility

Digital's unique Power Scale architecture features a motherboard/daughtercard design placing CPU-specific components on the daughtercard and common system components on the motherboard. This modular approach offers excellent flexibility in configuring systems, while providing customers with a superior migration path for future generations of single and multiprocessing Intel processor technologies.

"As our customers' applications grow, the Power Scale architecture offers unprecedented scalability in processors and option capability," said Duane Dickhut, vice president of Digital's PC Server Product Line. "Combined in our one-footprint design, the new servers provide users with a compelling and precedent-setting value proposition."

"The scalability and reliability of the Prioris HX server make it the leading server in its class," said Scott Rackliffe, assistant vice president, information services, Farm Credit Banks, Agawam, Mass. "All our upgrade needs -- from the small to the large office -- are fully met in one platform."

The Prioris HX is the first PC server to implement PCI-to-PCI bridging providing a total of six bus-master PCI slots. Along with the six EISA slots -- for a total of 12 slots -- users can merge existing and new industry standard technologies as well as take advantage of the ever-increasing growth of high-performance PCI options.

#### Designed for Reliability

"Digital has been producing industrial-strength servers for more than 20 years," said Dickhut. "We understand enterprise-wide networking and we drew on Digital's years of engineering experience at building in quality and reliability when we developed these new highly-reliable PC servers."

Digital's Prioris HX systems are superior departmental application servers for workgroups numbering in the hundreds. Ideal for LAN consolidation, and in environments where the highest degree of confidence in data integrity is mandatory, Prioris HX systems deliver excellent reliability and fault-tolerant features, such as:

- Seven hot-swap device bays with various levels of RAID support; Support for Digital's RAID controller with 1 or 3 channels for internal and external SCSI support;
- 512KB write-back cache standard;
- Error Correction Code (ECC) memory support up to 256MB to guard against data corruption;
- A second 450 watt redundant power supply (optional) supporting automatic failover and current sharing;
- Redundant cooling system with failover fans;
- Operator Control Panel connected to an IIC interface to display

system status;

- Dual channel hot swap backplane for increased redundancy; and
- Remote Server Manager option to maximize system availability.

Because today's businesses rely on a variety of network and operating systems, the Prioris HX servers are designed to support the widest range of operating environments, including Novell NetWare 3.X and 4.X; Microsoft Windows, Windows for Workgroups, and Windows NT Server 3.5; SCO UNIX; Novell UnixWare; IBM OS/2 SMP; Banyan VINES; and Digital PATHWORKS.

The new Prioris HX servers are covered by a three-year, on-site limited warranty, with next-day response standard from Digital's Multivendor Customer Services organization or a Digital channel partner.

### High-Performance Delivery Machine

The Prioris HX architecture optimizes applications server system performance, particularly in the CPU and I/O subsystems with PCI Fast-Wide SCSI-2 controllers and drives; 512MB of parity memory; 512KB write-back cache; single- and dual-processor 64-bit memory support; support for Pentium 90 and future Intel CPU chips; and extensive high-performance PCI options, including PCI Ethernet.

Digital has opened the way for users to take advantage of a wide range of SCSI controllers, including single- and multi-channel, EISA- or PCI-based. Ten external SCSI knock-outs, coupled with Digital's external storage cabinets, enable further systems disk capacity expansion.

### Managing Servers Around the World

The new Digital Remote Server Manager provides IS managers with reliable, low-cost remote management worldwide for Digital's EISA-based servers. With its network independent Point-to-Point Protocol (PPP) interface, Remote Server Manager helps administrators control and monitor servers remotely using a telephone line and modem.

Operating system independent, Remote Server Manager needs only one package to monitor servers running any major operating system. Central site monitoring of remote stations reduces costs by using the multitasking capabilities of Windows NT, displaying multiple sessions running simultaneously on one management console.

Remote console and diskette control allow downloading of software or remote boots from a diskette over a serial line, eliminating the need for on-

site updating of software and minimizing service calls. Prior to calling a technician, system administrators can run remote diagnostics, thereby saving time and unnecessary service visits. Enhanced system security with multi-level password and dialback enables system access control and protection by assigning various levels of security. In addition, environmental sensors can be set to alert system administrators of internal and external voltage and internal temperature.

### Pricing and Availability

A base-level configuration of the Prioris HX 590 server is \$5,699, and includes one 90MHz Pentium processor, 16MB of memory, and a PCI Fast-Wide SCSI-2 adapter. A Prioris HX 590DP server with two 90MHz Pentium processors and 32MB of memory, and a PCI Fast-Wide SCSI-2 adapter is priced at \$8,699. A RAID-based Prioris HX 590 system is priced at \$8699 and includes one 90MHz Pentium processor, 16MB memory, a high-performance EISA RAID controller and two hot-swap Fast SCSI-2, 1 GB drives. All models come standard with 512KB writeback cache, dual speed SCSI CD-ROM drive, and a keyboard, mouse and floppy disk drive. The Prioris HX is available immediately in the U.S.; the Prioris HX 590DP will be available in the U.S. in early January. Digital's Remote Server Manager, shipping this month, is priced at \$799 for the hardware controller and \$999 for the controller and management station software.

Digital Equipment Corporation is the world's leader in open client/server solutions from personal computing to integrated worldwide information systems. Digital's scalable Alpha platforms, storage, networking, software and services, together with industry-focused solutions from business partners, help organizations compete and win in today's global marketplace.

## Digital Demonstrates High-speed, Internet Access Via Cable TV At Western Cable Show

### ChannelWorks Internet Router and RoamAbout Wireless LAN Products Underscore CableNet '94 Theme "Internet via Cable"

ANAHEIM, California -- November 30, 1994 -- To underscore its commitment to provide high-bandwidth multimedia solutions for the cable industry, Digital Equipment Corporation today showcased its ChannelWorks Internet Router at the Western Cable Show, demonstrating Internet access via cable TV. As the Internet evolves as a basis for the information superhighway, high-speed access is essential to tap the wealth of available information. Digital's ChannelWorks products provide this level of access to the Internet.

The ChannelWorks Internet Router is unique in the industry as a one-product solution, providing high-speed Internet access over standard cable television networks. Digital's ChannelWorks Router, announced during the summer, delivers 10 megabits per second (Mb/s) Ethernet connectivity over the cable TV network. ChannelWorks enhances the power of the Internet by delivering high-speed connectivity, enabling users to engage the full range of Internet applications without lengthy transmission delays. Not only is this ideal for interactive multimedia applications, it is also economical for all Internet activity since transactions take less time.

At the show, Digital demonstrated:

- Wireless access from the office to the Internet via cable
- High-speed access to America Online databases including Internet access
- Internet security capabilities for CableNet '94

"The Internet's expanding role in industry, government and academia is constrained by the demands of high-bandwidth applications," according to Dr. Laurence Walker, vice president and general manager of Digital's Network Product Business. "These demonstrations show Digital's continuing efforts to 'raise the speed limit' on the information highway through improved connectivity with cable networks. We're focused on providing high-speed 'on-ramps' to the highway, as well as providing enhanced security for users, hosts and networks."

### Evolving Role for Digital's ChannelWorks Product Family

In response to the convergence of the cable and computer industries and a customer interest in high-bandwidth data applications, Digital's Network Product Business offers the ChannelWorks Bridge and ChannelWorks Internet Router as part of its wide range of networking products to provide the most

flexible and comprehensive set of networking products for this market. The ChannelWorks Internet Brouter is based on the design of the popular ChannelWorks Bridge, which delivers 10 Mb/s Ethernet connectivity over cable networks for metropolitan area networks. The distance capability of the ChannelWorks products has recently been improved, from 70 cable miles to 160 cable miles round trip. The ChannelWorks Brouter extends the Bridge functionality, providing access to, and routing of, Internet traffic at speeds significantly greater than those of traditional leased lines.

Dozens of cable operators have already seen the potential of high-speed data transmission services as an important new service and revenue stream. Digital believes that forward-looking cable companies will recognize the ChannelWorks products as enablers for this significant business opportunity.

### Internet Access for Mobile Users

As part of its seamless network access strategy, Digital is providing wireless Internet access with a network solution combining Digital's ChannelWorks products and RoamAbout wireless LAN products. These products now couple the freedom of wireless communications with integrated Internet, WAN and LAN connectivity. For example, in one demonstration at the Western Cable Show, a laptop user roaming about the exhibit floor maintained the connection to services provided by the cable network, including access to the Internet, in the same fashion as a peer seated at a desk.

The RoamAbout Access Point and RoamAbout PCMCIA Network Adapter, the highest performing wireless duo in the market today, offer distinctive functionality, including cell-to-cell roaming within a building and enhanced SNMP management. The RoamAbout Access Point serves as a bridge between the laptop, the LAN, and the ChannelWorks Internet Brouter. It operates in conjunction with the RoamAbout PCMCIA Network Adapter, a credit card-sized adapter and radio modem that attaches to the laptop. In this way, data is transferred from the roaming laptop to the access point which connects the wireless user to the wired LAN. The ChannelWorks Internet Brouter sits on the LAN and provides access to the cable network. Wireless users can roam from the 800 foot coverage area of one RoamAbout Access Point to another with a smooth, seamless hand-off.

### ChannelWorks Accelerates America Online Delivery

Digital partnered with online services provider America Online at the show to demonstrate high-speed access to data-intensive applications, including the Internet, via cable TV technology.

The growth of popular data-intensive applications such as distance learning, interactive games, and transfer of large files require high-speed connections

for rapid interaction. Digital demonstrated that its ChannelWorks products eliminate the constraint of low-speed access over traditional phone lines through on-demand, high-bandwidth access to these services. The symmetry of high-speed connections in both directions enabled fast and easy use of America Online's services including interactive applications.

When Digital connected its ChannelWorks Internet Brouter to data-intensive America Online applications via cable TV, attendees at the show observed dramatic increases in performance of these services.

#### Digital Delivers Internet Security for CableNet '94

Digital also provided Internet security for all CableNet '94 Exhibit participants at the show. Highlighting the CableNet theme of "Internet via Cable," the exhibit demonstrated the convergence of cable and data networking technologies and interconnected the network and computer products of over 45 companies on the show floor.

At the center of CableNet '94 security are Digital's Internet Security Services, which help make private computer networks and databases secure from intrusion from non-secure networks such as the Internet. These Internet Security Services combine Digital's Screening External Access Link (S.E.A.L.) with consulting services for customized solutions. S.E.A.L. is a set of Digital hardware and software components that control and monitor access among secure private networks and non-secure networks. Digital's Internet Security Services were announced in May of this year.

As a leader in networking, Digital will continue to work with the cable TV industry's multiple systems operators to develop new solutions for high-speed, broadband data communications over cable. Digital is currently chairing the IEEE 802.14 committee to develop standards for the delivery of multiple services over the cable infrastructure.

Digital Equipment Corporation is the world's leader in open client/server solutions from personal computing to integrated worldwide information systems. Digital's scalable Alpha platforms, storage, networking, software and services, together with industry-focused solutions from business partners, help organizations compete and win in today's global marketplace.

## NCD AND FIRST VIRTUAL HOLDINGS FORM STRATEGIC ALLIANCE TO ENABLE FINANCIAL TRANSACTIONS OVER THE INTERNET

EMAIL WORLD, BOSTON, November 29, 1994 -- Network Computing Devices, Inc. (NASDAQ:NCDI), a leading manufacturer of information access products, and First Virtual Holdings Incorporated, a financial services company, announced today a strategic alliance to enable Internet users to conduct financial transactions over the Internet using NCD's Z-Mail electronic mail package.

First Virtual Holdings, a Cheyenne, Wyoming-based company, was founded by well-known Internet gurus Nathaniel Borenstein, the author of the MIME internet standard for multimedia; Marshall Rose, a lead developer of the global standards for electronic messaging and network management; Einar Stefferud, a leading expert on global messaging systems; and Lee Stein, a well-known entrepreneur. The company's Internet Payment System enables Internet users to buy and sell electronic information over the Internet using a First Virtual account number.

The Internet Payment System provides a secure way to conduct commerce over the Internet, without revealing credit card numbers on the Internet, or relying on the complex encryption mechanisms used by other Internet commerce systems.

NCD's Z-Mail will provide the e-mail "front-end" or graphical user interface to First Virtual's Internet Payment System. Z-Mail was chosen by First Virtual Holdings because it provides a truly open systems approach to electronic mail that is solely based on industry-standard protocols. NCD's Z-Mail cross platform e-mail package runs on Microsoft Windows, Apple Macintosh and UNIX-based systems, as well as character terminals.

"Our Internet Payment System was designed to be used by anyone who has access to electronic mail," said Nathaniel Borenstein, Ph.D., chief scientist at First Virtual Holdings Incorporated. "We chose NCD as our first strategic e-mail partner because Z-Mail's architecture was a perfect match for First Virtual's open protocols. The speed and ease in which NCD's engineers were able to extend Z-Mail's scripting language to provide enhanced handling of First Virtual messages is a tribute to Z-Mail's underlying power and flexibility, which will serve users well in innumerable other situations."

"We believe the growth of electronic commerce is accelerating with the rapid expansion of the Internet," said Bill Crane, vice president and general manager of NCD's Z-Code Division. "Z-Mail's open system architecture easily supports this shift because it focuses on industry standard protocols, not necessarily platforms. Z-Mail supports all major desktop platforms today and will extend to other server platforms in the future. The ability for the vendors

to custom- design their messaging schemes through Z-Mail's powerful Z-Script feature provides a broad array of options for message-based business transactions both now and in the future. We are very happy to be working with First Virtual and to be part of the first wave of electronic commerce over the Internet."

## The Internet Payment System

The Internet Payment System is the fastest and easiest way to conduct information commerce over the Internet. A user can buy information over the Internet using a First Virtual account. When a user finds something he wishes to purchase, he simply attempts to download the product using ordinary Internet protocols such as the World Wide Web, FTP, or e-mail. In the process of doing so, he is asked to give the vendor his First Virtual account ID. The vendor then, in real-time, verifies the account ID with First Virtual, and notifies First Virtual of the transaction. First Virtual's Internet Payment System then "calls back" the user (via e-mail) to confirm or deny the purchase. If the user fails to respond to queries, or indicates an unwillingness to pay, the purchase is denied. If the user indicates that the purchase was never requested, First Virtual cancels the account, and allows the user to open a new account. If the user indicates a willingness to pay, the transaction is billed to the user's credit card and the vendor is paid.

First Virtual Holdings Incorporated is currently providing services for the transfer of electronic information only over the Internet. Information on how to buy and sell information over the internet and on-line registration can be obtained at [info@fv.com](mailto:info@fv.com) or through the World-Wide Web at [ht://www.fv.com](http://www.fv.com).

Network Computing Devices, Inc., formed in February 1988, provides information-access solutions for client-server computing environments. NCD is the leading supplier of X Window System terminals, with a broad family of color and monochrome units, and PC-X server software products which integrate Microsoft Windows- and DOS-based PCs into X/UNIX networks. The Company's Z-Code Division supplies the Z-Mail family of cross platform electronic-mail and messaging software for open-system environments. For more information, contact NCD's Z-Code Division, 101 Rowland Way, Suite 300, Novato, CA 94945, phone: (415) 898-8649.

First Virtual Holdings Incorporated is a virtual corporation, with members of the organization linked electronically from facilities throughout the United States. For further information, contact The Gable Group at (619) 234-1300, or by e-mail to [media-help@fv.com](mailto:media-help@fv.com).

Consumer Health Full Text Database -- Health and Drug Information Library --  
Now Available from SilverPlatter Information

December 9, 1994 -- SilverPlatter Information announces the availability of a new consumer health information CD-ROM that contains full text articles and images. The Health and Drug Information Library, published by Clinical Reference Systems and SilverPlatter, contains a comprehensive collection of information on over 6,000 health topics, including over-the-counter drugs and prescription drugs, adult health, pediatrics, and OB/GYN. Many of the pediatrics articles have been translated into Spanish.

This new CD-ROM is ideal for both the lay person as well as for members of the medical and pharmaceutical community. It is written in easy-to-understand, non-technical language with many articles covering medical procedures and conditions written with versions specific to adults, teenagers, children and infants. Articles contain practical information such as symptoms and causes of illnesses, when to call a doctor, what questions to ask your doctor, treatment information, and prevention. It addresses an individual's needs while remaining non-technical. The contents are further enhanced by over 100 illustrations which serve to highlight the advice provided and help the lay person to better understand the subject matter.

All sections have been contributed to by physicians, nurses, patient educators, and other health care professionals. The Adult Health section is favorably reviewed by the American Academy of Family Physicians Foundation, adding emphasis to the quality of the materials in this product.

In addition to public, school and medical libraries, this new product is of particular interest to health care institutions that must comply with JCAHO patient education requirements.

The Health and Drug Information Library is updated twice yearly, and can be networked.

For further information, or to subscribe to the Health and Drug Information Library, contact:

SilverPlatter Information, Inc.  
100 River Ridge Drive  
Norwood, MA 02062-5043  
Tel: 1-800-343-0064 (U.S. and Canada) or 1-617-769-2599  
Fax: 1-617-769-8763  
Internet: [info@silverplatter.com](mailto:info@silverplatter.com)

## New Menus for Windows v1.41

### What's new

- integrated Virtual Desktop
- X-Window like Window Management (XMouse)
- 'visual' Editor for the menu structure
- Customizable colors and fonts
- executes batches
- and about more 40 new features and improvements

### A short description

New Menus for Windows 1.4 <ASP> is a shell and a desktop enhancement for MS Windows 3.1, quite similar to some window managers of the X-window system (GUI of UNIX f.e. Motif, OpenLook) and the upcoming GUI of Windows 95, with many features, lean resource needs (82% GDI & 95% USER) and highly configurable. To launch programs, you just have to push the right (or middle) mousebutton to get a graphic popup menu. The programs and documents can be grouped in submenus. The items are visualized with icons. Each submenu can be stuck to your desktop with a needle. The Menu supports the Program Manager-groups, wild cards, directory browsing, Windows API (DLL) calls, batches with keyboard macros, etc. Many special functions for window and task management are available. Windows can be activated by only moving the mouse into the window. Another basic feature is the possibility to stick normal application menus onto the desktop. The systemmenus can be enhanced and customized by the user. Some window controls (edit control, File Manager, DOS-box, etc.) have enhanced features, which are accessible via context sensitive popup-menus. The user can also compile their own individual context sensitive menus for all window programs. With the integrated Virtual Desktop, a desktop up to 64 larger is accessible with a mouse click. The layout of windows can be saved in the context of Virtual Desktops. The Menu supports system administration for multi-user installations.

New Menus for Windows 1.4 is shareware.  
The registration fee is \$20 US.

### Availability

English version:

<ftp.cica.indiana.edu:/pub/windows/desktop/nmfw141e.zip> (soon)  
(and mirrors)  
<garbo.uwasa.fi:/windows/desktop/nmfw141e.zip> (now)  
(and mirrors)

ftp.uni-koeln.de:/pc/win3/manager/nmfw141e.zip (now)  
CompuServe: GO WINSHARE, Lib Program Managers nm141e.exe (soon)

German version:

ftp.uni-koeln.de:/pc/win3/manager/nmfw141g.zip (now)  
CompuServe: GO PCPRO, Lib Utilities/Tools (now)  
Fido: 2:2437/501 - 2:2437/502 (49-561-5740777, 49-561-573967)  
nmfw141g.arj (now)

Questions / Support:

Dipl.Ing. Roger Rene Kommer; Fido: 2:2437/501.10; CIS: 100412,3624  
Internet: roger@architektur.uni-kassel.de; Voice: ++49 561 78015010

## SilverPlatter Announces General Release of its Electronic Reference Library (ERL) Technology

December 7, 1994 -- ERL - a technological framework for a Worldwide Library enabling access from multiple software and hardware platforms, opportunities for collaboration, and new publishing possibilities

ERL (Electronic Reference Library) is SilverPlatter's technology for enabling Wide Area Network access to all major databases. Utilizing an open systems design, ERL offers librarians the ability to create an electronic library by collecting, organizing and distributing increasing amounts of electronic information across institutional and cross-consortium networks, including the Internet, via TCP/IP. Based on client/server architecture, ERL Technology has two software components: the ERL Retrieval Clients (user interface) and the ERL Server Software (search engine). SilverPlatter's Data eXchange Protocol (DXP) standardizes the communication between ERL clients and servers.

### Server Software for SCO UNIX and Solaris

SilverPlatter's first release of ERL Server software supports a SCO UNIX server on an Intel platform. This server software has been installed at over 40 customer sites worldwide for several months and is now in general release.

SilverPlatter has also developed ERL Server software for a Sun Solaris server for SPARC. The Solaris Server software has undergone extensive testing and is already in use at 15 sites worldwide. SilverPlatter is releasing the Solaris ERL Server software to additional sites over the coming months.

### Retrieval Clients for Multiple Platforms

SilverPlatter's ERL Retrieval Clients (user interfaces) offer the same functionality as their standalone SPIRS software. Currently, clients are available for Windows, DOS and Macintosh platforms. UNIX-SPIRS, a UNIX character-based client which will support VT-100 terminals as well as others, terminal emulation packages and telnet access, will be available to interested sites in the coming months.

### Sharing Technology

SilverPlatter has designed ERL Technology so that software and OPAC vendors can write clients or develop gateways from existing clients to access ERL-compliant databases. By sharing its technology, SilverPlatter is working with others in the industry to build a Worldwide Library with ERL as the technological foundation. Collaboration between SilverPlatter and Ameritech Library Systems, Academic Division (formerly NOTIS Systems) has resulted in

the first example of a Z39.50 third-party client to access ERL-compliant databases. From this collaboration, the next release of SilverPlatter's ERL Server software will enable Z39.50 clients to display MARC-formatted records.

### Increasing Publishing Opportunities

In addition to expanding the access channels with ERL technology, SilverPlatter, in working with information providers, is increasing the electronic information collection that is ERL-compliant. SilverPlatter already offers over 200 ERL-compliant databases, and expects to dramatically increase this collection by extending publishing options which enable others to publish ERL-compliant data on their own. By providing tools, technology and training, opportunities for publishing data electronically will be made available not only to traditional publishers, but also to those who previously were unable to take advantage of it. SilverPlatter will formally introduce this program in 1995.

For further information about ERL, contact:

SilverPlatter Information, Inc.  
100 River Ridge Drive  
Norwood, MA 02062-5043  
Tel: 1-800-343-0064 (U.S. and Canada) or 1-617-769-2599  
Fax: 1-617-769-8763  
Internet: [info@silverplatter.com](mailto:info@silverplatter.com)

## Music Notation Software Available: NOTA MUSICA

Nota Musica is a 32 Bit Presentation Manager application to write and print music pieces. It offers both a text based and a graphical mouse driven editor. Tools such as transpose and similar facilitate revising and rearranging your tunes. Although Nota Musica uses its own file format to store your music pieces appropriately on disk, it also supports the MIDI file format, which is supported by most major tune editors for DOS, Atari, Macintosh and Amiga.

Nota Musica creates fine printouts of your pieces, even on 9 pin printers. Of course it also supports 24 pin, inkjet, and laser printers. Printouts are created using emTeX and MusicTeX which are included in the commercial version in an easy to install package. TeX is available for many computer and operating systems (Unix, Atari, Amiga, Macintosh, etc ...). Therefore Nota Musica's output can be used for further processing on these machines if required.

You can also import Nota Musica's output into your favorite word processor to write music related papers and books, for example.

You don't have to know anything about emTeX and MusicTeX to use Nota Musica.

Nota Musica with the included emTeX and MusicTeX requires less than 5MB of harddisk space.

So far, Nota Musica was only available in a German version and was highly appreciated by its users. Now, the English version is available.

Demonstration versions are available from [hobbes.nmsu.edu:/os2/incoming](http://hobbes.nmsu.edu:/os2/incoming) as nota15de.zip (English version) and nota15dg.zip (German version). These files will be moved to /32bit/mmedia or to /32bit/demos sometime. The demonstration version can only handle pieces of limited size and is not able to create printouts (emTeX and MusicTeX are not included). Sample printouts (for Laser/Inkjet, 24 pin and 9 pin printers) are available as nota15ex.zip at the same location as the demonstration version.

Additional Information (documentation, ordering, pricing) is contained in these files and can also be obtained from:

Johannes Martin Software-Entwicklung  
z.Hd. Ludger Martin  
Pfarrer-Dorn-Strasse 26  
55127 Mainz  
Germany  
E-Mail: [lumartin@rbhp56.rbg.informatik.th-darmstadt.de](mailto:lumartin@rbhp56.rbg.informatik.th-darmstadt.de)

and:

Johannes Martin Software-Entwicklung  
Attn: Johannes Martin  
Douglas 337  
DeKalb, IL 60115 USA  
E-Mail: [jmartin@goofy.zdv.uni-mainz.de](mailto:jmartin@goofy.zdv.uni-mainz.de)

## Visual Parse++ - New Visual Programming Tool Slashes up to 90% of Development Time From Common Tasks

November 30, 1994 -- Hendserson -- OS/2 software developers can save up to 90% of the time needed for many common programming tasks with a new type of visual programming tool from SandStone Technology Inc.

Visual Parse++ brings visual programming technology to parsing techniques -- programming methods used to manipulate and control information.

Parsing technology has traditionally been restricted to compilers and interpreters because of the difficulty in using such existing parsing tools as the Unix utility yacc, or its derivatives.

With Visual Parse++, developers can use parsing technology for end user commands, protocols, data file structures, as well as the traditional compiler and interpreter applications. Visual Parse++ even makes parsing economical for such small tasks as edit field validators, user parameter files, scripting, tagged data, formatted files, and data filters.

"Developers can gain enormous productivity through visual programming," explained SandStone Technology president, Bill Donahue, "but the technology has been mostly restricted to GUI design and object oriented development. We hope to expand development efficiency through new types of tools."

Visual Parse++ works by creating tables and a skeleton application for a developer from a specification. Because of this, it is programming language and platform independent. Support for C, C++, and REXX is currently included.

While presently shipping for OS/2, a Windows version of Visual Parse++ is planned for the first quarter of 1995. SandStone Technology is also considering an AIX version.

"Because of the tools we used in creating the OS/2 version, we anticipate that the AIX port will be easy. Our first goal, however, is to finish the Windows version,"

"By the second quarter of 95, we will have support for UNIX as well. This is the first cross platform, multi-programming language tool of its kind. This should lead to the standardization of programming languages and other file formats. This is true even across national boundaries, as Visual Parse++ supports DBCS and Unicode," said Donahue.

Visual Parse++ is available directly from SandStone Technology. While the

list price for the OS/2 version is \$699, there is an introductory special of \$299 until February 28, 1995.

SANDSTONE TECHNOLOGY INC.

70 Tidwell Lane

Henderson NV, 89014

(702) 896-7623 (Voice)

(702) 896-6932 (Fax)

(800) 988-9023 (Voice)

## UZful Software - Three Useful Laptop Utilities The Vendors Forgot.

Merrimack, NH - UZful Software, Inc. releases the latest versions of the UZful Software utilities geared specially to all brands of laptop computers.

UZPower 1.30 is a battery power monitor program designed specifically for power-managed laptop computers running Microsoft Windows 3.x. Its main function is to constantly monitor the status of the battery, indicate the remaining charge and warn the user when it becomes dangerously low. This utility is absent on many laptop models, causing users to lose work because the computer shuts off without notice.

UZBlank 1.11 is a screen blanking program designed specifically for power-managed laptop and desktop computers running Microsoft Windows 3.x. It uses the Advanced Power Management (APM) features of modern laptop computers to power off devices (eg. the display) when running in battery-operated mode, in order to preserve power. It also incorporates password-protected screen locking functionality to thwart casual unwanted access at your data by others.

UZEvProf 1.10 is a Windows Event Profiler, which lets the user statistically examine the number of events posted to each running application. This utility immediately illuminates the hidden costs of each program executing on your computer, and gives a partial answer to the question: why is the computer running so slow? The proliferation of software and the complexity of the operating system increase the need for diagnostic tools to fine-tune your computing environment.

Each application is available separately for download at your local BBS, internet site or commercial service provider (search for UZ\*.\*), and is marketed on a shareware (try-before-you-buy) basis.

For more details, contact UZful Software, Inc. at [uzful@mv.mv.com](mailto:uzful@mv.mv.com) .

UZful Software, Inc.  
PO Box 2089  
Merrimack, NH 03054-2089

November 1994 -- Organizing your 3.5" disks has just become much easier with DiskIndex dividers. These plastic dividers fit easily between your disks in any disk storage system and can quickly be labeled. The package includes 10 dividers, 48 preprinted labels for most popular applications and basic categories. Also included are 16 blank labels for customizing. Colored and alphabetical labels are available to further enhance disk organization. If you have ever wished that the dividers in your disk storage system were more flexible, your wish has come true with DiskIndex. By removing all dividers that come with your system and placing DiskIndex dividers anywhere between the disks, you will no longer search endlessly for that certain program or data disk. The labels are readily visible when they are separated by only one disk.

DiskIndex

1918 West Clarke

Spokane, WA 99201

509-747-7412, 800-777-5089, fax 509-747-5447

## E-POS for DOS

Point-of-Sale software designed for the small business that's thinking big!

E-POS version 2.0 gives small business an edge

## Off-the-shelf Point-of-Sale

E-POS is a software product designed specifically for the small business. E-POS provides all the powerful business management tools that, until now, were available only to the large corporations able to pay for custom development. These tools enhance the control and profitability of a business involved in selling of products and/or services.

To compete in today's marketplace, instant and detail information about your business fiscal performance, is an absolute necessity. E-POS compiles this information while you are conducting the day-to-day business functions like generating invoices, issuing purchase orders, etc. E-POS is a must-have product for companies that want to prosper into the future.

## Fast and Powerful tools to run your business

E-POS is a fully integrated business management system built around an Electronic Point-of-Sale front-end. The sales invoice metaphor of E-POS is designed to reduce your business control chores to the simple task of creating a sales invoice. With every sales invoice you generate, E-POS automatically and instantly stores information on all your sales transactions; it retrieves and updates your inventory information; it tracks your tax transactions; and it builds your customer database for follow up and marketing campaigns.

To assist you in making more informed and effective decisions about your business, E-POS features a host of management reports. Through these reports, detailed information is available on your sales, inventory levels, merchandise performance, suppliers, gross margins, tax transactions, customers, and other essential business statistics. And while E-POS works very hard in the background, it is as fast as a cash register.

## No Accounting Knowledge Required

E-POS is not an accounting software and it does not require an accounting knowledge. The accounting intelligence is built into the program logic. E-POS will automatically set up the necessary database structures as you engage in conducting your business.

## Easy-to-use, Easy to learn

You don't have to be a programmer to use E-POS. The software provides easy, automatic installation, quick setup and an exceptionally easy to master user interface that requires minimum of learning time -- even for a novice computer user. You can be up-and-running in minutes.

### Context sensitive on-line help

E-POS has a context sensitive on-line help at every level in the program. You can get help in any situation even if the manual is not handy. The help screens eliminate the guess work out of learning E-POS. Any level, any field on the screen, press F1 and you will get a screen full of information on this particular field and how to use it.

### E-POS grows with your business

E-POS is packed with so many features that you might not use them all today. Some day, as your business grows, you will be ready. By giving you all the power now, E-POS is ready for your future. For example, hardware support for cash drawer, receipt printer, barcode scanner and customer display pole is built-in and ready to use at any time.

### Start to prosper now

The best way to manage your business for success into the future, is to start managing it with E-POS today. E-POS version 2.0 is designed to help you generate more business with less effort. And E-POS is priced right for small business needs.

### E-POS v2.0 specifications

#### General Features

- Easy to use with logically arranged pull-down menus
- Context sensitive HELP from any field in the program
- On screen display and editing of invoices
- Invoice tracking
- Global discounts and/or individual item discounts
- Customer tracking
- Volume discounts can be assigned to selected customers
- Six levels of password security
- On screen reports with panning and scrolling
- Profit tracking
- Supplier database
- Purchase orders
- Barcode reading and printing

- Inventory searches by product code or by description
- Print invoices on custom forms or plain paper
- Choice of any industry bar code for your product
- Full database on employees with personal information
- On screen pop-up calculator for quick price adjustments
- Mixed payment options allowed for a single transaction
- Automatic retrieval of customer information
- Control of discounting by Salesperson
- Price look-up
- Supports all types of receipt printers, invoice printers, display poles, cash drawers and barcode scanners
- Special transactions involving credit accounts, layaway, and foreign currency payment supported

### Inventory Control Features

- Serialized inventory
- No limit on number of products in inventory
- Volume discount tables
- Supplier tracking
- Supplier product codes and internal product codes supported
- Each product can be linked to three discount price categories
- Each product can be tagged to accept serialized items
- Each product is individually specified for PST and GST
- Matrix capability allows access of products according to size and colour
- Display on-hand quantities and calculated dollar values
- Assembly support (many products combined to form a single product)

### Report Features

- Report type of credit card and cash transactions made over a specified period
- Report salesperson's commissions and performance
- Report sales activity for each product
- Report taxes collected on PST and GST
- Report products with low on-hand levels to be reordered
- Report sales summaries for any day or for a defined period
- Report outstanding credit accounts

### System Requirements

- All PCs using 80286, 80386 and 80486 CPUs
- DOS 3.3 or later, 100% compatible versions
- 1MB of RAM (2MB recommended)
- Monochrome VGA, Colour VGA monitor

- One 3.5" 1.44MB floppy disk drive
- One 30MB hard disk
- Printer capable of printing in compressed print mode

E\_Log Business Systems  
3555 14th Ave, Unit 8  
Markham, Ontario L3R 0H5 CANADA  
905-946-9649, fax 905-946-8228

## Newer Technology PowerClip Accelerator Chosen As Editor's Choice Award Finalist

WICHITA, Kan. - 12/09/94 - Newer Technology's innovative PowerClip accelerator, which combines increased operating speeds with lower costs for optimum value, has been selected as one of three Editors' Choice Award finalists for best New Accelerator Product by MacUser magazine. Unlike competitive "clips" that change speed by replacing the entire clock crystal, the PowerClip design offers more than 110 different speeds. Retail price is just \$195, with a street price through mail-order firms of around \$160. PowerClip represents a growing line of accelerators from Newer Technology, recognized as an industry leader in memory enhancement products for Macintosh computers.

The 1994 "Eddy" Awards will be presented for products in 36 categories on January 3, 1995, in San Francisco, Calif, and recognize the best Macintosh hardware and software products released throughout the year. Finalists are selected based on technological innovation, quality, performance, user friendliness and value to Macintosh users. Special awards will honor the Hardware and Software Products of the Year as well as recognize the Breakthrough Technology of the year.

PowerClip is a low-cost CPU accelerator for Power Macintosh 6100/60 and 7100/66 computers, as well as for the Performa 6110, 6112, 6115, 6117 and 6118 models (which are based on the Power Mac 6100). The 6100 and 7100 both operate at an accelerated speed of approximately 80MHz translating into a minimum guaranteed performance improvement of 33 percent and 21 percent, respectively.

Depending upon the configuration of each individual computer (chip tolerances, RAM speed, installed NuBus card, etc.), increased speed may be possible. Using a simple DIP switch, users adjust the CPU's speed upwards in 0.2 MHz increments. PowerClip installs directly onto the motherboard clock chip and involves no permanent alterations to the computer, no wires and no software.

PowerClip has passed both the Class A (for business use) and the more rigorous Class B testing (for home use). It comes with a two-year parts and labor warranty, unlimited toll-free technical support, illustrated manual and a 30-day money-back guarantee.

"PowerClip represents the type of innovation, quality and performance that we engineer into every product, and we are proud it is a finalist for this prestigious award," stated Newer Technology president, James Wiebe. We began applying our expertise in memory products to accelerator products for the Macintosh more than three years ago. Today, Newer Technology offers a

full line of seven accelerators for everything from the IIsi to the Power Mac 7100."

Newer Technology offers a similar clip, MacClip, which has all of the features of the PowerClip and is 100 percent compatible with the Macintosh Centris 610, 650 and 660AV, and the Quadra 610, 650, 660AV, 800 and 840AV. Minimum guaranteed speed increases range from 12 percent in the 840AV to 40 percent in the Centris 610.

"This year, the 10th anniversary of the Eddy Awards, it's clear that the 1994 finalists represent the best products of the year and set the stage for product innovation in the future," noted Maggie Canon, MacUser editor-in-chief. Newer Technology's PowerClip is competing with two Radius graphic accelerator products.

Newer Technology  
7803 East Osie, Suite 105  
Wichita, KS 67207  
316-685-4904

## 512K and 1MB Cache SIMMs from Newer Technology Enhance System Speed for High-End Applications

WICHITA, Kan. - 12/09/94 - Newer Technology has begun shipping high-density Level 2 cache memory, providing additional system speed when running the most demanding high-end engineering, rendering and 3D applications on Power Macintosh computers. The 512K and 1MB cache SIMMs are 100 percent compatible with the Power Mac 6100/60, 7100/66, 8100/80 and 8100/110, and with the Power Mac 6100-based Performa' 6110, 6112, 6115, 6117 and 6118 models. Most notable are increases found in the Power Mac 8100, where the 512K and 1MB cache SIMMs provide between five and 10 percent more speed when used to replace the stock 256K cache memory.

The addition of the high-density 512K and 1MB cache SIMMs complements Newer Technology's existing cache memory products. Newer Technology offers Cache 040 for Macintosh Centris and Quadra computers. Installing into the motherboard CPU socket, Cache 040 leaves the valuable NuBus and PDS slots open. This "slotless" design, made popular by Newer Technology, makes the addition of other performance upgrades such as video cards and fast SCSI controllers possible.

A leader in Macintosh memory upgrades, Newer Technology also provides a complete selection of 4MB, 8MB, 16MB and 32MB SIMMs for all Power Mac models. All Newer Technology RAM and cache memory come with a lifetime warranty, 100 percent compatibility guarantee, 30-day money back guarantee and unlimited toll-free technical support.

Newer Technology is offering a free GUiDe to RAM Upgrades (GURU) diskette, which provides a detailed explanation of all memory upgrades available for each Macintosh computer. A printed Macintosh Memory Configuration Guide is also available. For more information, write Newer Technology, 7803 E. Osie Street, Suite 105, Wichita, KS 67207, or by AppleLink at Newer.Sales or Internet at [newer.tech@applelink.apple.com](mailto:newer.tech@applelink.apple.com). Call 1-800-678-3726 or 316-685-4904, or fax 316-685-9368.

Newer Technology  
7803 East Osie, Suite 105  
Wichita, KS 67207  
316-685-4904

## NETWORKS EXPO BOSTON ATTENDEES WILL LEARN HOW TO TAP THE INTERNET'S POTENTIAL FOR THEIR CORPORATE NETWORKS

(Business users must adapt their corporate networks to integrate the Internet into their enterprise systems. Networks Expo will provide hands-on access to the Internet for all experience levels.)

(Fort Lee, NJ, December 9) -- The technology for connecting business networks to the Internet will be in the spotlight at the Networks Expo '95 Boston, February 14-16, 1995, at the Hynes Convention Center in Boston, MA. For the first time, the Boston networking show will feature a comprehensive Internet focus -- with the new hands-on Internet Theater, co-sponsored by Pencom Systems, Inc., combined with the debut of the Internet Pavilion, plus new and updated seminars exploring the Internet and business.

Highlights of the Internet program at Networks Expo '95 Boston will include:

- \* Internet Theater. This interactive showcase on the exhibit floor will include more than 40 desktop stations, where Networks Expo attendees will receive a guided, hands-on tour of the Internet. Sponsored by Networks Expo and Pencom Systems Inc., this showcase, featured on national television, will offer classes every hour during Networks Expo Boston.
- \* Internet Pavilion. Attendees will have an opportunity to evaluate scores of products from Networks Expo Boston exhibitors that provide Internet access, knowledge and related services .
- \* Commercial uses of the Internet. Rose Ann Giordano, vice president of the Internet Business Group for Digital Equipment Corporation, will deliver her keynote presentation on Wednesday, February 15 at 9 a.m. Ms. Giordano will address the "Commercialization of the Internet," and explore Internet business models.
- \* The White House, the Internet and democracy. The keynote presentation by Jonathan Gill, director of special projects, Office of Media Affairs at the White House, will address, "The National Information Infrastructure and the Coming Era of Participatory Communications," in his presentation on Thursday, February 16, at 9 a.m.
- \* The 'Net for Novices. Business professionals new to the Internet can attend a practical primer, including a demonstration of Internet access, given by John Krick, senior analyst of Datapro entitled, "Driver Training on the Information Superhighway."
- \* ShowNet Access to the Internet. The show network and on-line show directory will provide attendees with expanded access to the Internet

through Mosaic and other tools for both electronic mail and information retrieval.

\* In-depth Seminars and Tutorials. For the first time, Networks Expo Boston will present tutorials and a dedicated educational seminar track on the Internet. The track will provide a business-oriented exploration of the Internet, including a session entitled, "Doing Business on the Internet." Network security, and how a business can establish "points of presence" on the Internet will be among the topics covered during the in-depth tutorial, "An Introduction to the Internet," to be held Monday, February 13, from 9 a.m. to 4 p.m.

\* "You Can't Do That on the Internet. " The nation's largest user group, the Boston Computer Society (BCS), in cooperation with Networks Expo Boston, will present this complimentary session on Tuesday, February 14, from 1:30 - 3:00 p.m.

"Despite all of the general and technical information available about the Internet, there is still a definite need for information about integrating corporate business networks to the Internet," said John Krick of Datapro. "Managers must also understand the critical need for corporate data security, before driving while impaired on the Information Superhighway."

More than 253 exhibitors of computer networking and communications technology are expected at Networks Expo Boston, at the John B. Hynes Convention Center. The show will run Tuesday through Thursday, February 14-16, 1995; exhibit hours are Tuesday and Wednesday -- 10 a.m. to 5 p.m., and Thursday, from 10 a.m. to 4 p.m.

Bruno Blenheim Inc  
Fort Lee Executive Park, One Executive Dr, Fort Lee, NJ 07024  
800-829-3976, 201-346-1400, Fax: 201-346-1532

## Extend Ships WinZones

### A Windows Utility that Displays the Current Time Anywhere in the World

Pleasanton, Calif. -- December 12, 1994 -- Extend, Inc. today announced the release of WinZones, a Windows utility that displays multiple time zone clocks simultaneously on the user's computer. WinZones is currently shipping and has an introductory retail price of \$29.95.

"Anyone who travels or does business in other time zones will benefit from WinZones" said Lorraine Ling, President and CEO for Extend. "Using WinZones, a user can conveniently know the time at a client's location and can think in terms of the client's current time. Also, the alarm feature makes it easier to make calls at appropriate times and never miss important deadlines."

WinZones provides several customizable features including: digital or analog clock faces, optional date and seconds display, color selections, alarms and more, making it fun to use. Over 100 major cities are preprogrammed into the WinZones database covering all time zones throughout the world. New cities can be added in seconds.

WinZones is easy to install and runs on Window 3.1 and above. It complements a variety of desktop applications such as Personal Information Managers, Sales Information Systems, Spreadsheets and Word Processors. Recognizing that screen real estate is always at a premium, WinZones clocks can be customized to any size and moved anywhere on the screen.

"My business requires setting up appointments with overseas clients," said Peggy Cai, Telemarketing Coordinator for Sherpa Corporation, "I am tired of counting on my fingers to figure out what time it is over there. With WinZones, I can now set an alarm, do my work, and not worry that I will miss the window of opportunity to contact my overseas customers and prospects."

Extend, Inc.

The company was founded in 1993 to develop Windows based utility software. Extend's offices are located the San Francisco Bay Area. It's Pleasanton, California office develops, markets and licenses software for the business and consumer markets worldwide.

Extend Inc  
4847 Hopyard Rd, Ste 3218  
Pleasanton, CA 94588  
CompuServe: 74024,3574  
Phone: (510) 484-0395, Fax: (510) 484-0153



## BOCASOFT ANNOUNCES SOFTWARE SOLUTIONS DIVISION

Boca Raton, FL -- BocaSoft, authors of the popular BocaSoft WipeOut screen saver for IBM's OS/2 Operating System have announced a new division formed to develop custom software applications for the growing number of companies implementing solutions on the OS/2 operating system.

"With the recent release of IBM's OS/2 Warp and it's stability and acceptance, we see a real opportunity in the development of custom enterprise applications", said John Blackmon, a senior developer for BocaSoft. "We have delivered a number of software projects with very positive results. It just makes sense to formalize this part of our business."

BocaSoft is no newcomer to custom software development. Current projects include contract work for IBM on both the OS/2 and OS/2 for Power PC platforms, a Windows CD-ROM multimedia application for Cincinnati's based CollegeView Inc., a vehicle location system for Ft. Lauderdale's Seeker Systems using OS/2 with OS/2 LAN Server, and custom screen savers for Macintosh, OS/2, and Windows.

"Our engineering staff has numerous years of software development experience with large software companies such as IBM, EDS, Gould, and TechData Corporation", stated Chris Shablak, BocaSoft's Chief Financial Officer. "Combine that with self managed developers in small project groups gives us a huge advantage over larger more traditional software contracting firms."

Please contact BocaSoft Attn.: Chris Shablak regarding technically challenging software projects with an emphasis on long term company relationships.

BocaSoft Inc.  
Voice: 407/241-1812  
Fax: 407/241-6301  
CompuServe: 71333,3617 or GO BOCASOFT  
Internet: 71333.3617@compuserve.com

## "Dharma Moves Data Integration To The Desktop With ODBC Integrator"

NASHUA, NH, November 1, Dharma Systems, Inc., today announced ODBC Integrator, a new client-based product that moves data integration capabilities to the desktop. Unlike previous data integration products, ODBC Integrator works on PCs and makes distributed ODBC data sources appear as one data source. It also provides the capability to join data transparently between multiple data sources. Today's announcement reinforces Dharma's ongoing commitment to provide users with comprehensive open database solutions.

The move to client/server computing has provided many benefits to users: the most important is easy access to business information from the desktop. Client/Server computing, however, has resulted in the distribution of corporate data between multiple disparate databases. Corporate information is now distributed between desktops, LAN file servers, Unix servers, and mainframes. Corporate information is also distributed in legacy applications and platforms. This data distribution has created the need for making this complex database environment look and behave as a single, unified database.

Data integration products have traditionally been developed and licensed as server oriented products from both database vendors and Middleware vendors. The server-oriented characteristics which are common to all these products include the cost (typically ranging between \$50,000 to \$500,000), the high level of system integration skills required, and the need for full time system administration to manage the products.

Dharma's ODBC Integrator introduces a new approach to data integration; i.e., the use of the desktop to integrate data. The differences between server-oriented data integration and client-oriented data integration are lower cost, lower integration skills, and lower administration costs.

### ODBC Integrator

The ODBC Integrator is targeted as a data integration middleware product for desktops. The ODBC Integrator works with all ODBC drivers and tools to provide the following data integration functionality.

**Data Access:** The ODBC Integrator makes distributed ODBC data sources appear as one data source to applications.

**Data Synthesis:** The ODBC Integrator provides the capability to join data transparently between multiple data sources.

**Data Synchronization:** The ODBC Integrator manages synchronization of data

between a laptop/desktop and a server database.

Data Warehousing: The ODBC Integrator allows users to move data subsets from server databases to the personal workstation for local analysis.

"The ODBC Integrator provides the core functionality to build a wide range of sophisticated applications on the desktop/laptop," said J. Sasidhar, president, Dharma Systems, Inc. "The ODBC Integrator makes data integration affordable by making it a desktop software purchase rather than a server-based software purchase."

#### Pricing and Availability

Dharma's ODBC Integrator for Windows 3.1 will be available in the first quarter of 1995. Pricing of the ODBC Integrator is \$400 per user.

#### Dharma Systems

Dharma Systems provides SQL-based solutions that open databases. For non-SQL data sources we provide SQL and ODBC technology. For SQL data sources we provide ODBC integration: joins across multiple databases, data synchronization, and data warehousing.

#### Industry contacts:

Wayne Kernochan  
Aberdeen Group  
617-723-7890

Mr. A. Vaseekaran  
914-335-7011 (Philip Morris)  
800-225-0256 id 93493 (Beeper)

Betsy Burton  
Gartner Group  
408-748-1111

Ed Acly  
International Data Corporation  
800-343-4935

## ENTERPRISE SOLUTIONS' X.400 AND X.500 MESSAGING PRODUCTS TO HELP FIGHT WAR AGAINST DRUGS;

Logicon, Inc. Awards ESL Contract for Secure Anti-Drug Information System for the Southwest Border States (California, Arizona, New Mexico and Texas)

(Westlake Village, CA; November 22, 1994)--Enterprise Solutions Limited (ESL), provider of complete X.400/X.500 messaging solutions, today announced that Logicon, Inc. headquartered in Torrance, California, awarded it a contract to provide EXM Mail X.400 and X.500 products for the Southwest Border States Anti-Drug Information System. The Department of Defense is funding this system as a part of a Congressional mandate to design, integrate, and implement counternarcotic information sharing systems. The system could eventually span across every state. Enterprise Solutions is proud to play a strategic role in this vital project to help in the fight against drugs.

The Southwest Border States Anti-Drug Information System allows law enforcement officers to exchange information necessary to curtail the flow of drugs across borders into the United States. The network incorporates ESL's X.400 Message Transfer Agents (EXM/MTAs), 1988 X.400 Message Stores, and X.500 Directory Service Agents (EXM/DSAs) distributed throughout all regions of these four border states. Logicon and the Georgia Tech Research Institute are developing electronic data interchange (EDI) transaction capabilities as a part of the overall project.

The network is completely secure. It uses strong authentication for access to the network, and encryption across the network. Further details on the security features are not available due to the sensitive nature of the information.

Logicon uses enterprise-wide integrated solutions to provide select counternarcotics law enforcement activities with information management solutions. Under contract to the Defense Information System Agency (DISA), Logicon engineered the capability to exchange counternarcotic and criminal information among disparate legacy information systems of the four states. The private, encrypted, X.25 packet-switched wide area network for the Southwest Border States Anti-Drug Information System, using Enterprise Solutions' X.400 and X.500 messaging solution, enables law enforcement officers to securely exchange sensitive intelligence and other investigative information.

Mr. Gabriel Alcala, Logicon's Director of Counter-Drug Support, says, "The ability to collect, process, disseminate, and share information among law enforcement agencies directly impacts the Federal and state counter-drug strategies. The timeliness and security of this information is critical not only

to the success of an investigation but also to the survival of law enforcement officers."

ESL recently introduced EXM Mail, a new series of native X.400 and X.500 products. EXM Mail consists of X.400 User Agents with P7 protocol and Message Store for multiple user interfaces, remote user agents for non-connected users, full X.500 Directory Services, complete Mail Administration, both department level and system 1988 X.400 Message Transfer Agents, and a family of mail-enabled add-on products which extend and enhance the Enterprise Xtended Mail X.400 product line.

Enterprise Solutions began shipping EXM Mail in the United States in December 1991, with first installations at major government agencies and at selected corporate sites. An early adopter of ESL's X.400 and X.500 messaging products was the Naval Computer and Telecommunications Station (NCTS) in Washington. The NCTS standardized on Enterprise Solutions' X.400 client products for their mail system. One of ESL's first customers in the U.S. was Wal\*Mart Stores, where ESL established an entire messaging capability for the Home Office as well as for the movement of all information to and from more than 2,300 stores, all their primary vendors, and Wal\*Mart's international operations. Other major customers include McDonalds, Fleischmann-Hillard, Smith's Food and Drug, and the State of Iowa.

Enterprise Solutions Limited may be contacted at their corporate headquarters at 2900 Townsgate Road, Suite 210, Westlake Village, CA 91361; telephone 805.449.4181; or fax 805.449.4186.

Enterprise Solutions Limited, ENTERPRISE MAIL, EXM Mail, Enterprise Xtended Mail and their logotypes are trademarks of Enterprise Solutions Limited. All other brand or product names are trademarks and registered trademarks of their respective owners.

ENTERPRISE SOLUTIONS LIMITED ANNOUNCES EXM/EDI ENABLER;  
PROVIDES INTERFACE TO MOST POPULAR EDI PACKAGES;  
EXM/EDI Enabler Bridges the Gap Between X.400 and EDI

(Boston, Massachusetts; 29 November 1994)--Enterprise Solutions Limited (ESL), provider of complete X.400/X.500 messaging solutions, announced today at EMail World the EXM/EDI Enabler, its new Electronic Data Interchange interface product. EXM/EDI Enabler integrates EDI and EXM Mail in an X.400 platform, providing the interface to most popular MS-DOS, Windows and Unix EDI packages. It provides full X.435 and X12 support, and employs Personality Modules to establish rules for EDI activity. The product is available integrated with the EXM User Agent, and requires only a single user mailbox at a Message Store.

EXM/EDI Enabler allows an EDI Translation and Management Package to be incorporated into the desktop environment. It provides the EXM X.400 mail user with seamless access to the rich features and advantages of EDI. Corporate users, government agencies and IT manufacturers can all take advantage of EDI, which has rapidly become a major value-added service provided on top of X.400. Some of the strategic business benefits of EDI include faster transmission of data, more accurate transmission of data, and more secure transmission of data.

The EXM/EDI Enabler P7 protocol can be configured at startup to interface with all available 1988 X.400 P7 Message Store servers. The P7 protocol and the Message Store, added value features of the 1988 X.400 Message Handling standards, allow a much higher level of functionality and flexibility than previously available. Users on a LAN can connect to the Message Store from their desktop; remote users can access the Message Store asynchronously via a modem. The product supports all P2 Heading fields, and supports X.435 (Pedi) Messages. The X.400 P3 protocol is available as an alternative for use when required to interface to a 1984 mounted file system MTA.

Using X.400 as the mail transport allows EDI information to be reliably delivered over both connected and dial-up network environments. An advantage of X.400 is the ability to request a (non)-delivery report, which can be automatically correlated with the original request to tell the sender whether a submission was successful. Users of EXM/EDI Enabler, integrated with EXM Mail X.400 UA, gain the benefits of X.400 reliable messaging and EDI.

Users can set specific parameters for the sending and receiving of EDI files. EXM/EDI Enabler will then automatically recognize, route and manage the EDI files based upon these preset criteria. EXM/EDI Enabler employs Personality Modules to automatically identify and filter EDI messages from

other mail messages. Through the use of these Personality Modules, EXM/EDI Enabler can convert and forward EDI messages. It can also be used in Manual Mode, enabling the user to configure an EDI application to perform required functions such as database update, log file access, etc.

EXM/EDI Enabler comes integrated with the EXM/UA. The product is available now at a US list price from \$120 to \$450 per User Agent, depending on quantity.

### Company Information

ESL has delivered and installed complete messaging solutions which include both X.400 and X.500, as well as administration tools and add-on components such as calendar/scheduling, document interchange, document viewer and printer, and security. ESL has found a great deal of success with both commercial users and government agencies who want a messaging system which delivers, manages, and controls the information flow across the enterprise, including the sending of personal mail. Companies and organizations like McDonalds, Wal\*Mart, Fleischmann-Hillard, Smith's Food and Drug, the U.S. Navy, and the State of Iowa have chosen ESL's X.400/X.500 messaging products to solve their total, global business communications needs.

Enterprise Solutions Limited may be contacted at their corporate headquarters at 2900 Townsgate Road, Suite 210, Westlake Village, California; tel: 805.449.4181, fax: 805.449.4186.

## Galacticomm, Inc. Launches Network and Integrated Services division

Ft. Lauderdale, FL -- Dec. 7 -- Organizations creating online systems can enjoy chauffeur service on the Information Highway with the debut of Galacticomm, Inc.'s Network and Integrated Services (NIS) division. NIS will plan and implement interactive solutions to get organizations up and running fast with their own custom-tailored online service.

Galacticomm is the developer of The Major BBS, the world's leading online software. "Once the province of computer hobbyists, bulletin board technology is now harnessed by corporations, government agencies, and educational institutions as a guerrilla weapon for information exchange," Galacticomm President and CEO Scott Brinker said. "We created this new division to give these customers everything they need for a professional online service -- from software and hardware components to business and marketing strategies."

NIS will stay on top of all the latest technologies to help clients gain the competitive edge in the marketplace. Currently, the Internet is the "killer app," according to Brinker. NIS will help organizations create their own interactive services on the Internet and offer Internet access to employees, customers, and others. World-Wide Web (WWW) is the hot new way for organizations to promote themselves or disseminate information over the Internet. NIS can design attractive WWW sites with hypertext-linked multimedia pages that users navigate with Mosaic and other browsers.

Other services NIS can integrate for clients include e-mail and wide-area workgroup applications, customer service systems, secure online ordering, electronic commerce programs (EDI), document and information dissemination, databases, and more. NIS will consult with clients to get a clear picture of the system they are envisioning, and create a blueprint for making it happen. With out-of-the-box software from Galacticomm and Integrated Software Vendors (ISVs) -- combined with custom programming if necessary -- NIS can offer complete online solutions. They can also fine-tune existing systems.

For organizations that have in-house systems analysts, the division offers training in all aspects of configuring and managing an online system. Training courses for end-users are also available. In addition, yearly support contracts offer advanced technical support to assist in-house staff in configuring their systems, establishing network connections, creating new services, and other special projects.

Ken Royer has joined Galacticomm as the director of the new division. Most recently, he was with the U.S. Department of Commerce where he was the systems manager for the prestigious government system, FedWorld

Information Network. The system, which runs The Major BBS, has been unofficially deemed the future of government information dissemination, and has been recognized as an example of the National Information Infrastructure. "NIS will bring clients the knowledge of online technology that we've gained as the world's leading online software developer, as well as a fresh perspective in creating online solutions," Royer says. "By outsourcing system integration, organizations will save time and money. They'll eliminate the cost of hiring a high-level developer, and we'll ensure that they select the most cost-effective and appropriate products to create a successful online service."

Galacticomm is a privately held Fort Lauderdale corporation. The company's flagship product, The Major BBS, is full-featured, multi-user software that organizations use to create their own online interactive service or corporate workgroup interface. It features e-mail, teleconference, file transfer, public messaging, a polling facility, and more. The Major BBS can support well over 200 simultaneous users on a single PC connecting via modems, LAN, serial links, or (optionally) X.25 and the Internet. Galacticomm has been the leading developer of multi-user communications hardware and BBS software since 1985. Galacticomm can be reached at (800) 328-1128 or (305) 583-5990, outside the U.S. and Canada.

## Software Publishing Introduces OnFile

### Offers Windows Users a Hassle-Free, Fun Solution for Organizing and Finding Their Files

SANTA CLARA, Calif., December 12, 1994 -- Software Publishing Corporation today introduced OnFile, a new product that helps Windows users organize and quickly find their files. OnFile offers an easy and fun-to-use notebook metaphor that lets business or home computer users organize their files by project, file type, or any way they prefer. By providing users with detailed file descriptions and visual snapshots, OnFile addresses the complexity of using Windows subdirectories to organize files. OnFile is designed to complement existing Windows software applications, including suite offerings.

"Finally, there's a better way for me to organize and find my files," said Howard Schmidt, an OnFile beta tester. "Before using OnFile, I would waste countless hours searching through my subdirectories for files. Now, it's all organized for me in a neat book that includes file descriptions in plain English and small pictures to help me quickly identify what's in my hundreds of files. I'm even using it at home to organize my personal files."

OnFile lets users create an unlimited number of books stored in a Bookshelf for quick access. Each book contains different chapters that are divided by colored tabs. Since flexibility is key, users can customize the names and colors of the tabs according to their own personal filing system. A table of contents and index also make it easy to find a specific file.

The chapters in OnFile provide detailed information, such as long file names, summary text descriptions, and miniature pictures of the files or the associated program icons, so that users can quickly recognize their files. To access files, users simply double-click on the filename, and OnFile automatically launches the application and opens the file.

"One of the biggest frustrations many users encounter is not being able to find a specific file on their computer," said Irfan Salim, president and chief executive officer of Software Publishing Corporation. "OnFile offers a unique visual solution that helps users spend more time working on new projects, rather than looking for old files."

To speed up the process of organizing files, OnFile offers an innovative capability called AutoBook that searches users' existing files on their hard disk and creates a book. Users have the option of organizing their files by program type or by subdirectory. AutoBook also automatically creates 250-character summary descriptions for text files, saving yet another step in file organization. Once OnFile creates a book, customization is easy. Users can quickly add new files by using AutoUpdate, or they can simply drag and drop

files into a specific chapter.

### Quickly Viewing Any File

In addition to organizing files, OnFile also offers users a quick way to look at files without having to open the associated application, or without having the program installed on their computer. A built-in File Viewer supports more than 50 of the most common file formats, so users can quickly review a word processing document, spreadsheet, presentation, or other file type. The File Viewer is up to five times faster than launching an application to view a file. While in the File Viewer, users can also print files, copy text and search for key words.

### Staying Organized, Even on the Go

With OnFile, users can copy their books onto a floppy disk for use at work, home, or on the road. The product automatically synchronizes files to ensure that the user is always working with the most up-to-date information. Users can also send entire books, chapters, or individually selected files via e-mail to others. For networked users this can save time, since it no longer requires them to search through different subdirectories when attaching files.

### Pricing, Availability & System Requirements

OnFile will be available by the end of December 1994 for an estimated street price of \$49. The product offers a 90-day money-back guarantee, and 30 days of free technical support (from the first call). OnFile requires a 386 or higher IBM-PC or compatible, 4 MB of RAM, 4 MB hard disk space, VGA or higher display, mouse, DOS 5.0 or higher and Windows 3.1.

### The Company

Software Publishing Corporation (NASDAQ:SPCO) is an international supplier of business productivity software for the IBM personal computer and compatibles. The Company currently develops and markets software solutions which enrich the user's ability to see, understand and communicate information to make more effective business decisions.

The Harvard product line includes Harvard Graphics, Harvard Spotlight, and Harvard ChartXL. Software Publishing also offers its customers a variety of value-added and customer support programs. For more information on Software Publishing products, users can contact the Company's Customer Service Department at (800) 234-2500.

## PASTERP - Pascal-Like Interpreter

Enhance your Applications with a powerful and easy to use extension language

HyperAct, Inc. released a new version of PASTERP - a Pascal-Like interpreter with an embedding interface to C++ and Borland Pascal programs. Now you can enhance your applications - add a powerful and easy to use extension language to your projects.

The language parsed by the interpreter is a subset of Pascal with syntax enhancements that make it more readable. In most of the constructs, the PASTERP language is more forgiving than Pascal.

PASTERP development kit includes two main elements:

- \* Object - The PASTERP parser and execution engine implemented as a hierarchy of Borland Pascal Object classes, that can be integrated with your DOS, DPMI (Protected Mode DOS) and Windows programs.
- \* DLL - The PASTERP parser and execution engine implemented in a DLL, that can be interfaced using the DLL's API. You can use this DLL with C++, BORLAND Pascal DPMI and Windows applications, as well as any other language that supports DLLs. New with this version are Object Oriented Frameworks and support for Dynamic Functions.

Get all this for one great price - \$200 - NO ROYALTY !

And get a free copy of UDH - Universal Directory Handler, a user extendible file and directory management tool with pre-defined PASTERP procedures calls. A small example of PASTERP's power ! UDH source code included !

List price is \$350. Offer ends December 31, 1994. UDH value is \$40. All prices are in US Dollars. Prices do not include S&H fees. Visa/MC and PO orders accepted. 30 days money-back guarantee. Evaluation/Trial systems provided upon request. PASTERP source code is offered separately.

S&H: USA: \$5- 1st class mail; \$10- Priority mail; \$20- Express mail.  
International: \$10- US Post air-mail; \$20- US Post express mail.

HyperAct, Inc.  
P.O.Box 5517 Coralville IA 52241  
Phone/Fax (319) 351-8413  
Compuserve: 76350,333  
Internet: rloewy@panix.com

## IBM AND PHILIPS ANNOUNCE CO-OPERATION ON OS/2 WARP AND CD-i/PC

November 22nd, 1994.....IBM and Philips announced today their co-operation on IBM OS/2 Warp and the Philips CD-i/PC playback board.

This combination offers the user the latest, most advanced software capable of running almost all programs for IBM compatible computers plus full CD-i functionality and access to the hundreds of CD-i titles which include films, music videos, and games.

The two companies are developing joint marketing programmes. Philips Media will include the OS/2 Warp product with its CD-i/PC kit in selected channels.

In a reaction, Frank Pauli, Senior VP for Professional Markets Philips Media IMS, stated that this combination of both technologies results in a truly new product and the combined marketing powers of both organisations will drive the success in the market.

IBM's Colin Reid, Director of Personal Software Marketing added, "The number of people using OS/2 Warp at home is expanding rapidly and we are delighted that they will be able to enjoy CD-i from Philips in this integrated fashion. We believe this joint venture marks another milestone in OS/2 Warp's progress into the home, but more importantly it offers our customers the advanced multimedia function they demand in an uncomplicated package."

The CD-i/PC Playback Board turns any industry standard PC into a fully featured CD-i player, in combination with the Philips LMS CM 208 quad speed CD-ROM drive. With this addition the PC gains full CD-i compatibility, enabling access to all CD-i titles which are already on the market.

Within the established CD-i standard, the PC can then play MPEG-encoded digital video from either interactive CD-i discs or Video CDs carrying linear-play movie titles. No other MPEG-based video board offers this full CD-i compatibility. Next to that it also plays Photo CD, CD-Audio and CD graphics software.

OS/2 Warp runs DOS, Windows and OS/2 programs in a single environment. Its true multitasking allows the user to run multiple programs simultaneously and the vastly enhanced user interface and animated icons make computing not only easy but fun.

An extensive BonusPak completes the new version of OS/2 with a range of additional software. The BonusPak is supplied free of charge with all sales of OS/2 Warp. It contains video conferencing software, fax and communications

software, Internet connection and an integrated word processing, spreadsheet, charting, data filing and report writing programs plus a multimedia viewer and video editor.

Contacts:

PHILIPS: Marijke Van Hooren + 31 40 734 866 (Holland)

IBM: Claire Wilkins +44 256 343574 (UK)

## Speakers needed for the Int'l Conf on Object Technology

The IBM Corporation is currently seeking speakers for the Eighth IBM International Conference on Object Technology

June 11-12, 1995 (IBM-only)  
June 13-16, 1995 (IBM & Customer)  
San Francisco Hilton  
San Francisco, California

The goal of this year's event is to provide educational sessions in a variety of formats that will address the transition of the theory and technology of object-oriented systems into practice. The 1995 conference will be chaired by Susan Lilly, Senior Instructor, Object Technology University, IBM Education and Training.

Members of both the IBM and customer communities are invited to submit ABSTRACTS describing the topic(s) they wish to present. Sessions will be one hour and fifteen minutes (1 hour lecture/15 minute questions). Session length can be adjusted (longer or shorter) based upon the topic and the format required.

Those selected to present at this event can submit complete papers which will then be reproduced and made available (by the conference staff) to conference attendees. Selected speakers will also receive complimentary attendance to the conference. In order to accommodate attendee interest and demand, some speakers may be asked to present their topic twice during the conference.

### Potential Topics for the Combined Portion of the Conference

The "combined audience" portion of the conference will seek to appeal to OT technical professionals and managers of varying backgrounds and needs who are responsible for designing, developing, maintaining, tuning or managing object-oriented applications on any platform. This portion of the conference will include approximately 60 elective sessions in areas such as:

- Management/Project Management
  - Managing OO Projects
  - Experiences Solving Business Problems using Object Technology
  - Business Process Reengineering and OT
  - Selecting Candidates for OT Training
  - OT Training in General
  
- Analysis/Design/Testing Methodologies
  - Comparing Methods of OOA and OOD

- Reuse: Maximizing in OOT (technical - design perspective),  
Practical Considerations of Reuse, Planning for Reuse, etc.
- Class Libraries
- OT Testing Techniques, OO Metrics, Maintaining OO Applications
- Tool, Language, Product Usage (Building Applications/Tuning/Maintaining)
  - IBM Smalltalk, VisualAge\*, C Set ++\*, OO Cobol, Object PLX,  
Object Rexx, Kaleida, ScriptX, Frameworks
  - OpenDoc, SOM/DSOM, Taligent Usage
- Objects and Databases
  - Using ObjectStore
  - Mapping Objects to Relational Databases
- Objects in a Distributed Environment
  - Interoperability - Actual Experiences
  - Middleware & Request Brokers, e.g. ORB, CORBA, DCE
  - Object Managers (SOM vs. OLE, COM vs. DOM, etc.)
  - OT and Client/Server; OT & IBM's Open Blueprint
- OO & the Legacy Environment
  - Experiences Integrating Object Technology with Legacy Systems  
Migrating to OO - Incorporating Legacy Code
  - C++/Smalltalk on the Mainframe
  - Implementation Experiences of LARGE OO applications  
(i.e., addressing the scalability issue)

#### Additional Features of the Conference

In addition to the lecture/Q&A sessions, the IBM International Conference on Object Technology will provide these additional learning formats:

- Tutorials and Hands-On Workshops
  - Introductory sessions on various topics, some of which will be re-enforced by hands-on workshops.
- Panel Discussions
  - Panels will be based on a general theme or relevant issue. Panel discussions will be the same length as elective sessions: one hour and fifteen minutes. Those interested in organizing the panel can submit an abstract with questions to be covered and a list of potential participants.
- Tools Expo/Product Demonstrations
  - Exhibitors during this portion of the event will feature IBM products and other leading edge technology from other companies

as well. Interested parties (potential exhibitors) should submit an abstract describing the product/tool to be demonstrated.

### Requirements for Abstract Submission

- 1) Abstracts should be one page (or more) in length.
- 2) Include the level of the intended audience (e.g., beginner, intermediate, advanced, manager).
- 3) Indicate whether your session should be included in the IBM-only portion of the conference or is appropriate for a combined audience.
- 4) List references from any prior speaking engagement or from anyone familiar with your work in the subject area.
- 5) Abstracts are due NO LATER than January 6, 1995.
- 6) Selections will be made and speakers will be notified by Feb 1, 1995.
- 7) Please FAX a copy to D. Mueller at (312)245-5920 with the following information:

Speaker Name, Node & Id: \_\_\_\_\_  
Speaker Phone Number: \_\_\_\_\_  
Speaker Job Title: \_\_\_\_\_  
Intended Audience: IBM-only \_\_\_ Combined \_\_\_  
Level of Intended Audience: Beginner \_\_\_ Intermediate \_\_\_ Advanced \_\_\_  
Management \_\_\_ All \_\_\_

Name & Phone Number  
of References: \_\_\_\_\_  
Title of Presentation: \_\_\_\_\_  
Abstract: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## FARGO Now Shipping Pictura 310: \$4995 Tabloid-Size Dye-Sublimation/Wax Thermal Color Printer

EDEN PRAIRIE, MN (December 12, 1994) -- FARGO Electronics, Incorporated, today began shipping the Pictura 310 Color Printer, an affordable dual-function dye-sublimation and wax thermal transfer tabloid-size color page printer. The printer is the latest addition to the FARGO line of photo-realistic color printers at breakthrough prices.

The Pictura 310 delivers continuous tone, photo-realistic 24-bit color or 256-level black and white (monochrome) dye-sublimation prints as well as fast and inexpensive wax thermal transfer color proofs. Resolution is 300 x 300 dots-per-inch. Maximum media size is 12" wide by 20" long (305 x 508mm), allowing full bleeds for a wide range of page sizes which include B, B Long, A3, A3 Long and B/A3 super. Standard A, A4, A-long, A4-long and legal size media can also be used.

### Breakthrough Price

Priced at just \$4995 for either the Macintosh( or Windows versions, the Pictura 310 is about one-third the price of its competitors. However, even at this price, the printer delivers the output quality of much higher priced printers.

"Users can expect color output that's among the best available from continuous tone dye-sublimation printers," said Mark D. Strobel, FARGO's Vice President of Marketing. "With 16.7 million colors available at each pixel, and support for several of the industry's most popular color matching systems, the Pictura 310 meets the needs of a wide range of graphics professionals. All for a price that's considerably less than other tabloid-size color printers."

Typical applications for the printer include pre-press color proofs, final comps, and digital photographs in fields as diverse as advertising agencies, graphic design, architecture, 3D solid modeling, medicine or science. Available media includes plain uncoated or coated paper, transparency film, dye-sublimation materials and even T-shirt transfer paper for printing customized fabric transfers. Transparency film may also be used by screen printers for producing color separation film masters in sizes up to 12" x 18".

Adobe's PostScript Level 2 CPSI Interpreter is available as an option for \$795(MSRP). Interfaces include Centronics-type parallel and an included NuBus interface board for the Macintosh version of the printer.

### Time and Cost Savings

Because tabloid-size dye-sublimation printers of this quality have until now cost \$14,000 or more, equipment cost savings alone are substantial. However, since many advertising agencies and other users who require large-format output have not been able to cost-justify such an expensive piece of equipment, they've had to send out to service bureaus instead. In addition to the time delay that this causes, service bureaus typically charge \$25 to \$50 per tabloid-size dye-sub print. The Pictura 310 prints the same output for less than \$7.00 per print in just minutes. The printer is therefore not only a convenience, but a potential profit center as well.

"The Pictura 310 is a very unique printer," said Strobel. "Not only does the printer have dual dye-sublimation and wax thermal technologies -- which is a great advantage all by itself -- but it also breaks down a price barrier that has kept most graphics professionals from acquiring their own tabloid-size color printer."

There are two primary reasons that Pictura 310 has such a low price relative to competitive models. First, FARGO manufactures its own print engines in the U.S.A. Unlike most others who import their engines from the Far East, no intermediate profit margins, freight costs, or currency fluctuation expenses are incurred. Secondly, the printer rasterizes images in the host computer through its proprietary RasterSoft technology. This eliminates expensive duplication of processing power and memory in the printer that the user already owns inside his computer. FARGO has been a leader in this approach to professional color printing with its award-winning Primera and PrimeraPro Color Printers.

The Pictura 310 is now available through FARGO's world-wide network of Authorized Resellers. For further information and sample output, contact FARGO at 1-800-327-4622. Outside the USA and Canada, call (612) 941-9470 or FAX (612) 941-7836.

Headquartered in Eden Prairie, MN, FARGO Electronics is a leading developer and manufacturer of dye-sublimation and wax thermal transfer color page printers. FARGO does business in more than 80 countries and maintains one of the largest reseller networks in the color printer business today.

FARGO Electronics, Inc  
7901 Flying Cloud Dr  
Eden Prairie, MN 55344  
Phone: (612) 941-9470, 1-800-327-4622  
FAX: (612) 941-7836

## Apple Computer Announces New Pippin Multimedia CD-ROM Platform

First Pippin Licensee, Bandai Co., Ltd., To Introduce Multimedia Player For Families In Late 1995

CUPERTINO, California--December 13, 1994--Apple Computer announced today a new platform for multimedia players that aims to provide consumers with high performance and affordable CD-ROM-based systems for education and entertainment. The platform is called Pippin, and is derived from the Mac OS--the operating system for Macintosh personal computers---and the PowerPC microprocessor. Apple plans to openly license the platform to a variety of vendors from different industries.

"Pippin is yet another example of Apple's commitment to expand the availability of multimedia technologies to people around the world," stated Satjiv Chahil, vice president of Apple Computers New Media Group. "Now multimedia technology has the potential of reaching the penetration levels of audio CD players and VCR's."

Apple believes that the Pippin platform will provide customers and software developers with significant advantages over current CD-ROM- based multimedia players, many of which are focused simply on playing game software. Perhaps most important, the Pippin platform is expected to support a wide array of multimedia titles. Many existing Macintosh multimedia titles--from child and adult education, information reference, entertainment, games and music--are expected to run on Pippin-based systems, as developers will only need to make slight modifications to current Macintosh multimedia software to make them compatible with Pippin-based systems. This is expected to give consumers a much broader range of software titles than that offered by game-based CD-ROM players. Conveniently, CD-ROM titles developed specifically for Pippin can also be played, without modification, on a Macintosh computer. And just as important, it is expected to greatly expand the market for Macintosh multimedia developers. Macintosh already is the leading platform for multimedia software development in the world and the market leader in multimedia software sales in Japan.

Additionally, the company believes that Pippin's RISC-based architecture will promote the development of new and compelling multimedia software that takes advantage of the exceptional power of the PowerPC microprocessor.

As a result, Apple expects that Pippin will be the multimedia platform able to deliver easy-to-use family entertainment and education at a lower price than existing personal computer products, and with much greater expandability and broader access to CD-ROM software programs than current game players.

"CyberFlix is excited that Apple is bringing an easy-to-use CD-ROM player to the mass market," said Bill Appleton, President of CyberFlix, Inc. "We plan to support it with all our titles."

Concurrently, at a press conference today in Tokyo, Apple and Bandai Co., Ltd., one of the largest family entertainment companies in the world, announced that Bandai will be the first to license Pippin, with introduction of Bandai's multimedia player slated for late 1995.

**PowerPC Performance For the Next Generation of Multimedia Players**  
Powered by the advanced PowerPC 603 microprocessor, Pippin will use a subset, or run-time version, of Apple's popular Macintosh operating system that allows users to run a given title. The performance of the RISC-based, 64-bit architecture of the PowerPC chip is expected to provide processing power for a new generation of interactive education and entertainment CD-ROM software programs.

"Prior to Pippin, moving software from the Mac to any of the set top systems required a huge development effort," stated Michael Kripalani, CEO of Presto Studios, Inc. "We are already engaged in many Pippin projects, including a new version of the Journeyman Project which has been designed to take advantage of Pippin's PowerPC 603 processor and 4X ROM drive."

Apple Computer, Inc., a recognized pioneer and innovator in the information industry, creates powerful solutions based on easy to use personal computers, servers, peripherals, software, online services, and personal digital assistants. Headquartered in Cupertino, California, Apple (NASDAQ:AAPL) develops, manufactures, licenses and markets products, technologies and services for the business, education, consumer, scientific & engineering and government markets in over 140 countries.

Apple Computer Inc  
20525 Mariana Ave  
Cupertino, CA 95014  
408-996-1010

CUPERTINO, California--December 12, 1994 -- Apple Computer, Inc. today announced availability of AppleSearch Version 1.5, the latest update to its easy-to-use information search and retrieval application software. The new update has expanded AppleSearch software's cost-effective capabilities to search and find information on local-area networks (LANs) to include navigating and finding information residing on the Internet.

#### Significance:

AppleSearch v1.5 allows users to easily access and find information on LANs and on the Internet's Wide-Area Information Servers (WAIS) through a single access point---without tying-up individual desktop computers. This provides organizations with a way to allow all of their AppleSearch users to share Internet access and functionality without having to connect each user separately.

Using AppleSearch v1.5, system administrators can also pre-select the WAIS servers that contain the most relevant information for a particular department or organization. This saves time by focusing the scope of searches to the applicable sources on the Internet.

AppleSearch is also more affordable with a new site license that allows organizations to make unlimited copies of the AppleSearch client software at their sites without incurring additional cost.

#### Availability, Pricing and Upgrades:

AppleSearch v1.5 and software upgrades for current AppleSearch customers are available now through authorized Apple resellers in the U.S. AppleSearch v1.5 has a suggested retail price in the U.S. of \$1,799 and includes both client and server software with a license to copy unlimited AppleSearch client software at a single site.

For customers who purchased AppleSearch 1.0 on or after July 1, 1994, an upgrade to AppleSearch v1.5 is available from Apple at no charge beyond shipping and handling expenses. For customers who purchased AppleSearch 1.0 prior to July 1, 1994, an upgrade to AppleSearch v1.5 is available in the U.S. for \$99 plus a shipping and handling charge. To purchase an upgrade, please call 1-800-769-2775 (x5921). Proof of purchase is required.

Customers who want more information on AppleSearch v1.5 can contact the Apple Network Information Line at (408) 862-3385, or by AppleLink at ABS.NETINFO.

Apple Computer Inc  
20525 Mariana Ave

Cupertino, CA 95014  
408-996-1010

## Delrina Wins 1994 STAR Award for Excellence in Technical and Software Support

### Industry Unanimous in Selecting Delrina as the Most Improved

SAN JOSE, CA and TORONTO, ONT -- December 13, 1994 -- Delrina Corporation (Nasdaq:DENAF, TSE:DC) the world's leading vendor of PC communications and electronic forms software, today announced receipt of the prestigious 1994 Software Technical Assistance Recognition (STAR) Award from the Software Support Professionals Association (SSPA) during ceremonies held at the recent Software Support '94 Conference in Monterey, CA. Delrina won the award for illustrating the greatest improvement in customer satisfaction along with overall gains in support productivity.

The STAR Awards are given annually to recognize excellence in four categories of software and technical support. Competing companies undergo a rigorous self-nominating process, and winners are selected by SSPA's Advisory Board members. There are more than 360 member companies in the SSPA including Microsoft, Lotus, WordPerfect/Novell, IBM, Sun, and Apple.

"This award is a tribute to the hard work and dedication that the technical support team has put into delivering superior customer support," said Jim Moore, Director of Operations at Delrina. "With the commitment of our executive management team we have built an environment that has empowered Delrina employees to treat customers as if they were the only customer in a business that belonged to them. We have many stories where our people have put in the extra effort to satisfy our customers."

"In all the years that we have been presenting these awards, I have never seen a company win so big," said Bill Rose, SSPA founder and Executive Director. "This year, all 12 members of the board unanimously agreed on Delrina as their number one selection."

"We are pleased to be singled out for this excellence by our peers," said Dennis Bennie, Delrina Chairman and CEO. "Our investment in high quality support is a major success factor in maintaining leadership in our markets. We are an example for others to follow."

Since 1992, Delrina's customer service contacts increased rapidly from 250 telephone calls per day to more than 4,000 contacts today. Delrina's Technical Support Centre in Toronto now handles more than 100,000 customer contacts per month. For every 10,000 contacts Delrina receives only two complaints.

The Company was able to improve service quality through extensive

customer surveys and responding with innovative services, instituting a pay for performance plan to focus employees on delivering a high quality service, and investing substantially in training, technology, and facilities. This included the development of specialized knowledge databases, call tracking systems, fax on demand information distribution, diagnostic tools, extended support services, and the operation of Radio Delrina which provides telephone traffic reports, music, and other useful information on Delrina products and services while callers hold for a Delrina representative.

Founded in June 1988, Delrina is a high-profile Canadian success story and ranked among the fastest growing software companies in North America. The company develops, markets and supports PC-based software products and services for fax, voice, data communications, electronic forms processing, and consumer markets. Delrina employs more than 550 people with headquarters in Toronto, Canada, and offices in San Jose, CA, Washington DC, Kirkland, WA, the U.K., France, and Germany.

Delrina Corp  
895 Don Mills, 500-2 Park Center  
Toronto, Ontario M3C 1W3 CANADA  
416-441-3676, fax 416-441-0774

## Apple PowerBook Tops Customer Satisfaction Study by J.D. Power and Associates

CUPERTINO, California--December 12, 1994--In a recently completed 1994 Notebook Computer End-User Satisfaction Study conducted by J.D. Power and Associates, Apple Computer, Inc. was ranked highest in customer satisfaction among notebook computer business users for its PowerBook notebook computer. Factors contributing to Apple's top ranking included industrial design and price-value, in addition to its simple computer set-up and understandable documentation. Apple posted an industry-leading score in the study, beating out several other major U.S. and international notebook computer vendors.

"We're extremely pleased with the results of this study," said Brodie Keast, Apple's vice president of PowerBook Products. "Integrating customer feedback into our products is a top priority, and a study such as this suggests that the process is working. It's clear to us that customers truly value the extra effort we take with the details."

More than 970 office-based business users took part in the study by rating their notebook computer's performance, service and support. Nearly half of the respondents were from technical or scientific fields with users from executive or managerial positions comprising over one-third of the users studied.

Apple Computer, Inc., a recognized pioneer and innovator in the information industry, creates powerful solutions based on easy-to-use personal computers, servers, peripherals, software, online services, and personal digital assistants. Headquartered in Cupertino, California, Apple (NASDAQ: AAPL) develops, manufactures, licenses and markets products, technologies and services for the business, education, consumer, scientific & engineering and government markets in over 140 countries.

Apple Computer Inc  
20525 Mariana Ave  
Cupertino, CA 95014  
408-996-1010

EveryWare Development Corp. ships SQL-based client-server network scheduler

Leading Macintosh database developer offers an enterprise-level scheduling solution for organizations who bill for their time, track projects or utilize activity based costing.

December 14, 1994 -- Mississauga, Ontario, Canada -- EveryWare Development Corp. today shipped Enterprise Time Capture (ETC), the first in a family of enterprise solutions based on EveryWare's Butler SQL database engine. ETC is the first full-featured Macintosh network scheduler to combine the power of an industry standard SQL server backend with an easy-to-use time management application.

To date, scheduling software has been aimed solely at making individuals and small workgroups more productive. ETC extends productivity to the enterprise level by providing unique features that allow users' calendars to interact in meaningful ways with the enterprises information infrastructure.

ETC's enterprise-level functionality is based on its SQL backend. "ETC was designed from the backend forward," says company president Dan McKenzie. "Working very closely with our clients, we designed ETC to provide organizations with the information they need to be competitive in the 90's. By using ETC, organizations can stay on top of the questions: who, what, when, where, why -- and of course, how much!"

Other workgroup scheduling solutions maintain a server-based data file that is proprietary in nature. In these systems, only the scheduling software can access the data. This kind of closed system offers no hooks for capturing and using the data for analysis and billing. Since ETC stores its data in the most easily accessible Macintosh database, organizations can use any number of Butler-compliant applications on the market to analyze and integrate the data.

Don't just manage time, capture it!

"We are currently deploying ETC to 3500 users across the country," says Mike Veaudry, Partner for National Systems, Ernst & Young Canada. "In our organization time is money. ETC saves us a lot of time. The metaphor of using a diary to automatically capture time and expense information is an enormous time-saver in our organization."

Key benefits of ETC include:

Personal time management -- With ETC, users can manage their personal schedules, develop to-do lists, set reminders, track expenses and view their

schedules in daily, weekly or monthly views.

Who, what, when, where, why and how much! -- When you book a meeting with ETC you can easily capture information that can later be used to generate a bill or track a project. A lawyer, for example, can use pop-up menus to indicate who the client is, what they are working on and what they did for the client. The amount of time involved is captured directly from the calendar and any expenses that were incurred, such as a taxi ride, can also be recorded.

"What we are gaining (by using ETC) is a substantial reduction in timesheet preparation and the flexibility of posting time directly into our enterprise database from the desktop or on the road," says Martin Fourie, manager of systems development for the accounting firm, Ernst & Young in Toronto.

Working together -- ETC lets people propose, coordinate and manage meetings with other ETC users and resources. ETC's "best time" feature automatically finds the first available time for all people and resources involved in the meeting. ETC also lets you look at other users' schedules to find available meeting times.

I am never in the office -- ETC offers full off-line support for those who work at home or on the road. Simply use it as you would in the office and next time you connect to the network your calendar will automatically synchronize with the ETC server. Using ETC's proxy feature, you can designate another person to manage your calendar when you're not available.

From static to live -- As ETC is based on EveryWare's Butler SQL database, integrating any information entered into ETC is very straightforward. For example, the ETC server can act as a data warehouse that the existing accounting system can query for client billing information. A department manager can get an instant update of a project's status, or a salesperson could find out how many service calls a client has had in the last three months.

"We plan to use ETC for project management, as a building block for tracking cases through the court," says John Clement, senior manager of IS at the law firm of Osler, Hoskin & Harcourt, based in Toronto.

Scalability -- ETC is a true client-server application. Moreover, any number of servers can be networked together to accommodate even the largest of organizations. With the flexibility of ETC's SQL, multi-server deployment architecture, its easily scalable to support 50 to 25,000+ users. Depending on an organizations requirements, ETC can use Butler, Oracle, SYBASE or Informix as the backend server.

"Our firm spent nearly two years looking for an enterprise-wide network scheduling solution," says John Clement. "We were looking for a solution that would meet the needs of our very demanding user community as well as fit into our long term MIS strategy. ETC is the only product that gives us everything we need."

#### Availability and pricing

ETC for Macintosh is available today.

French, German and Spanish versions will be available in 1995.

ETC for Windows will be available mid-1995.

ETC for UNIX will be available end-1995.

Complete 50-user systems based on a Butler SQL server are \$149 (US) per user.

#### About EveryWare Development Corp.

Located in Mississauga, Ontario, Canada, EveryWare Development Corp. has been a Macintosh software developer since 1987. In September 1994, MacUser Europe gave Butler SQL the highest rating for Macintosh database servers (4.5 mice).

Other EveryWare products include: Butler SQL client-server database; Connected multi-user Accounting for both Mac & Windows; and PatchMaker, a software developer's utility.

For further information contact Henry Lach, Director of Marketing at 905-819-1173; or Email to: [hlach@everyware.com](mailto:hlach@everyware.com)

## EveryWare Development Corp. Offers Enterprise Applications

Canadian Macintosh software developer delivers first in a series of enterprise products

December 14, 1994 -- Mississauga, Ontario, Canada -- EveryWare Development Corp., a leading SQL client-server database developer for the Macintosh, announced that its Enterprise Solutions Group has delivered the first round of its promised workgroup solutions. Enterprise Time Capture (ETC) is a client-server SQL-based scheduling tool for the Macintosh.

In the first quarter of 1995, EveryWare will begin shipping other applications in the Enterprise suite. Enterprise Document Management, Enterprise Contact Management, Enterprise Periscope and Enterprise Print Counter, are aimed at increasing both personal and organizational productivity. The market for such workgroup products -- or tools that facilitate people working together in teams -- is growing at an estimated 41% annually (Source: WorkGroup Technologies Inc.).

### Enterprise Solutions Group Product Release Schedule

Product	Release Date
Enterprise Time Capture Shipped	Dec.14/94
Enterprise Document Management	Q1/95
Enterprise Periscope	Q1/95
Enterprise Contact Management	Q2/95
Enterprise Print Controller	Q2/95

The complete Enterprise suite of products will be shown at MacWorld San Francisco in Booth #2549.

"Our goal when we formed the Enterprise Solutions Group last year was to deliver a suite of applications that focus as much on the needs of the enterprise and workgroups as the individual," says Dan McKenzie, president of EveryWare. "Since that time, the division has been working on a number of workgroup applications based on our Butler SQL client-server technology. I'm excited by the market's response to the products we've demonstrated so far, and pleased to say we're on track to deliver the full suite of Enterprise applications."

The Enterprise Solutions Group is focusing on several vertical markets, including accounting, advertising, communications, education, engineering, financial, government, legal, medical, manufacturing, multimedia, retail and transportation. Currently a Macintosh developer, EveryWare will deliver workgroup applications for the Windows and UNIX platforms as well.

EveryWare currently markets its products in 23 countries with over 80% of its sales coming from outside Canada.

About EveryWare Development Corp.

Located in Mississauga, Ontario, Canada, EveryWare Development Corp. has been a Macintosh software developer since 1987. In September 1994, MacUser Europe gave Butler SQL the highest rating for Macintosh database servers (4.5 mice).

Other EveryWare products include: Butler SQL client-server database; Connected multi-user Accounting for both Mac & Windows; and PatchMaker, a software developer's utility.

For further information contact Henry Lach, Director of Marketing at 905-819-1173; or Email to: [hlach@everyware.com](mailto:hlach@everyware.com)

GRAFFIX Screen Capture System for Windows and DOS now captures text screens in color to GIF or PCX

December 12, 1994 -- GRAFFIX 4.1 includes screen-capture programs for both Windows and DOS. The DOS program is a TSR that can now capture a text mode screen to an ASCII file or to an Attribute Text File. The ATF format preserves text color attributes. A utility program is included that can display an ATF file in graphics mode, so that the captured text mode screen can be converted to GIF or PCX format. The DOS TSR can also capture a screen from a graphical application and save it directly to a GIF or a PCX file.

While GRAFFIX for Windows is minimized, press PrtSc to capture the screen, and GRAFFIX will pop up and display the capture. You can then save the entire screen or any rectangular portion to a BMP, GIF, or PCX file. GRAFFIX for Windows can also save to an ASCII file text that was captured to the clipboard by pressing PrtSc while a DOS text mode application was running full-screen under Windows.

The Shareware Edition of GRAFFIX for Windows and DOS is available for download from the following sources:

1. Internet. SimTel Software Repository. FTP: OAK.Oakland.Edu (SimTel/msdos/graphics/grafx410.zip).
2. CompuServe. Graphics Support Forum (GO GRAPHSUP), Library 10 (GRAFFX.ZIP).
3. America Online. Graphics and Animation Forum (GRAFFIX.ZIP).
4. PsL BBS, 1-713-442-6704 (GRAFX410.ZIP).

Steven A. Brown  
125 N. Prospect St.  
Washington NJ 07882  
(908) 689-0047  
CIS: 73140.3340

December, 1994 -- Selecting the right mutual fund for investment is easy with the new Optima Series - Investment Selection & Analysis program. Optima's database covers over 4,000 mutual funds/indices with historical performance and statistical information going back up to 15 years. The program is used to sort, rank and filter through all of these funds to create a universe of funds that meet the user's specific criteria.

Optima's database is updated every week and is available to its users to download 24 hours a day, every day. The database provides over 180 different fields of information per fund including: weekly and monthly total returns, calculated to include all dividends and other fund distributions reinvested when paid; average annual returns; yearly total returns; current and historical Alpha, Beta, Standard Deviation, R-Squared, Treynor and Sharpe statistics; current and historical Relative Position; relevant portfolio and fund background information including manager's tenure, fund inception date, portfolio holdings, sales loads, fund expenses and ratings.

Optima enables the user to create, view and print graphs including line, bar, pie, radar, area, etc., in 2D and 3D formats. The program also produces reports including detailed single fund profiles, a weekly summary of all funds and a list of bullish or bearish breakouts.

Technical indicators are included in the program which can be used to analyze a single fund, fund composites and indices. Built-in indicators include MACD, Moving Averages, Wilder's Relative Strength, Momentum, Modified Lane Stochastic and others.

The Optima Series - Investment Selection & Analysis program for Windows is available for \$39.00 US and arrives with the most current data available. Data updates are available weekly by modem or monthly on diskette, starting at \$110.00 per year, or can be purchased individually for \$15.00 each. System Requirements: IBM Compatible running Windows 3.1, 35 MB free hard disk space, 4 MB RAM, 14.4 baud modem recommended for weekly updates. For More Information, please contact:

Huntington Associates Financial, Inc.  
7000 S.E. Federal Highway - Suite 210  
Stuart, FL 34997-8682 -- USA  
(407) 288-1403

Usability Sciences Corporation announces the introduction of the QuickCard Development Kit for MS-Windows.

Provide the newest, most effective help technology for your Windows-based applications with this standalone development tool. No run-time license fee, context-sensitive, bitmap and definition hotwords easily linked, spell-checker and compiler included, international translations made easy.

Currently sold by MicrosoftPress and used by companies like IBM, Intel, and Xerox, QuickCards provide instructions one step at a time. The QuickCard Development Kit allows you to create help for your users with much less time and effort than traditional Windows help tools.

The QuickCard Development Kit is currently shipping in two editions, the Standard Edition and the Corporate Edition.

The Standard Edition requires access to the source code to tie the QuickCards to the application. For the software developer building QuickCards for their own application, the Standard Edition is probably sufficient, allowing the flexibility of tying a single QuickCard or a list of QuickCards to dialog boxes, toolbars, menus, etc.. Writing a couple lines of code is all that is required to tie QuickCards to your Windows-based application. Sample templates and information are included with the QCDK for all the common development tools.

The Corporate Edition contains all of the functionality of the Standard Edition as well as allows the user the flexibility to link QuickCards to any Windows-based application. This additional functionality gives developers and non-developers the ability to add QuickCards to existing applications in cases where access to the source code is not an option. Once the QuickCards have been created, the Corporate Edition is designed to allow anyone to customize or add additional QuickCards as needed. With the QCDK, Corporate Edition a disk can be created to distribute and install like any other Windows-based application.

Neither edition has a run time license fee.

For a limited time the QCDK, Standard Edition is available at a special introductory price of \$495.00 U.S. and the QCDK, Corporate Edition at \$995.00 U.S. After December 31, 1994, the suggested U.S. retail price will be \$695.00 and \$1195.00 respectively.

If you would like to get more information, please contact me at [mgordon@netcom.com](mailto:mgordon@netcom.com). If you would to get a fully functional demo of the QCDK, ftp to <ftp.netcom.com>, and get `qcdkdemo.exe`, a self-extracting archive, from the `pub/qu/quickc` directory.

Usability Sciences Corporation  
214/550-1599

Science and Engineering Network News is a new newsletter devoted to covering Internet resources for the sciences and engineering. Resources covered include World Wide Web pages, FTP and Telnet sites, mailing lists, newsgroups, FAQs, and more.

Regular features of SENN are:

- lists of new resources in at least two subject areas
- an updated reference list of our favorite resources
- book and CD reviews
- site reviews
- tutorials and information guides for connecting to and using Internet tools.
- feature articles on particular cross-disciplinary tools and methods

Subject areas include biology and agriculture, chemistry and chemical engineering, electrical engineering, materials science, mechanical engineering, medicine and health, molecular biology, physics and optical engineering, social sciences, software engineering, and space sciences.

The cross-disciplinary topics we cover include scientific imaging, data acquisition and control, math and statistics, CAD/CAM/CAE, DSP and multi-media, modeling and simulation, and platform specific tools for DOS/Windows, Macintosh, and UNIX.

The first issue includes:

- Feature article on "Imaging Resources"
- Special pointers to Medicine/Health and Control Engineering resources
- Site review of the CMU technical reports archive
- Book reviews of "Internet Explorer Kit," and "Internet Starter Kit"
- Overview of Internet tools

The first issue is available free in either electronic form or hard copy. You may request either format from Soliloquess Communications, Worcester, MA., (508) 755-5242, or send e-mail with your request to [senn@world.std.com](mailto:senn@world.std.com).

## IBM ANNOUNCES NEW ISDN OFFERINGS AND ENHANCEMENTS FOR WAVERUNNER DIGITAL MODEM

December 6, 1994, IBM is announcing new ISDN offerings, the WaveRunner PCMCIA ISDN or Analog Modem, and a single package containing both the WaveRunner Digital Modem and the IBM 7845 Network Terminator(NT)-Extended. Additionally, enhancements for the IBM WaveRunner Digital Modem are being announced, and delivered as software upgrades that are available to existing WaveRunner customers at no additional charge. Both the WaveRunner Digital Modem and the PCMCIA WaveRunner ISDN or Analog Modem will be available in five and thirty multipacks.

There is now a cost effective way to access enterprise networks as efficiently as if the remote users were wired in on-site. Because of the 1990 clean air act many customers are investigating the feasibility of telecommuting via remote LAN access. The enhancements being announced today offer our customers greater speeds and increased flexibility in implementing remote LAN access solutions using ISDN while protecting their prior investments.

Highlights of the WaveRunner Digital Modem's new features are:

- o Support for two B channels in data mode on ISDN Basic Rate Interface at speeds up to 64 Kbps per B channel
- o Supports rates up to 128Kbps using packet aggregation techniques for IP packets using both B channels
- o WinISDN Application Program Interface for Microsoft Windows for interoperability with ISDN products that support Point to Point Protocol such as MAX Digital Access Server from Ascend(1) Communications, Inc.
- o Network Driver Interface Specifications(NDIS) API support
- o Data compression
- o Interoperability with other ISDN products
  - IBM ISDN Primary Rate adapter
  - Network Express Interhub
  - Combinet(2) CB 150
  - Teleos IAP 200 and IAP 6000

The PCMCIA adapter features are similar to the full size WaveRunner in the Windows environment, and is a PCMCIA type II adapter. In the mobile environment ISDN may not always be available, such as in hotels or airports. With the PCMCIA WaveRunner or Analog Modem mobile users have the flexibility to connect to either ISDN or Analog service. The initial transmission rate on analog service will be 14.4Kbps and a software upgrade will be available June 30, 1995 to upgrade the transmission rate to 28.8Kbps.

Additionally, the WaveRunner offerings are now available in North America,

Canada, Latin America, Europe/Middle East/Africa Corporation, and Asia Pacific.

The WaveRunner Digital Modem enhancements are available December 30, 1994 except for following which will be available April 28, 1995:

- o In the Windows environment
  - V.42bis over V.120 ISDN
  - WinISDN support
  - CAPI application program interface support
- o All announced enhancements in the OS/2 environment

The PCMCIA WaveRunner ISDN or Analog Modem is available February 24, 1995 except for the following which will be:

- o available April 28, 1995
  - V.42bis over V.120 ISDN
  - WinISDN support
  - CAPI application program interface support
  - VN4(for France)
- o available June 30, 1995
  - V.34 (28.8Kbps)

Current IBM WaveRunner owners can take advantage of these enhancements by downloading them from the IBM PC Company BBS at (919) 517-0001 at no charge.

Product	Pack	Part #	List Price
WaveRunner Digital Modem- MCA	single	60G0736	\$ 545
WaveRunner Digital Modem- MCA	five	13H5386	\$ 2,645
WaveRunner Digital Modem- MCA	thirty	13H5387	\$15,870
WaveRunner Digital Modem- ISA	single	73G1393	\$ 545
WaveRunner Digital Modem- ISA	five	13H5366	\$ 2,645
WaveRunner Digital Modem- ISA	thirty	13H5367	\$15,870
WaveRunner Digital Modem - MCA & 7845 NT- Extended	single	13H5385	\$ 845
WaveRunner Digital Modem - ISA & 7845 NT- Extended	single	13H5365	\$ 845
PCMCIA WaveRunner ISDN & Analog Modem	single	04H7686	\$ 595
PCMCIA WaveRunner ISDN & Analog Modem	five	04H7757	\$ 2,885
PCMCIA WaveRunner ISDN & Analog Modem	thirty	04H7758	\$17,310

The XJ12 Multimedia Distribution Amplifier is a computer video projection system. The XJ12 allows an instructor to send his/her computer screen to multiple remote computer monitors throughout a lab or building. The instructor's "master" screen is distributed with the same clarity and quality as the computer monitor from which it was sent. Video and audio distribution are initiated from the "master" location by simply pressing a button. Pressing this button sends the "master" station's video and audio to all connected remote computer stations allowing the class to see and hear exactly what the instructor is doing on his/her computer in real-time.

When the instructor sends the "master" video and audio, all connected computers are rendered inoperative. This feature allows students to view the instructor's monitor while disallowing the students from using their own computers. If the instructor allows, the students would be able to "switch" between his/her monitor and the instructor's monitor. This alleviates the need for an LCD panel and a projection system. What's more, an XJ12 system can be installed for about half the cost.

Integrated Multimedia Systems 800 284-6640, 412 344-4858 Fax

## IBM Halts Shipments of Pentium-Based Personal Computers Based on Company Research

SOMERS, N.Y., Dec. 12, 1994 . . . IBM today announced it has stopped shipment of all IBM personal computers based on the Intel Pentium\* microprocessor. The action is based on tests conducted by the IBM Research Division stimulated by growing customer concern that Pentium-related problems are more frequent than previously estimated.

Results of IBM Research Division tests indicate that while Intel's descriptions of the flaw are technically accurate, there are many customer situations in which the risk of error may be significantly higher.

IBM is working with customers on interim solutions and will resume shipments upon customer and business partner request. Also, IBM is:

- Sharing its analyses with customers and the industry on the Internet.
- Working with IBM customers to help guide them in their own specific risk assessments.
- Providing for replacement of flawed Pentium chips at no cost to customers. This applies to all its Pentium-based PCs, either those already installed or systems that will be shipped prior to new chips being available.
- Working with Intel to help resolve Pentium-related problems as quickly as possible.

"We believe no one should have to wonder about the integrity of data calculated on IBM PCs," said G. Richard Thoman, IBM senior vice president and group executive. "Many of our customers have indicated concern since the Pentium flaw was disclosed. We've conducted our own tests and concluded that the risk of error is significantly higher than previously thought and warrants today's actions."

Intel has said that in purely random situations the likelihood of a customer encountering an error is only once in 27,000 years and that off-the-shelf software is not affected. However, IBM tests indicate that common spreadsheet programs, recalculating for 15 minutes a day, could produce Pentium-related errors as often as once every 24 days. For a customer with 500 Pentium-based PCs, this could result in as many as 20 mistakes a day.

Pentium-based systems currently shipped by IBM are the ValuePoint P60, the IBM PC 300 P60 and 700 P90, the Aptiva 710 and 730 models and IBM PC

server models 85, 95, 300 and 500.

## PENTIUM STUDY

### Summary:

IBM Research focused on the likelihood of error on the Pentium chip in everyday floating point division activities. Intel has analyzed the probability of making an error based on the assumption that any possible 64 bit pattern is equally likely to occur in both the numerator and the denominator. If that were the case, then the chances of the error would be 1 in 9 billion. They also estimate that an average spreadsheet user will perform 1,000 floating point division per day. Based on these assumptions, Intel estimates that an error will be encountered only once in 9 million days (or once in about 27,000 years).

Our analysis shows that the chances of an error occurring are significantly greater when we perform simulations of the types of calculations performed by financial spreadsheet users, because, in this case, all bit patterns are not equally probable.

### Probability Tests:

We have analyzed a Pentium chip in order to understand the sources of errors and have found that in order for an error to occur, both the numerator and denominator must have certain "bad" bit patterns, as described below.

First, for the denominator to be "at risk", that is, capable of producing an error with certain numerators, it must contain a long string of consecutive 1's in its binary representation. Although such numbers represent only a very small fraction of all possible numbers, they do occur much more frequently when denominators are created by adding, subtracting, multiplying or dividing simple numbers. For example, the number 3.0 represented exactly, does not have that pattern, but the result of the computation  $4.1 - 1.1$  does have that pattern.

How many denominators produced in this fashion can be "at risk" that is, capable of producing an error for certain numerators? When we randomly added or subtracted ten random numbers having a single digit dollar amount and two digit in cents, for example, \$4.57, then one out of every 300 of the results was "at risk" and hence capable of producing an error. If we repeated the test with numbers having two digit dollar amounts and two digits in cents, then one out of every 2,000 could cause an error. If the denominator was calculated by dividing two numbers having one digit to the left and one to the right of the decimal point, then approximately one in every 200 could cause an error.

For simplicity, suppose that one of every 1000 denominators produced by

some calculations was "at risk."

Now, suppose we have created a bad denominator. What is the chance of now encountering a bad numerator, which will produce an error? It depends on the actual value of the "at risk" denominator, but based on our tests, a conservative estimate would be that only one out of every 100,000 numerators causes a problem.

Finally, when we combine the chances of a bad numerator and the chances of a bad denominator, the result is that one out of every 100 million divisions will give a bad result. Our conclusion is vastly different from Intel's.

#### Frequency Tests:

We also questioned Intel's analysis and assumption that spreadsheet users will only perform 1,000 divides in a day. Tests run independently suggest that a spreadsheet user (Lotus 1-2-3) does about 5,000 divides every second when he is calculating his spreadsheet. Even if he does this for only 15 minutes a day, he will perform 4.2 million divides in a day, and according to our probability findings, on average, a computer could make a mistake every 24 days. Hypothetically, if 100,000 Pentium customers were doing 15 minutes of calculations every day, we could expect 4,000 mistakes to occur each day.

#### Conclusion:

The Pentium processor does make errors on floating point divisions when both the numerator and denominator of the division have certain characteristics. Our study is an analysis based on probabilities and chances. In reality, a user could face either significantly more errors or no errors at all. If an error occurs, it will first appear in the fifth or higher significant digit and it may have no effect or it may have catastrophic effects.

---

#### Additional Technical Detail:

##### Some Experiments on Pentium Using Decimal Numbers

According to an Intel white paper, if you were to choose a random binary bit pattern for numerator and the denominator, the probability of error in divide is about 1 in 9 billion.

The error occurs when certain divisors (termed "at risk" or bad) are divided into certain numerators. In order for the error to occur, our belief is that divisors must lie in a certain range. For each such denominator, there is a range of numerator values which produce an incorrect result.

An example of affected numbers is the decimal constants we hardwire in our programs. For example, if converting from months to years and we are interested in 7-8 decimal digits of accuracy, then we can hard wire a constant to convert from months to years.

$$\alpha = 1/12 = .083333333$$

Let us construct a hypothetical example. We have contracted a job which is expected to last 22.5 months. The total value of the contract is \$96000. From this, tax at the rate of 14 and 2/3 percent rate has to be deducted. The taxing authority has defined 14 and 2/3 percent to be 14.66667. We want to calculate the net take at a per annum basis. We do the following calculations.

$$\text{Tax} = 96000 * .1466667 = 14080.0032$$

$$\text{Net take home money} = 96000 - 14080.0032 = 81919.9968$$

$$\begin{aligned} \text{The number of years in 22.5 months} &= 22.5 * .083333333 \\ &= 1.874999925 \text{ years} \end{aligned}$$

$$\begin{aligned} \text{Net take home money per annum} &= 81919.9968 / 1.874999925 \\ &= \$43690.6667 \end{aligned}$$

Most machines give the above answer which satisfies the desired 7-8 digit accuracy criterion. On Pentium, the answer is \$43690.53, which has only 5 correct digits.

In this example, both numerator and denominator are bad numbers. They are both near some simple integer boundary in their binary presentation and as you rightly observed, these numbers occur in real world at a much higher frequency compared to the totally random bit pattern hypothesis.

### Probabilistic Analysis

We are addressing the question of how likely it is to have a bad divisor. On Pentium, a bad divisor belongs to one of the five bad table entries characterized by 1.0001, 1.0100, 1.0111, 1.1010, and 1.1101, followed by a string of 1's in the mantissa.

We have found that if the string of 1's is of length 20 or so, then it is a bad divisor. Given a bad divisor, the probability of making an error in the division increases dramatically, compared to the 1 in 9 billion figure quoted by Intel.

We did some simple experiments using decimal numbers and the findings are reported below. We counted only those bad divisors which belong to one of the above five table values, followed by a string of 32 1's. Intel people

argue that all binary patterns are equally likely. If that was really the case, the probability of finding a bad divisor, as defined above, will be  $5/(2^{36})$  or about one in 13 billion random divisors. However, we are finding the probabilities to be much higher.

### Addition/Subtraction of Decimal Numbers

In this experiment, we randomly added or subtracted, 10 uniformly distributed random numbers having one or two decimal digits (as in dollars and cents) and then we examined the result for the above binary patterns. Here are the results for two cases. In the first case, we chose only one digit to the left of decimal (as in \$3.47) and in the second case, we chose two digits to the left of the decimal (as in \$29.56). All the digits were chosen randomly with uniform probability. In the third case, we chose one digit to the right of the decimal point and two digits to the left. The results below give the number of times the result of this experiment has the bit pattern corresponding to a bad divisor.

Case 1 (one digit to the left, two to the right)	---	188 out of 100,000
Case 2 (two digits to the left, two to the right)	---	45 out of 100,000
Case 3 (two digits to the left, one to the right)	---	356 out of 100,000

Clearly, these probabilities are much higher than those obtained with the random bit pattern hypothesis.

### Division Of Two Decimal Numbers:

These experiments were conducted through exhaustive tests on all possible digits patterns. Here (a.b)/(c.d) represents division of a two digit (one to the left of the decimal point and one to the right of the decimal point) number by another two digit number.

(a.b)/(c.d)	-	44 out of	10,000
(0.ab)/(0.cd)	-	27 out of	10,000
(a.bc)/(d.ef)	-	344 out of	1,000,000
(ab.c)/(de.f)	-	422 out of	1,000,000

### Multiplication of Two Numbers

Here we are multiplying a decimal number by another number which was computed as a reciprocal of another decimal number as in scaling by a constant.

(a.b) * (1/(c.d))	-	37 out of	10,000
(a.bc) * (1/(d.e))	-	139 out of	100,000
(a.bc) * (1/(d.ef))	-	434 out of	1,000,000

To summarize, for the decimal calculations of the type given above, the probability of having a result which falls into the category of being a bad divisor is rather high. It appears to be somewhere between 1 in 3000 to 1 in 250. Let us say that it is of the order of 1 in 1000.

Furthermore, if the rounding mode corresponds to truncate, the probability of arriving at bad divisors increases significantly.

### The Dependency on Numerator

Given a bad divisor, the divide error occurs for some range of values of the denominator. If we were to take a totally random bit pattern for the denominator, the probability of error appears to be of the order one in 100,000. This is a first cut rough estimate and probably could be improved. It appears that probabilities are different for different table values. The table corresponding to '1.0001' seems to have the most error. For numerator also, there are bands of values where the error is much more likely. Again these bands are more prominent near whole numbers. For example, if we were using  $(19.4 - 10.4) = '9'$  as a divisor (a bad one), and you picked a random value between 6 and 6.01, as the numerator then the chance of error increases to about one in 1000.

For the purpose of our simplistic analysis, we will use the figure of 1 in 100,000 for a bad numerator. This assumes that we are picking up a random numerator. Using the value of 1 in 1000 as the probability for a bad divisor, the overall probability for a 'typical' divide being incorrect seems to be of the order of 1 in 100 millions. This is about two orders of magnitude higher compared to the Intel estimate of 1 in 9 billion.

### Probability of a Divide Instruction

Let us assume that a Pentium operating at 90 MHz does an op in 1.2 cycles on the average. That will give about 75 Million ops per second of actual compute time. We will use a figure of 1 divide per 16,000 instructions, even though many estimates suggest a much higher frequency of divide.

Thus using this conservative estimate of one divide per 16,000 instructions, we come up at about 4687 divides per second. Let us further assume that a typical spread-sheet user does only about 15 minutes of actual intensive computing per day. Then, he is likely to do  $4687 * 900 = 4.2$  million divides per day. Assuming an error rate of 1 in 100 million, it will take about 24 days for an error to occur for an individual user.

Combine this with the fact that there are millions of PENTIUM users worldwide, we quickly come to the conclusion that on a typical day a large

number of people are making mistakes in their computation without realizing it.

IBM Corporation  
ibmstudy@watson.ibm.com

## SILICON GRAPHICS AND NETMANAGE TECHNOLOGY ALLIANCE TO BRING COLLABORATIVE TECHNOLOGY TO WINDOWS PCS

On November 15, 1994, Silicon Graphics, Inc. announced that it has licensed its InPerson desktop videoconferencing application to NetManage, a leader in TCP/IP for Windows applications development, for the purpose of developing an interoperability solution that will allow InPerson users to communicate with PCs running the Windows operating system.

"Silicon Graphics is committed to delivering the most advanced collaborative computing solutions on the market," said Way Ting, vice president and general manager of Silicon Graphics' Visual Magic Division. "We believe NetManage, with its experience and expertise in TCP/IP applications, can provide the technology to allow Silicon Graphics workstation users to collaborate with Windows PC users."

"We are happy to have formed a technology alliance that draws on the combined strengths of Silicon Graphics and NetManage," said Zvi Alon, president and CEO of NetManage. "With our proven track record in TCP/IP Windows applications and Silicon Graphics experience in providing advanced collaboration tools, we can work toward developing a solution that will allow Silicon Graphics customers and Windows users to interact using real-time desktop conference sessions."

Silicon Graphics, Inc. is the leading manufacturer of high-performance visual computing systems. The company delivers interactive three-dimensional graphics, digital media and multiprocessing supercomputing technologies to technical, scientific and creative professionals. Its subsidiary, MIPS Technologies, Inc., designs and licenses the industry's leading RISC processor technology for the computer systems and embedded control markets. Silicon Graphics has offices worldwide and headquarters in Mountain View, California.

NetManage Inc. develops, markets and supports an integrated set of TCP/IP connectivity applications and development tools for Microsoft Windows that facilitate communications and administration of personal computers across dissimilar networking environments. The company's Chameleon product family was the first to specifically target Microsoft Windows inter-networking. The company's products are sold by NetManage's own direct sales organization and through distributors internationally.

## INTERGRAPH CORPORATION REINFORCES PENTIUM SYSTEMS COMMITMENTS

HUNTSVILLE, Ala., December 14, 1994 -- Intergraph Corporation, the world's largest supplier of technical computer solutions, announced today its firm commitment to stand behind its Pentium processor-based products. Both the software and hardware divisions of the company emphasized their commitments to continue to supply solutions optimized for Intel Corporation's Pentium processors.

"Intergraph Software Solutions is now shipping more than 200 applications on Microsoft's Windows NT operating system for technical markets," said Tom Steele, president, Intergraph Software Solutions. "These applications benefit greatly from the processing power of the Pentium, and our customer base includes many Pentium-based systems. To date, we have found no applications in our testing labs which exhibit the recently reported Pentium floating-point division problem."

Jim Meadlock, chairman and CEO of Intergraph, said, "Intergraph stands on its long reputation of customer satisfaction, and Intergraph Computer Systems is working with Intel to ensure our mutual Pentium customers will have quality, fully functioning processors. Providing Pentium-based workstations and servers will continue to be the focus of Intergraph Computer Systems' business."

### Intergraph Background Information

A member of the Fortune 500, Intergraph Corporation is the world's largest company dedicated to supplying interactive computer graphics systems. Products range from point solutions, meeting individual and departmental needs, to integrated, enterprise wide systems.

Noted for delivering interoperable systems and applications, Intergraph bases its products on Windows, Window NT and UNIX operating systems.

The company has four business units:

Intergraph Software Solutions (ISS) develops and markets integrated software for the Technical Desktop the combination of compatible technical applications and personal productivity tools in a single desktop computer. Technical applications include computer-aided design, engineering, analysis, manufacturing, publishing and earth sciences. ISS also provides core system software, high-end applications, and training, consulting, and implementation through its Solution Engineering Division.

Intergraph Computer Systems develops and markets Intergraph hardware products, including personal workstations and servers.

Intergraph Federal Systems markets commercial off-the-shelf products and services, and specially-developed products, to governments worldwide.

Intergraph Electronics develops and markets a complete suite of Electronic Design Automation (EDA) software tools for design capture, simulation, synthesis, layout, and verification/analysis.

Intergraph  
800-763-0242

## MOTOROLA'S LEXICUS CLAIMS HANDWRITING BREAKTHROUGH

December 2, 1994 -- Lexicus Corp, the Palo Alto handwriting recognition software developer acquired by Motorola Inc last year, is set to go with its flagship Lexicus Longhand Handwriting Recognition Software for Developers. Claimed to be the first cursive handwriting recognition software designed for the Windows for Pen operating system, the software applies neural network technology to recognise and correct natural handwriting - cursive, print or a mixture of the two - and is claimed to provide faster and more accurate recognition than previously available. The neural network technology is used to train the Lexicus Longhand system to recognise natural handwriting. Lexicus sees Longhand being used in medical applications such as prescription writing, psychiatric notes and clinical drug trials, and sales force automation, market surveys and police incident reports.

It is claimed to be able to correct spelling errors and accommodate difficult-to-recognise cursive handwriting. Accuracy is derived from a 25,000 word built-in dictionary with a customisable user dictionary to correct errors on the fly, anticipate common user words, and recognise proper nouns. It is claimed to do its thing at 12 characters per second, making handwritten text more legible, readable and more efficiently stored. Lexicus Longhand is user-installable without additional hardware or software beyond the Windows for Pen requirements, the company says, and is writer-independent, easily learned and does not require training. Lexicus Longhand learns each user's vocabulary and adapts to the user's subject matter, but it can also accommodate multiple users in a shared environment.

It converts cursive handwriting to ASCII, saving space and enabling users to save text on notebooks and input text to client-server and enterprise-wide computer systems. Saved text can then be searched for key words at a later date - all of which explains why Motorola thought that a company working in such a currently unfashionable and unfancied niche was worth buying. The developer version of Lexicus Longhand will be shipping next month and will sell for \$150.

## CodeWarrior Integrated Development Environment

December 9, 1994 -- Metrowerks CodeWarrior is a complete development solution for C/C++ and Pascal programming on both 68K Macintosh and the new PowerMacintosh from Apple Computer. CodeWarrior has been used to create 60 percent of the PowerPC native Macintosh applications, including products from Aldus and Claris.

CodeWarrior Development Environments for C/C++ run native on either platform and also cross-compile for either platform. You can therefore build Power Macintosh binaries on 68K or 68K binaries on Power Macintosh at Power Macintosh speeds.

The compiler technology and development tools melded together in the CodeWarrior package try to strike a balance between powerful tools and ease of use. Our objective is to make sure you have the tools you need to get the job done. We will do everything possible to make sure that this is the case. We intend to make CodeWarrior on Macintosh our design center for state-of-the-art development tools.

### State-of-the-Art Compilers & Linkers

The compiler technology contained on this CD is based on an advanced architecture where multiple language front-ends (C/C++ and Pascal) share multiple back-ends (680x0 and PowerPC 601) as well as a common development environment. This ensures that as you go forward on Power Macintosh, you also conserve your investment in your installed code base on 68K Macintosh and your code base remains backward-compatible.

Using the same front-end across different processors reduces source-code compatibility problems. Using the same back-end code generator ensures equal code quality for C/C++ and Pascal as well as full binary compatibility. The 68K Macintosh compilers are being used extensively to implement a common code base across 68K and Power Macintosh by many in the Macintosh Developer Community since their first release on January 5, 1994.

The CodeWarrior 68K and the PowerPC C/C++ compilers have passed the Plum Hall Validation Suite for C version 5.0 and have been used successfully to port very large software products to Power Macintosh. The compilers undergo final validation under Suite++x, the Plum Hall Validation Suite for C++ version 1.07.

The C/C++ compilers build pointer-based MacApp v3.1 as well as our own new framework, Metrowerks PowerPlant. This provides you with a full range of framework options for full native development on either Power Macintosh or 68K Macintosh. These compilers also build the TCL version 1.1.3 and 2.0

after the TCL has been modified using porting tools available on the Internet (for more info, send email to support@metrowerks.com)

The PowerPC C/C++ and 68K compilers are fat binaries. You can build software on a PowerPC Macintosh or you can build software on a 68K-based Macintosh and then drag the binary to a Power Macintosh for execution. They are both native compilers (on Power and 68K Macintosh) and cross compilers (on 68K and Power Macintosh).

The 68K Pascal compiler is a mature beta release. It conforms substantially to MPW Pascal v3.3 excluding Object Pascal extensions. It is in the process of final validation under the BSI validation suite version 5.6 and has built some pretty large software products. We're very happy to bring you the first external development release of Pascal for Power Macintosh on this CD.

### CodeWarrior Debuggers

The CodeWarrior Debugger, one for 68K, the other for PowerPC have also been further developed and implement a range of new features to help in debugging both 68K and Power Macintosh binaries. The debuggers use the PowerPlant framework to implement their document and symbolic views and both read standard SYM files generated by the compilers. CodeWarrior binaries can also be debugged with standard debuggers such as The Debugger from Jasik Designs. The CodeWarrior Debuggers have graduated to V1.0 level in this CW4 release.

### Metrowerks PowerPlant, a new framework

Metrowerks PowerPlant is a very modern non-monolithic application framework. It implements a mixin architecture to reduce object size and fully supports the Apple Object Model. Applications written with PowerPlant are recordable and scriptable. PowerPlant Constructor, the view editor, accelerates development by making view design much easier. In this release of PowerPlant, we are happy to provide NeoPersist, a new and powerful object-oriented object persistence library from NeoLogic Systems, the developers of NeoAccess and NeoShare. NeoLogic products provide back-end database support for PowerPlant applications. We are also providing PowerPlant as a shared library that can be distributed to your users free of charge.

### New Plauger/Plum Hall C & C++ Libraries

The Standard C Library and the Draft Standard C++ Library developed by P. J. Plauger and distributed and supported by Plum Hall, Inc. are also available with this release. They carefully track the emerging ANSI/ISO C++ standard and are upgraded with each release of CodeWarrior.

## Metrowerks Active Profilers

We're also happy to introduce the version 1.0 release of the Metrowerks Profiler. This new active profiler should enable you to fine-tune your code on both 68K and Power Macintosh.

## CodeWarrior Development Environment

The CodeWarrior Development Environment represents a modern scriptable, open architecture for Macintosh Software Development.

## International CodeWarrior

On the international front, Metrowerks CodeWarrior has been localized in French, German, and Spanish. All these versions of CodeWarrior are available on this CD. Kanji version is sold separately through our Japanese distributor, BUG.

## Ordering Information:

### 68K & Power Mac Versions

Bronze \$ 99.00

Gold \$399.00

## Where to order Metrowerks CodeWarrior:

### Metrowerks Mail Order

voice: (800) 377-5416

(419) 281 1802

fax: (419) 281-6883

Or you can place an order, request additional information or submit questions and comments by mailing: [metro@power.globalnews.com](mailto:metro@power.globalnews.com)

For further details of products, service and support, please visit the CodeWarrior World Wide Web site at the following URL:

<http://www.iquest.com/~fairgate/cw/cw.html>

## Metrowerks Corporation

8920 Business Park Drive, Suite 315

Austin, Texas 78759-7405

Voice: (512) 346-1935

Fax: (512) 346-3329

Internet: [sales@metrowerks.com](mailto:sales@metrowerks.com)

## NEW MEDIA PCMCIA ADD-ON TO MAKE NOTEBOOKS SING

December 2, 1994 -- So there you are with your shiny new notebook computer with its super - insofar as any liquid crystal technology can be super - display and inviting PCMCIA Type II slots. It's so wonderful that it does everything except sing and dance. Shame about that last bit, but then Shazam! Up jumps New Media Corp with the PCMCIA add-on to let your joy be unconfined.

The Irvine, California company has come up with CD Sound Studio, a portable multimedia peripheral "combining all of the components for on-the-go multimedia into one streamlined package". Features include a double-speed CD-ROM drive, built-in microphone, 16-bit stereo sound board and dual stereo speakers, and the ACS3000 sound system from Altec Lansing Inc. The ACS3000 uses proprietary sound technology, dynamic compensation circuitry and an amplifier system to provide "theatre-quality" sound.

The CD Sound Studio is claimed to offer 100% compatibility across the full range of laptops and subnotebook computers available today and costs \$800. It comes with New Media's PCMCIA true Plug-&-Play device drivers, and users can exchange, remove or insert the CD Sound Studio into and out of their mobile system without the need to reconfigure, reboot or power up the machine. It measures 9.1" by 11.9" by 2.1" and weighs 4 lbs 8 oz including internal power supply. Dual Altec Lansing speakers are on the front and side corners of the CD Sound Studio, which ships with Microsoft Sound System software, including speech recognition. It draws 180mA from the laptop, 21mA in stand-by mode, and is out next quarter.

## PHILIPS RELEASES CD-I BOARD FOR PERSONAL COMPUTERS

December 2, 1994 -- Philips Electronics NV has decided that to increase the market further it now has to release the Compact Disk-interactive board for iAPX-86-based personal computers it has had up its sleeve for some time - but it is starting out offering it only as an OEM product for personal computer manufacturers. The board is based on the Motorola Inc 68070 microprocessor found in the CD-i machines - despite the number, the 68070 is a 16-bit 68000 with multimedia-specific circuitry added.

Upgrade boards enabling users to add CD-i capability to their own systems will be available in computer stores by the spring for \$500. The CD-i/PC board is claimed to offer "superb quality true colour display of all CD-i images, both still and motion video regardless of the host's VGA display specification". The user will also need a Philips LMS CM208 quad-speed CD-ROM drive, and a 16MHz 80386SX and up machine with one 16-bit AT slot vacant, and VGA display.

## PHOENIX ATTACKS FLOPPY SWAPPY WITH BOOTABLE CD-ROM BIOS

December 2, 1994 -- Phoenix Technologies Ltd reckons there is a big future in being able to boot your personal computer not from the hard disk or from a floppy, but from a CD-ROM drive, and it has come up with a BIOS to support the facility. It eliminates that absurd game of floppy swappy you have to play with today's bloated and voluminous software, and it means that software vendors that are really serious about piracy can deliver their programs in a form that can only run direct from the compact disk, which effectively eliminates the need to back up the application - in contrast to a slow floppy, a relatively fast CD-ROM should last for at least the lifetime of the program if you treat it with respect. And for those of a nervous disposition, since the CD-ROM is a read-only device, CD-ROMs are impervious to viruses that weren't encoded on in their manufacture.

Phoenix is of course the company that did most to ensure that the second generation of IBM Personal-like makers - the best of which are all still around today - would be able to build machines that would be out of IBM Corp's legal reach by designing 100% compatible BIOSes in a location where all the coders were quarantined from anyone that had actually seen the code of the original IBM BIOS they were cloning. Underlining how much the world has changed since then, IBM actually helped out with development of the new BIOS, the Bootable CD-ROM Specification 1.0, which describes how IDE- and SCSI-based CD-ROM drives can be used in place of floppy or hard disks as boot devices. The specification is now available in the Norwood, Massachusetts company's PhoenixBIOS 4.0.

The feature will enable system manufacturers to ship their machines with a single compact disk that contains everything needed for system configuration: operating system, applications and programs, saving hours of time spent playing floppy swappy. The Bootable CD-ROM Specification 1.0 defines a CD-ROM format and INT 13 extensions that enable systems to detect and boot CD-ROMs without any device driver. CD-ROM boot images can emulate a 1.2Mb, 1.44Mb or 2.88Mb floppy image or a hard disk. The BIOS, on finding a bootable CD-ROM, makes the CD-ROM device appear to the CPU as a floppy or hard disk.

## TALIGENT ANNOUNCES CERTIFICATION AND BRANDING PROGRAM FOR APPLICATION SYSTEM

New Product Identity to Provide Developers, OEMs and End-Users With a Common Foundation for Taligent Products

LAS VEGAS, Nevada -- November 14, 1994 -- Moving forward in its mission to deliver an object-oriented programming standard, Taligent, Inc. today announced a certification and branding program for its application system, here at COMDEX/Fall'94.

As part of the announcement, the company unveiled a new product name and logo for the system. Formerly known as the Taligent Application Environment (or Tal), the product was officially named the CommonPoint application system.

"We wanted the product name to connote the fundamental promise of the Taligent solution -- a common foundation for next generation applications; a common platform for distributed computing; and a common user environment for people to work together," said Joe Guglielmi, Taligent chairman and CEO. "With CommonPoint we believe we've succeeded in choosing a name that appropriately represents this vision. And through the execution of our branding and certification program, we'll be able to ensure a consistent set of object-oriented APIs are deployed across leading hardware and operating system architectures. This will provide developers and users with a common point for a new generation of computing."

The announcement of the CommonPoint branding and certification program accompanies Taligent's debut as a COMDEX exhibitor and the demonstration of the first CommonPoint application prototypes in the company's booth #L482.

### Certification and Branding Program

Taligent and its investors, Apple Computer, Inc., Hewlett-Packard Company and IBM Corporation, share a common goal of creating an object-oriented programming standard for the industry. The certification and branding program announced today is intended to provide software developers and end-users with confidence that applications developed for the CommonPoint system will be compatible across implementations on leading 32-bit operating systems such as AIX, OS/2 and HP-UX.

Taligent will license the CommonPoint name for use with certified implementations of the product beginning with the 1.0 version, which is currently planned for delivery in 1995. To achieve certification, each implementation must pass a verification suite including a depth test, that will

check the base functionality and quality of the core set of frameworks, and a breadth test that will search for the existence of all public object classes and member functions.

Taligent plans to extend the program in the future to include certification of OEM implementations of the CommonPoint system on other operating system platforms, as well as ISV applications written for the object-oriented system.

In addition, Taligent intends to make its APIs and the test suites available to OEMs and standards bodies. In January 1994, Taligent announced plans to submit its APIs to industry standards associations such as X/Open Company Ltd. and the Object Management Group (OMG) to ensure broad acceptance of the CommonPoint frameworks and make its testing-based certification program available to third parties.

As part of its worldwide branding strategy, Taligent also unveiled a visual identity for the CommonPoint system. The logo features a multi-colored hand pointing the way to the future. Through use of the CommonPoint logo, Taligent intends to create a market identity for its products, and make the logo available for use by application and system vendors that support the platform.

The first public showing of the CommonPoint logo occurs today in Taligent's booth at COMDEX.

Taligent, Inc. is developing a new application system based on object-oriented technology, which will provide the foundation for a new generation of distributed workgroup and enterprise applications and software components. Established in March 1992, Taligent is an independent software company, owned by Apple Computer, Inc., Hewlett-Packard Company and IBM Corporation. Taligent, along with its investors, will license, market and support its software products worldwide.

## Buying a Multimedia Computer This Holiday Season? Questions to Ask to Avoid Christmas Eve Nightmares

CUPERTINO, California---November 23, 1994--The complications of buying a multimedia computer for the holidays can give you more nightmares than Scrooge himself had on Christmas Eve. But before you give up and mutter "Bah, Humbug!," consider this a multimedia computer can be a springboard to years of family fun and learning. With the explosive growth of multimedia PCs on the market and new CD-ROM titles for every member of the family, there has never been a better time to buy.

Multimedia is generally defined as the ability to show video footage and animated images, and play digital-quality sound on a computer using a CD-ROM (Compact Disk-Read Only Memory). It is the latest rage among consumers, and for good reason. All ages can enjoy the proliferation of exciting new CD-ROM titles that suit every interest -- from learning to cook Thai meals, preparing for college boards, learning to speak German, visiting the Amazon rainforest, to learning how to read. Making the multimedia computer purchase, however, can be intimidating with all of the computer brands, technical jargon, hardware, software and peripherals from which to choose. So, here's a quick holiday guide to help multimedia computer buyers avoid nightmares and make the best choice for the family.

### Avoiding Christmas Eve Nightmares: Seven Questions Consumers Should Ask

\* Christmas Eve Nightmare #1: Trying to Use the Computer -- and Not Being Able To -- Consumers should ask: Will I be able to use it without taking classes? Make sure that the multimedia computer you are buying is truly easy to use. You might want to go to a local computer retailer and take a "test drive" of a demonstration computer to find out which computer you feel comfortable using. Go with the computer you can use without asking for too much help---one you can use right away.

\* Christmas Eve Nightmare #2: Figuring Out Which Cable to Plug in Where Consumers should ask: Can I set up my new multimedia computer at home, by myself? Make sure that the multimedia computer you are buying is easy to set up. Cables should be labeled to match the ports they plug into, and software should already be loaded on the machine, so everything is ready to go when you turn on the computer. It is often easier to stay with one manufacturer so that all of your hardware and software is designed to work together and all of your instructions are in one place.

\* Christmas Eve Nightmare #3: Having to Open Up Your Computer to Make it a Multimedia PC Consumers should ask: Is this a true multimedia computer? A true multimedia computer comes with built-in sound capability, a CD-ROM drive, and video and audio input and output. These capabilities will make

your system multimedia-ready right out of the box. With most computers, you will need to open up the computer and add in boards, even for basic multimedia functionality such as sound. You may need to add software, too. Adding software and hardware to turn your personal computer into a true multimedia machine can be an expensive, time-consuming and a frustrating experience.

\* Christmas Eve Nightmare #4: Adding Equipment to the Computer. Consumers should ask: Can I easily add things to the computer later on? Make sure it will be easy and affordable to add extra options to your system when you're ready. It's easy to add external components if the computer already has a SCSI connector (SCSI simply refers to a kind of plug that connects a computer to external equipment). You may also want to ask your dealer if there are open slots inside the computer for adding multimedia components.

\* Christmas Eve Nightmare #5: Dealing with Configuration Files. Consumers should ask: Will I have to deal with configuration files? Most PCs require you to inspect or change configuration files, even for ordinary tasks like running multimedia games and education titles. Configuration files tell the computer how to communicate with different hardware and software, and dealing with them can turn even the jolliest Santa into the Abominable Snowman. You won't have to face this nightmare if you buy a personal computer that does not have configuration files.

\* Christmas Eve Nightmare #6: Finding Out You Can Only Run One Kind of Computer File. Consumers should ask: With this computer, can I read and write Apple Macintosh, DOS and Windows files with this computer? A multimedia computer should be able to read and write files from the major computer platforms such as Macintosh, DOS and Windows. This will make your personal computer much more versatile and it won't limit your software options.

\* Christmas Eve Nightmare #7: Discovering Your New Multimedia Computer Will Be Obsolete in a Month. Consumers should ask: Is this a high-performance computer, and can I upgrade to even faster performance later? A multimedia computer should have a lot of power, and be easy to upgrade to even faster performance later. Computers powered by RISC (Reduced Instruction Set Computing) microprocessors are well-suited to multimedia. RISC microprocessors at first could be found only in the world's most powerful workstation computers, but are now used in some very affordable multimedia personal computers, such as Apple's Power Macintosh. Multimedia computers that are based on RISC or have an upgrade path to RISC will offer excellent long-term performance and value far into the future.

By asking the right questions, consumers will be able to avoid holiday

nightmares when purchasing a multimedia computer--and end up with an asset that will help the family learn, work and be entertained for years to come.

Apple Computer, Inc., a recognized pioneer and innovator in the information industry, creates powerful solutions based on easy to use personal computers, servers, peripherals, software, online services, and personal digital assistants. Headquartered in Cupertino, California, Apple (NASDAQ:AAPL) develops, manufactures, licenses and markets products, technologies and services for the business, education, consumer, scientific & engineering and government markets in over 140 countries.

Apple Computer Inc  
20525 Mariana Ave  
Cupertino, CA 95014  
408-996-1010

-----  
An Introduction to Multimedia

What is Multimedia?

Multimedia is the combination of different types of media such as sound, video, text, animations, photos and illustrations. Many people think of CD-ROMs and games when they think of multimedia--but it s much more than that. With multimedia we can create, use and combine graphics, text, music, video and images in our office Or in our home on our personal computers. Multimedia can enhance our personal productivity, make our business presentations more professional and interesting, provide us with entertainment, and of course help us learn.

What Is a CD-ROM?

CD-ROMs look exactly like the audio CDs consumers listen to. The difference is that CD-ROMs can combine elements of books, movies, television, music and computer programs all on one disk. CD-ROM technology is compelling because of its capacity to store huge amounts of all types of data, including multimedia graphics, video, sound and text. One CD-ROM can hold as much data as 500 floppy disks. But large storage capacity is just part of the story. CD-ROMs allow for permanent storage of data, plus provide the ability to search, sort and retrieve large volumes of information.

But multimedia is more than CD-ROM technology; it is the creation of graphics, text, music and video. Today it means easy cut and paste video, access to real-time information and image capture and recording. we have moved beyond simply playing games, storing data and watching video to actually creating and interacting with all facets of multimedia.

## Is Multimedia a Big Market Area?

It's exciting technology and the booming sales show it Apple sold 50,000 CD-ROM players in 1992; in 1993 the company delivered more than 1 million! In fact, 1993 was a turning point for the CD-ROM industry as a whole. In just one year, approximately 7.2 million CD-ROM drives were sold worldwide--an annual shipment growth rate of 170 percent! ! Most computer manufacturers now offer CD-ROM drives as a standard component of their systems.

## What About the Future?

Multimedia is here to stay! In fact, the number of multimedia-capable personal computers with CD-ROM drives will increase by approximately 5 million in each of the next two years. And by 1999, an estimated 8 of every 10 computer users will have CD-ROM players attached to their systems'.

## Apple and Multimedia

Apple and Multimedia Apple's leadership in multimedia dates back to the first Macintosh in 1984 with its built-in sound capabilities. From the beginning, Apple has integrated media such as sound, graphics and networking into its personal computers--so all Macintosh personal computers are multimedia machines. With the introduction of the Macintosh 630 computers--designed specifically for multimedia use--and a suite of multimedia computer products, Apple continues to raise the bar on multimedia. Through its New Media group and other areas within the company, Apple continues to be instrumental in building the multimedia marketplace by working with developers of CD-ROM titles, as well as creating several consumer multimedia products--for the Macintosh and other platforms as well.  
--end----end----end----end----end----end----end----end----end--

## AVERY ANNOUNCES LABELPRO 2.0 FOR WINDOWS: NEW VERSION SIMPLIFIES MAIL MERGE, EASES VOLUME MAILINGS

### Powerful, Easy-To-Use Software Lets Users Add Elegance to Business Correspondence

DIAMOND BAR, Calif. -- Avery Dennison Office Products has introduced LabelPro 2.0 for Windows, a powerful new version of its labeling and addressing software that enables users to manage high-volume mailings easily, with guaranteed, professional-looking results. LabelPro 2.0 for Windows features an exclusive AutoMerge function that automatically formats text, eliminating the labor-intensive setup procedures typically associated with text merging. Lists of any size can be imported from a wide variety of data management and word processing programs, including the latest versions of both WordPerfect and Microsoft Word for Windows, plus Paradox for Windows and dBASE, as well as ASCII files.

LabelPro 2.0 for Windows also features a powerful shrink-to-fit capability that automatically sizes merged text to fit a wide variety of Avery supplies: addressing, shipping, Mini-Sheets, file folder, diskette and videotape labels, business cards, post cards, rotary cards, and index dividers.

"LabelPro 2.0 for Windows is a real productivity boon for users who do mass mailings, but don't want their correspondence to lose that personal touch," said John Perez, international software marketing manager for Avery. "By automating tasks like grouping merge fields, Avery has made the merge process hassle-free. Combined with shrink-to-fit and other new features, we're offering a potent, versatile package that combines an unprecedented level of automation with graphics flexibility."

New graphics features enable users to dress up business correspondence. With the software's rotation function, users can place text at any angle. Documents can be further personalized by adding company logos or graphics to individual labels in any of 10 of the most popular graphics file formats, including .PCX, .TIF, .BMP, .JPEG, and .TGA, among others.

LabelPro 2.0 for Windows can print graphics, text, lines, rectangles, ellipses or circles in up to 16 colors. The program's zoom function enables users to view designs at any size from 25 to 400 percent.

LabelPro 2.0 for Windows will be available in office product and computer stores in the U.S. and Canada in Q3 '94 at a suggested retail price of \$129.95. The software will also be available in Europe, Latin America, and Asia during the fourth quarter of 1994. Current LabelPro users can upgrade to the new version by contacting Avery at 1-800-326-0407.

As a special promotion, Avery is offering buyers of LabelPro 2.0 for Windows 1,000 free CD-ROM-based clip art images and 100 fonts from Micrografx. Images are also available on 3-1/2 inch diskettes.

LabelPro 2.0 for windows is equipped with ready-to-use layouts for more than 140 Avery laser, ink jet and dot matrix printer supplies. Users simply select the Avery product they need, add text and design elements, and print. A new time-saving QuickPrint function accelerates the printing process.

Core features of LabelPro 2.0 for Windows include a powerful list manager for creating lists of unlimited sizes, with up to 15 user-selected fields. The software also automatically calculates and prints USPS Delivery Point Bar Codes.

LabelPro 2.0 for Windows requires Microsoft windows 3.1, support for VGA or higher resolution display, and Windows-compatible laser, ink jet or dot matrix printers.

Avery Dennison Office Products North America, a unit of Avery Dennison Corporation, is the world's leading producer of self-adhesive labels for laser and ink jet printers, labeling and list management software, indexed and other office supplies. Avery Dennison Office Products North America is based in Diamond Bar, Calif.

Avery Dennison  
20955 Pathfinder Rd  
Diamond Bar, CA 91765-4000  
909-865-7711, fax 909-598-2905

Sources & Solutions New Edition Planned  
December 15, 1994

---

IBM Independent Vendor League  
IVL News Service  
Sources & Solutions: The Book In the Box

---

Each OS/2 Warp and LAN Server 4.0 product box contains a copy of Sources & Solutions, a 180-page directory of useful information for OS/2 users. The Third Edition (May 1995) is now in the planning stages, and producers of desktop software, publications, courseware and services are invited to participate.

#### IBM Independent/International Vendor League (IVL) Listings

Members of the IVL (companies and individuals) receive free listings in Sources & Solutions for their publications, courseware, training, consulting and other services. IVL membership is free.

Deadline: January 15, 1995 Contact: Gail Ostrow, 203-384-9996  
Fax: 203-368-6379 E-mail: GailO@Vnet.IBM.Com

#### Other Listings

OS/2 and LAN-certified software applications, authorized dealers and IBM BESTeam members also receive free listings in Sources & Solutions.

Deadline: January 15, 1995 Contact: Leslie Palin, 512-823-1859  
Fax: 512-823-1517 E-mail: LeslieP@Vnet.IBM.Com  
Software: 800-285-2936 (call for certification package)  
Dealers: 305-932-8454  
BESTeam: 800-627-8363 or 404-835-9900 (Support for VARs,  
consultants, systems and network integrators.)

#### Advertisements

Advertising space for software, books and other products may be reserved now. In addition to inclusion in the OS/2 Warp and LAN Server 4.0 product boxes, Sources & Solutions is mailed to users, user groups, software developers, and other targeted audiences in the US, Canada and international markets. It is also distributed at trade shows and special events. 700,000 copies of each edition are distributed.

Deadline to reserve space: February 17, 1995 Contact: Leslie Palin  
Phone: 512-823-1859 Fax: 512-823-1517 LeslieP@Vnet.IBM.Com  
For a Media Kit, call 203-452-7704 or fax 203-268-1075.

Lyrrus, Inc. and Fender team up to introduce multimedia software to the guitarist

Philadelphia -- December 14, 1994 -- Lyrrus, Inc., a leading Philadelphia-based music software developer, and Fender, a world leader in guitar manufacturing, recently introduced a multimedia education software package designed for the next generation of guitar players.

The new G-VOX Blender software package consists of a sample assortment of music software that features famous guitar riffs (musical phrases), including the actual music of award-winning artists like Steve Morse. The G-VOX Blender software allows the user to listen to a digital recording, and then displays an animated fingerboard on the computer screen. The user can see and hear how the music is played and is able to control the speed with which it is played back -- fast, slow or note-by-note. The user can play back the music over and over while learning to play it.

The software additionally includes an in-depth music theory program which can help improve sight-reading ability.

G-VOX Blender is available now through Fender retailers for a suggested retail price of \$49. From now through March 1995, many Fender retailers will be offering G-VOX Blender software as part of a special package to customers who purchase one of the company's electric guitars.

"For years, developments in music technology existed only for the professional musician," said Nathaniel Weiss, president of Lyrrus. "High prices and sophisticated products created barriers for aspiring players. Now, with the rapid growth of personal computers and the ability to combine video, audio and vivid graphics, a whole new world of opportunity is opening up to consumers.

"But our products aren't just about technology," he continued. "They're about the individual and the experience of music. It's now possible to combine a Fender guitar -- a real musical instrument -- with an entertaining and fully interactive software package designed for the musician."

Bill Schultz, president of Fender Musical Instruments, said the company is dedicated to encouraging young people to learn to play and that computers are already playing a major role in music education. For example, G-VOX Blender is used on computers in music education classes at the world-renowned Berklee School of Music and at Duquesne University in Pittsburg.

"Fender has a rich history of innovation," said Schultz. "It's only natural for us to venture into the world of digital technology. Young people are already immersed into the world of computers and video games. Why not teach

them to use those skills, learn more about music and have fun -- all at the same time?"

About Lyrrus, Inc.

Lyrrus, Inc., is a high-technology music company located in Philadelphia. Formed in 1990, the company manufactures, markets and sells interactive hardware and software for connecting musical instruments to computers.

Lyrrus' first product, G-VOX, was introduced in 1993 and is designed to link any acoustic or electric guitar to an IBM PC-compatible or Macintosh computer. Its patented interface technology affordably and accurately displays on the computer screen anything that is played on the guitar. Later that year, Lyrrus introduced a series of software programs and artist libraries to help the beginning and intermediate guitarists improve their playing. Artist libraries were developed with leading guitarists like Steve Morse and Adrian Legg.

In 1994 Lyrrus diversified its product line to include powerful composing tools. Its GVOX Bridge program is the company's first Windows program and can take anything played on the guitar, record it, play it back, and even print out sheet music of the composition.

Lyrrus products are available at Fender dealers. Customers may also contact Lyrrus directly at (215) 922-0880 for more information.

Lyrrus, Inc.  
35 North 3rd Street  
Philadelphia, PA 19106  
(215) 922-0880, FAX (215) 922-7230

## An Easy-to-Follow AutoLISP Tutorial

Ventana updates popular step-by-step guide for Release 13

CHAPEL HILL, N.C., November 28, 1994 -- Ventana Press announces AutoLISP in Plain English: A practical guide for non-programmers, completely revised and updated for AutoCAD Release 13, now bundled with a disk of AutoLISP routines and drawings. A tutorial into two parts, one for novices and one for experienced AutoCAD users, the book teaches users how to write customized programs controlling every aspect of their drawings.

AutoLISP in Plain English assumes readers know little or nothing about AutoLISP or programming. Veteran AutoCAD author George O. Head provides dozens of well-documented examples that have readers creating customized text entry programs, making global changes in their drawings and writing programs that eliminate excessive steps in various drawing situations, all in a short time. A working AutoLISP program illustrating each point is dissected throughout each chapter, and further examples appear at the end of each chapter.

Six new chapters on advanced techniques feature a section on Extended Entity Data and provide instruction on working with files, tables and advanced list construction; error checking; and working with strings, advanced entity manipulations and associative codes.

Additional chapters in AutoLISP in Plain English include useful tips and tricks for programming, testing and debugging, and fifteen ready-to-run programs showing AutoLISP in action. Appendices address how to modify AutoCAD's ACAD.PGP file and set up a prototype drawing file.

"Most AutoCAD users want to use AutoLISP to solve everyday drawing problems--without investing their careers in becoming an AutoLISP expert," commented Head. "Fortunately, creating AutoLISP programs doesn't have to be a difficult, confusing endeavor. AutoLISP can be taught in plain English and anyone can understand it."

The enclosed Companion Disk includes programs from each chapter, sample entities and blocks, and seven additional programs.

A unique feature of AutoLISP in Plain English is its Online Companion, developed by Ventana Online and residing on Ventana's World Wide Web server. The Online Companion provides access to an archive of free AutoCAD programs available on the Internet and hot links to other Internet CAD resources. The URL for the AutoLISP in Plain English Online Companion is <http://www.vmedia.com/autolisp.html>.

AutoLISP in Plain English is the latest volume in Ventana Press's AutoCAD Reference Library. The other volumes, also scheduled for Release 13 updates, include 1,000 AutoCAD Tips and Tricks, AutoCAD: A concise guide to commands & features, The AutoCAD 3D Companion and The AutoCAD Productivity Book.

AutoLISP in Plain English: A practical guide for non-programmers, is 352 pages, illustrated, with disk and an Online Companion. ISBN: 1-56604-140-6. Suggested retail price: \$27.95. For orders in the U.S. only, call 800/743-5369.

Author George O. Head is co-owner of Associated Market Research, a Rhode Island-based consulting firm for architects and engineers. He has written three additional titles in the Ventana Press AutoCAD Reference Library.

Ventana Press and Ventana Online are divisions of Ventana Communications Group, Inc., a diversified publisher of computer-related information tools. Ventana Online supports VCG products with Internet-based content and context. Ventana Press publishes books and other materials that help computer users become more productive, including The Visual Guide to Visual C++, The Visual Basic Power Toolkit, The Windows Internet Tour Guide, Mosaic Quick Tour, Voodoo UNIX and The System 7.5 Book. All titles are available in bookstores and by writing Ventana Press, PO Box 2468, Chapel Hill, NC 27515; by calling Ventana's toll-free order line, 800/743-5369; by faxing Ventana at 919/942-1140; by sending email to [orders@vmedia.com](mailto:orders@vmedia.com); or via the World Wide Web at <http://www.vmedia.com/index.html>.

MacSap is a program for the stress analysis of structures using the finite elements method.

MacSap was established in December 1983 as the result of an agreement with Apple Computer Italy. Since then no less than ten new versions have been produced, raising MacSap to such high standards of quality and market distribution that it is now considered an industrial benchmark for structural analysis on Macintosh.

With the advent of Power Macintosh, Apple invited Softing to adapt MacSap for the new system by entering the "Fast Track": a privileged development agreement for third parties to bring the products on to the market at the same time as Power Macintosh.

This is how MacSap VII came into being, completely rewritten in C++ and optimized for RISC processors.

With this latest version, MacSap VII adds to its existing record of being the only program in its sector conceived exclusively for Macintosh, the record of being the fastest stress analysis program for personal computers.

Softing SRL  
00161 - ROMA - Italy  
Via Reggio Calabria, 6  
Tel. (39) (6) 44291061-44290900  
fax (39) (6) 44235715

---

#### MacSap Structural analysis

- Finite Element Method
- Three-dimensional structures
- Working environment fully graphic and interactive
- Direct drawing of the structure on the screen
- Buildings (frames, trusses), civil structures (bridges, basins), mechanical structures.
- Static, modal, dynamic, seismic analysis. Time history analysis.
- 8-node shell element with 6 degrees of freedom per node
- Non-linear analysis of frames
- Completely scriptable by Apple Script
- Graphic representation of results (deformed shapes, modal shapes, stress diagrams, isostress contours, stress directions)
- Wireframe and surface automatic mesh generation
- Pre- and post-processors for reinforced concrete structures (CADSap and MacBeam) and steel structures (EasySteel)

---

MacSap is a program for the analysis of three-dimensional structures.

MacSap has no limitations as to structure type and geometry and uses the most advanced techniques for structural analysis.

MacSap allows the designer to analyze building structures ranging from the simplest, such as continuous beams or plane frames, to the most complex three-dimensional structures in seismic areas with stiffening cores and shear walls. And all with no limits as to structure shape.

MacSap also allows the analysis of complex structures modelled with two-dimensional finite elements: from basins, circular filters, and storage tanks to body panels and mechanical parts.

The power and ease of use of MacSap enable the designer to deal with every structural problem using the model that he or she judges most appropriate, without having to use rigid procedures dictated by the program itself, which would prevent the user from exerting critical control on the design process.

Although MacSap is of general use, it is particularly suited to building structures where it can be integrated with pre- and post-processors such as CADSap, EasyWall, EasySteel and MacBeam to make up a coordinated design environment that takes full advantage of MacSap's power.

MacSap uses the Finite Element Method, the most powerful method for structural analysis.

Thanks to MacSap's advanced user interface, a knowledge of the Finite Element Method is not required for normal use of the program, and yet the full power of the method is still made available to the designer.

MacSap performs static analysis, modal analysis, dynamic analysis with both the response spectrum technique and the time history technique, and non-linear analysis of framed structures.

The seismic dynamic analysis is performed for two orthogonal directions at the same time to allow for an immediate evaluation of the three-dimensional behavior of the structure.

The non-linear analysis of framed structures (optional) allows an efficient analysis for geometrical non-linearity. This kind of analysis is indispensable for instability checks and for the design of slender structures, such as steel structures. It allows an exact evaluation of the critical load and the exact calculation of stresses in structural members. The analysis method adopted does not require a specific modelling and is easy to use.

MacSap has a large finite element library which makes it possible to handle

any structural problem: Truss, Beam, Rectangular Beam, Boundary, Rigel, Winkler Beam, Plane stress, Plane strain, Plate, Shell, Axisymmetric, Winkler plate.

MacSap is provided with a special shell finite element with 8 nodes and 6 degrees of freedom per node (optional) which allows complex structures to be analysed with extreme ease of modelling. Therefore the element resolves mathematically the complex problem of the connection between beam elements and plane elements (for example between beams and walls) and allows exceptionally accurate results to be obtained using very few elements. The element, moreover, has curvilinear sides, which makes it possible to model curvilinear structures exactly (round plates, for instance).

MacSap is the only structural analysis program that allows the user to draw the geometry of the structure directly on the screen and then to use this geometry as an access key to data and results.

In MacSap a structure is a three-dimensional object, represented in axonometric projection, that can be rotated, translated and enlarged.

Using simple graphic operations, the structure can be generated and modified while continuing to work on its three-dimensional representation.

Numerical data, such as static properties, can be associated with the geometry of the structure simply by selecting the required graphic objects with the mouse. In the same way it is possible to display in a dialog box the numerical values of the results, such as displacements or stresses, associated with any part of the structure.

Automatic stress generation is also possible. Extremely powerful and "smart" functions allow the user to generate complex frames or surfaces using very few parameters.

A wide range of functions allow the user to verify at any time, and on the structure itself, the values assigned or the analysis results. Each node or element can moreover be highlighted automatically in colors, corresponding to its characteristics, to facilitate checks or subsequent alterations. It is possible, for example, to color all the beams with a given cross-section and the load condition in green.

Any representation on the screen can at any moment be saved in CAD\$ap format to be reprocessed later, printed in typographic quality, sent to the plotter or exported to other programs using the standard "cut and paste" function.

The solid representation of the structural model, also sections, is not only an

effective means of checking the numerical model, but can be also exported to provide the layout of the floor plans.

The results can be assessed both numerically and graphically using the graphics of the deformed shapes, or the modal shapes, of the stresses, of the principal directions of the stresses, or of the isostress contours.

The scope of MacSap is virtually unlimited, as it places no restrictions on the number of nodes, elements, degrees of freedom, load conditions, or eigenvalues to be calculated.

The numbering of the degrees of freedom is automatic and optimised. This is only one example of the many functions that free the designer from tedious tasks and allow him or her to concentrate exclusively on structural matters.

MacSap can use the AppleScript programming language, which means that the program can be given commands for the description or modification of a structure, for analysis, for saving on file, or even for switching off the computer. This programmability by AppleScript allows an extremely productive and "open" use of the program.

MacSap also accepts "multi-tasking", which allows for the simultaneous use of other applications while MacSap is active, or even the simultaneous use of more active copies of MacSap itself working on different tasks. This substantially increases the program's productivity.

MacSap was the first structural analysis program to use a graphic interactive interface (1984), to use C++ (1994), and to be optimized for Power Macintosh (1994).

MacSap has been verified by Milan Polytechnic (Technical University), which has attested to the numerical accuracy of the results provided by its calculation.

The Ultimate in CPU cooling! Thermoelectric CPU Cooler keeps CPU to operate in a low temperature range, which is not only prevent the data lose and system crash due to the overheating, but also extends the lifetime of the processor and surrounding components.

#### FEATURES:

- \* Linear control circuitry that continuously controls the temperature to within a small range and as there is no on/off switching of the thermoelectric.
- \* Failure detection and alarm for DC fan and thermoelectric unit.
- \* Over-Temperature Alarm
- \* No condensation
- \* Green function for Intel P54 CPU

#### TECHNICAL SPECIFICATIONS:

Model	DT-486A	DT-586A	DT-P54A
CPU Type	486	Pentium	P54
Temp w/o cooler	180F	240F	200F
Temp w/ cooler	86F	96F	98F
Alarm Temp	145F	155F	145F
Mounting	Clip On	Clip On	Thermal Tape
Fan Noise	35dB	35dB	35dB
Input Require	5VDC@700mA	5VDC@1600mA	12VDC@100mA
Electrical Conn.	Drive Conn.	Drive Conn.	Drive Conn.
Circuit Box	No	No	Yes
Dimensions			
L x W x H (inch)	0.21x0.17x0.09	0.27x0.23x0.2	0.24x0.20x0.12
Warranty	1 Year	1 Year	1 Year
	Made In Taiwan		
PRICE	US\$ 40	US\$ 45	US\$ 55

Jackmoon USA Inc.  
 1128 Coiner Court, Industry, CA 91748, USA  
 Tel: 818-854-1670  
 Fax: 818-854-1675  
 E-Mail: Jackmoon@ix.netcom.com

## Third Quarter Software Sales \$1.7 Billion

Strength in Consumer Products, and Rebound in Core Business Productivity Products Fuel 15% Growth, While DOS Business Applications Plummet

December 13, 1994 (Washington, DC) -- The Software Publishers Association (SPA) announced today that sales of personal computer application software in the US and Canada reached \$1.7 billion in the third quarter of 1994 (3Q94), a 15.1% increase from \$1.48 billion in the third quarter of 1993 (3Q93). For the first three quarters of 1994, sales were \$4.7 billion, an 11.2% increase from the \$4.2 billion registered in the first three quarters of 1993. Unit sales were up 63% for 3Q94 and 65% for the first three quarters.

A total of \$1.06 billion of Windows applications were sold in 3Q94, an increase of 49% from last year's third quarter. Windows sales for the quarter were paced by strong growth in the entertainment, home education and word processor categories. For the first three quarters, sales of Windows applications reached \$2.94 billion, a 45% increase from the same 1993 period.

Sales of Macintosh software continue to grow at or just above overall industry growth. Sales of Macintosh applications reached \$316 million in 3Q94, a 17% increase from 3Q93. For the first three quarters of 1994, \$832 million in Macintosh software was sold, an 11.5% increase from the first three quarters of 1993.

## DOS Business Application Sales Fall

DOS applications sales continue to fall, declining 42% to \$305 million in 3Q94. DOS entertainment products accounted for better than one in three DOS application dollars in the quarter. DOS business application software sales have fallen off so much that for 3Q94, DOS entertainment products outsold spreadsheets, word processors, databases, integrated products, utilities, presentation graphics, project management, PIM and language & tools products combined.

## Consumer Product Sales Maintain Sales Growth

Among the product categories, consumer products again led the charge. After a feverish first half, with growth in excess of 120%, home education products' sales growth slowed in 3Q94, but remained the fastest growing category. For the quarter, sales were \$107 million, up 61% - four times the industry average growth and nearly two times as fast as entertainment products, the next fastest growing category. Entertainment software sales in 3Q94 were \$171 million, a 32% increase from 3Q93. Entertainment software was the third largest category of software in 3Q94 and remains the only

category where more DOS products were sold than Windows products.

### Word Processor and Spreadsheet Categories Remain Largest

For both the third quarter and the first three quarters, word processors and spreadsheets remain the largest categories of application software in the US and Canada market. Word processor sales were \$272 million in the quarter, a 20% increase from 3Q93. Spreadsheet sales were \$217 million, a 16% increase.

For the first three quarters, word processor sales were \$730 million (up 5.4%), while spreadsheet sales were \$620 million (up 5.5%). Database sales rebounded in 3Q94, reaching \$112 million, a 22% increase. For the first three quarters of 1994, database sales were \$286 million, a 13% decline from the period last year.

"1994 will be seen as a watershed year for the personal computer application software business," said David Tremblay, Research Director of the SPA. "The rapid emergence of the consumer market has changed the landscape of the software industry. Entertainment software is now the third largest category of software for the industry. And, with its rapid growth this year, home education software is now about as large as is database software. The emergence of the consumer market marks a fundamental shift in the character of the industry. Companies are having to learn how to make money selling at lower, consumer market price points and how to sell in traditional retail channels."

The Software Publishers Association is the principal trade association of the PC software industry. Its 1,150 members represent the leading publishers in the business, consumer, and education markets. The SPA has offices in Washington, DC, and Paris, France. SPA press releases are available on-line through CompuServe (GO:SPAFORUM), and from SPA's faxback service at 800 637-6823.

Software Publishers Association  
1730 M St, Northwest, Suite 700, Washington, D.C. 20036  
202-452-1600, Fax: 202-223-8756

## NEW REPORTS, WINDOWS PRINT DRIVERS AND A NEW LOOK ARE A FEW OF THE ENHANCEMENTS FOUND IN TIMBERLINE SOFTWARE'S CONSTRUCTION GOLD VERSION 2.0

November 29, Beaverton, Ore -- Timberline Software Corporation is now shipping Construction Gold version 2.0. The update features enhancements and improvements throughout the Windows-based management accounting applications. The most significant enhancements increase the system's reporting capability to make it easier to get exactly the information an accountant, project manager or company executive needs. Gold v. 2.0 also gives customers greater flexibility when it comes to communicating between the home office and job sites.

Sixteen reports have been added to Construction Gold including a report that helps monitor safety plans. This brings the total number of reports available with Gold to 109. Additionally, customers can create their own reports using the TS-Reports application.

Gold v. 2.0 further expands reporting capabilities by letting customers change report criteria right before printing a report. Customers can modify reports by answering specific questions prior to printing. For example, before running a Receivables Aging Report, on-screen prompts can ask: Do you want to include retainage detail? What date do you want to use for aging the receivables? The report will be modified based on answers to these questions. These questions, tailored by company, are installed when the report is set up. Then, anyone can use the prompts when printing a report. The benefit: Construction Gold customers can vary a basic report to get the specific information they need. In many cases, this eliminates the need to design a new report.

With Gold v. 2.0, pull-down report menus can be tailored by job function and/or individual. A project manager using Gold sees a list of reports relevant to his job, while the company accountant selects from a different list of reports relevant to his task. Neither has to wade through items irrelevant to them.

Construction Gold v. 2.0's ability to use Windows printer drivers provides customers access to a greater number of type fonts making documents easier to read and more professional looking. It also gives them the capability to use fax modems that may be available on their computers. They can now fax reports right from their system to fax machines in the field. The days of waiting for reports to be printed and then delivered are numbered.

Other significant enhancements:

\* Customers who use Gold Open Database Connectivity (ODBC) for linking Timberline data to word processing and spreadsheet programs will now find they can "write back" (import data from other ODBC-compliant applications back into selected Timberline fields).

\* A Gold Payroll enhancement imports time-sheet data electronically entered at a job site. Now, contractors can send labor hours from the field to the home office on a weekly or even daily basis as long as labor data is captured in an ASCII file compatible with Gold Payroll. This means up-to-date Labor Costs Reports can be produced anytime. The enhancement will be compatible with Construction Gold's soon to be released RemoteTime Entry application.

Current customers receiving their 2.0 update will also notice that screens throughout the applications have been redesigned with a 3D appearance.

A fully featured management accounting software, Construction Gold was introduced to the construction industry in October 1992. It now features: Job Cost, Accounts Payable, Accounts Receivable, Check Management, Executive Information System, General Ledger, Payroll, Remote Time Entry and TS-Report.

Timberline Software Corporation is an international supplier of accounting software for the construction, estimating, property management and architecture and engineering industries. Founded in 1971, the company has installed more than 24,000 systems worldwide.

Timberline Software Corp  
9600 SW Nimbus Ave  
Beaverton, OR 97005-7163

## Street Wizard Map Software on CD-ROM

December 13, 1994 -- San Diego, CA - Adept Computer Solutions, Inc. announces the release of its headliner Street Wizard mapping software on CD-ROM. Street Wizard 5.0 is a low cost mapping application that runs in the Microsoft Windows environment. If you've ever tried to find your way around an unfamiliar neighborhood using paper maps, you'll appreciate Adept Software Solution's latest version. The small San Diego based company has brought new functionality and tools to the table. According to Scott Pickett, the President of Adept, they will continue to support its floppy disk products. Floppy diskette maps are available for any county in the US.

Street Wizard can look up addresses, calculate routes, attach to databases and print maps and text directions. The CD-ROM version helps you find your way around any major city area like a native.

The CD-ROM contains maps of all the counties in the state of California plus maps of over 130 major metropolitan areas across the US. The map files must be installed on the hard drive prior to use. This not only speeds up the program, it allows the user to download maps onto a portable computer not equipped with a CD-ROM drive so the maps can be used on a trip. The maps are loaded and unloaded from the hard drive with a single mouse click. Full compatibility with floppy disk maps is retained. The CD-ROM is available for \$99.95. This means your maps cost less than a dollar each. Licenses for additional computers sell for \$29.95.

Street Wizard is used by a broad spectrum of people including insurance companies, real estate agents, appraisers, health care providers, delivery services, law enforcement agencies...even Disneyland uses the software. The San Diego County Sheriffs Department uses Street Wizard on portable computers in all their patrol cars. The Los Angeles Fire Department uses it to keep track of maintenance on fire hydrants and hazardous materials. But you don't have to be a member of a big organization to benefit from this amazing software. The low price tag means individuals can afford it to use it to find the soccer field, a store, theater or any address in the area, or print maps to help friends find a party.

For more information on these products, contact Adept Computer Solutions, 1742 Garnet Avenue, #206, San Diego, CA 92109, (619) 597-1776.

Epic releases first cd-rom games

## Jazz Jackrabbit CD & Epic Pinball CD Released

Rockville, Maryland -- December 1, 1994 -- Epic MegaGames, Inc., a leading publisher of shareware games, announces the release of Jazz Jackrabbit CD and Epic Pinball CD.

Jazz Jackrabbit CD is an enhanced version of Epic's smash platform action game for IBM PC and Compatible computers. In this game, you play a little bunny (with a very big gun) on a mission to save your beloved rabbit princess, Eva Earlong, from Devan Shell and his group of rabbit-hating tortoises.

Featuring three new episodes and over 90 levels total, this CD offers all-new graphics and sound effects, as well as all six episodes from the disk based Jazz Jackrabbit. As an added bonus, the CD version of Jazz Jackrabbit includes the much requested ability to play thru all the 3D bonus stages consecutively as an extra mini game.

Called "Absolutely stunning... highly recommended" by John Dvorak of PC Magazine, Jazz is sure to please anyone interested in 100% pure fun for their IBM PC. Jazz Jackrabbit CD is available directly from Epic MegaGames for \$49 (plus \$4 S&H).

Epic Pinball CD: The Complete Collection features all of the award-winning Epic Pinball tables on one CD-ROM, with an extra bonus table exclusive to the CD version of Epic Pinball. Epic Pinball is our best selling game, and the CD version allows you to play all 12 tables from Pinball Packs 1, 2 & 3 while taking up less than 100K on your hard disk.

Epic Pinball CD brings the true pinball arcade feel home to the PC, with all the great pinball devices including ramps, score multipliers, bumpers and multi-ball play. Each table offers a different theme and a whole new challenge to master.

Rated 5/5 by PC Power, Epic Pinball is "Perfected to the Peak of Playability." With 13 tables of great pinball action, Epic Pinball is sure to keep any PC gamer happy for a long, long time. Epic Pinball CD is available directly from Epic MegaGames for \$64 (plus \$4 S&H).

Epic Pinball CD and Jazz Jackrabbit CD can be purchased directly from Epic MegaGames. To order with Visa or Mastercard, call 1-800-972-7434 or fax (301)-299-3841. Orders may also be placed through the mail to Epic MegaGames, 3204 Tower Oaks Blvd. Rockville, MD 20852. Special pricing is available for previous owners of Jazz Jackrabbit or Epic Pinball. MD residents

add 5% sales tax.

Epic MegaGames, Inc.  
3204 Tower Oaks Blvd  
Rockville, Maryland 20852.  
Compuserve 70451,633  
Phone: 1-800-972-7434 or (301)-983-9771  
Fax: (301)-299-3841

## INTERACTIVE MEDIA CORPORATION AWARDED PATENT FOR GRAPHICAL METHOD FOR EASILY CREATING INTERACTIVITY.

Technology is Applicable to Multimedia Authoring, On-Line Services and Interactive Television.

Los Altos, CA--December 12, 1994 -- Interactive Media Corporation (IMC) today announced that the United States Patent Office has awarded the company a patent for its graphical system and method for the creation of interactivity. The patent's claims cover a system and method for controlling multimedia objects (movies, pictures, sound and text) in a computer environment, and a graphical means for defining interactive navigation and control among buttons, media objects and regions of a video display. The technology, because it uses a simple graphical methodology, allows mainstream users, graphics artists, designers and subject-matter experts to easily create interactivity, without the need for complex scripting or programming languages, timelines or flowcharts.

Roger Badertscher, co-inventor and president of IMC said, "We have invented a simple yet powerful method for creating and modifying interactive relationships. This invention addresses the growing importance of interactive technologies in a wide variety of fields. Its applicability spans today's uses in the creation of interactive multimedia and tomorrow's development of communications materials for the information superhighway. IMC's technology can expedite the development of interactive products and services by mainstream users."

IMC is currently using its patented technology in its multimedia authoring tool, Special Delivery 2.0. IMC plans to extend its current Macintosh-based product offering to support other platforms as well as broaden its utility through the use of component software technology. Future developments of IMC's invention will allow the technology to be readily integrated into a variety of applications. IMC plans on utilizing the technology in future software products and intends to license the technology and form cooperative ventures for other applications.

The patent, number 5,363,482, is available by number from the U.S. Patent & Trademark Office, Washington, D.C. 20231

Technology to be Highlighted at MacWorld San Francisco

IMC will be demonstrating the technology in Booth 3666 at MacWorld ExpoSan Francisco, January 4-7 1995. A press conference at which the technology will be described is scheduled for 5:00 P.M., January 4 in the Moscone Center Press Room at MacWorld Expo, San Francisco.

## About the Company

Interactive Media Corporation, located in Los Altos, California, was founded in September 1990 to develop and market interactive multimedia software to mainstream computer users.

Interactive Media Corporation  
P.O. Box 0089  
Los Altos, CA 94023  
415-948-0745

Lightning Fast Communications!!!

## COMM-DRV/LIB v15.0 Upgrade

Willies Computer Software Co. (WCSC) is proud to announce COMM-DRV/LIB version 15.0. It has been over a year since our last upgrade and we are sure you won't want to miss the new features and enhancements of this version.

This upgrade is 100% upwardly compatible with our previous versions. We know your time is valuable and our commitment to compatibility stands. As usual, it was difficult to get the enhancements without adversely affecting compatibility, but we got there successfully.

The COMM-DRV product was split into its logical and functional components. We did this because of the very large number and the growing number of features supported by the product that tended to overwhelm the user. COMM-DRV was split into its Windows & MS-DOS Library/DLL component(COMM-DRV/LIB), its MS-DOS TSR/Driver/Utility component(COMM-DRV/DOS), and its Windows Replacement Driver component(COMM-DRV/WIN). A new VxD product(COMM-DRV/VxD) was added to dramatically enhance serial I/O performance on slow UARTs as well. The enclosed brochures detail the features of each product.

Following are some of the additions and enhancements to COMM-DRV/LIB v15.0.

### \* Manual Completely Redone

We took all your suggestions and made the COMM-DRV/LIB manual extremely comprehensive. The description of each function now has an example usage sub-section, a section with related functions, and any caveats that may be present. Chapters were added for COMM-DRV use with QuickBasic, Visual Basic, Access, and more.

### \* On line help.

Online help is now provided. You can now search for help by function, topics, and more. For those who hate written manuals, this is a long awaited blessing.

### \* Zmodem enhanced significantly.

Zmodem now supports Crash Recovery, duplicate file renaming, and duplicate file deleting. Time-outs and retry counts are now configurable.

### \* Supports Network INT14H modem pools, any INT14H server, or

INT14H driver.

Any application written with the COMM-DRV functions can now work transparently over any INT14H redirector or any INT14H driver. This allows COMM-DRV to support any device that supplies an INT14H driver, period!!

\* Support for more intelligent multiport cards.

COMM-DRV now supports the-GTEK multiport cards, and the Boca Research multiport cards. Additionally, any multiport card with its own INT14H driver is supported.

\* New and Improved Modem Functions

Several modem functions were added. Existing functions were enhanced. Modem strings are now configurable.

\* New and Improved Input Scanning Functions

Several input stream scanning functions were added. Scanning can be done destructively or non-destructively. The scanning is now multidimensional. A scan can be performed on a list of tokens with the WaitForTabl() and WaitForPeekTable() functions.

\* Built In Support for WCSC High Speed VxD (COMM-DRV/VxD)

Support for the WCSC high speed VxD(COMM-DRV/VxD) is built into COMM-DRV.

\* More detailed Windows & MS-DOS Examples.

\* Enhanced Installation

COMM-DRV/LIB now features a Windows hosted and an MS-DOS hosted installation program. The product is now installed in a well defined directory structure.

\* Fully tested under Windows 95 (formerly Chicago).

Upgrade to COMM-DRV/LIB v15.0 today. The COMM-DRV libraries are second to none. COMM-DRV has been reviewed by the best in the field and it has always come out ahead of the competition.

**NO NONSENSE UPGRADE OFFER:** If you own any version of our COMM-DRV libraries, you can upgrade to COMM-DRV/LIB v15.0 for \$69.95. If you purchased COMM-DRV within the last 60 days you can upgrade for \$29.95. If

you do not own COMM-DRV and receive this notice, you can purchase a copy under our promotional offer for \$129.95. As a further incentive to upgrade or purchase we are offering discounts on all our products listed below. These prices are only in effect along with this offer.

COMPETITIVE UPGRADE OFFER: If you own any serial communication libraries from any of our competitors, we will give you COMM-DRV/LIB for \$99.95. Send in or fax the title page of your manual with your order.

To order call 1-800-966-4832

COMM-DRV/LIB v15.0 Upgrade .....	\$ 69.95
COMM-DRV/LIB v15.0 Upgrade (Purchased <60 days) ...	\$ 29.95
COMM-DRV/LIB v15.0 Competitive Upgrade offer .....	\$ 99.95
COMM-DRV/LIB v15.0.....	\$129.95
COMM-DRV/VxD.....	\$ 69.95
COMM-DRV/DOS .....	\$ 69.95
COMM-DRV/WIN.....	\$ 69.95
COMM-LOG.....	\$ 99.95
COMM-DRV Combo(Lib,VxD,Dos,& Win) .....	\$189.95
Software Combo(COMM-DRV Combo+COMM-LOG).....	\$249.95
4 Port Multiport card w/16450 UARTS.....	\$ 79.95
4 Port Multiport card w/16550A UARTS.....	\$ 99.95
8 Port MultiDort card w/1655QA UARTS.....	\$169.95

Willies Computer Software Co.  
2470 S. Dairy Ashford, Suite 188  
Houston, TX 77077  
Telephone: 800-966-4832, 713-498-4832  
Fax:713-568-3334  
BBS:713-568-6401  
Internet:sales@wcscnet.com  
Compuserve: 75300,3427

## NEW PROGRAM RELEASE: DRAFTCHOICE VERSION 2.15

December 12, 1994 -- DraftChoice, winner of the 1993 Shareware Industry's "Best Graphics Applications & Utilities" Award, just got better! TRIUS is pleased to announce the release of the latest version of DraftChoice, Version 2.15. Version 2.15 continues the high standards set by DraftChoice by offering even more value for the money. The following features complement the already extensive capabilities of Version 2.00:

On-screen tool icons for frequently used Draw, View and Measure Commands  
\* 3 New Attach modes - Reference, Tangent, and Closest Point \* New  
Quadrant Angle and Shifted Coordinate Systems \* Outline Font Technology -  
supports fillable text characters which are controllable as vectors \* 8 New  
Object Alignment Options quickly align groups of objects \* Automatically  
allocates XMS/EMS/VMS for optimum performance \* 6 New Leader Line  
Entities \* Support for 200 Symbols per drawing \* New Tangent and  
Calculated Arc Draw modes \* New Layer Management \* Auto-centering Pan  
Mode \* Value Format File Export, and much more....

Perhaps the most outstanding new feature of Version 2.15 is its price. The registration cost for DraftChoice is just \$49.00 (plus shipping and handling)!

Trius Inc  
231 Sutton St, Suite 2D-3  
Post Office Box 249  
North Andover, MA 01845-1639  
508-793-9377, fax 508-688-6312

-----  
Title: DraftChoice  
Version: 2.15  
Category: CAD Software, CAD Drawing/Drafting  
Registration: \$49.00 plus S&H; \$69.00 (plus S&H) for Productivity Pack  
(includes DraftChoice, XTRAN Ver. 1.2 & DCLIB1 Ver. 1.2)

### Description:

Fast, powerful object-oriented (CAT) program with optimized XMS/EMS/ Virtual Memory support. Intuitive commands and on-screen tool icons allow amazingly detailed drawings and conceptual schematics to be created with ease. Symbol library management, multiple fonts, parametric function generator, user-definable fill patterns and line styles, 256 layers, 16 colors, and more. Powerful enough to satisfy the most demanding user, yet simple enough to be used by the beginner.

Operating System: PC/MS-DOS, Ver. 3.x and later  
Computer Types: IBM PC/XT/AT, 286, 386, 486, PS/2

Minimum RAM: 450K free, Supports up to 4 MB XMS/EMS/VMS

Network: NetBios Compatible

Math Co-Proc: Recommended, but not required

Graphic Monitor: HGA/AT&T/CGA/EGA/VGA/SVGA  
(EGA or better recommended)

Storage Device: 1-720K Floppy Drive, 2-360K Floppy Drives, or  
Hard Disk (recommended)

Disk Space: 600 KB Minimum (1.5 MB recommended)

Input Device: Mouse, Digitizer (with mouse emulation), Keyboard

Output Devices: 9/24-pin Dot Matrix Printers, LaserJet, PostScript,  
HP-GL Pen Plotters

#### File Formats

Export: HPGL, PIC, PCX, WPG, BSAVE, Value, and native formats

Import: HPGL, PIC, PCX, SPCX, WPG, ASCII, Value, and native formats

#### Commands

Draw: Line, Box, Circle, Text, Arc, Polygon, Bezier, Complex,  
Spline, Freehand, Tape, Parametric, Leader Lines,  
Parallel/Perpendicular/Orthogonal Modes

Edit: Copy, Move, Erase, Scale, Rotate, Xtend, Mirror, Array  
(Linear, Circular, Volume, Path), Trim, Break, Offset,  
Text, Style, Fill, Hatch, Units, Corner, Explode, Rubber,  
Warp, Tween, Complex (Modify, Double, Join, Control),  
Align, Layer, Multi-level Undo

Measure: Dimension, Coordinate, Radius, Diameter, Angle, Arrow,  
Mark, Boundary

Inquiry: Length, Area, Object, Angle, Elements, Symbols, Layer,  
Style, Fill, Width, Memory, Redraw Speed, Video Mode,  
Co-processor Support

#### User-definable

Macros: 5 multi-line keyboard macros

Views: 8 User-definable view windows per drawing

Fonts: 2 different fonts per drawing, Fillable Outline Font  
Support

Symbols: Up to 200 symbols per drawing

Line Styles: Up to 20 user-definable Line Styles (14 predefined)

Hatch Pattern: Up to 20 user-definable Hatch Patterns (13 predefined)

Fill Pattern: Up to 60 user-definable Fill Patterns (46 predefined)

## GROUPQUEST SOFTWARE RELEASES ESSENTIAL TOOLS 2.0a

### UTILITY PROVIDES A POINT AND SHOOT VEHICLE FOR PERFORMING LOTUS NOTES SYSTEM ADMINISTRATION FUNCTIONS

LAS VEGAS, NOVEMBER 14 -- GroupQuest Software today announced the release of Essential Tools 2.0a, an administration utility for Lotus Notes designed to significantly reduce the time it takes to perform day-to-day Notes administrative functions. Lotus Notes is the worldwide market-leading platform for developing and deploying groupware applications.

Using the Notes API, several server based programs are combined to compile information contained in Notes Database Access Control Lists (ACLs) and the Notes Name and Address Book. Using this information, a Notes administrator can easily manipulate multiple groups, control multiple ACLs, and even terminate users from the Notes environment in the same transaction. Essential Tools 2.0a will greatly benefit Notes administrators by streamlining the process of properly controlling management functions, including server security, database security and user privileges.

"Given the tremendous popularity of Lotus Notes, systems administrators need relief from the repetitive day-to-day chores of user administration" said Lisa Petrucci, President of GroupQuest. "GroupQuest specifically developed Essential Tools to allow Notes administrators easy control over virtually all aspects of Notes server, user, and ACL management. Administrators can reduce many hours of work to minutes by using simple point-and-click actions to complete most of their administrative tasks" said Petrucci.

#### ET Features

From any Notes workstation, Essential Tools will save an administrator time and increase their accuracy by allowing them to:

- \* Add/Remove Groups, People, and/or Servers to/from Groups found within the Notes Name and Address Book. Multiple groups can be manipulated in a single transaction.
- \* Add/Update/Remove Access Control Levels for Notes Databases and/or Templates. Multiple Databases on multiple Servers can be manipulated in a single transaction.
- \* Queue ACL and people changes to run during off-hours.

Essential Tools automatically compiles all of the critical information system administrators need about their databases, and has ready-made audit trails and increased accountability that can be viewed for their entire worldwide

## Notes network:

- \* Servers, directory paths and file names
- \* ACL access by ACL Entry
- \* ACL access by Access Control Levels
- \* ACL access by file names
- \* ACL access by Database names
- \* Essential Tools ACL changes

## Compatibility and Pricing

Essential Tools is compatible with any Lotus Notes server release 3.0 or later running OS/2 2.0 or later. A version supporting a Notes server running Novell's Netware will ship in December, 1994. In the future, Essential Tools will run on any server platform for which Lotus has released an API. Suggested Retail Price for Essential Tools is \$1,995.00 for the first server and \$995.00 for each additional server. Volume discounts are available.

GroupQuest Software was created to address the growing need for strategic applications and utilities to meet the exacting demands of an organization utilizing Lotus Notes. GroupQuest applications are sophisticated, yet designed to be easily modified, for powerful corporate solutions. GroupQuest applications are available through Lotus Business Partners.

GroupQuest Software  
6709 La Tijera Blvd, Ste 221  
Los Angeles, CA 90045  
310-201-0747

## POWERFUL FAX SOFTWARE AVAILABLE AS SHAREWARE

Missouri City (Houston), Texas, December 19, 1994 - a widely-used software package for facsimile sending and receiving has been upgraded. The latest version of "FaxMail for Windows" is now being distributed to bulletin boards and other publicly accessible Internet sites throughout the world. ElectraSoft, which originated and distributes the program, estimates that more than 87,500 copies of their fax software are currently in use.

FaxMail for Windows is extremely fast and easy to use, with fewer mouse commands and keystrokes required for all functions than any other comparable product. It includes every convenience and utility feature offered by commercial programs which cost over \$100, including optional optical character recognition capability. Outputs are at much higher definition than those generated by dedicated fax machines, with near-laser-printer quality.

By attaching itself to the Windows environment, FaxMail becomes a part of the graphical user interface. It appends itself to all system menus, making it available in all Windows applications. It operates in foreground or background, including background operation behind DOS programs. Included in the program is a feature named "FaxBook," which allows users to create an unlimited number of quickly accessible name and phone number lists up to 1,000 entries per book. Files from most data bases can be imported directly to FaxBooks.

ElectraSoft provides product support for their programs, through phone, Internet access and their tech support bulletin board. The basic FaxMail program is available on direct order from ElectraSoft for \$29.00, which includes shipping and handling cost. An enhanced version, which includes the OCR feature and several utilities, is priced at \$59.00, including s/h. Orders can be placed by telephone to 713-261-0307, by fax to 713-499-5939,11,11,11,11, over the Internet to [Jon.Krahmer@f10000.n106.z1.fidonet.org](mailto:Jon.Krahmer@f10000.n106.z1.fidonet.org) or to [JonK@blkbox.com](mailto:JonK@blkbox.com), and by FodoNet to Jon Krahmer on 1:106/10000. Cash, check, Visa, MC, AmEx and Discover are accepted.

ElectraSoft  
3207 Carmel Valley Dr.  
Missouri City, TX 77459-3068

## CNC Software Announces Release of Mastercam Lathe Version 5 for Windows

TOLLAND, Connecticut -- CNC Software, Inc., announces the release of Mastercam Lathe Version 5 for Windows. Mastercam Lathe is integrated CAD/CAM software for contouring, grooving, profiling, threading, drilling, point-to-point machining and more. This latest release is designed to give NC programmers more machining options and a faster time to market.

Version 5 includes a new function for roughing to an outside boundary, and includes enhancements for universal UNDO and increased IGES and VDA entity translation. Mastercam Lathe Version 5 also includes a new shading feature that gives users a photorealistic view of their finished part.

Mastercam Lathe is a powerful standalone CAD/CAM package. In addition to its extensive turning operations, Mastercam Lathe Version 5 offers full CAD capabilities designed to make part definition easy.

With the release of Version 5, Mastercam Lathe is also available at considerably reduced rates as an add-on to Mastercam Mill for complete compatibility between all milling and turning operations.

CNC Software offers a complete family of Mastercam CAD/CAM systems for 2-through 5-axis milling, turning, 2-and 4-axis wire EDM, lasers, moldbase development and 3-D design and drafting.

CNC Software, Inc. is a privately owned corporation founded in 1984. With more than 22,000 installations in 56 countries, the U.S.-based company supports their products with a worldwide network of trained Mastercam resellers.

For more information about CNC Software, Inc. and its Mastercam family of products, please contact CNC Software, Inc. directly at 1-800-228-2877, or write 344 Merrow Road, Tolland, CT 06084 USA.

## The Hartley Health Education Series

December 19, 1994 -- A new series of software is now available to provide secondary school learners with accurate, frank, up-to-date information about health topics that are often sensitive. Titles, written by health professionals, include: Acquired Immunodeficiency Syndrome (AIDS), Cardiopulmonary Resuscitation (CPR) and Sexually Transmitted Diseases (STDs). Each title is \$49.95.

Designed to run on the IBM-PC or compatibles with a minimum of 640K memory and MS-DOS operating system 2.0 or later, disks may be used alone or as an entire series. Information is presented in a confidential format, and no records are kept, so learners are assured of complete privacy.

Each disk contains lesson objectives, information-packed lessons, an extensive glossary and a self test which shows the learner's score after he or she answers each question. Individualized instruction allows the learner to proceed at his or her own pace.

The disks can be used as part of a on-going health education curriculum, and can even be checked out for students to take home to review with parents.

For more information, write Hartley at 3451 Dunckel Rd., Ste. 200, Lansing, MI 48911-4216, or call 1-800-247-1380.

## EXPLORER PACK: An Exciting Collection of TEN full-length CD-ROMs

Wayzata Technology announces that the Explorer Pack is now available and shipping!

December 12, 1994 -- This unique package gives you the opportunity to explore all the facets of multimedia (music, sound, animation, photos and fonts) on 10 CD-ROM's for an incredibly low price! From strategy games and cool art to productivity and fun, the Explorer Pack has it all. The Explorer Pack also comes with quality packaging, toll-free technical support, and a 60-Day money-back guarantee. All the things you've come to expect from Wayzata Technology.

Looking for unusual sounds, cool backgrounds, film clips for your multimedia presentations and/or desktop publishing! Look no further! World of Motion gives you over 100 royalty-free professional stock film clips in categories of abstracts, animals, humans, flora, and many more. Sound Library Pro contains over 1,200 digitally recorded, royalty-free sounds. In 8-bit, 11Khz and 22Khz. The main categories are special effects, voice, animals, nature, musical instruments and household. In Matt & Joe's Cool Screen Backgrounds there are nearly 500 "COOL", Royalty-free backgrounds. The image categories run from Abstract, Masterworks, Patterns to Psychotic, Realistic, Simulation and more.

All bird lovers will be delighted with Loon Magic as they experience the romance and reality of the world of loons. This multimedia CD-ROM includes over 100 full color photographs, sounds music, QuickTime Movies and audio tracks. Within the disc is Loon Magic for Kids: an interactive, educational talking book.

For all the cartoon buffs there is SuperToons: The Legend Continues! and CD FilmFest: Comedy Classics. These are public domain movies which can be used in multimedia presentations, desktop publishing or for pure fun! The classics include W.C. Fields, Charlie Chaplin and Keystone Cops.

PhotpPro Select/The Best of PhotoPro is just what it says: the best selection of more than 100 awesome images from the 9 Photo Pro CDs! They are Patterns of Nature - People Doing Things - FotoBank - High Country Trees - Desert and Tropical Trees - Flowers! - The Water Planet - Cacti: Sentinels of the Desert - Pacific Oceansides

Express yourself in your visual pieces with Font Pro 2: Types of Distinction. This collection of unique fonts contains over 150 typefaces, both TrueType and Type One PostScript formats. All are royalty-free.

Last, but not least, don't miss out on the interactive game discs: Beyond the

Wall of Stars: Quest One of the Taran Trilogy and Tony Quinn's Virtual Galaxy.  
These simulations and interactive movies make for an incredible place to  
explore!

Wayzata Technology, Inc.

2515 East Highway 2

Grand Rapids, MN 55744

218-326-0597, 800-735-7321, fax 218-326-0598, BBS 218-326-2939

## First Flat Panel Computer with a Sunlight-Readable, Active Matrix Monochrome LCD

December 12, 1994 -- Greer, SC . . . Computer Dynamics introduces the "DisplayPac-SunVue", the first flat panel computer to feature the new active matrix monochrome LCD. With its crisp, sunlight-readable black and white display, the DisplayPac-SunVue provides the high contrast and fast response time of an active matrix color TFT LCD at a much lower cost. The powerful 486 computer behind the display offers a variety of processor speeds, all standard PC features, plus video and disk interfaces. Measuring just 12.5" x 8.5" x 3", this highly readable display, computing power and optional resistive or infrared touchscreen create an excellent package for mobile computing applications, medical imaging, portable data acquisition and monitoring, and more.

256 gray levels and sunlight readability distinguish the Display-SunVue's display from other monochrome LCDs and EL displays. Like color TFT LCDs, the DisplayPac-SunVue has a wide viewing angle. It is CCFT edgelit, measures 9.5" diagonal, and offers 640x480 resolution with white characters on black. The display is rated 0-45 degree-C with a response time of less than 80 milliseconds.

The DisplayPac-SunVue offers a variety of processor speeds: 486DX4 at 100 MHz, 486DX2 at 66 MHz, 486DX at 33 MHz and 486SX at 25 MHz. Enhancing its performance are a local bus video controller with built-in Windows accelerators, up to 32M DRAM, 1.5M semiconductor disk, hard and floppy disk interfaces, and a watch-dog timer. Extra functions can be added through PC bus and SBX expansion. You can boot and run DOS from the onboard RAM/ROM disk, allowing you to have a totally diskless system.

For simple, intuitive operator interface, the DisplayPac-SunVue is paired with a resistive or infrared touchscreen. Touchscreen implementation is easy with our advanced touchscreen software tools. Drivers are available which allow the touchscreen to function as a mouse in either DOS or Windows applications.

The DisplayPac-SunVue is \$3195 (OEM quantity) for the 25 MHz 486SX-based system with the active matrix monochrome LCD and resistive or IR touchscreen. Delivery is stock to 30 days. For more information, contact the Sales Department, Computer Dynamics, 107 S. Main Street, Greer, SC 29650. Phone 803-877-8700 or FAX 803-879-2030.

## HELP BROWSER AVAILABLE FOR DEVELOPERS

There is now a developer's version of the Help Browser 2.0 which allows help file authors to add important features to their help files for distribution. The Help Browser allows users to search for any word or phrase in a help file, and adds an interactive map to the help file which even allows users to print multiple topics. The developer's version makes it easy and affordable to add these features, meaning happier and more productive customers.

A developer's license for the Help Browser costs just \$179.00. For details, write or call Cascadilla Press and ask for information about the developer's version of the Help Browser.

CASCADILLA PRESS  
PO Box 440355  
Somerville, MA 02144

phone: (617) 776-2370  
fax: (617) 776-2271  
e-mail: [info@cascadilla.com](mailto:info@cascadilla.com)

InfoRad's new software advances capabilities of wireless messaging.

PIMformation integrates Personal Information Management with Wireless Communications.

CLEVELAND, OHIO, September 21, 1994 -- For Immediate Release

InfoRad, Inc. announces the immediate availability of PIMformation, innovative software for Microsoft Windows. PIMformation combines powerful and useful Personal Information Management with the send and receive connectivity of today's wireless messaging technology, including alphanumeric paging.

PIMformation is your Personal Electronic Assistant. Use it to track all of the information you need to conduct business: people, addresses and phone numbers, letters, faxes, phone calls, a to-do list and text pager messages. Through your pager, you can receive "pre-meeting" reminders or notification of an appointment change. For anyone in business, sales, service, or medical fields, PIMformation provides "proactive organization", resulting in increased productivity.

PIMformation is also a powerful platform for "unified desktop messaging". With a variety of PIMformation Add-ons, you can build "centralized message gateways" -- a seamless solution. Whether you need to integrate pager messaging, FAX, E-Mail or Telephony, PIMformation offers "single view" tools with the same "look and feel" for sending, receiving and viewing information. In addition to compatibility with PIMformation's standard Pager Notification and Message Log, PIMformation Add-ons include:

**PIMformation FAX** -- Send, receive and forward using a CLASS 1 or CLASS 2 FAX/modem. Create and store standard format TIFF files for commonly used cover pages and complete multi-page FAX documents.

**PIMformation E-Mail** -- Send, receive and forward electronic mail with industry standard systems including Lotus cc:Mail (VIM), MS-Mail (MAPI) and Novell (and other MHS compatible systems).

**PIMformation Telephony** -- Telephone dialing, answering with Caller-ID (where available), Voice Mail and Interactive Voice Response which includes call routing, FAX back and information dissemination .. i.e. "Press 1 to hear about our latest PIMformation Add-ons." Some features require additional hardware such as a FAX/modem with CLASS 1, CLASS 2 or AT-Voice compatibility, or an M-WAVE or Dialogics voice card.

Advanced versions also feature network integration, group scheduling, flexible data and screen customization, and custom agents to provide

automation of repetitive tasks

### Company Background

InfoRad, Inc, based in Cleveland, Ohio, is the nation's largest supplier of wireless messaging solutions. The company provides the most complete line of reliable easy to use messaging software sold under the AlphaPage name. AlphaPage is available for MS-DOS, MS-Windows, Apple Macintosh, networks, paging servers and other specialized applications for alphanumeric paging. InfoRad also offers custom solutions for end users requiring sophisticated wireless messaging systems. Since 1985, the company has focused on turning advanced technology into reliable, usable business tools.

InfoRad Inc  
635 East 185th St  
Cleveland, Ohio 44119 USA  
(216) 531-1313, FAX (216) 531-8383

## Satellite Technology Lends Realism to New Electronic Arts' 3D Atlas

Multimedia CD-ROM From EA World Features Spy and Commercial Satellite Photos of Earth

Now Available for 3DO

SAN MATEO, Calif., December 12, 1994 - Ever want to see the world from a spy's point of view? Now you can, with Electronic Arts' 3D Atlas, a new multimedia CD-ROM that's coming to American homes this fall as the first in a series of family reference products under the brand name "EA World", from Electronic Arts (NASDAQ: ERTS). Electronic Arts' 3D Atlas allows users to see satellite images of New York, London, and San Francisco, including some images gathered by Russian spy satellites. "The view is fascinating, and that's the whole idea," says Greg Bestick, EA World and EA\*Kids general manager.

"In creating this atlas, we wanted to create an atlas that is real and truly multidimensional, not just a boring flat map representation of the world. The satellite images are just one feature we've included to create an Atlas that is 'alive' with information. We've also packed in over one hour of video and audio, over 800 photos and thousands of images based on satellite data to make it the first high-quality photo realistic interactive globe."

Users also can "flyover" different parts of the world and experience full-screen, closeups of rugged terrain such as the Alps and the Himalayas. These flyovers are based on satellite data and rendered in 3D, to give users a thrillingly "real" ride.

Nine other flyovers allow users to explore different types of biomes. These shorter flyovers offer a close-up photo realistic perspective of topography. Rain forests, deserts, and Arctic tundra that might otherwise be represented by a few symbols on other atlases are breathtakingly depicted in these movie flyovers.

"We packed a lot of video, sound, and other information into the Electronic Arts' 3D Atlas, but it's all easy to use. We designed it so people can get information easily, and then think about it in different contexts and disciplines," says Bestick.

Easy-to-use Interface Encourages a Multi-Disciplinary Approach to Learning  
Electronic Arts' 3D Atlas' multimedia format encourages users to first choose one of the Physical, Political, or Environmental World globes. The worlds offer a compelling way to interface with all the information that is available in the Electronic Arts' 3D Atlas.

The Physical World shows the world in topographical shadings and dimensions, and offers short flyovers to illustrate key biomes such as the rain forest.

In the Political World, users can get quick information from country "postcards," or review over 500 different statistics on any given country.

The Environmental World offers interactive time lapse videos of the ozone layer and 11 other major environmental issues to illustrate how the Physical and Political Worlds converge.

Connections between the worlds of information are easy to make and intuitive. Picture icons, or "Picons", appear in all the worlds and offer opportunities to explore how different kinds of information interrelates.

With other features, Electronic Arts' 3D Atlas adds up to the most fully dimensional atlas available, and the only atlas that puts information within a multi-disciplinary context.

#### Unique Features Set Electronic Arts' 3D Atlas Apart

- \* Time-lapse photos depict all kinds of physical changes on earth, including Mount Pinatubo's dramatic eruption.
- \* Eleven one- to two-minute environmental stories with interactive exhibits allow users to explore major environmental changes on the earth. For example, users who click on one of the interactive exhibits, the "extinction globe", will be able to find out where, and how, extinct species (starting with the dinosaurs) lived.
- \* The 3D Atlas allows users to personalize their world atlas by pinpointing their own special places (such as their home or their birthplace) on the globe. After marking the spot with a pin, they can label or tag it with a short note about that place, and even illustrate it with personal photos.
- \* Other globes provide unusual perspectives on the earth. The night globe, for instance, is accompanied by narration that points out that many of the Earth's night lights come from fishing and logging industries.
- \* An Around the World trivia game challenges young and old learners alike to explore the vast storehouse of information in 3D Atlas.

All information, photographic and text, can be printed, so the Atlas is ideal for students and business people who need to create reports. 3D Atlas includes a statistical database based on facts from the authoritative World Resources Institute, which users can view in line, graph, flat map, or scatter

charts -- all created at the touch of a button.

Truly multi-dimensional in its presentation, information, and interface, the 3D Atlas will appeal to those who want to or must learn more about the world around them, as well as those who appreciate the latest in technology.

Electronic Arts' 3D Atlas for 3DO retails for around \$79.95. It is also available now for Mac CD, and for Windows CD in early 1995.

Electronic Arts  
1450 Fashion Island Blvd  
San Mateo, CA 94404

## NOCTROPOLIS: SOPHISTICATED ADVENTURE FOR A MATURE AUDIENCE

SAN MATEO, Calif., December 14, 1994 -- Electronic Arts (NASDAQ: ERTS) unveils a product designed to appeal to a growing segment of the CD ROM market that demands more sophisticated themes from its entertainment products. Flashpoint Productions and Electronic Arts enter this emerging market with Noctropolis, a darkly flavored and involved graphic adventure dealing with such mature issues as adult relationships, the bitter-sweetness of dreams fulfilled, and the dark side of human nature.

Twenty-six hours of video footage has been condensed to over two hours of digitized speech -- 100% spoken audio by every character -- and video footage with professional actors delivering arresting dialog. Former Playboy Playmate Hope Marie Carlton plays Darksheer's beautiful partner Stiletto, lending her many talents to this complex, adult tale.

Set in a dark, surreal alternate reality, the urban environment of Noctropolis is revealed as the incarnation of a comic book city. The player, existing in the real world, idolizes the famed comic superhero team of Darksheer and Stiletto. The player is devastated to discover that the comic publisher is discontinuing the Darksheer line, but his depression quickly vanishes when he receives a mysterious "limited edition" continuation of the series in the mail. Overcoming the impossible barrier between the fiction of Noctropolis and the player's reality, the limited edition comic grants the player the means to translate himself to the city of Noctropolis and assume the identity of the vigilante-hero, Darksheer.

After winning the support of Darksheer's counterpart, Stiletto, the player must crush the sinister advances of Darksheer's archenemies. He quickly learns that their evil plots revolve around him and he must engage them on the terms of an unknown diabolical mastermind, named Flux. Realized as Darksheer's potential nemesis, the enigmatic Flux orchestrates a series of convoluted plans to achieve his secret agenda -- an agenda that holds the death of Darksheer at its center.

With Noctropolis, players enter a visual feast featuring over 50 hand-painted, full-screen backgrounds with a convenient floating interface allowing the player to concentrate on the intricacies of the game itself -- not the game controls. The rich story line and diverse characters unfold gradually, offering player satisfaction at several levels.

Noctropolis was created by the talented team at Flashpoint Productions headed by Brent Erickson and Shaun Mitchell with over 40 titles to their credit including Martian Memorandum, Mean Streets, Countdown, and Amazon Gardens of Eden. Roland Kippenhan and Jeff Lee are producing the title for Electronic Arts.

Award-winning composer Ron Saltmarsh creates a new standard for General MIDI soundtracks with his haunting, cinematic score that meshes with the story to set the mood as the player maneuvers throughout the vast city. Saltmarsh heads Flashpoint's Symphonix division which has produced scores to accompany nationally broadcast shows from network news to Entertainment Tonight.

Noctropolis has been rated M by the Entertainment Software Rating Board. An M rating indicates that the product's content may contain mature subject matter and is appropriate for ages 17 and older.

Electronic Arts  
1450 Fashion Island Blvd  
San Mateo, CA 94404

InfoMagic is pleased to announce the 3rd update of our "CICA Windows CD-ROM set"

This 3-CD set contains the complete Windows software archive from [winftp.cica.indiana.edu](http://winftp.cica.indiana.edu), the largest Internet's largest archive of Windows software, currently over 1GB (compressed).

As with our previous releases \*All files are uncompressed\* and ready to run directly from the CD. We have also provided a true Windows(tm) interface that supports both hypertext style access to the archive and full-text search on the single line descriptions included for every package. Any package on the disc can be copied to the hard drive, installed in a new or existing program manager group, or run directly from the CD (except for video and printer drivers).

There are hundreds of Windows(tm)programs, 250+ games, sources, video and printer drivers, utilities, fonts for Postscript, ATM, TrueType, plus thousands of icons & bitmaps, programming tools for C, C++, Toolbook, Turbo Pascal, Visual Basic. Plus lots of demos for commercial programs! Overall, this 3 CD set has over 1.8 gigabytes of windows software!!! To remain in compliance with applicable copyright laws we are forced to remove a number of sound files, PC Magazine utilities and other restricted packages from the collection.

\* Shareware programs require separate payment to authors if found useful \*

For pricing and ordering information contact InfoMagic at:

FTP: [ftp.infomagic.com:/pub/cds](ftp://ftp.infomagic.com/pub/cds)  
email: [info@InfoMagic.com](mailto:info@InfoMagic.com)  
Tel: 602-526-9565 (800-800-6613 with the US and Canada)  
Fax: 602-526-9573

InfoMagic, Inc.  
PO Box 30370  
Flagstaff, AZ 86003-0370

## High C/C++ for OS/2 First to Offer DirectToSOM to Create Reusable Objects

SANTA CRUZ, CA, December 1, 1994 -- The first compiler to offer DirectToSOM C++ for OS/2 was announced today by MetaWare Incorporated. With DirectToSOM, any C/C++ source code can be compiled with High C/C++ to create SOM-compatible binaries without writing IDL (Interface Definition Language) class descriptions. SOMobjects compiled with High C/C++ for OS/2 can interoperate with SOMobjects written in any other language. High C/C++ for OS/2 is scheduled for a January 2, 1995, commercial release. Suggested list price will be \$595.

"High C/C++ generates IDL for C++ classes so other SOM-supported languages that use IDL can interface with these classes," said Dr. Thomas Pennello, MetaWare's co-founder and vice president. "Additionally, High C/C++ will allow subclassing of the OS/2 Workplace Shell just by writing C++ code. OS/2 application developers will save considerable time and effort by utilizing MetaWare's DirectToSOM functionality."

IBM's System Object Model (SOM) technology was developed to enable programmers to take advantage of fully reusable code by putting an end to tight binary coupling. This technology allows developers to upgrade binary C++ libraries without having to recompile client source code. High C/C++ makes it easy to implement and use this technology, and at the same time compiles extremely fast running executable code.

High C/C++ compilers include fully implemented C++ exception handling (including nested exceptions), so developers can build run-time error handling into applications. Other C++ enhancements include namespaces to avoid name clashes with third-party libraries; run-time type information (RTTI); and ANSI C++ casting notation to make C++ typecasts safer than Standard C notation. High C/C++ also provides OMF common areas for templates, virtual function tables, RTTI, and inline functions.

The compiler includes "thread-safe" libraries that can be used in multi-threaded applications, and all library functions are documented as to reentrancy. With High C/C++ developers can apply thread-local storage over large blocks of code, or even entire program modules, with little or no change to their source code.

Al Caplan of North Bay Systems said about his experience with a MetaWare compiler, "I have never seen a more robust product!... The quality of the MetaWare documentation is really impressive! Great examples are given for everything."

High C/C++ includes additional switches for fine-tuning function inlining; additional optimizations to produce faster executables for specific processors

such as the Pentium; improved floating-point performance; and support for long long types.

Developers can set a multitude of compiler controls to optimize and fine-tune their applications. With a single switch programmers can optimize their code for speed, code size, or compile time.

MetaWare Incorporated, founded in 1979 with headquarters in Santa Cruz, CA, is a leading supplier of multi-platform, multi-architecture compiler products for professional software developers. Refer inquiries to MetaWare Incorporated, 2161 Delaware Avenue, Santa Cruz, CA, 95060-5706. Phone: (408) 429-6382; Fax: (408) 429-9273; Email: [techsales@metaware.com](mailto:techsales@metaware.com)

## The Air Combat Series: U.S. NAVY FIGHTERS

SAN MATEO, Calif., December 14, 1994 -- The high-G excitement of modern carrier aviation comes alive in U.S. Navy Fighters, the first in Electronic Arts' new Air Combat Series of high-end PC CD-ROM flight simulations. Developed by the team that brought us Chuck Yeager's Air Combat, this ultimate dogfighting sim lets players push the envelopes of some of the hottest U.S. combat aircraft including the F-14 Tomcat, F/A-18 Hornet, and the proposed naval version of the F-22 Lightning. In addition, the player gets the unique chance to "turn and burn" in the SU-33 Flanker, the Russian Navy's powerful fourth-generation fighter-bomber.

The Air Combat Series' line of flight sims is designed to meet the demand for extraordinary graphic performance and sound effects. The first in the series, U.S. Navy Fighters, utilizes features such as digital stereo sound effects, bit-mapped and digitized animations, and -- a first -- rear view mirrors, to create an environment unrivaled by other flight sims.

For a sensation of seamless air combat maneuvering, multiple resolution modes and graphics options are used to match the processor speed of the user for maximum performance. Dramatic four-track (four left, four right) digital stereo sound effects create an atmosphere filled with sonic booms, crackling fire, ricocheting cannon shells, and thundering aircraft. Players hear radio transmissions from shouting wingmen, radar intercept officers, and AWAC's aircraft as they update the pilot on the ever-changing combat situation.

Many other special effects add to the game's realism, including fully texture-mapped aircraft, ships, and land vehicles. Bitmapped animations are used to create a variety of special effects, including animated catapult officers directing aircraft on the carrier deck; multiple explosion effects digitized from actual video; and ejection/parachute sequences. The game environment itself features texture-mapped water, sky, coastlines, roads, bridges, trees, and cities, while atmospheric hazing, time of day, and weather effects bring the world to life.

U.S. Navy Fighters is the first flight sim to display rear view mirrors like those used in real fighter aircraft. These provide the pilot with a quick "check six" for bandits and enemy missiles. "Track View" simulates a pilot's head rotation -- the player's view shifts around the cockpit to keep sight of the enemy target. The player remains in control of the airplane and is free to maneuver in order to bring the target back into his gunsights. Many players find the Track View provides a more realistic sensation of flight and is easier to use than the "virtual cockpit" of other games. Other player features include "pop up" windows of all the cockpit displays, flight envelopes, and target views.

As the first in a series, U.S. Navy Fighters sets the stage for what can be expected from future Air Combat Series' titles -- an enhanced air combat experience, attention to detail, and a knock-your-socks-off good time.

The storyline of U.S. Navy Fighters, places the player, a Navy pilot. on board the aircraft carrier Dwight D. Eisenhower. Radical nationalist forces in Russia have ousted Boris Yeltsin and are now leading a crusade to absorb ethnically Russian areas in neighboring republics. When the United States agrees to protect Ukraine--a recent ally in the region --the Eisenhower is deployed to the Black Sea. The player must use his skill and judgment to repel the Russian invasion using all of the aircraft in his carrier wing. In the course of a 50 mission campaign, he will experience a wide variety of fighter and strike missions: combat air patrols, escort missions, and-ship and anti-tanks strikes, close air support, suppression of enemy air defenses, and more.

Electronic Arts  
1450 Fashion Island Blvd  
San Mateo, CA 94404

## IBM'S OS/2 FOR THE POWERPC ENTERS BETA CYCLE

### Beta 1 released to developers this week

AUSTIN, TX., Dec. 15, 1994 ... IBM today announced that it will begin to distribute its beta for the OS/2 for the PowerPC operating system and software developer kit to 150 select software vendors and corporate developers, marking the start of its OS/2 for the PowerPC beta program.

The first beta of OS/2 for the PowerPC includes features of OS/2 Warp plus a complete application development environment. This confidential beta is designed to give developers a head start on porting their existing 32-bit Intel applications to the PowerPC and allow them to begin to develop new applications that exploit the benefits native to the RISC architecture.

"This platform's success depends on building a critical mass of exciting applications that run on it. At COMDEX, we demonstrated how easy it is to port existing 32-bit applications," said John Schwarz, vice president, development, IBM Personal Systems. "With this program, we intend to show how easy it is to build applications from the ground up that exploit the combined power of the RISC hardware and software."

Several ISVs have successfully ported their applications to OS/2 for the PowerPC as demonstrated at COMDEX/Fall'94. Developers who use the 32-bit API set can easily port their source code -- often in less than one week -- from one hardware platform to another with only a recompile.

"We have spent time doing the Mesa port and everything IBM says about OS/2 for the PowerPC being a simple recompile is true," said David Pollak, president, Athena Design. "If you develop for OS/2 Warp today, your investment will be protected when it's time to move on to the PowerPC."

"We were able to port to a whole new platform within two days," said Chris Shablak, senior vice president, future development, BocaSoft. "I am extremely excited about OS/2 for the PowerPC. With little or no effort -- we have been able to open up a brand new market for the future."

"Pinnacle Technology is proud to be involved in the early releases of OS/2 for the PowerPC," said Charles Dircks, president, Pinnacle Technology. "We believe IBM is truly living up to the OS/2 API commitment. Conversion from Intel was fast, easy and best of all, very inexpensive."

With OS/2 for the PowerPC, developers use a single source code for Intel and RISC, allowing them to efficiently maintain, update, market and support both versions of their applications.

This is especially beneficial to ISVs who want to support multiple platforms

but have been hindered by the complexity and cost.

OS/2 for the PowerPC, which is scheduled to be commercially available from IBM next year, combines the award-winning features of OS/2 with the leading-edge performance of PowerPC hardware.

## Softdesk Announces Softdesk 7: the Next Generation of Application Software for AutoCAD

### Major Release Features Advanced Integration, Networking, and Localization Tools

HENNIKER, NH, December 7, 1994 - Softdesk, Inc. announces the release of Softdesk 7 (S7), the next generation of Softdesk application software for AutoCAD. S7 represents the seventh major cycle in technology for both the Softdesk and the ASG applications and unifies both lines into a powerful new product line. S7 introduces networking, translation and localization tools, advanced integration, and the benefits of the new Softdesk Core module.

"S7 breaks new ground for our customers in the AEC industry worldwide," said Jesse Devitte, Executive Vice President of Sales and Marketing at Softdesk. "S7's new level of integration allows different design disciplines to work together as never before, taking into consideration the needs of large and small companies alike."

S7 is built on a new foundation called Softdesk Core, which provides true integration between Softdesk's Civil/Survey, Building Design & Engineering, and Productivity product families. Core consolidates all of the commonly needed features for managing Softdesk applications into a single, easy-to-use interface that is consistent throughout all S7 products. With Core, all Softdesk applications look and feel alike to make users more comfortable and help reduce the learning curve when additional applications are added to a Softdesk system.

Networking is a key advantage to S7, requested especially by customers using Softdesk applications for multi-user, multi-discipline design. Now Softdesk applications can be easily and efficiently accessed by many designers and engineers over a network so that designers can work on different aspects of a project simultaneously and speed the project workflow. S7's network support also helps companies manage software licenses and the number of users working with Softdesk products.

S7 features translation and localization tools that are critical to Softdesk products becoming a global standard. The S7 generation of Softdesk products will be available in more languages, faster than possible before. This means, for example, that an office in New York can use the same design tools as a firm in Sao Paulo, Brazil, while designers work comfortably with Softdesk products appearing in their native languages.

S7 will begin shipping in the fourth quarter of 1994. Upgrade pricing from Softdesk's Release 12 will be \$150 per module in the U. S. For other pricing, contact Softdesk at 603-428-3199.

## Softdesk Background Information

Softdesk, Inc. is the world's leading supplier of Architecture, Engineering, and Construction (AEC) application software for AutoCAD, offering integrated solutions or automating the entire building, site, infrastructure, and utilities project lifecycle. Softdesk products are sold by a worldwide network of more than 600 resellers and distributors who offer comprehensive implementation, training, and support services. Covering the range of AEC disciplines, Softdesk software applications are grouped into product families for Civil Engineering & Survey, Architecture & Building Services, the Productivity Series, Facilities Management, Mapping/GIS, AM/FM & Utilities, Process & Power Plant Design, and Imaging. Softdesk has an installed base of over 128,000 modules in over 18,000 customers sites.

Softdesk Imaging Group  
385 Jordan Rd.  
Troy, NY 12180  
PH 518-283-8783, FX 518-283-8790

## ROAD & TRACK PRESENTS: THE NEED FOR SPEED

SAN MATEO, Calif., December 12, 1994 -- Road & Track, the premier enthusiast automotive magazine, and Electronic Arts (NASDAQ: ERTS) join forces to push the envelope of racing realism with their latest entry into the 32 bit CD-ROM market -- Road & Track Presents: The Need For Speed. This pulse-quickening racing simulator is designed for the 3DO Interactive Multiplayer system and is sure to grab the technological pole position in this exploding worldwide market.

The result of this powerhouse collaboration is a stunning visual odyssey into the world of speed and high-performance driving. Go flat-out in one of eight purebred exotic sports cars: Lamborghini Diablo VT, Ferrari 512TR, Dodge viper RT/10, Porsche 911, Chevrolet Corvette ZR-1, Acura NSX, Mazda RX-7, Toyota Supra Turbo. Race any of these supercars against the clock, or duel with the computer on three markedly different and challenging routes, from urban freeways to Alpine roads to twisty coastal two-lanes.

Road & Track, renown in automotive circles for its expertise and in-depth knowledge of high-performance automobiles, delivers the realism with performance statistics straight from its own road tests. This insight and attention to detail translates to pure power and performance, producing the most authentic racing game to date. Road & Track also contributed to the artistic look and feel of the product by lending its world-class photography to the design.

For Road & Track Presents: The Need For Speed, Electronic Arts developed a unique, new 3-D software engine with an extremely accurate physics model and photo-realistic graphics. One feature of the 3-D engine allows the player to switch on-the-fly among three real-time racing views: In-car, Tail-Cam, and Heli-Cam. The graphics are based on photographs of actual locations and blended together for maximum impact. And the physics model, fine-tuned with input from Road & Track writers, accurately simulates each car's handling, acceleration, body roll, lateral g capability and more, adding mightily to the sensation of speed. You can feel the difference. For example, the Corvette will tolerate braking in a high-speed turn much better than the Porsche 911.

So, what does a Viper sound like at redline in fourth gear? Real-time, encoded Dolby Surround Sound Digital audio samples taken on a test track are used in the actual gameplay. The CD-quality audio effects, with skids, crashes, speed shifting and the distinctive roar of each car's engine, complete the experience. And for the ultimate in visual thrill, Electronic Arts put each of the eight supercars through its paces on a two-week video shoot, using both onboard and helicopter-mounted cameras. Dramatic footage of the cars being pushed to their limits is used throughout the game.

Gameplay features like Instant Replay and Highlight Reel let the player view his best run, or most monumental crash. Six different camera views ensure that none of the action will be missed.

Road & Track Presents: The Need For Speed will be released by Electronic Arts this December and be priced at \$59.95.

Electronic Arts  
1450 Fashion Island Blvd  
San Mateo, CA 94404

## SYNDICATE -- BATTLE FOR ULTIMATE CONTROL OF THE ENTIRE GLOBE

### AWARD-WINNING COMPUTER GAME NOW AVAILABLE FOR THE SEGA GENESIS

SAN MATEO, Calif., December 14, 1994 -- Electronic Arts (NASDAQ: ERTS) and Bullfrog announce the release of Syndicate for the Sega Genesis. As the original smash hit computer program of 1993, Syndicate received several industry awards including Compute Magazine's Choice Award, Electronic Games' Best Strategy Computer Game of the Year, and Special Achievement in Innovative Design by Game Players PC Entertainment magazine.

The Sega version of Syndicate retains the same non-stop action of the home computer version and the strategic elements vital to ensuring that the player's syndicate rules the world. The program has been adapted to ensure that Sega users enjoy the same outstanding gaming sensation as do home computer users.

To this end, the Sega version features no fewer than 50 newly designed missions and 50 new cities. Computer users can play the Sega version of their favorite game knowing that it offers a fresh challenge.

The setting for Syndicate is a grim and dangerous future world sometime after the Corporation Wars. The world's multinational corporations grew to such an extent that their power began to rival that of small countries. Before long the corporations owned the small countries and corporate influence was felt at the highest level of world government. Then they developed the CHIP...

The CHIP was a technological revolution that was better than any drug. Inserted into the head, a CHIP could alter a person's perception of the outside world, and give hope to the masses by numbing their senses to the misery and squalor surrounding them. For example, a person living on the 49th floor of the grimeiest city apartment block could buy a 'Mansion CHIP' which, once inserted would make him immediately believe he was living in the grandest, most expensive, mansion! Why change your environment, when you can change your mind' ran the company slogan. The only problem was that the CHIP had a 'back door', and like any new and potent drug -- control of the CHIP meant control of the people. Before long the corporations were at war with each other, battling to monopolize CHIP manufacture and toppling nations and governments in the process.

The greed of the corporations began attracting dangerous criminal elements and soon the crime syndicates had infiltrated the corporate boardrooms and had become the controlling force all over the globe. Using custom built cyborg-agents, corporate bureaucrats hunt down rivals and battle each other for ultimate control of the entire globe.

In one such syndicate, the player takes the role of a young executive who is looking to make a name for himself. From his control platform in an airship high above the city, he observes as his agents, controlled by CHIP technology, spread the shadow of syndicate terror in a bid to conquer territory after territory, ousting the rival syndicates and striving for world domination.

The player is faced with over fifty elaborate missions -- each set in a living city teeming with intelligent men and women, cars and commuter trains, rival agents, and law enforcement forces. Within this environment the player has complete freedom to perpetrate the nefarious deeds of the Syndicate. Succeed in conquering a territory and raise taxes to fund research and development into more advanced weaponry and cybernetic body parts. Raise taxes too far and the territory will become ripe for insurrection and defection to a rival Syndicate.

Syndicate's unique combination of action and strategy stunned the home computer world, now Sega owners will have the chance to have one of software's most original experiences.

Electronic Arts  
1450 Fashion Island Blvd  
San Mateo, CA 94404

Latest Releases from IDG Books...  
(from their November news bulletin)

---

Programmers Press Titles

---

Unauthorized Windows 95:  
A Developer's Guide to Exploring the Foundations of Windows "Chicago"  
by Andrew Schulman  
(ISBN: 169-8)

The most eagerly awaited of all "Chicago" books, Unauthorized Windows is the first critical and realistic look at what "Chicago" will mean for Windows programming. Is Windows 95 revolutionary or evolutionary? What impact will it have on other operating system vendors, software and system vendors, users, and developers? What will Microsoft's legal problems mean to the industry?

Price: \$29.99 USA/\$39.99 Canada  
Level: Advanced

---

Unauthorized Windows 95: A Developer's Resource Kit  
by Andrew Schulman  
(ISBN: 305-4)

Unauthorized Windows is also available with a disk and CD-ROM tailored for programmers and developers.

The disk and CD-ROM includes:

- \* Special spy utilities that allow programmers to look inside Windows
- \* Developer's Resource Kit includes everything you need to program with power. You get:
  - Spy Utilities, which allows you to look inside Windows 95 with WIN32PSP, MAPFILE, VXDLIST, V86TEST and dozens more.
  - Smash Hits for Programmers, the first try before you buy CD-ROM created exclusively for programmers. Test drive more than 70 popular products from leading companies like Powersoft, Micrografx, and Computer Associates.

Price: \$39.99 USA/\$54.99 Canada  
Level: Advanced

---

Heavy Metal OLE 2.0 Programming  
by Steve Holzner  
(ISBN: 301-1)

OLE is a cornerstone Windows programming topic, regardless of the tools programmers choose to develop applications. With Heavy Metal OLE 2.0 Programming, programmers can learn how to make applications that are easy-to-use, document-centric, and OLE-aware.

Highlights:

- \* Review Visual C++, and understand how OLE is encapsulated in the Microsoft Foundation Class Library (MFC) that comes with Visual C++
- \* Learn about power OLE automation that will let users assemble custom applications from an assortment of components
- \* Find techniques on power container programming and power server programming

Price: \$39.95/\$54.95 Canada

Level: Intermediate to Advanced Programmers

---

dBASE 5 For Windows Programming For Dummies  
by Ted Coombs & Jason Coombs  
(ISBN: 215-5)

This book is the easiest way to start programming with dBASE for Windows. Become an expert in visual programming, object orientation, and event programming.

dBASE 5 For Windows Programming For Dummies teaches readers how to:

- \* Build a user interface and control the look and feel of an application
- \* Create and perfect a table, the storage unit for data
- \* Write Windows programs with events and procedures

Price: \$19.99 USA/\$26.99 Canada

Level: Beginning to Intermediate

---

Excel 5 For Windows Power Programming Techniques  
by John Walkenbach  
(ISBN: 303-8)

Excel 5 is the first application on the market to feature Visual Basic for Applications, Microsoft's common macro language that's making its way into most Microsoft Office applications. Mastering VBA in Excel allows programmers to advance into writing macros for the multitude of other Microsoft products. Excel 5 For Windows Power Programming Techniques teaches programmers how to create complete programs that utilize many different programming features across various applications. Includes a bonus

disk that contains all the codes and examples in the book.

Price: \$39.95 USA/\$52.95 Canada  
Level: Intermediate to Advanced Users

---

...For Dummies Press Titles

---

VCRs & Camcorders For Dummies  
by Andy Rathbone & Gordon McComb  
(ISBN: 229-5)

For millions of people, a VCR is as easy to use as a toaster. The hardest part is remembering to return the video to the rental place. And camcorders are becoming just as common. But press anything other than Play and it all self-destructs. Why does that light constantly blink? How do you watch one show while recording another? VCRs & Camcorders For Dummies has the answers !

Highlights:

- \* Record one show while watching the other and set that blinking VCR clock
- \* Edit home movies easily like a Hollywood hot shot
- \* Connect your camcorder, VCR, and TV

Price: \$14.99 USA/\$20.99 Canada  
Level: Beginning to Intermediate

---

Modems For Dummies, 2nd Edition  
by Tina Rathbone  
(ISBN: 223-6)

Here's a wealth of information for beginners and vets alike, completely revised and expanded to cover the latest modem hardware and software - from what plugs into where to clever tips on cruising on-line services and the Internet.

Price: \$19.99/\$26.99 Canada  
Level: Beginning to Intermediate

---

Microsoft Works 3 For Windows For Dummies Quick Reference  
by Michael Partington  
(ISBN: 959-1)

Get up and running with a comprehensive guide to the features of MS Works, including tips and shortcuts. Covers version 3 for Windows plus features that are identical in the DOS and Mac versions.

Price: \$9.99 USA/\$12.99 Canada  
Level: Beginning to Advanced

---

Macintosh System 7.5 For Dummies Quick Reference  
by Stuart J. Stuple  
(ISBN: 956-7)

This handy reference gets users of all levels up and running immediately with Apple's new system 7.5 and is filled with nuts-and-bolts tips on installation, net working, power-user shortcuts, troubleshooting, and much more.

Price: \$9.99 USA/\$12.99 Canada  
Level: Beginning to Advanced

---

Microsoft Works 3 For Windows For Dummies  
by David C. Kay  
(ISBN: 214-7)

Learn the ins and outs of Works for Windows with this intro to the basics of word processing, databases, and spreadsheets. Covers version 3 for Windows, plus features that are identical in DOS and Mac versions.

Price: \$19.99 USA/\$26.99 Canada  
Level: Beginning to Intermediate

---

ProComm PLUS 2 For Windows For Dummies  
by Wallace Wang  
(ISBN: 219-8)

This book clearly explains the world's best communications software package, and covers the features users need to learn right away-covers version 2.

Price: \$19.99 USA/\$26.99 Canada  
Level: Beginning to Intermediate

---

Paradox 5 For Windows For Dummies  
Dummies Quick Reference  
by Scott Palmer  
(ISBN: 233-3)

Quick answers are at your fingertips with this pocket-sized quick reference of Paradox information. Covers version 5.

Price: \$9.99 USA/\$12.99 Canada  
Level: Beginning to Advanced

---

#### Mac Book Titles

---

Macworld Ultimate Mac CD-ROM  
by Jim Heid  
(ISBN: 477-8)

This outstanding book/CD bundle offers Macintosh users an exciting interactive tour of the Mac world with its library of valuable shareware (over 50 floppies' worth, compiled by the legendary BMUG) and its interactive multimedia production (over 40 minutes of full-screen digital video). The CD-ROM also includes the latest full release (version 2.0) of Apple's QuickTime software.

Highlights include:

\* "Handbook Interactive," an interactive multimedia companion to the text that uses 3D animation, over 40 minutes of original digital video, QuickTime movies, and digital audio to explain Macintosh concepts

\* QuickTime 2.0 and the QuickTime Musical Instruments extension. The full version of Apple's brand-new QuickTime release, including musical instruments from Roland Corporation

Price: \$19.99 USA/\$26.99 Canada  
Level: Beginning to Advanced

---

Macworld Ultimate Mac CD-ROM (boxed set)  
by Jim Heid  
(ISBN: 479-4)

Boxed version of the Macworld Ultimate Mac CD-ROM.

Price: \$19.99 USA/\$26.99 Canada  
Level: Beginning to Advanced

---

#### PC Press Titles

---

The Internet  
by Paul Hoffman  
(ISBN: 461-1)

The Internet is a four color companion to the PBS special, "The Internet Show," which will be broadcast in late November and early December, 1994.

The Internet will cover not only the territory and subject matter addressed in the show, but also provides the kind of reference and how-to material that may be inappropriate for the video/TV forum. Historical and education insight, plus practical tips on use make this reference the total resource for Internet addicts and new comers alike. Readers will learn the buzz words and how to distinguish between the Internet reality and hype.

Price: \$24.99 USA/\$34.99 Canada  
Level: Beginning to Intermediate

---

The Internet, Deluxe Edition  
by Paul Hoffman  
(ISBN: 247-3)

The Internet Deluxe Edition includes 3 disks that feature NetManage Software. This software provides instant access through a completely automated Internet sign-up program. This allows the user to select an Internet provider via an automated guide that dials a host server via a model software called Instant Internet. The diskettes also include the following NetManage applications: Electronic Mail, Chameleon Mosaic+ (World Wide Web), Internet News Reader, Gopher Client (information browser), FTP Client (File Transfer Program), FTP Server, Archie (Internet search and retrieval), Telnet (terminal emulation), Ping, Finger, Whols (communications tool), a WinSock compliant TCP/IP stack with dialer supporting dial-up SLIP, CSLIP, PPP and high speed ISDN Internet connections.

Price: \$39.99 USA  
Level: Beginning to Intermediate

---

IDG Books Worldwide  
919 E. Hillsdale Blvd, Suite 400  
Foster City, CA 94404  
415-655-3000, fax 415-655-3299

PUT YOUR JOHN HANCOCK IN YOUR COMPUTER!

Rhode Island Soft Systems Introduces TrueType Signature Fonts

WOONSOCKET, RI, December 19, 1994 -- Computer-based faxing is an explosive growth area in today's personal computer marketplace, but there's just one problem: there is no way to "sign" these electronic documents. Until now.

Rhode Island Soft Systems (RISS) announces a new service for both Microsoft Windows and Macintosh System 7 users: TrueType Signature Fonts. RISS can create a scalable TrueType font of a customer's individual signature. The signature is used like any other font and can easily be incorporated into computerized faxing, mail merges and form letters, offering considerable time savings.

RISS provides the signature font services for only \$75 per signature; RISS can allow for dividing the font to use as a first name signature only. For an additional \$20, a customer can also have his or her initials added to the same font.

RISS is a developer of consumer and business software programs specializing in Windows and Macintosh products, including multimedia titles, screen savers, utilities, games, and technologies that are licensed to software publishers such as its Image Carousel still image screen saver engine. For more information, contact Rhode Island Soft Systems at (800) 959-RISS or (401) 767-3106, or write to RISS at P.O. Box 748, Woonsocket, RI 02895-0784.

## Rhode Island Soft Systems Releases Emeri Version 1.3 Windows Cardfile Program for DOS

WOONSOCKET, RI, December 19, 1994 -- Rhode Island Soft Systems Inc. (RISS) announces the availability of Emeri Version 1.3, a DOS program for viewing Windows' cardfiles from DOS. This program is a handy, convenient DOS program that no "part-time Windows user" should be without. Emeri provides the complimentary features needed to make it a truly useful product:

As a DOS program, it doesn't require Windows. Great for accessing cardfiles on a laptop that doesn't have Windows--copy cardfiles from desktop to laptop using Emeri

Auto dialer features better than Windows' own--Emeri dials any number on the card!

- Case insensitive searches
- Partially qualified searches
- Remembers last search for fast re-searching
- Quick Reference help screen
- Fast "pick lists" for moving among multiple cardfiles
- Quick and easy installation and configuration utilities
- User can pre-configure Emeri so that it "remembers" settings every time

The Windows Cardfile program offers a great means of organizing phone numbers, addresses and other types of information in an index card format, but is almost useless to "part-time Windows users"--the majority of users who bounce in and out of Windows. Whenever in DOS, simply use Emeri to look up cards instead of getting frustrated while waiting for Windows to boot, solely to look up a card.

Emeri is now available for \$16.95 from Rhode Island Soft Systems. For more information, contact Rhode Island Soft Systems at (800) 959-RISS or (401) 767-3106, or write to RISS at P.O. Box 748, Woonsocket, RI 02895-0784.

December 19, 1994

To TeleGrafix Customers:

All of us at TeleGrafix Communications Inc. wish you Happy Holidays. We hope 1994 has been great for you, and that 1995 will be even better.

For TeleGrafix, 1994 was a challenging year of transition. We enhanced our management team, customer support and financial controls to strengthen our growth as a cutting-edge interactive media company.

We expect 1995 to be an exciting year. We'll start out in new and expanded California offices (our mailing address and telephones will remain the same). In the spring, our East Coast office will open on CyberStreet, the exciting new Internet business development zone in downtown Winchester, Virginia. We're also planning a new R&D office in Indianapolis, under the direction of VP/Chief Technology Officer Mark Hayton.

TeleGrafix will make news early in the new year. The New York Times Company is launching an electronic newspaper in Gainesville, Florida based on our RIPscrip online multimedia technology. Our BBS sysop advertising network program is attracting great interest from the media and national advertisers. And soon you'll hear about Project Apache, something we expect will change the course of Internet development.

**\*\*Orders Now Accepted for RIPterm 2.0 Professional\*\***

After many months of research and development on our advanced RIPscrip 2.0 technologies, we are now accepting pre-paid advance orders for our RIPterm 2.0 Professional information superhighway access software that will begin shipping on January 16, 1995. The introductory price is \$10 per copy, plus applicable sales tax and shipping charges. After April 1, 1995 at 5:00 PM Pacific Time, the software will be available to the public for a suggested retail price of \$29.95 per copy.

An order form follows this letter for your convenience, with information detailing the special bargains available for those buying our Platinum, Gold and Silver Sysop Packs. Due to heavy demand, orders will be filled strictly on a first-come, first served basis. Orders may be placed with Visa, MasterCard or American Express by phoning TeleGrafix at (714) 379-2131. Orders may be faxed to (714) 379-2132, or sent via Vector Sector BBS at (714) 379-2133. Orders may be sent via the Internet to [rip.support@telegrafix.com](mailto:rip.support@telegrafix.com).

A freeware "test drive" version of the software will be available electronically via our Vector Sector BBS beginning February 1, 1995. This demonstration version includes only limited features and functionality of RIPterm 2.0

Professional.

**\*\*\*Sysops Can Profit By Reselling RIPterm 2.0 Professional\*\*\***

For a limited time, Sysops may obtain attractive quantity discounts to resell RIPterm 2.0 Professional to the general public. All Sysop Distributor Contracts signed with TeleGrafix prior to 5:00 PM Pacific Time April 1, 1995 will guarantee the following prices for orders shipped through the following year, until February 1, 1996:

Quantity	Discount	Unit Price
01 - 10 units	0%	\$10.00
11 - 25 units	5%	\$ 9.50
26 - 50 units	10%	\$ 9.00
51 - 100 units	12.5%	\$ 8.75
101 - 250 units	15%	\$ 8.50
251 - 500 units	20%	\$ 8.00
501 + units	25%	\$ 7.50

Shipping charges and sales taxes are extra. Orders of 100 units or less must be prepaid. Sysops may obtain zero-interest installment payment terms and flexible delivery for orders over 100 copies.

Sysops may achieve greater economies by obtaining inexpensive site licenses for specially customized versions of RIPterm 2.0 Professional. While site licensing rates vary depending on the degree of customization involved and number of users, systems with up to 5,000 users can qualify for rates as low as \$1.00 per user.

**\*\*\*Software to Include Sysop Advertising\*\*\***

Sysops can inexpensively promote their bulletin board systems by taking advantage of a unique "electronic yellow pages" advertising feature available with RIPterm 2.0 Professional directory listings. BBS telephone numbers will be listed in the software's dialing directory for an advertising fee of only \$100 each per 25,000 units of software shipped, less than one cent per unit. BBS systems that are members of the TeleGrafix BBS Advertising Network will be listed free of charge. Fifteen premium listing positions, valued at \$200 each per 25,000 units of software shipped, are available on a first-come, first-served basis for those who purchase our Platinum Sysop Pack.

Sysops, modem manufacturers, bulletin board system developers and others may insert printed product literature or advertising with shipments of RIPterm 2.0 Professional. Inserts are priced at \$0.10 each, up to 100,000 units, and \$0.09 thereafter. Inserts may range from post-card size up to a

double-sided 8.5" x 11" letter-sized sheet of paper. The minimum insertion order is 10,000 units for \$1,000.

THE DEADLINE FOR ADVERTISING PLACEMENT IN THE INAUGURAL RELEASE OF RIPterm 2.0 PROFESSIONAL IS 5:00 PM PACIFIC TIME ON JANUARY 6, 1994.

\*\*\*RIPterm 2.0 Professional Is Revolutionary New Software\*\*\*

Our programmers have been pushing the outer limits of cyberspace in their efforts to develop the most advanced online technologies available. We believe that RIPscrip 2.0 online multimedia technology is a miracle of telecommunications engineering - a milestone breakthrough that represents a sea change in the online communications industry.

Following is a summary of the technological capabilities of our software:

\*\*\*RIPTERM 2.0 PROFESSIONAL FOR DOS FEATURES\*\*\*

- \* Viewing of JPEG and GIF files while they rapidly download
- \* SuperVGA support; 16 color and 256 color; 640x350, 640x480, 800x600, and 1024x768
- \* Auto-sensing support for 19 separate digitized audio boards
- \* Enhanced dialing directory for 1,000 entries, multiple phone numbers per entry
- \* Rock solid VT-102 support (developed in cooperation with Digital Equipment Corporation)
- \* Enhanced keystroke macro system, supporting extended 101-key keyboards
- \* Terminal macros, global macros and system-specific macros now supported
- \* A completely re-designed scrollback system allowing multi-megabyte scrollbacks
- \* A new one-on-one chat mode
- \* An extended external application system that now supports external protocols
- \* Completely re-designed CUA-compliant Graphical User Interface, easy for MS-Windows users
- \* CompuServe Quick B+ protocol
- \* Solid Zmodem file transfer support that now supports sliding windows
- \* 32 bit, protected mode application; no more memory binds
- \* A Graphical Print Screen feature that prints to Epson, HP LaserJet and Postscript printers
- \* A Printer Log that supports output to Postscript printer devices

\*\*\*RIPSCRIP 2.0 ONLINE MULTIMEDIA TECHNOLOGY FEATURES\*\*\*

- \* Integrated JPEG and GIF image file formats for compressed photos  
JPEG and GIF images are displayed "on the fly" while downloading  
- New device independent bitmap (BMP) support for icons and simple bitmaps
- \* Digitized audio playback (real-time while RIPscrip graphics are being displayed)
- \* Binary-to-Text encoding for completely self-contained RIPscrip files. A .RIP file can now contain encoded JPEG, GIF, WAV, BMP or any other type of file in addition to
- \* RIPscrip commands for fully streaming data transmission
- \* Temporary file flag: the terminal can clean up after a host has disconnected so no space is wasted on the user's drive
- \* New Poly-Bezier drawing commands for extremely flexible curved/filled objects
- \* Radically enhanced text variable language
- \* Full resolution independence
- \* Full color palette independence
- \* Support for 24-bit color
- \* Environment context swapping for easy switching between different window-like objects
- \* The ability to create an extended True-Type style font system for full font extensibility and the ability to create borderless, filled graphical objects with two-tone filled patterns and line styles
- \* Enhanced drawing mode support (XOR, AND, NOT) on all graphics primitives (line, circle, arc, bezier, etc.) for more special effects
- \* Offscreen drawing ports and high-speed bit-blitting of graphics data. This supports panning and zooming of bitmaps for new effects.
- \* Multiple color palettes, clipboards/drawing ports, text windows, graphics style, button styles, environment configurations and data backup areas.

Later in 1995, we will release exciting new RIPaint 2.0 and RIPterm 2.0 programs that are compatible with Microsoft Windows and Apple Macintosh platforms.

We encourage you to order RIPterm 2.0 Professional now. Again, orders will be filled strictly on a first-come, first served basis. As initial supplies of the software will be limited, order now to avoid delays. Several attractive bundling packages are outlined on the attached order form. Please fax or BBS your order to us to speed processing.

We appreciate your interest and continued support. TeleGrafix Communications is here to serve you. If you have any questions or comments, please do not hesitate to call me on my direct phone, (714) 379-

2140. We look forward to doing business with you in 1995.

Best regards and happy holidays,

Pat Clawson,  
President & Chief Executive Officer

TeleGrafix Communications Inc.  
16458 Bolsa Chica #15  
Huntington Beach, CA 92649

714/379-2131 Voice  
714/379-2132 FAX  
714/379-2133 BBS  
Internet: [rip.support@telegrafix.com](mailto:rip.support@telegrafix.com)

## Apple and IBM Multimedia Venture, Kaleida Labs, Ships First Products

CUPERTINO, California -- December 19, 1994 -- Apple Computer, Inc. today announced support for both the Kaleida Media Player Version 1.0 and the ScriptX Language and Class Library Version 1.0 (ScriptX), shipping today from Kaleida Labs. Kaleida Labs was founded as part of strategic partnership between Apple Computer and IBM Corporation in June of 1992 as an independent, privately-held company. Its goal was to create a new software platform designed for interactive multimedia developers that would be independent of underlying operating systems and hardware.

"While we've witnessed numerous multimedia alliances springing up recently, the Apple/IBM alliance that launched Kaleida is notable because it is delivering the products it was chartered to create," said David Nagel, Apple senior vice president and general manager of the company's AppleSoft division. "Kaleida has produced a much-needed, platform-independent standard that removes technical barriers to multimedia innovation. These first products from Kaleida are just the beginning. We support ScriptX and not only do we see the Kaleida Media Player becoming a popular feature on future Apple systems, we also intend to support the Kaleida software platform with ScriptX tools."

The Kaleida Media Player (KMP) is the heart of the system that was envisioned in 1992. It represents a complete multimedia software platform for both developers and end users. With the KMP, developers can write one version of an application instead of many versions targeted at specific operating systems. The second component is the ScriptX Language and Class Library (ScriptX), a complete object-oriented programming solution that developers will use to create ScriptX applications for the KMP. The third component of the Kaleida software platform will consist of forthcoming application development and authoring tools that will provide access to ScriptX for non-programmers.

ScriptX and the Kaleida Media Player will allow Apple developers to create applications on the Apple Macintosh and have them run on any platform, saving time and money in the multimedia development process. Customers can then benefit by having access to richer interactive multimedia content.

Apple Computer, Inc., a recognized pioneer and innovator in the information industry, creates powerful solutions based on easy to use personal computers, servers, peripherals, software, online services, and personal digital assistants. Headquartered in Cupertino, California, Apple (NASDAQ:AAPL) develops, manufactures, licenses and markets products, technologies and services for the business, education, consumer, scientific & engineering and government markets in over 140 countries.

Apple Computer Inc  
20525 Mariana Ave  
Cupertino, CA 95014  
408-996-1010

## INTEL ADOPTS UPON-REQUEST REPLACEMENT POLICY ON PENTIUM PROCESSORS WITH FLOATING POINT FLAW; WILL TAKE Q4 CHARGE AGAINST EARNINGS

SANTA CLARA, Calif., December 20, 1994 -- Intel today said it will exchange the processor for any owner of a Pentium processor-based system who is concerned about the subtle flaw in the floating point unit of the processor. The company has been criticized in recent weeks for replacing processors on the basis of need rather than on request. Intel will take a reserve against fourth quarter earnings to cover costs associated with the replacement program.

The flaw can produce reduced precision in floating point divide operations once every nine billion random number pairs. Intel said that while almost no one will ever encounter the flaw, the company will nevertheless replace the processor upon request with an updated version that does not have the flaw. This offer will be in effect for the lifetime of a user's PC, which means that users can conclude they do not currently want a replacement, but still have the option of replacing the chip in the future if they wish. Intel is making a rapid manufacturing transition to the updated version, and expects to be able to ship sufficient replacement parts to meet demand during the next few months.

"The past few weeks have been deeply troubling. What we view as an extremely minor technical problem has taken on a life of its own," said Dr. Andrew S. Grove, president and chief executive officer. "Our OEM customers and the retail channel have been very supportive during this difficult period, and we are very grateful," Dr. Grove said. "To support them and their customers, we are today announcing a no-questions-asked return policy on the current version of the Pentium processor.

"Our previous policy was to talk with users to determine whether their needs required replacement of the processor. To some people, this policy seemed arrogant and uncaring. We apologize. We were motivated by a belief that replacement is simply unnecessary for most people. We still feel that way, but we are changing our policy because we want there to be no doubt that we stand behind this product."

Intel will send a replacement processor to PC users who choose to do the replacement themselves, and will offer telephone technical assistance. Call 1-800-628-8686 for details. Intel also said it planned to contract with service providers to do replacements at no charge for PC owners who prefer to bring their PC's to a service location. Details will be provided in the next few weeks. Finally, Intel said it would work with its OEM customers to provide replacement for PC users who prefer to work with the manufacturer of their system.

The company said it would take an unspecified but material charge against fourth quarter earnings to cover costs associated with the replacement program announced today. Intel said it was unable to determine the amount of the reserve, but said an estimated total will be provided on or before January 17, the date of Intel's 1994 financial results announcement. Following this release is a copy of an advertisement that will appear starting on December 21 in major newspapers in North America.

Intel, the world's largest chip maker, is also a leading manufacturer of personal computer, networking and communications products.

## INTEL SAYS IBM SHIPMENT HALT IS UNWARRANTED

SANTA CLARA, CA, December 12, 1994 -- In response to an IBM press release, Intel reiterated that it has studied the Pentium(tm) processor flaw for months and has concluded that the frequency of encountering reduced precision in floating point divide operations is once in every nine billion random divide operations. Intel said it regards IBM's decision to halt shipments of its Pentium processor-based systems as unwarranted.

"Based upon the work of our scientists analyzing real world applications, and the experience of millions of users of Pentium processor-based systems, we have no evidence of increased probability of encountering the flaw," said Andrew S. Grove, president and chief executive officer.

"You can always contrive situations that force this error. In other words, if you know where a meteor will land, you can go there and get hit," Grove said.

Intel does not agree with the conclusions reached by IBM, but reiterates nonetheless that any customer who might encounter the problem with the Pentium processor in the course of their applications will be sent a replacement at any time during the life of their PC.

Intel, the world's largest chip maker, is also a leading manufacturer of personal computer networking and communications products.

## VERSANT RELEASES INDUSTRY-LEADING OBJECT DATABASE FOR IBM'S OS/2 2.1

### New Product Supplements Client- Server Offerings

Menlo Park, Calif. - December 20, 1994 - Versant Object Technology Corporation (Versant), provider of the VERSANT ODBMS, the leading object database management system for multi-user distributed applications, today announced general availability of its database system on IBM's OS/2 version 2.1. This new offering supplements the industry's most complete object database offering for general purpose platforms.

"Our support for the OS/2 operating system is helping customers create competitive advantage across a variety of industries," said David Kellogg, vice president of marketing at Versant. "Customers are taking advantage of lower-cost platforms while gaining the benefits of fully utilizing an object paradigm."

Several of Versant's corporate customers, including Sprint and Blue Cross/Blue Shield (BSCA) have embraced OS/2 as a key platform for development and deployment purposes. With VERSANT able to support remote disconnected databases, one customer uses VERSANT and OS/2 on laptops and allows users to connect and utilize the corporate VERSANT database as needed. Customers are also using the power of VERSANT and of OS/2 to balance workloads efficiently across clients and servers.

The VERSANT ODBMS is a high performance, client/server database management system designed to support today's critical applications in markets like telecom-munications, utilities, transportation, and corporate MIS. VERSANT eliminates the need for joins and maps objects directly into the database. Because of this, VERSANT provides users with levels of concurrency and performance often 10 times that of the fastest relational technology. VERSANT has been named the top performing ODBMS by both the University of Wisconsin and by the British consulting group, ButlerBloor. VERSANT is the only leading DBMS to support both C++ and Smalltalk.

The new OS/2 operating system with 32-bit processing supports the complete functionality of the VERSANT ODBMS. OS/2 can be used as both server and client platforms. Critically, OS/2 systems are fully interoperable with other Versant platforms across heterogeneous networks.

Versant Object Technology is the industry's leading provider of object database management systems (ODBMS) for multi-user, distributed environments. Versant offers the industry's most complete product line including the VERSANT ODBMS, application development and database administration tools, programming language interfaces to both C++ and

Smalltalk, SQL-based legacy data integration, and a family of support services. Versant products reduce the cost of creating complex applications, and enable the development of next-generation applications that are difficult or impossible to build using traditional database management technologies. Versant customers include Ameritech, British Telecom, Fujitsu, IBM, MCI, Nippon Steel, Panasonic, Sprint, Telecom Australia, Texaco, Volkswagen and many other companies worldwide.

Versant Object Technology  
1380 Willow Rd  
Menlo Park, CA 94025  
415-329-7500

## AUTODESK UNIVERSITY GEARS UP FOR 1995 CONFERENCE AND EXHIBITION IN SAN FRANCISCO

Follows Successful 1994 Conference on East Coast with Plans for Expanded Exhibits in Moscone Center

San Francisco -- December 20, 1994 -- Miller Freeman, Inc. today announced that the Third Annual Autodesk University Conference & Exhibition will take place in San Francisco's Moscone Center, Oct 29 - Nov 2, 1995. A significant increase in attendance for conference sessions, demonstrated at the recently concluded Autodesk University 1994 in Atlanta, combined with the need for expanded exhibit space to make Moscone Center the ideal location for the show's return to San Francisco.

"Autodesk University conference attendance increased by 34 percent this year and we expect to see a similar jump in 1995," said Anastasia Kellow, conference director for Miller Freeman, Inc. "The conference's educational programs and workshops are a big draw both for Autodesk software users and the thousands of independent application developers in this market, so we expect to see a corresponding increase in exhibitors and exhibit only attendees in San Francisco."

Described as "the ultimate event for the Autodesk community" the five-day conference and exhibition brings together the worldwide network of Autodesk dealers, application developers and users. Autodesk University is the only event devoted to the market for Autodesk-related products, which are now used by more than 2.5 million people worldwide. Highlights of the 1994 Autodesk University included the unveiling of AutoCAD Release 13, the annual meeting of the North American Autodesk User Group, and more than 150 classes, lectures and labs for Autodesk software professionals.

Autodesk University, the industry's leading gathering of computer-aided design professionals working with AutoCAD and related products, is presented by Autodesk, Inc. and Miller Freeman,

Autodesk, Inc., is the world's fifth largest PC software company and a leading supplier of desktop computer-aided design (CAD) software. Autodesk develops, markets and supports a family of design automation, engineering, multimedia, manufacturing and scientific products for desktop computers and workstations. Autodesk's customer base totals more than 2.5 million users who are supported either directly by the company or through a network of authorized dealers.

Miller Freeman, Inc. is the third largest trade show producer in North America. A wholly-owned subsidiary of United Newspapers plc of London, England, the company produces dozens of electronics and software

conferences and trade shows, including: The Embedded System Conferences (East and West), MechanCAD, the PCB Design Conference, Surface Mount International, and the OS/2 World Conference and Exhibition.

Exhibitor Sales Contacts: Lisa Arasteh, 415-905-2476

Attendee Contact: Yolanda White, 415-905-4994

Press Registration: FS Communications, 415-691-1488

Miller Freeman Inc  
600 Harrison St  
San Francisco, CA 94107  
415-905-2354, fax 415-905-2220

## Illuminatus Lights Up Multimedia Publishing!

MINNETONKA, MN--JASC, Inc., publisher of award winning Windows graphics products including Paint Shop Pro, today announced the release of Illuminatus, an entry-level multimedia authoring tool. Illuminatus enables you to produce publications which can include sound, graphics, slideshows, animation, video, and run other programs from within a publication.

For the new or experienced multimedia author, Illuminatus is powerful enough to create a full blown computer-based training package or multimedia programs, and yet is so quick and easy to use that it can be used to write multimedia memos, interactive product demonstrations, or even greeting cards for friends and colleagues. Creating a presentation is as simple as laying out text, sound, graphics, and more in frames within the publication. Once your publication is done, you can have Illuminatus create a stand-alone presentation for you. Illuminatus will compress the files onto floppy disks, complete with a Windows installation program, and best of all, a royalty free runtime!

"No longer should we hear, 'Yes, we want multimedia, but it's too expensive and too complicated to use', because Illuminatus is inexpensive and very easy to use," says Bill Dickson, Vice President of Sales and Marketing. "The easiest way to think of Illuminatus is as DTP for multimedia. It is designed as a front-end and layout tool, and is supplied with plenty of templates to get you started," Dickson remarks. Included with Illuminatus are over 300 page templates, 50 plus animations, sounds and images. Additionally, a file search facility, program launcher, a jukebox (WAV and MIDI player), and Remix for polishing the soundtracks of your production, are bundled with the Illuminatus.

System requirements include Windows 3.1 or better, color VGA, 4Mb RAM, hard disk with 4Mb free space. Sound and music requires a Windows compatible sound card. Illuminatus may be purchased directly from JASC, Inc. 10901 Red Circle Drive, Suite 340, Minnetonka, MN 55343 for \$149.00 plus shipping and handling. Phone orders may be placed by calling 1-800-622-2793 or 612-930-9171 or by fax at 612-9309172. Quantity discounts and site licensing are available.

## DATA BUS PROTECTION

Electronic Specialists' expanding product line now includes Industrial Grade RS-232, RS-422 and RS-485 computer bus protection. Kleen-Line protection models are available with any combination of connectors and pins to accommodate diverse requirements.

Intended for suppression of electrical or lightning Induced spikes often found on longer bus lines, these data protection systems employ the latest high-speed, high-current suppression techniques. Isolated ground suppression is employed to shield equipment from damage caused by massive lightning discharge currents flowing between local and remote grounds.

RF Interference (RFI) filtering and suppression is also available.

Units can be configured to accommodate unusual system requirements.

Single unit prices start at \$50. From Stock.

Electronic Specialists, Inc  
171 South Main Street  
Natick, Massachusetts 01760  
Phone 800-225-4876, FAX 508-653-0268

## Sumitomo Metal Industries to Deliver XSoft's TabWorks Notebook Interface for Windows to Japanese PC Market

PALO ALTO, Calif., December 19, 1994 - The XSoft division of Xerox Corporation and Japan-based Sumitomo Metal Industries, Ltd. (SMI) today announced that a contract has been signed for SMI to distribute TabWorks, XSoft's successful notebook-style interface for Windows, through retail sales channels in Japan. SMI, a main member of the Sumitomo Group, will begin distributing TabWorks by the end of 1994.

TabWorks is pre-installed by Compaq Computer Corporation on all of its non-server PCs. It is also sold separately in the U.S. through the direct telemarketing channels of both XSoft and Compaq.

TabWorks provides a simple and intuitive way for Windows users to organize work and manage their personal documents. An enhancement to the Windows Program Manager, it is designed to look and function like a three-ring notebook, using familiar components like tabs, pages, and a dynamic Table of Contents to manage icons that represent files and documents. TabWorks is available in 12 national languages.

In the past five years PC software shipments have swelled more than 200 percent in Japan, making it one of the most explosive growth sectors in the world. During this time, Windows has gained over 40 percent share in PC packaged software sales, compared to a decline in DOS-based software sales. Personal computers are beginning to move into homes in Japan, as they are in the U.S., and ease-of-use is one of the important factors driving this expansion.

"PC users in Japan are searching for easier, more intuitive ways to manage their programs, files and documents, without sacrificing performance or price," stated Masao Tatsuwaki, deputy general manager of SMI. "TabWorks has gained rapid acceptance in the U.S. by providing this functionality. With TabWorks, Sumitomo will now provide PC users in Japan the opportunity to work with their computers in a more intuitive and familiar way than ever before."

David McQuilkin, Asia Pacific regional sales manager for XSoft, stated, "SMI is an important partner for XSoft in delivering TabWorks to the burgeoning Windows market in Japan. They have a broad knowledge of the software industry and have demonstrated impressive growth in software sales over the last few years. We are extremely pleased that Sumitomo sees the potential of TabWorks to become the ease-of-use standard for Windows PCs in Japan."

TabWorks lets the organizational habits and needs of the individual user

supersede the structure of the computer. Built around the familiar and intuitive notebook metaphor, TabWorks allows users to organize their work in any way that makes sense to them - by project, function, or other structure preferences. Documents and applications are easily and quickly accessible on the pages of the user's personalized notebook, and TabWorks can launch them automatically. By giving the user direct document access, TabWorks eliminates the need for the user to know where a document exists in the directory structure or even what application is used to run it.

The development of TabWorks is based on research completed in 1987 by Stuart Card and Austin Henderson of the Xerox Palo Alto Research Center (PARC). They published a white paper entitled "Catalogues: A Metaphor for Computer Application Delivery," which presented the concept of using the notebook metaphor for the delivery of application software and contains patents based on this research.

Sumitomo Metal Industries, Ltd.

Founded in 1897, Sumitomo Metal Industries, Ltd. (SMI) is headquartered in Osaka and Tokyo. It is a main member of the Sumitomo Group, which is comprised of 30 companies. Within SMI's diversified business is the Systems Engineering Division (SED), which publishes, resells and distributes a variety of PC-based application software products. TabWorks will be sold mainly through its three PC distributors--SoftBank, SoftwareJAPAN and Catena. SED also has nine subsidiaries in systems integration, computer sales and network services.

XSoft

Headquartered on a campus with PARC, the renowned Xerox research center in Palo Alto, Calif., the XSoft division of Xerox provides software that improves the way people create and use documents to capture, manage and communicate ideas and information.

The company develops and markets a broad range of products that support its vision of an Open Document Environment. They include document management and workflow solutions, user-interface utilities, office productivity packages, content-based search and retrieval systems, and structured-document publishing applications. In addition, XSoft enables workgroup collaboration through a series of shared document services products. The company also offers extensive product support, training and consulting services. XSoft's products and services are available on multiple operating systems, networks, and computer platforms. They are sold through a worldwide network of direct sales and reseller partners.

XSoft

3400 Hillview Avenue  
XSoft Palo Alto, California 94304  
800-428-2995, fax 415-813-7499

## Authoritative Handbook Sheds Light on Interactive Television and Advanced Multimedia Technology

Explains how to maximize system performance at minimum cost without sacrificing quality and functionality

BLUE RIDGE SUMMIT, PA--A practical, well-illustrated resource for those who work on the front lines of the information superhighway, *Interactive Television: A Comprehensive Guide for Multimedia Technologists* examines the concepts, design approaches, and technology requirements for pay-per-view TV, interactive television (ITV), advanced multimedia, and Video On Demand (VOD) systems.

Author Winston William Hodge takes a detailed look at each of these emerging technologies, beginning with a chapter discussing the convergence of TV, multimedia, and virtual reality. After covering the architecture, systems, and applications for Video on Demand, he describes the evolution and constraints of cable television and telephone system networks.

Readers will also find important information on storage systems and video servers; image compression cost, quality, technology, and philosophy; the differences between True Video On Demand and Near Video On Demand; switching, traffic control, and management; and ITV requirements and architecture.

At the conclusion of the book, Hodge explores the possibilities for the future in terms of ITV organizational structure and technology. He examines issues such as whether or not motion picture studios will become the Video On Demand encoders and wholesalers of tomorrow, the future and promise of cellular TV, and how virtual reality will be integrated into ITV.

About the author:

Winston William Hodge has applied advanced multimedia and image database technology to projects ranging from flight simulation and TV to film, digital imaging and newspaper publishing systems. His clients have included Eastman Kodak, Sony, Intel, DEC, Memorex, and TRW. He is a resident of Yorba Linda, California.

*Interactive Television:  
A Comprehensive Guide for Multimedia Technologists*  
Winston William Hodge  
Hard \$34.95  
ISBN 0-07-029151-9  
Publication Date: March 1995  
256 pp., 113 illus., 7 x 10

Available In bookstores or from the publisher at: 800-822-8158  
McGraw-Hill Inc  
Professional Book Group  
Blue Ridge Summit, PA 17294-0850  
800-233-1128, Fax: 1-800-932-0183

## WordPerfect Certification Candidates Get the Perfect Study Aid Reviewed by WordPerfect Corporation

Covers certification in WordPerfect, InForms, and Office

Features sample test questions for the CBC, CPC, and CSE exams

BLUE RIDGE SUMMIT, PA--With free technical support no longer being supplied by WordPerfect Corporation, certified professionals are in greater demand than ever. A good bet for furthering a career, certification is not an easy achievement, however. But WordPerfect Certification Success Guide all but guarantees just that--success, without having to sit through time-consuming and expensive classes.

WordPerfect certified professionals Brian Ford and Debra Kiefer-Ford provide an easy-to-use study guide that contains all of the background information, test preparation advice, and practice questions candidates will need to pass the Certified Business Credential (CBC), Certified Professional Credential (CPC), and Certified Systems Engineer (CSE) exams for WordPerfect, InForms, and Office. They also offer insight into making the most of certification, including how to present credentials to current and prospective employers as well as potential consulting clients.

The invaluable test-taker's guide describes in detail each section of the exam, the application functions it covers, and the best ways to learn those functions.

Other features include:

- \* Information on how to find, register for, and schedule an exam
- \* Insider tips on how to prepare and study
- \* A complete list of WordPerfect classes, telephone numbers, and other resources

About the authors:

Brian Ford is a computer consultant, trainer, and WordPerfect Certified Professional. Debra Kiefer-Ford, a WordPerfect Certified Professional and Instructor, also is a computer consultant and trainer. They make their home in Port Jefferson Station, New York.

WordPerfect Certification Success Guide  
Brian Ford and Debra Kiefer-Ford  
Paper \$29.95 ISBN 0-07-021519-7  
Hard \$42.95 ISBN 0-07-021518-9  
Publication Date: February 1995

304 pp., 8 illus., 7x10

Available in bookstores or from the publisher (1-800-822-8158)

McGraw-Hill, Inc.

Professional Book Group

Blue Ridge Summit, PA 17294-0850

800-233-1128, Fax: 1-800-932-0183

COMPASS/51 and COMPASS/Z8 from Production Languages Corp.

Macro Assembler, Linker-Locator, Object Librarian, ANSI C Compiler, Source-level Debugger, and Instruction Simulator for Intel/Phillips/Dallas Semiconductor 8051 family microcontrollers and Zilog Z8 family embedded microcontrollers.

System Requirements:

Windows, 386 or above, 4MB RAM, 5MB free hard-drive space

For more details, contact Production Languages Corp at:

PO Box 109

Weatherford, TX 76086-0109

817-599-8363, fax 817-599-5098, BBS 817-599-8366

## Missing the FAX in Microsoft NT Server 3.5? LANSource Provides Needed Fax Elements for NT

TORONTO, Canada -- December 20, 1994 -- LANSource Technologies, the leader in combined network fax and data communications server technology, announces support for NT Servers with their fax-server FAXport v5.0. Now NT users who are yearning for fax-support will have a solution to their needs early in February.

"Microsoft NT is now reality, and so now is our time to support it," says Marc Bisnaire, President of LANSource Technologies Inc. "Windows NT Server, unlike Windows for Workgroups, currently does not provide a built-in fax product. LANSource is stepping in to provide that missing and crucial element."

FAXport v5.0 brings a new look to network fax. It has the features of Winfax Pro in an easy to use and manage fax client, but the network interface is faster and is much more streamlined and user-oriented.

FAXport provides real-time fax and queue management. This includes full reporting, logging, diagnostics, and security. Leo Pukhovitsky of Charm Sciences Inc. says he likes that it runs in real-time "so I can see the faxing in progress and have more control."

The store-and-forward fax-server makes use of all shared fax-modems for simultaneous faxing to multiple recipients. Incoming faxes are automatically or manually routed to the appropriate user to ensure privacy. The cover pages are generated at the fax-server, so faxing becomes much faster, and users can get back to work quicker. All forwarding of faxes happens transparently in the background.

There are no TSRs on the Windows client PCs.

FAXport now has a full-featured integrated fax client including OCR, a FAX viewer, FAX markup and custom cover pages. It is specifically engineered for simplicity and ease-of-use. The client software features large, descriptive smart-icons with flyover help boxes.

It has unlimited shared phonebooks and phonebook groups (both network and private) with pre-defined handling instructions. This means each user can associate basic defaults for each recipient in the phone book such cover pages, sending times, and priorities. There is even a top-ten list that can be set as either the top-ten recipients, or the last ten faxes sent. In addition, document folders are pre-definable for sent and received faxes with multiple layers of filing. In fact, each recipient and sender can have their own folder for recieved or sent faxes complete with associated billing codes.

Multiple document folders make document management and cross-referencing a snap. Drag-and-drop action allows users to drag faxes from the send and receive logs and deposit them in the correct document folder. The folders have general query functions. Parameters for fax compression, archival, and deletion are folder specific and user-adjustable with a pop-up calander. Default billing codes make tracing communication costs simple.

E-mail integration for MAPI, VIM, and MHS is included. DDE and OLE 2.0 support is also available in keeping with Microsofts strategic direction for 32-bit processing.

Previously a lighter version of FAXport was included in WINport, LANSource's modem sharing solution. But with the 5.0 release, the products will be sold separately.

"We are doing this to give our clients the specific network communications functionality that they are looking for in a modular format," says Ihor Petelycky, VP of Marketing at LANSource. "WINport v5.0 will remain the best product for fax/modem sharing, and FAXport will become the full-featured fax-server and fax-client solution. By combining, WINport v5.0 and FAXport v5.0 network administrators can integrate a complete fax and communication server. Both applications are completely scaleable with WINport licensed by the number of shared modems, and FAXport by the number of users. Combo packs are also available."

FAXport currently works with any IPX, NetBIOS and TCP/IP network running in a Windows client environment. The server portion can run on any dedicated DOS PC, dedicated or non-dedicated Windows or WFW 3.11 PC, and any non-dedicated Microsoft Windows NT 3.5 Server. Windows, Windows for Workgroups and Windows NT clients are supported.

## LANSOURCE COMPANY BACKGROUND

LANSource Technologies Inc. is a privately held company based in Toronto, Canada. LANSource has been developing and marketing a range of advanced network communications products for LANs since 1987. Other products include the LANSource Fax & Communications Suite for Networks (includes Eclipse Fax for Networks and Terminal Plus for Networks), WINport for Workgroups, WINport for LANtastic for Windows, and ViaFAX for Windows.

The LANSource product line is distributed by Micro Central, DistribuPro, and EMJ America in the United States and by Ingram Micro and EMJ Data Systems in Canada with other distributors in Europe and the South Pacific.

LANSource Technologies Inc.

221 Dufferin Street, Suite 310A  
Toronto, Ontario, Canada M6K 3J2  
Toll Free: 1-800 677-2727; Tel: (416) 535-3555; Fax: (416) 535-6225

## ALADDIN SYSTEMS UPGRADES STUFFIT SHAREWARE

Watsonville, CA (December 12, 1994) -- Aladdin Systems today began shipping Stuffit Lite 3.5, a major upgrade to the company's award-winning shareware product. Stuffit Lite is an easy-to-use application that provides compression, encryption, and archiving capabilities. Improvements to Stuffit Lite 3.5 include accelerated speed for Power Macintosh computers, more "drag and drop" functionality for improved ease-of-use, and better AppleScript support.

### Faster Stuffing and UnStuffing

Stuffit Lite 3.5 is now accelerated for Power Macintosh. Stuffing and UnStuffing now occurs approximately five times faster on a Power Macintosh 6100/60 than on a Macintosh IIci. In many cases, expansion of files which were originally compressed on other platforms is also accelerated, including those files compressed into Compact Pro (.cpt) and BinHex (.hqx) formats. Stuffit Lite works by compressing files (an average of 60%) into a document called an archive. Archives assist in saving disk space, speeding modem or network file transfers, and making backups easier. Stuffit is the international standard and accepted method of file compression and archiving on all major online services (including America Online, CompuServe, and GENie) and thousands of bulletin board systems.

### Drag and Drop Support

Stuffit Lite 3.5 adds drag and drop support to the package, making compression and expansion easier to perform. To expand a file from a Stuffit archive, the user can simply drag a file from an open archive onto the desktop (or a folder on the desktop). A file can be Stuffed into a Stuffit archive by dragging it from the desktop onto an open archive window. This functionality works under System 7.5. if the user also has the Macintosh Drag and Drop and Dragging Enabler extensions installed. This drag and drop functionality is available under System 7 Pro (7.1.1) and higher. The Drag and Drop extensions are not included with Stuffit Lite.

### AppleScript Support

Stuffit Lite 3.5 features improved AppleScript support. A suite of Apple events for registered copies of Stuffit Lite allow the program to be automated using Apple's scripting system. Stuffit Lite is also fully recordable; just like a tape recorder, a user can perform a series of actions and the script will be automatically written.

### Other Information

StuffIt Lite 3.5 features other capabilities found in previous versions, including the ability to password protect archives, and to create self-extracting segmented archives for fitting large files across multiple floppy disks. StuffIt Lite 3.5 comes complete with an online guide.

Aladdin is offering registered users of previous versions of StuffIt Lite a special upgrade price to StuffIt Lite 3.5 for \$9.95. Registered users of StuffIt Lite are also offered a special upgrade price to StuffIt Deluxe 3.5, Aladdin's flagship compression product for \$34.95. This price upgrade is valid through January 31, 1995.

StuffIt Lite is copyrighted shareware. After using StuffIt Lite for 15 days, users are honor-bound to send Aladdin a \$30 registration fee. By registering StuffIt Lite, the user receives added benefits including AppleScriptability, free technical support and updates, enhanced features, and special pricing on other Aladdin products.

StuffIt Lite is distributed through online information services, bulletin board systems, the Internet, user groups, and freeware/shareware collections. All Aladdin shareware and freeware is available from the various Aladdin online forums. Members of the press, user group ambassadors and disk librarians, and online Sysops should contact Aladdin Systems directly to obtain the software.

Founded in 1988, Aladdin Systems, Inc. is credited with creating the compression standard for applications and communications for the Macintosh platform. The company's product line includes the StuffIt Family of products including StuffIt Deluxe and StuffIt SpaceSaver, award-winning products which offer comprehensive solutions for compression, translation, and archiving. The StuffIt Family of products received Macworld's prestigious World Class Award for Best Compression Utility the past two years in a row. StuffIt Deluxe 3.0 also received the 1992 MacUser Editors' Choice Award. Aladdin's developer tool, StuffIt InstallerMaker, is the installer of choice for leading software developers, network administrators, and MIS directors. Aladdin recently branched out into the telecommunications arena with the introduction of SITcomm, which was a finalist for the 1993 MacUser Editors' Choice Award for Best Communications Product only three weeks after its debut.

Aladdin is one of the few remaining pioneers committed to the shareware and freeware philosophy of software distribution and marketing. Their commitment has helped garner millions of users worldwide. In addition, over 1,000 software developers, including Microsoft, Claris, and Apple, have licensed Aladdin's data compression and installation technology.

Aladdin Systems

408/761-6200

## ALADDIN SYSTEMS' STUFFIT INSTALLERMAKER UPDATED

Watsonville, CA (December 12, 1994) -- Aladdin Systems has announced the availability of Stuffit InstallerMaker 2.0.2, an update to the company's easy-to-use installer program which allows software developers and product managers to easily create custom installers for their products. Enhancements in version 2.0.2 include drag and drop functionality for improved ease-of use, extensive support for the Power Macintosh, and more foreign language support.

Stuffit InstallerMaker is the turnkey system that allows software developers, MIS directors, and network administrators to easily create custom installers, reduce costs associated with software distribution, and make installation fast and easy for their end users. What sets Stuffit InstallerMaker apart from other installer programs is that it is based on a point and click interface with integrated Stuffit compression.

Stuffit InstallerMaker 2.0.2 provides drag and drop functionality to ease the task of maintaining installer archives. To add a file or folder to your suite of installable items, simply drag the item from a Finder window or from the desktop, onto an open installer archive window. To create a copy of one or more installable items for verification or comparison purposes, simply drag the items from the open installer archive window into a Finder folder or window, or even onto the Macintosh desktop. This functionality works under System 7.5. if the user also has the Macintosh Drag and Drop and Dragging Enabler extensions installed. This drag and drop functionality is available under System 7 Pro (7.1.1) and higher. The Drag and Drop extensions are not included with InstallerMaker.

Stuffit InstallerMaker 2.0.2 offers extensive support for the Power Macintosh computer, allowing developers to build powerful "smart" installers quickly and easily for their products, while making installation a breeze for end users. Developers can build native installers for Power Macintoshes, "fat" installers for use on 680x0 or Power Macintoshes, or 680x0-only installers.

Stuffit InstallerMaker 2.0.2 adds even more foreign language support. By choosing a language from a menu, developers can convert all of an installer's standard user interface elements for English into the language of choice. This gives developers an easy way to develop international-savvy installers. Localized versions of Stuffit InstallerMaker include Japanese, German, French, Italian, Spanish, and Swedish.

By using Stuffit InstallerMaker, developers can simply choose from a number of pre-defined destinations for each file to be installed. Developers can also determine what files will be installed predicated on the configuration of the destination computer. In addition, Stuffit InstallerMaker allows the developer

to compress all the files being installed, thereby reducing the number of distribution disks and providing the end user with easy, one-button installation. With Stuffit InstallerMaker, compression was designed as an integral part from the beginning, not as an afterthought as in other installation technologies.

MPW and ResEdit are NOT required to create powerful installation programs using Stuffit InstallerMaker. However, Aladdin does provide the ability for developers to further customize installers by adding their own custom code during startup, installation, and at the completion of installation. Because of InstallerMaker's built-in features, most developers will find that they will not need to write any custom code or use ResEdit.

Founded in 1988, Aladdin Systems, Inc., is credited with creating the compression standard for applications and communications for the Macintosh platform. The company's product line includes Stuffit Deluxe and Stuffit SpaceSaver, products which offer comprehensive solutions for compression, translation and archiving.

Aladdin is one of the few remaining pioneers committed to the shareware and freeware philosophy of software distribution and marketing. Their commitment has helped garner them over 1,000,000 users worldwide. In addition, over 1,000 software developers such as Microsoft, Claris and Apple have licensed their money saving installation technology. For more information about Aladdin Systems or its products contact the company at 165 Westridge Drive, Watsonville, CA 95076; (408) 761-6200.

Aladdin Systems  
(408) 761-6200

## ASPEN SYSTEMS AND DIGITAL EQUIPMENT ANNOUNCE MISSION-CRITICAL ALPHA-BASED WORKSTATION RUNNING OpenVMS OPERATING SYSTEM

### FIRST VENDOR TO LICENSE AND SELL ALPHA OpenVMS IN NON-DIGITAL HARDWARE TO DEBUT AT FALL '94 DECUS

WHEAT RIDGE, Colorado -- December 12, 1994 -- Aspen Systems, Inc. today announced a joint licensing agreement with Digital Equipment Corporation to package the OpenVMS operating system with its high-performance line of workstations. Aspen's ALPINE workstations - powered by the Alpha AXP microprocessor - represent the first commitment by a hardware vendor outside of Digital to load OpenVMS right on their Alpha-based systems. The new workstations running OpenVMS will be demonstrated at Fall '94 DECUS, which opens today at the Anaheim Convention Center in Anaheim, Calif.

"The performance of the Alpha microprocessor allows us to create very powerful systems which will increase the OpenVMS systems presence in small-to-medium-sized enterprises (SME). The rapidly expanding SME market demands the business critical functionality of OpenVMS," notes Steven Spring, CEO of Aspen Systems, Inc. "In addition, we see great growth potential as more and more applications port to the OpenVMS operating system - that adds up to a tremendous market opportunity for us."

### SYSTEMS FEATURES AND CAPABILITIES

Aspen Systems' ALPINE combines Digital's 21066, 21064 or 21064A processor and the 21072 PCI core logic chip set with a 128-bit RAM bus designed for maximum computing performance. By using Aspen's "pop out chip and oscillator" design, the same ALPINE motherboard supports processor speeds of 166MHz, 200MHz, 233MHz, and 275MHz. Motherboards may be easily upgraded with this unique design. The board includes three version-2 PCI compliant expansion slots for high speed I/O throughput of up to 132 megabytes per second. Three ISA expansion slots provide backward compatibility with thousands of PC peripherals. All of these features are now available with the Digital OpenVMS operating system loaded right on the box.

### ALPHA AXP, OPENVMS AND ALPINE DELIVER SOLUTIONS TODAY

The 166MHz and 200MHz Alpha-based ALPINE Systems began shipping in April 1994. The 233MHz and 275MHz ALPINE Systems began shipping in July of 1994. These workstations - available as complete systems and to OEMs as motherboards - target Windows NT (out of the box), Windows NT Advanced Server, OSF/1 and OpenVMS markets, with initial focus on engineering, graphics and automation applications.

According to Jesse Lipcon, OpenVMS systems business vice president, "This is a significant milestone in the history of OpenVMS. As part of our commitment to continue open systems practices and willingness to share our key technologies, we have encouraged and welcome this new relationship, that ultimately puts OpenVMS and Alpha systems into new customer environments. Aspen customers will enjoy the benefits of OpenVMS' large applications portfolio that over ten million users are currently accessing, not to mention the advantage of being on the world's leading 64-bit technology with Alpha systems. We look forward to much mutual success with Aspen."

#### THE ASPEN SYSTEMS COMMITMENT

The founders and staff of Aspen Systems have more than fifteen years of manufacturing, development and marketing experience in the desktop computer market. Aspen's people have long been committed to providing quality, service and value to customers worldwide.

## Delrina Introduces New Professional Partner Program

Program Offers New Levels of Support and Opportunity for Third Party Developers and Professional Trainers to Provide Solutions with Delrina Products

SAN JOSE, CA and TORONTO, ONT -- December 19, 1994 -- Delrina Corporation (TSE:DC, NASDAQ:DENAF), the world's leading supplier of PC communications and forms software, today announced its new Professional Partner Program. The new program is a multi-level approach that provides education, service, support, and marketing assistance to third party solution providers and professional trainers in selling and supporting Delrina's enterprise solution products: Delrina FormFlow and Delrina WinFax Pro for Networks. The new program includes two levels of commitment for a select group of solution providers, as well as professional trainers, and is designed to expand and support Delrina's customer base through strong relationships with VARs, systems integrators, application developers, and professional trainers.

"The Delrina Professional Partner Program addresses the unique business opportunity for VARs, integrators, and trainers to tap into the exploding worldwide market for value-added LAN products, vertical applications and forms-based workflow automation," said Robin Matlock, National VAR Manager at Delrina. "Under the program, we provide education and training to third party developers and professional trainers, and certify them in the development and application of our forms automation and network fax solutions. The certification process thoroughly evaluates the product knowledge and business skills of service providers through a series of tests and interviews, and if qualified, the vendor is selected to be a Delrina Certified Developer or Delrina Certified Instructor. For the customer, this ensures that they have a high level of confidence in the solution providers who add value and re-market our products or provide training for them."

The Delrina Professional Partner Program includes two programs, one for solution providers and a second for professional trainers. Solution providers such as VARs, systems integrators, and application developers, who demonstrate excellent knowledge of Delrina's forms and fax products and provide Delrina-based solutions to their customers are eligible to become a Premier-level Delrina Strategic Solution Partner. Each candidate is carefully screened to ensure a solid background in development with the latest technology. Further, the candidate must employ a full-time Delrina Certified Developer to gain membership in the program. If an interested party does not meet these qualifications or does not want to participate at this level of commitment, they have the option to become a Delrina Business Associate, the second tier of the program, which offers technical and development support. In many cases, being a Delrina Business Associate enables the

solution provider to become familiar with Delrina products before making a significant commitment.

For professional trainers there is the Delrina Authorized Training Partner Program, which has a set of requirements parallel to the Strategic Solution Partner Program. There is an Authorized Trainer level and a Training Associate level. To qualify as an Authorized Training Center, an organization must demonstrate that it provides high-quality training services, and further, must employ a Delrina Certified Instructor, provide a comfortable learning environment, have at least two years of experience in computer training, and must provide a satisfaction guaranteed policy to students who receive training on Delrina products.

"Delrina is committed to the enterprise solution and we recognize that the channel plays a key role in delivering such solutions," said Matlock. "We aren't in the training or development services business. We work with VARs to understand their business and empower them to provide Delrina software solutions that make sense for their customers. Delrina's software coupled with the VAR's industry and application development expertise, result in a best-of-breed solution for the customer."

Delrina is providing its Premier-level Partner Program members with many tools and opportunities to increase their client base, reduce their development time, and broaden their penetration of existing accounts. These include:

- 1) Free software, product training and training materials.
- 2) Evaluation and volume purchasing discounts.
- 3) Priority, senior level technical support.
- 4) Systems engineering support.
- 5) Advertisement in the Delrina Professional Solutions Directory.
- 6) Joint sales calls with Delrina's field organization.

Two years ago, Delrina launched its PROVAR program expanding the number of expert Delrina VARs in North America to more than 150. "The new Delrina VAR program, with its two-tier positioning strategy, is beneficial for all concerned," said Ed Andersson, Director of the Technology Applications Division of System Resources Corporation, a Delrina PROVAR. "Since Premier-level Partner Program members are certified by Delrina, complex and strategic FormFlow software development will be handled by the most experienced service providers, increasing not only the value of automated forms routing as a process re-engineering technology, but increasing the customer's return on investment by providing the most appropriate solution in the shortest project time possible."

As a systems integrator for the past ten years, SRC has been providing "one-

stop" shopping for both public and private sector firms. Services include open architecture systems design and administration, information technology implementation, outsourcing, and custom communications solutions. SRC has adopted Delrina FormFlow for the paperless, electronic forms processing of its internal purchase requisition system. Extensive modifications to meet both internal needs and governmental guidelines have put Delrina FormFlow to the test, and it has succeeded in meeting the challenge. This has resulted in faster processing time, better tracking and the elimination of forms routing confusion.

"Delrina provided strong support during the developmental and deployment stages of this project," said Andersson. "We now have a comprehensive understanding of Delrina FormFlow and can produce intricate and multifaceted custom applications on time and on budget. Customers in the financial, insurance, healthcare and industrial arenas can benefit from our systems experience deploying FormFlow applications."

Forms processing, with its ability to conditionally route information across LAN-based e-mail systems, is increasingly considered one of the initial areas of workflow automation for many small, medium and large businesses. According to Bill King, Senior Workflow Analyst at BIS Strategic Decisions, of Norwell, Mass., the total market for workflow enabled and enabling software is expected to grow from approximately half a billion dollars today to more than US\$2 billion by 1998. "Our research shows that there is rapid growth and activity in the workflow software market. VARs have an enormous opportunity to capitalize on this burgeoning market by offering to implement and service customers with workflow-based applications using products like FormFlow."

The application fee for the Delrina Strategic Partner Program is \$875 with a \$350 annual renewal fee. The Business Associate Program is \$295 to apply with an annual renewal fee of \$145. When upgrading to Premier-level status from Associate status, the fee is \$600. The Authorized Training Partner Program requires an application fee of \$875 with a \$350 annual renewal fee. The Training Associate fee is \$295, with an annual renewal fee of \$145. After the initial roll out in North America, Delrina plans to introduce the Professional Partner Program world-wide.

Founded in June 1988, Delrina is a high-profile Canadian success story ranked among the fastest growing software companies in North America. The company develops, markets and supports PC-based software products and services for fax, voice, data communications, electronic forms processing, and consumer software markets, and is recognized as the technical and market leader in PC fax and forms. Delrina employs more than 550 people with headquarters in Toronto, Canada, and offices in San Jose, CA, Washington DC, Kirkland, WA, the U.K., France, and Germany. Delrina can be

contacted at (408) 363-2345.

Delrina Corp  
895 Don Mills, 500-2 Park Center  
Toronto, Ontario M3C 1W3 CANADA  
416-441-3676, fax 416-441-0774

## PACER SOFTWARE ANNOUNCES PACERSHARE, PACERPRINT TRADE UP PROGRAM FOR HELIOS ETHERSHARE CUSTOMERS

### Offers Reliable File and Print Serving Products, Service

Westborough, MA, Dec. 21, 1994 -- Pacer Software, Inc. announced today a new program that allows HELIOS Software GmbH customers to trade in their EtherShare products for Pacer's PacerShare and PacerPrint at a 33% discounted price.

According to David Hudson, Pacer Software vice president of sales, "Litigation between HELIOS U.S.A. and HELIOS Software GmbH has created great concern about the future of the EtherShare product. We're offering this program because of recent calls from HELIOS customers seeking reliable file and print serving products and support from a stable vendor."

PacerShare is an AFP 2.1-compliant implementation of Apple Computer, Inc.'s AppleTalk Filing Protocol (AFP), which lets Macintosh users mount directories as if they were Macintosh volumes. Clients access the PacerShare file server via Apple's standard AppleShare client software.

PacerPrint integrates Macintosh and UNIX printing resources by allowing Macintosh users to print directly to UNIX server print queues as if they were PostScript-compatible printers such as the Apple LaserWriter and HP LaserJet families. Sites can design a network topology that makes printers simultaneously accessible to host and Macintosh print jobs.

PacerShare provides complete interoperability with PC-NFS, PathWorks for UNIX and LAN Manager for UNIX. This high level of compatibility lets system managers integrate file sharing services for Macintosh, DOS, Windows and UNIX users on a single high-performance server.

PacerShare and PacerPrint include PacerTerm, the leading multi-session, multi-protocol Macintosh terminal emulation package, as well as PacerAdmin, a Macintosh application that lets system managers add, modify and delete server users and groups. PacerAdmin also provides an easy to-use graphical interface for creating and modifying PacerShare volumes and PacerPrint print queues. System administrators can use PacerAdmin to list, delete and move jobs in UNIX print queues and manage PacerShare and PacerPrint host log files.

The PacerShare and PacerPrint are available for IBM AIX, DEC OSF/1, DEC Ultrix, Solaris Intel, Solaris SPARC, SunOS and HP-UX platforms. Pricing is based on the number of simultaneously connected users, starting at \$3,000 for a 20-user license. The same license for EtherShare customers under this program is \$2,000. PacerShare and PacerPrint are available by calling Pacer

Software at 508/893-3300.

Founded in 1981, Pacer Software specializes in networking products that provide pathways to and from the Macintosh for large corporate and university sites. Headquartered in La Jolla, CA, with development and marketing facilities in Westborough, MA, the privately held company's full range of products gives users access to other computers, networks, information and people.

Pacer Software's product line includes PacerTerm, multi-session, multi-protocol Macintosh terminal emulation; Pacer AppleTalk Protocol Family, AppleTalk protocols for non-Macintosh platforms; PacerShare, AppleShare file services for UNIX and VMS systems; PacerPrint, PostScript spooling for UNIX and VMS systems; and DAL Server, desktop-to-UNIX database connectivity. Among its more than 10,000 customers are Minnesota Mining & Manufacturing Corp.(3M); BellSouth Information Systems; BP America, Inc.; Motorola, Inc.; NBC News; Northern Telecom, Inc.; Federal Express Corporation; and Walt Disney Pictures.

Pacer Software, Inc  
1900 West Park Dr., Suite 280  
Westborough, MA 01581-3919  
TEL: 508 898-3300  
FAX: 508 366-1356

## Announcing WiT - a complete visual programming environment for image processing on Windows 3.1

### How to get the WiT demo

A demo may be downloaded (using binary mode) from [ftp.cica.indiana.edu](ftp:cica.indiana.edu), /pub/pc/win3/demo/wit47.zip. Type: `pkunzip -d wit47`, then from Windows run the setup program to install WiT and create a WiT folder.

### What is WiT?

WiT offers an object-oriented, open-ended package for imaging algorithm design. A full set of imaging libraries allow you to perform image I/O, filtering, morphology, segmentation, pyramids, point operations, etc.. You can add your own functions and data structures easily (full release). Run in either demand-driven mode (select an operation and see the result) or data-driven mode (draw a graph using icons then execute the graph). Graphs can incorporate conditional flow control logic such as if-then-else or for-loops. Graphs are block diagrams you draw using icons which represent image processing operations. The links in such a diagram connect icons to direct data flow from one operation to the next. Probes may be placed on the links to view intermediate results. Complex graphs may be encapsulated into a single icon (hierarchical operators). Visualization support includes multi-curve plots, 3D perspective surfaces, 2D images with contrast enhancement, and any C data structure introduced to WiT.

WiT is a client/server application offering full networking support for both Windows 3.11/Windows NT and Unix systems. Both TCP/IP and DDE protocols are supported. One or many servers perform the computation underlying the icons in a graph and connect to the WiT user interface (the client) at startup. Management of server processes is automatically done by WiT for smooth start-up and shutdown.

For instance, you can start WiT on Windows 3.11 then start a server on a Sparcstation 20 to do all the computation in a graph. WiT is ideal for consolidating developments in both software and hardware.

Please direct all inquires to 1-800-665-1157 (US or Canada) or use FAX, e-mail or voice.

Logical Vision Ltd.  
Suite 265, 4299 Canada Way  
Burnaby, B.C., CANADA V5G 1H3  
Tel: 604-435-2587, Fax: 604-435-8840

## Sound Source Introduces Interactive MovieBooks on CD-ROM

Warner Bros. Consumer Products has teamed up with Sound Source Interactive to produce a new series of interactive MovieBooks with storylines, photographs, and full-motion film footage from feature films including *The Secret Garden*, *Black Beauty*, and *Lassie*. Each MovieBook title features a simulated open book with text on the left page and images on the right. Children can change pictures, trigger sounds, or animate various elements on the screen.

## Comfy Interactive Movies has Toddler Computer Called ComfyKeyboard

The ComfyKeyboard by Comfy Interactive Movies is a computer keyboard and software package created for children as young as two. ComfyKeyboard comes with ComfyLand interactive Movies software that transforms computer game play into valuable educational lessons that help children develop their motor and mental abilities, as well as enhance their emotional development through hands-on computer learning, according to the company. ComfyKeyboard features large, colorful button displays.

## LabWindows Adds Functionality to Teradyne's Z1800 Board Test System

December 19, 1994 -- Austin, TX - The National Instruments LabWindows for DOS software is the graphical user interface used to equip the Teradyne Z1800-Series in-circuit testers to meet customers' needs for adding function test programming capabilities. Z1800-series testers are used by 550 customers in 40 countries, in industries such as computers, telecommunications, automotive, portable electronics, and contract manufacturing, to control manufacturing processes and ensure high yields by finding assembly faults such as shorts, solder opens, and wrong, missing, dead, or misoriented devices.

### About Z1800 Series Testers

Z1800-Series board testers lower the cost of manufacturing process test and increase fault coverage for manufacturers of printed circuit boards (PCBs). "The integration of LabWindows into the Z1800-Series tester gives our customers a fast, flexible solution for adding product function test to the Z1800's proven manufacturing test capabilities," said Dominic Haigh, product manager at Teradyne's Assembly Test Group. "LabWindows' ease of use, integration into the PC/DOS tester environment, and extensive instrument driver library speeds function test design and debug. The combination of LabWindows and the Z1800 makes practical, single-stage test a reality."

### About LabWindows

LabWindows is a set of software tools and libraries for developing programs in C and BASIC for instrument control, data acquisition, analysis, and presentation. LabWindows can be used to control GPIB, VXI, and RS-232 instruments, and plug-in data acquisition boards. The

LabWindows Instrument Library contains over 400 ready-to-use high-level drivers for controlling specific programmable instruments. Stand-alone libraries for the Borland C++ and Turbo C++ compilers and Microsoft Visual Basic for DOS (VB DOS) compiler are also included.

The LabWindows User Interface Library has functions for creating multiplot graphs, strip charts, bar charts, and scatter plots. The LabWindows Analysis Libraries have functions for array and matrix manipulation, complex arithmetic, and statistics, Fast Fourier Transforms, curve-fitting, digital filters, real and complex vector and scalar operations and high-level statistical analysis.

### For More Information

For more information on the Z1800-Series testers, please contact Teradyne

at 2625 Shadelands Drive, Walnut Creek, CA 94598, (510) 932-6900, fax (510) 934-0540.

For more information on LabWindows, contact National Instruments, 6504 Bridge Point Parkway, Austin, TX 78730-5039, (512) 794-0100. Or call toll free in the U.S. and Canada at (800) 433-3488, fax (512) 794-8411, e-mail [info@natinst.com](mailto:info@natinst.com).

## PROFESSIONAL INTERNET RESOURCE MANUALS

We are pleased to announce the immediate availability of the following Professional Internet Resource Manuals. The \*LinkSeries\* represents the leading envelope in discovering world-wide Gopher Internet resources and databases for niched SIC areas (reference, health, business, law, theology and K12) in an user-friendly, three-ring binder, hard copy and alphabetical index tabbed format. The Table of Contents include five sections: Section 1 - Introduction to Gopher (URL's, Telnet and Gophmail); Section 2 - Comprehensive Alphabetical State-of-the-Art Index to all selected niched resources; Section 3 - How to Compose VERONICA Queries; Section 4 - How to Compose JUGHEAD Queries and Section 5 - Maintaining Competency.

URL1 \*RefLink\* Global Internet Resources and Databases. Gopher URL's On the Internet for the Reference Librarian and Professional. 1994- 1995 ISSN: 1078-1455 (c) 1994 Marcus P. Zillman

URL2 \*HealthLink\* Global Internet Resources and Databases. Gopher URL's On the Internet for the Health Care Professional. 1994-1995 ISSN: 1077-6036 (c) 1994 Marcus P. Zillman

URL3 \*BusinessLink\* Global Internet Resources and Databases. Gopher URL's On the Internet for the Small and Medium Size Business. 1994- 1995 ISSN: 1077-9760 (c) 1994 Marcus P. Zillman

URL4 \*LawLink\* Global Internet Resources and Databases. Gopher URL's On the Internet for the Law Office. 1994-1995 ISSN: 1077-9639 (c) 1994 Marcus P. Zillman

URL5 \*TheoLink\* Global Internet Resources and Databases. Gopher URL's On the Internet for the Theologian. 1994-1995 ISSN: 1078-0556 (c) 1994 Marcus P. Zillman

URL6 \*K12Link\* Global Internet Resources and Databases. Gopher URL's On the Internet for the K12 Teacher. 1994-1995 ISSN: 1078-1447 (c) 1994 Marcus P. Zillman

These \*LinkSeries\* Professional State-of-the-Art Internet Resource Manuals cost US\$ 89.95 each plus US\$ 4.50 shipping and handling. Non USA orders are always welcomed and must include appropriate additional shipping, customs and handling (see our International Order Information addendum). Shipment in the continental USA is via UPS ground service. Next day delivery is available at extra charge. Payment must accompany all orders unless pre-approved in advance. Institutional purchase orders are accepted. All \*LinkSeries\* Professional Internet Resource Manuals offer our guarantee of satisfaction.

All \*LinkSeries\* Professional Internet Resource Manuals are custom produced, published and printed at time of your order on high speed laser printers to guarantee the most current publication available. URL's for gopher sites are harvested daily for the entire \*LinkSeries\*. Manuals are shipped no later than 24 hours after custom publication.

All standing annual subscription orders will receive two complete quarterly updates at no charge.

Order Telephone: (813) 434-3850 (24 Hours)  
Order Facsimile: (813) 642-9115 (24 Hours)  
Order Electronic Mail: zillmanusa@delphi.com  
Order Postal Address:  
Marcus P. Zillman, M.S., A.M.H.A.  
The LinkSeries  
Post Office Box 220  
Marco Island, FL 33969-0220 USA

Payment Payable to: Marcus P. Zillman, M.S., A.M.H.A.

## New Product Converts Macintosh Computers into 100 MS/s Digital Storage Oscilloscope

December 19, 1994 -- Hinsdale, IL - Information Systems Technology, Inc. announced today a hardware and software kit that converts Macintosh NuBus computers into a fully programmable, highspeed digital storage oscilloscope. The kit combines the MacQuire plug-in data acquisition board with LabVIEW graphical instrumentation software (National Instruments, Austin, TX) to create a full-function oscilloscope virtual instrument. Information Systems Technology, Inc. is a member of the National Instruments Alliance Program.

### About MacQuire

Scientists and engineers can use MacQuire in a broad range of applications, including radar, sonar, ultrasound, time-of-flight measurements, shock and vibration analysis, video signal analysis, image processing, medical imaging, speech analysis, and automatic test equipment. MacQuire features include dual-channel, 130 MHz bandwidth, 8-bit resolution; 100 MS/s transient, 12 GS/s repetitive; deep memory (1 MB standard, 4 MB optional); software-selectable triggering with adjustable coupling, slope, and level settings; extremely low dead-time of less than 400 ns between end of sweep and acceptance of next trigger; pre, post, and segmented triggering modes; signal averaging software to reduce noise and improve resolution; auto setup; and easy operation via the LabVIEW front panel display.

### System Requirements

MacQuire requires a Macintosh NuBus computer with at least 8 MB memory and 25 MB disk space. MacQuire is compatible with Power Macintosh computers.

### Pricing, Availability, and For More Information

MacQuire is available now from Information Systems Technology, Inc. for \$4,800, which includes the MacQuire plug-in board and LabVIEW VIs. For more information, please contact Information Systems Technology, Inc., 911 N. Elm Street, Suite 310, Hinsdale, IL 60521, telephone and fax (708) 887-1911.

LabVIEW for Windows PCs and Macintosh, Power Macintosh, Sun SPARCstation, and HP 9000 Series 700 computers is available now from National Instruments with pricing starting at \$995. For more information, please contact National Instruments, 6504 Bridge Point Parkway, Austin, TX 78730-5039, (512) 794-0100. Or call toll free in the U.S. and Canada at (800) 433-3488. Fax: (512) 794-8411.



## New Windows-Based System Simulates Signals to Test Radar

December 19, 1994 -- Santa Monica, CA - Technology Service Corporation (TSC) has announced its new PC-based system for generating simulated radar signals for testing radars. The RES2000 includes a standard IBM-compatible PC, custom-designed digital signal processing (DSP) plug-in modules for real-time radar calculations, and virtual instruments (VIs) for LabVIEW application software (National Instruments, Austin, TX) for system control. TSC's virtual instrument approach to testing radars represents not only a significant downsizing of the physical test system, but also a major price and performance breakthrough. Technology Service Corporation is a member of the National Instruments Alliance Program.

### About the RES-2000

The RES-2000 real-time simulator synchronizes to the timing and antenna position of the radar, then generates signals identical to what the radar would see if it were operating in its normal mode. The system provides a cost-effective means of radar performance evaluation and operator training on new and existing radar systems. With the RES-2000, users can operate a radar in a laboratory environment without having to radiate energy and use cooperative targets. Operator-defined scenarios can be repeatedly executed, which is useful for troubleshooting problems. Typical simulations include targets (aircraft, missiles), clutter (weather, land, sea), and jammers, which test the ability of the radar to operate in the presence of electronic countermeasures.

Through the LabVIEW for Windows operator interface, the user has complete control of the system. Graphic displays, including a Plan Position Indicator (PPI) are included to monitor the simulated environment and radar operation.

### System Requirements

The RES-2000 requires a 486 computer with floating-point capability, 8 MB RAM, 25 MB disk space, and Windows 3.1 or greater; LabVIEW Version 2.5 or greater; and a color monitor.

### Pricing, Availability, and For More Information

The RES-2000 is available now from TSC in several configurations, with pricing starting at \$75,000. For more information, please contact RES Marketing, Technology Service Corporation, 2950 31st Street, Santa Monica, CA 90405, (310) 450-9755 ext. 250, fax(310) 452-3175.

LabVIEW is available now from National Instruments for Windows PCs and Macintosh, Power Macintosh, Sun SPARCstations, and HP 9000 Series 700

computers. Pricing starts at \$995. For more information, please contact National Instruments, 6504 Bridge Point Parkway, Austin, TX 78730-5039, (512) 794-0100. Or call toll free in the U.S. and Canada at (800) 433-3488, fax (512) 794-8411, e-mail [info@natinst.com](mailto:info@natinst.com).

## First Jumperless IEEE 488.2 Controller Board Features Hardware Compatibility with Plug and Play ISA Standard

December 19, 1994 -- Austin, TX - National Instruments announced today a Plug and Play ISA version of its high-performance IEEE 488.2 controller board for computers with 16-bit ISA plug-in slots. The AT-GPIB/TNT (PnP), which is completely software configurable, is compatible with both Plug and Play and non-Plug and Play computer systems. The AT-GPIB/TNT (PnP) includes the company's NI-488.2 driver software for DOS and Windows, and is compatible with LabVIEW, LabWindows/CVI, and LabWindows application software packages. A PC equipped with the AT-GPIB/TNT (PnP) becomes a high-performance IEEE 488.2 Controller used to monitor, control, and communicate with thousands of GPIB-based engineering, scientific, or medical instruments, and graphics equipment.

### About the AT-GPIB/TNT (PnP)

The AT-GPIB/TNT (PnP) performs the basic Talker, Listener, and Controller functions required by all versions of the IEEE 488 (GPIB) standards and implements HS488 high-speed data transfers that can exceed 3.4 Mbytes/s on the EISA bus for both read and write operations. For standard IEEE 488 transfers, rates can attain 1.5 Mbytes/s. The AT-GPIB/TNT (PnP) is designed for true Plug and Play operation in Plug and Play-compatible systems. In a fully compatible Plug and Play system, the hardware settings are automatically configured on power up, so the user does not have to worry about hardware configuration details. For non-Plug and Play systems, the AT-GPIB/TNT (PnP) offers a completely jumperless solution - hardware configuration is accomplished through the NI-488.2 configuration utility.

### Programming Options

The AT-GPIB/TNT (PnP) kit includes the company's NI-488.2 driver software for DOS and Windows. The NI-488.2 software simplifies GPIB system programming, shortens development time, and offers the flexibility to handle any GPIB application. The NI-488.2 software includes two sets of functions. The NI-488.2 routines duplicate the protocols and sequences found in the IEEE 488.2 standard. The NI-488 functions are a de facto industry standard. NI-488.2 for both DOS and Windows includes a full set of development utilities, including a GPIB monitor, an interactive debugger, configuration utility, and a suite of sample programs. NI-488.2 for Windows has been recently enhanced to include a new Windows-based GPIB configuration utility, an on-line NI-488.2 Function Reference manual, and a GPIB monitor utility that captures GPIB data and status information.

### Pricing and Availability

The AT-GPIB/TNT (PnP) will be available in January 1995 for \$495. For more information, contact National Instruments, 6504 Bridge Point Parkway, Austin, TX 78730-5039, (512) 794-0100. Or call toll free in the U.S. and Canada at (800) 433-3488, fax (512) 794-8411, e-mail [info@natinst.com](mailto:info@natinst.com).

## New Module Gives Instrument Control Capability to PCs with PC/104 Slots

December 19, 1994 -- Austin, TX - National Instruments has announced a low-cost, high-performance IEEE 488 interface module for embedded PCs with PC/104 expansion. The PC/104-GPIB is fully hardware and software compatible with the company's AT-GPIB/TNT plug-in IEEE 488.2 interface in a compact, stackable module. It features the patented HS488 high-speed mode for GPIB transfers up to 1.6 Mbytes/s. The PC/104-GPIB includes NI488.2 software for DOS and Windows, and is compatible with the company's LabVIEW and LabWindows/CVI application software for Windows, and LabWindows application software for DOS.

An embedded PC equipped with the PC/104-GPIB becomes a high-performance IEEE 488.2 Controller used to monitor, control, and communicate with thousands of GPIB-based engineering, scientific, or medical instruments and graphics equipment.

### About the PC/104-GPIB

The PC/104-GPIB is a high-performance IEEE 488.2 controller board for embedded computers equipped with PC/104 expansion. (The PC/104 standard provides a compact implementation of the PC ISA bus to satisfy the reduced space and power constraints of embedded control applications.) It features the company's TNT4882C ASIC, and performs the basic Talker, Listener, and Controller functions required by all versions of the IEEE 488 standard. The PC/104-GPIB includes jumper-selectable hardware features, such as a choice of 11 interrupt lines and three 16-bit DMA channels.

### About NI-488.2 Software

NI-488.2 includes more than 50 GPIB-related routines and functions - including Talker, Listener, Active Controller, and System Controller - that simplify programming the GPIB. NI-488.2 includes two sets of functions. The NI488.2 routines duplicate the protocols and sequences found in the IEEE 488.2 standard. The NI-488 functions are the de facto industry standard. Both the NI-488.2 routines and NI-488 functions have complete multiplatform compatibility, regardless of hardware interface or operating system.

### Pricing, Availability, and For More Information

The PC/104-GPIB will be available in January 1995 for \$495. For more information, contact National Instruments, 6504 Bridge Point Parkway, Austin, TX 78730-5039, (512) 794-0100. Or call toll free in the U.S. and Canada at (800) 433-3488, fax (512) 794-8411, e-mail [info@natinst.com](mailto:info@natinst.com).

## Control GPIB Instruments with Macintosh Printer/Modem Ports

December 19, 1994 -- Austin, TX - National Instruments announced today a new external RS-232-to-GPIB controller for Macintosh computers. The GPIB-232CT-A/Mac includes the GPIB-232CT-A external box and NI-488.2 driver software for Macintosh computers, and is compatible with the company's LabVIEW graphical instrumentation software. System developers can use the GPIB-232CT-A/Mac to connect GPIB instruments to Macintosh computers through a Macintosh printer or modem port.

The GPIB-232CT-A/Mac is ideal for use in instrument control applications in which there are no plug-in slots available, such as with the Macintosh PowerBook. It uses the National Instruments NAT488.2 chip to perform all IEEE 488 Controller functions, including those specified by the IEEE 488.2 standard. The GPIB-232CT-A/Mac implements both normal and extended Talker and Listener, serial and parallel polling, service requests, pass and receive control functions, and remote programming functions.

NI-488.2 is a software package for Macintosh that simplifies programming National Instruments Macintosh-to-IEEE 488 interfaces that function as GPIB Controllers with complete communication and bus management capabilities. The software includes more than 50 GPIB-related routines and functions, thus eliminating the need for the user to understand or program the hardware. Operations include Talker, Listener, Active Controller, and System Controller. NI-488.2 high-level functions and routines simplify interfacing to GPIB instruments and shorten development time. Low-level functions and routines offer a means of optimizing system performance or interfacing to special devices. NI-488.2 applications are portable across many different computer platforms and operating systems so users never have to rewrite their programs when the move to new systems. The driver can be linked to application programs through language interfaces for Microsoft QuickBASIC, Lightspeed C, and MPW C.

### Pricing and Availability

The GPIB-232CT-A/Mac will be available in February 1995 for \$595. For more information, contact National Instruments, 6504 Bridge Point Parkway, Austin, TX 78730-5039, (512) 794-0100. Or call toll free in the U.S. and Canada at (800) 433-3488, fax: (512) 794-8411.

## Ethernet-Based Networking Kit Gives Windows PCs Instrument Control Capability

December 19, 1994 -- Austin, TX - National Instruments has announced that the company's GPIB-ENET external interface kit is now available for Windows PCs. Engineers and scientists can use the GPIB-ENET/Win kit to connect Windows computers to IEEE 488 (GPIB) instruments via Ethernet networks in numerous instrumentation applications, including automated testing and laboratory automation. The GPIB-ENET/Win kit, which includes the GPIB-ENET box and the company's NI-488.2 software for Windows, can also be programmed with the company's LabVIEW and LabWindows/CVI application software packages.

### About the GPIB-ENET

Engineers and scientists can use the GPIB-ENET to control GPIB instruments from driver-equipped host Windows PCs, Macintosh computers, Hewlett-Packard 9000 Series 700 workstations, or Sun SPARCstations anywhere on Internet, a worldwide scientific, research, and educational network. Scientists and engineers can also use the GPIB-ENET to share GPIB peripherals between many networked users. For example, a user can control a GPIB system interfaced to a network by the GPIB-ENET from computers or workstations located within the same building or from another location in another state or country. The compact GPIB-ENET also has an internal power supply, and includes high-level NI-488.2 software.

### About NI-488.2

The GPIB-ENET/Win includes the company's NI-488.2 driver software for Windows. NI488.2 includes more than 50 GPIB-related routines and functions - including Talker, Listener, Active Controller, and System Controller- that simplify programming the GPIB. NI-488.2 includes two sets of functions. The NI-488.2 routines duplicate the protocols and sequences found in the IEEE 488.2 standard. The NI-488 functions are a de facto industry standard. Both the NI-488.2 routines and NI-488 functions have complete multiplatform compatibility, regardless of hardware interface or operating system, so users can easily port their applications between computer systems.

### Pricing, Availability, and For More Information

The GPIB-ENET/Win kit will be available in January 1995. Prices are \$1,095 for the AUI/twisted-pair version and \$1,195 for the AUI/coaxial version. These prices are for single computer use; an optional multi-user software license is available for several computers and/or workstations. Software-only packages are also available for current GPIB-ENET/Mac, GPIB-ENET/Sun, and GPIB-ENET/HP users.

For more information, please contact National Instruments at 6504 Bridge Point Parkway, Austin, TX 78730-5039, (512) 794-0100. Call toll free in the U.S. and Canada at (800) 433-3488, fax (512) 794-8411, e-mail [info@natinst.com](mailto:info@natinst.com).

## Nintendo Introduces Virtual Reality Game Play

TOKYO - Nintendo has announced the introduction of Virtual Boy, the first virtual reality system developed and produced for the mass market. The RISC-based, 32-bit system utilizes two high-resolution, mirror-scanning LED displays to produce a 3-D experience not possible on conventional TV or LCD screens.

Virtual Boy is scheduled to be released in Japan in April 1995, along with three software titles. The product will be released in the Western Hemisphere in April 1995; and will be officially unveiled at the Winter CES.

Nintendo has acquired a majority interest in Relection Technology, Inc., the creators of the virtual reality display technology. This is the first time Nintendo has taken an equity position in a US-based company.

## Atari Signs Deal for Virtual Reality Games

LONDON - Virtuality, a British designer of virtual reality systems has announced a deal with Atari to produce the first virtual reality games for the home market.

Virtuality will design a headset for use with Atari's Jaguar, and Atari will begin to manufacture the headset in the second half of next year in order to have it ready for Christmas '95.

"This deal offers both companies great opportunities to build an early position in the home market for immersive virtual reality," says chief executive of Virtuality, Jon Waldern.

## Neurosoft releases new software to aid study of Japanese Language For users of Microsoft Windows

December 19, 1994 -- (Albany, Oregon) -- Neurosoft has released Nihongo Sensei 1.1, the first software product specifically designed for students to learn Japanese vocabulary. Nihongo Sensei combines Japanese hiragana characters and spoken Japanese words, to create a multimedia learning experience.

Users can combine groups of Japanese words with their English translations into a quiz. Nihongo Sensei comes with five sample quizzes, and users can easily create their own. The software will automatically write any word a user adds in Japanese hiragana and can say it in Japanese.

When taking the quiz Nihongo Sensei displays the Japanese word, says the word and then asks for an English translation. Users can easily customize it to use only hiragana, only verbal speech or both.

When the student practices the words, the software automatically keeps statistics on individual words and entire quizzes. Then it allows them to reinforce well-known words or practice difficult ones based on past scores.

The program's easy to use Windows interface and on-line help make it easy for beginners to jump right in.

System Requirements: 386 or better, 2 MB of hard drive of space, Windows 3.1, 4 MB of RAM, a sound card is recommended

Cost: \$20.00 + \$4.00 Shipping and handling Product information contact, Ben Gerdemann, 6294 Nelson Pl Sw, Albany, Or 97321, 503-926-3436, Internet: beng@csos.orst.edu.

### Ordering information

You can order Nihongo Sensei by sending check, cash or money order to Ben Gerdemann, 6294 Nelson Pl SW, Albany, Or 97321, or with MC, Visa or American Express from PsL by calling 1-800-2424-PSL or FAXing 1 -713-5246398. These numbers are for orders only. For product information, technical support, or quotes on volume discounts, dealer pricing, site licenses, etc. call 503-926-3436. You can also mail credit card orders to PsL at P.O. Box 35705, Houston, TX 77235.

## Attain Acquires New Macintosh Contact Manager

### FastPace Instant Contact Offers Direct Links to IN CONTROL Planner & Organizer

SOMERVILLE, MA, December 20, 1994--Attain Corporation, creators of the award-winning IN CONTROL Planner & Organizer for the Macintosh, announced today that it has signed a letter of agreement to acquire FastPace Instant Contact, a new Macintosh contact manager developed by Texas-based Foresight Technology.

FastPace Instant Contact is a feature-rich, competitively-priced contact manager for individuals and workgroups. It lets people manage over 50,000 contact records. In addition, FastPace offers direct links to IN CONTROL, giving people automatic access to names, addresses and phone numbers, right from IN CONTROL.

Launched in August, 1994, FastPace has received widespread industry praise for its complete, yet powerful feature set, graceful design and affordable price. Wrote MacWEEK magazine in an October 3, 1994 review: "FastPace Instant Contact stands apart in the crowded PIM market by providing an intuitive interface and powerful features at a reasonable price. Users looking for an elegant and intuitive contact manager should consider this product."

Attain will assume all marketing, sales, technical support and development functions for FastPace. The acquisition of FastPace enhances Attain's position as a leading provider of high-quality personal productivity software.

Attain's flagship product, IN CONTROL, has consistently earned top industry awards for helping people be more productive. It's the only personal productivity software that combines state-of-the art calendars with a unique project planning outliner. This focus on planning is what sets IN CONTROL apart from ordinary calendar programs, that just offer a place to list and schedule events and be reminded of them. The acquisition of FastPace rounds out Attain's product offerings, increasing the firm's value as the one-stop shop for total productivity software solutions.

First launched in early 1992, IN CONTROL won MacUser's 1992 Editors' Choice Award for "Best Organizational Tool", and has also earned four diamonds from MacWEEK and four stars from Macworld.

The addition of a top-notch contact manager to Attain's product line enables the company to satisfy users' needs to combine contact management with scheduling and project planning.

"With FastPace Instant Contact, we can now offer our customers a complete

solution for organizing and tracking their contacts," said Dan Chadwick, Attain's co-founder and president. He continued, "It's the perfect compliment to IN CONTROL, which people use to plan, organize and schedule projects and events, then actively manage that information to make decisions. Managing a contact list is an important element of the decision-making process. "

Foresight began actively pursuing a buyer for FastPace, when it recognized that a partnership with an established industry player would substantially enhance the product's market potential in the crowded PIM arena. The sale will also allow the company to focus on its primary business as a major third-party supplier of developers' tools and database add-on products.

"We've been impressed with the success of IN CONTROL," said Rich Gay, president of Foresight Technology. "By pooling FastPace's superior technology with the top position IN CONTROL enjoys in the market, I'm confident that FastPace will quickly become a major competitor," he said.

Attain has been successfully selling FastPace Instant Contact bundled with IN CONTROL for \$99.95, since October, 1994. Buyers of the bundle have also been receiving a free copy of new Quicken 5, Intuit's best-selling finance software.

Attain will also market FastPace Instant Contact as a stand-alone product for the suggested selling price of \$59.95. The suggested competitive upgrade price will be \$39.95. FastPace will be distributed nationally by major software distributors and through national mail order houses, including MacWarehouse and MacConnection.

#### Technical Requirements

IN CONTROL 3.0 requires Macintosh System 6.0.5 and later, including System 7.0 and later. Suggested RAM 1200K; suggested hard disk space 1200K. FastPace Instant Contact requires Macintosh System 7.0 or higher; suggested RAM 1500K.

#### Attain Corporation

Founded in 1991 by Dan Chadwick and Alan Albert, creators of the award-winning FileMaker, Attain develops, markets and supports personal productivity software. Attain is located at 48 Grove St., Somerville, MA 02144. 1-800-925-5615. Voice: 617-776-1110. Fax: 617-776-1626. Internet: [information@attain.com](mailto:information@attain.com)

## Western Europe PC Application Software Sales Reach \$307 Million in Third Quarter, 1994

### Soft Pricing Contributes to 20% Decline in Revenues

December 19, 1994 (Washington, DC) - The Software Publishers Association (SPA) announced today that personal computer application software sales in Western Europe were \$307 million for the third quarter of 1994, a 20% decline from the third quarter of 1993. For the first three quarters of 1994, sales were \$1,254 million, a 1% increase from the first three quarters of 1993. For the quarter, overall unit sales increased 65%, and were up 80% for the first three quarters.

### Revenues Decline in All Three Major Platforms

For the first time, Windows applications revenues in Western Europe declined year over year. Windows application sales for 3Q94 were \$259M, a 7% decrease from 3Q93. On the strength of 25 to 30% growth in the first half of 1994, Windows applications sales for the first three quarters were up 17% to \$1,054M. Third quarter 1994 DOS application sales were \$24.3M (off 65%), while Macintosh application sales were \$20.1M (off 28%). For the first three quarters of 1994, DOS applications were \$111M (off 53%), while Macintosh applications were \$78.3M (off 11%).

### Half of Western Europe Regions Report Revenue Declines in Q3 '94

The table below shows the sales results by country/region for Western Europe. Five of the ten regions, and all three of the largest regions, reported revenue declines in Q3 '94. The UK/Ireland region had the highest sales in the quarter and suffered the smallest decline of the big three. Revenues in Q3'94 were \$85.5 million, a 12% decline from Q3'93. Germany/Austria was the largest region for the first three quarters, but suffered a 43% decline in revenues in Q3'94, to just under \$70 million. France was the number three market in Q3'94, with sales off 16% to \$47.7 million.

### Sales Downturn Widespread

"The figures show that the sales slowdown in the third quarter in Western Europe was widespread, and not confined to just a few markets," said David Tremblay, the SPA's Research Director. "Only in the Benelux and Spain/Portugal regions were software sales growth in Q3'94 better than it had been in the first half."

"The figures also show that the culprit in the downturn is pricing," said Gerard Gabella, SPA Europe Managing Director. "The industry's quarterly unit growth rates have been between 60 and 90% so far this year. But, average

prices are down so sharply from 1993 that revenue growth for quarters 1, 2 and 3 were 10%, 12% and (20%), respectively. In this pricing environment, it has become very hard for application software companies to make money in Western Europe."

Thirty-eight primarily US-based software firms participated in the SPA's data program by submitting confidential data to the accounting firm of Arthur Andersen, which prepared the report for the SPA. Among the participants are: Adobe, Borland, Claris, Lotus, Microsoft, Software Publishing, Symantec, and the WordPerfect Division of Novell. The sales data were collected in 33 software categories (including word processors, spreadsheets, presentation graphics, and others) and in six operating systems (including DOS, Macintosh, and Windows).

The Software Publishers Association is the principal trade association of the PC software industry. Its 1,100 members represent the leading publishers in the business, consumer, and education markets. The SPA has offices in Washington, DC, and Paris, France. SPA press releases are available on-line through CompuServe (GO:SPAFORUM), and from SPA's faxback service at 800 637-6823.

Software Publishers Association  
1730 M St, Northwest, Suite 700, Washington, D.C. 20036  
202-452-1600, Fax: 202-223-8756

## Japan Becomes US Publishers' Largest Software Market Outside North America

### Asia/Pacific Region Software Sales Rise 45% To Reach \$208 Million for Third Quarter 1994

December 19, 1994 (Washington, DC) - The Software Publishers Association (SPA) announced today that sales of personal computer application software reached \$208 million in the Asia/Pacific region in the third quarter of 1994 (Q3'94), a 45% increase from the third quarter of 1993 (Q3'93). For the first three quarters of 1994, sales were \$565 million, an increase of 46% from the same period in 1993. Unit sales increased 119% for the third quarter, and 106% for the first three quarters.

### Japan US Publishers' Largest Software Market Outside North America

Sales growth in Japan continued to be very strong in Q3 '94. In the quarter, application software sales by US firms totaled \$132.3 million, a 62% increase from Q3 '93. For the first three quarters, Japan sales were up 65% to \$359 million. Sales in Japan for Q3 '94 were up on the strength of Windows (up 150%) and Macintosh (62%) applications. For the quarter, DOS sales were off 52%. US publishers' unit sales in Japan were up 155% for Q3 '94 and 123% for the first three quarters.

"The third quarter marked a milestone for US software publishers' international sales," said David Tremblay, SPA's Research Director.. " In the quarter, Japan became the largest international market for US publishers, surpassing the largest markets in Western Europe. With first three quarter sales of \$359 million, Japan is now a larger software market for US firms than are Germany/Austria (\$342 million for the first three quarters), and the UK/Ireland (\$319 million). And in contrast to those European markets, which were off 43% and 12% respectively in Q3 '94, software sales in Japan continues to surge ahead."

### Other Asia/Pacific Regions Show Good Growth

Sales growth for the quarter in other Asia/Pacific regions was good, but not as strong as in Japan. Sales in Australia/New Zealand were \$45.6 million, a 28% increase from Q3 '93. That growth was the fastest growth seen since the third quarter of 1991. For the first three quarters, sales were up 19% to \$126.8 million.

Sales in the "Asian Tiger" economies totaled \$30.4 million for the quarter and \$80.8 million for the first three quarters of 1994. At 15% for Q3 '94 and 24% for the first three quarters, sales growth in these economies was more moderate than in Australia/New Zealand and Japan. (Since sales of individual

countries were not separated in 1993, SPA is not able to provide individual country-level growth rates at this time.)

### Asia/Pacific Growth Exceeds North America and Western Europe

While North America and Western Europe remain larger markets, growth rates in the Asia/Pacific regions were generally higher. In Q3 '94, Western Europe sales were off 20%, while sales in North America were up 15%. At 62%, the increase in sales in Japan was four times the North America increase. Australia/New Zealand sales were up 28%, nearly twice the North America increase. The increase for the "Asian Tiger" economies, at 15%, matched the North America increase in Q3 '94.

Sales data reported are from the SPA's International Data Program, and represent total revenues in these regions of the forty primarily US-based software firms participating in the SPA's International Data Program. The companies submit their confidential sales data to the accounting firm of Arthur Andersen, which prepares the report for the SPA. Among the participants are Adobe, Borland, Claris, Lotus, Microsoft, Software Publishing, Symantec, and the WordPerfect Division of Novell. While US companies have the dominant market share in most of these regions, the figures reported should not be taken as an estimate of the total market size. Rather, they represent total sales of the reporting companies.

The Software Publishers Association is the principal trade association of the PC software industry. Its 1,100 members represent the leading publishers in the business, consumer, and education markets. The SPA has offices in Washington, DC, and Paris, France. SPA press releases are available on-line through CompuServe (GO:SPAFORUM), and from SPA's faxback service at 800 637-6823.

Software Publishers Association  
1730 M St, Northwest, Suite 700, Washington, D.C. 20036  
202-452-1600, Fax: 202-223-8756

## Latin America Software Sales Reach \$41 Million for Q3 1994 Doubling of Sales in Brazil Paces Growth

December 19, 1994 (Washington, DC) - The Software Publishers Association (SPA) announced today that US publishers' sales of personal computer application software reached \$41 million in Latin America in the third quarter of 1994 (Q3 '94), a 47% increase from the third quarter of 1993 (Q3 '93). For the first three quarters of 1994, sales were \$102 million, an increase of 37% from the same period in 1993. Unit sales increased 178% for the third quarter, and 156% for the first three quarters.

### Sales up Strongly in Brazil and in Mexico

SPA sales reports for Latin America are able to separate three regions: Brazil, Mexico and all other Latin American countries. Sales in Brazil were up 104% to \$11 million in Q3 '94, while first three quarter sales were up 96% to \$24 million. In Mexico, sales were \$13 million (up 56%) for the quarter and \$35 million (up 20%) for the first three quarters, respectively. For comparison, growth rates in the US/Canada market were 15% for the quarter and 11% for the first three quarters. While the US/Canada market is much larger, growth was much more robust in the Latin American markets.

### Windows Applications Account for the Majority of Sales

Windows applications accounted for the majority of application software sales in Latin America through the first three quarters of 1994. Sales of Windows applications reached \$86.7 million in the period, a 78% increase from 1993. Windows sales accounted for about seven in eight application software dollars spent in Latin America in Q3 '94.

Windows applications clearly drive US firms' sales in Latin America. For the first three quarters, DOS applications declined 48% to \$10.8 million, while Macintosh applications were off 19% to \$3.4 million.

"The Latin America sales growth in Q3 '94 was about three times the growth rate seen in the US/Canada market," said David Tremblay, SPA's Research Director. "Of course, actual growth of software usage was probably much higher over the period, as many of the countries in this region are notorious for their software piracy. With the increased protection of software intellectual property in the NAFTA and GATT agreements, we should be able to look forward to higher sales and even higher rates of growth in this region in the future."

Sales data reported are from the SPA's International Data Program, and represent total revenues in these regions of the forty primarily US-based software firms participating in the SPA's International Data Program. The

companies submit their confidential sales data to the accounting firm of Arthur Andersen, which prepares the report for the SPA. Among the participants are Adobe, Borland, Claris, Lotus, Microsoft, Software Publishing, Symantec, and the WordPerfect Division of Novell. While US companies have the dominant market share in most of these regions, the figures reported should not be taken as an estimate of the total market size. Rather, they represent total sales of the reporting companies.

The Software Publishers Association is the principal trade association of the PC software industry. Its 1,100 members represent the leading publishers in the business, consumer, and education markets. The SPA has offices in Washington, DC, and Paris, France. SPA press releases are available on-line through CompuServe (GO:SPAFORUM), and from SPA's faxback service at 800 637-6823.

Software Publishers Association  
1730 M St, Northwest, Suite 700, Washington, D.C. 20036  
202-452-1600, Fax: 202-223-8756

Gaming Industry 'Short Takes' from various sources....

---

Viacom & Nickelodeon to Collaborate: Viacom New Media and Nickelodeon have teamed up to create a new computer-based play experience for kids. Are You Afraid Of The Dark": The Tale of Orpheo's Curse will be on CD-ROM for PCs. In addition, the companies have developed a video game version of the kids' show Nickelodeon Guts for play on the Super NES. Nickelodeon Director's Lab, also a new introduction, is a CD-ROM that features the star of Nick's "Clarrisa Explains It All."

---

Muppets Appear on Activision CD-ROM: Activision, Inc. announced it will develop and publish a multimedia CD-ROM children's adventure game, Muppet Treasure Island, under a licensing agreement with Jim Henson's Productions.

---

For the Super Nintendo Entertainment System, Donkey Kong Country, which features the new Advanced Computer Modeling graphics system, is expected to sell well over the holiday season and into the new year.

---

Accolade is providing heavy marketing for its newest SNES games. Dragon Ballz is expected to do well in the first quarter of '95, while new introduction Fireteam Rogue will also feature well. For the Genesis, they'll be offering Zero Tolerance and Live Action Football.

---

From Activision in March comes BattleTech, based on the TV show, along with new releases of Radical Rex and Pitfall, all for the SNES. They'll also be bringing the arcade classic Pitfall to Sega Genesis and Sega CD, along with their newest game Radical Rex.

---

Acclaim is bringing out more SNES & Genesis games with movie tie-ins: True Lies and StarGate, along with a new game based on the upcoming Batman Forever. Also expected to do well will be NFL Quarterback Club and WWF Raw.

---

From Fox Interactive there are several SNES & Genesis titles coming: The Pagemaster, based on the film of the same name will be featured as part of a promotional tie-in during the video release in April. Also involved in the film-to-game crossover is a game based on Die Hard III, as well as a game based on the Fox cartoon "The Tick."

---

Sega is optimistic about the strength of the redesigned NFL '95. Also from Sega is the newest in the Sonic Hedgehog series, Sonic and Knuckles. Both have been heavily promoted over the holiday season and will continue to be into the new year. Also coming in the new year ar NHL All-Star Hockey and NBA Action '95 Starring David Robinson.

---

Electronic Arts' sports department will unveil a new boxing game, as well as Road Rash III for the Genesis.

---

For the CD addition that Atari released in October, the company has several new titles coming, including Dragons Lair, Demolition Man, Highlander, and Brett Hull Hockey. For the regular system, Hardball Baseball, Soccer Kid and Tiny Toon Adventures, all from Atari, along with a host of others.

---

Williams Entertainment will be offering Troy Aikman NFL Football and Double Dragon V for the Jaguar. Double Dragon V follows the adventures of the Dragon Brothers who were featured in their own film this holiday season.

---

For the 3DO system... Electronic Arts offers FIFA Soccer, completely rebuilt for the system, along with Road and Track Presents: The Need for Speed. Super Street Fighter II Turbo will be coming from Panasonic, a conversion from the arcade game, which will be the basis for the up coming film titled Street Fighter starring Jean Claude VanDamme. Also based on a movie is Rebel Assault, the Star Wars game from LucasArts. The system also has Triple Threat Shanghai, a classic strategy game from Activision and Star Trek: The Next Generation: A World For All Seasons from Spectrum HoloByte which places the gamer inside the bodies of various crew members in this interactive strategy game. Soon to be released are Dragon's Lair II: Time Warp from Ready Soft, Gex from Crystal Dynamics, and Kingdom: The Far Reaches from Interplay Productions.

---

LazerActive has two new products coming in '95. First is the conversion of Myst especially for the format. Then there's a new project being executive produced by Robert Redford, tentatively titled Legacy which will feature film-based footage from several national parks in an environmentally themed game.

## CHEAPSKATES UNITE!

The computer industry is hiding something and I'm out to expose their secret. In *Computing for Cheapskates*, I uncover the truth and tell you how to find the bargains and freebies the computer industry would rather you didn't know about.

All the computing power most people may ever need is readily available, from dirt-cheap hardware and inexpensive or even free software. Rarely the focus of computer industry hype and advertising, these often outstanding products have gone little noticed by a computing public bombarded by announcements for the latest, most extravagant offerings, But no longer!

*Computing for Cheapskates* shows readers hundreds of ways to spend less and get more computer hardware, software, supplies and services. It also includes tons of money-saving tips for buyers in the market for a new computer. It describes the kind of computer most people actually need and explains everything readers must know when buying a computer.

Some of the products I cover include: absolutely free software that makes DOS faster and easier to use than Windows; a multitasking GUI that works like Windows , comes with a host of top-notch applications, costs next to nothing, and runs on dirt-cheap computers; and a little-known completely unpromoted, world-class package that provides all the applications and free support most users will ever need--for less than the cost of many single programs. This is the ultimate book for the resourceful or downright stingy computer owner.

*Computing for Cheapskates* (ISBN1-56276-293-1), published by Ziff-Davis Press, carries a \$12.95 price tag (marked down from \$16.95). If your local bookstore doesn't have it get real ugly with them, or call 1-800-688-0448 to order it directly.

## PLAYER DEFENDS ACCUSED MURDERER IN NEW LEGAL GAME

SHREVEPORT, LA, December 14, 1994--Softdisk Publishing today announced the release of Juris Diction, an exciting new, courtroom game that stars the player as the defending attorney in a Beverly Hills murder trial.

Developed for IBM-PC compatible computers, Juris Diction features five levels of play, questions written by an experienced trial lawyer, an animated introductory courtroom sequence, and mood-setting sound effects--from the judge's voice to a squeaky chair.

"You don't have to be a lawyer or law student to enjoy this game," said Softdisk Publishing President Al Vekovius. "It's for anyone who is fascinated by law or enjoys a mental challenge. You have to think fast and act immediately, which isn't as easy as it sounds. I was hooked after my first game...and determined to keep my client from being found guilty of murder."

To protect and acquit his client, the Juris Diction player must quickly and accurately decide whether to allow the prosecutor's latest question or to object to it by pressing a key that corresponds to one of 10 grounds for objection. The 10 objections are: argumentative, violates the Best Evidence Rule, calls for a conclusion, assumes unestablished facts, calls for hearsay, irrelevant or immaterial, leading, multiple questions, violates privilege, speculative, and vague.

The judge may "overrule" the player's objection (no points), "sustain" the objection (points), or simply decide to "allow it" (partial points). The point values awarded for correct responses depend on how quickly the player presses a key from the time the question appears on the screen. The faster a player reacts, the more points he'll receive.

In order to advance to a new level, the player must score a minimum number of points and correctly answer all the questions on a short quiz about the testimony just presented. And to make the five-level game even more interesting, each level requires the player to score an increasingly higher number of points. When a player wins--or acquits his client--he learns the identity of the real murderer. Juris Diction contains thousands of possible questions, so there are over 1 million possible scenarios. Every new game is literally different from the last.

A demo of Juris Diction is currently available on America Online (keyword: softdisk), PRODIGY (jumpword: downloadsuper), CompuServe (go: gamers), via Anonymous FTP at ftp.uwp.edu in /pub/incoming/games as JURISDEM.ZIP or direct from Softdisk Publishing for \$2.50 to cover shipping. The full game (on high density 3.5-inch disks) is available only from Softdisk Publishing at an introductory price of \$29.95 plus shipping. Order Hot Line: 1-800-831-

2694 or 1-318-221-8718.

System requirements for Juris Diction are: IBM-PC compatible, 512K of RAM, VGA graphics, and MS-DOS 3.3. Compatible with Sound Blaster, Disney Sound Source, and Advanced Gravis Ultra Sound sound cards.

In addition to publishing "stand-alone" programs like Juris Diction, Softdisk Publishing, based in Shreveport, LA, is the world's leading publisher of software subscriptions for home computer owners. The company publishes six monthly software subscriptions on disk, including SOFTDISK for Windows (for IBM-PC compatibles with Windows), SOFTDISK PC (for MS-DOS-based IBM-PC compatibles), and SOFTDISK for Mac (for Macintosh).

JURIS DICTION Orders: 1-800-831-2694

December 26, 1994

It's here! The updated BGI256 driver V3.03 is now available.

The big improvements are:

1. An improved line draw algorithm which makes BGI256 line draw similar to the Borland line draw method. This improves the stroked font appearance.
2. Animation support has been enhanced by providing sprite animation support through a modified use of PutImage.
3. Virtual display support. Unfortunately, few vesa drivers provide proper virtual screen support, so this should be used at your own risk. If it doesn't work, yell at your display card manufacturer for not providing proper VESA support. If virtual display support is available, the SetActivePage and SetDisplayPage functions will be supported.
4. Patterned line draw has been enhanced with three new options; standard, continuous and fixed.

Users who have registered within the last 90 days will be receiving a copy of the new driver free of charge. Other registered users may upgrade their driver for \$10 plus \$5 shipping and handling. If you have not yet registered your BGI256 driver, you can still do so at the \$45 rate plus \$5 shipping and handling. See the attached order form for more information. Visa or Mastercard orders can now be accepted.

The specific Trident and Video Seven drivers are no longer supported. It is recommended that a VESA TSR be used with these cards unless you have a need to use the card specific BGI driver. The card specific include files are still provided so that you can create the drivers using the CREATE.BAT file if you need the card specific driver.

If you do not have a VESA driver for your display, you can find VESA drivers for the most popular display cards in the IBMPRO forum on CompuServe in section 12. For specific display card support, visit the GRAPHICS support forums on CompuServe. Most of the display card manufacturers provide support in one of the available graphics support forum sections.

Knight Software  
P.O. Box 22902  
Milwaukie, OR 97269

## WEST PUBLISHING MATERIALS NOW AVAILABLE ON THE WORLD WIDE WEB

West Publishing product and company information, some of which is already accessible on the Internet through the West Publishing gopher, is now available on the World Wide Web (WWW). WWW provides consistent access to information at thousands of locations and in a variety of media.

West materials, available with hypertext links on WWW, are divided into the following categories (see Backgrounder for more information):

- \* Hot Off the Press
- \* Welcome to West Publishing
- \* What's New from West
- \* Contacting West Publishing
- \* Frequently Asked Questions
- \* Educational Publishing: College & School
- \* Law School Publishing
- \* Legal Practice Tools
- \* Ordering Information
- \* WESTLAW Information
- \* West CD-ROM Libraries=FEinformation
  - \* Desktop Practice Systems=FEinformation
  - \* West's Legal Directory=FEinformation

WWW enables users to quickly find information in Internet databases by using "hypertext," a method for linking files on different computers with key words.

The URL (Uniform Resource Locator) for West's WWW home page is <http://www.westpub.com>. This home page can be accessed from Lynx or from a graphical Web browser.

For more information about West Publishing materials on the WWW, call (800) 778-8090 or send your inquiries via e-mail to [westmedia@westpub.com](mailto:westmedia@westpub.com) or [webmaster@westpub.com](mailto:webmaster@westpub.com).

---

### BACKGROUND - WEST MATERIALS AVAILABLE ON WWW HOME PAGE

---

Hot Off the Press - contains cover stories on hot news items about West Publishing.

Welcome to West Publishing - provides a general overview of the company; general descriptions of WESTLAW, West CD-ROM Libraries, Desktop Practice Systems, West books, and the company; and information on topics of interest/concern to West Publishing.

What's New from West - includes information on new West products or services.

Contacting West Publishing - contains information about West contacts for information and ordering needs.

Frequently Asked Questions - provides answers to questions frequently asked about West products and services.

Educational Publishing: College & School - contains information about West's elementary, high school and college divisions and materials produced within those divisions.

Law School Publishing - contains information about West's law school materials and the law school division.

Legal Practice Tools - contains information about West legal- practice services and publications.

Ordering Information - provides product ordering information.

WESTLAW Information - provides detailed information about WESTLAW, including technical documentation, newsletters and reference materials.

CD-ROM Information - provides detailed information about West CD- ROM products, including technical documentation, newsletters and reference materials.

Desktop Practice Systems Information - provides detailed information about West's Desktop Practice Systems software.

West's Legal Directory Information - provides detailed information about West's Legal Directory (WLD), and how to search WLD profiles.

Zenith Data Systems drops Z-NOTEFLEX prices, expands performance and support features

Strategic value-adds for popular notebook PCs target year-end purchases

Buffalo Grove, Ill. -- December 19, 1994 -- Zenith Data Systems announced today aggressive price reductions on its entire line of popular Z-NOTEFLEX notebook PCs, including savings of up to 18 percent and a new street price range starting at only \$2,369. ZDS also introduced new Z-NOTEFLEX premium performance upgrade and configuration options, extended service and support hours, plus an expanded Z-NOTEFLEX LCD protection policy.

"The Z-NOTEFLEX price/performance value has never been stronger," said Cliff Jenks, ZDS executive vice president of sales and marketing. "We've seen tremendous customer demand for our Z-NOTEFLEX product line. This series of strategic value-add moves will build even more momentum as year-end corporate PC purchasing activity peaks, and will further strengthen the company's competitive positioning within the full-featured notebook computer market."

Market-leading Flexibility, Performance and Savings

With prices reduced as much as 18 percent and new retail ranges starting as low as \$2,369, the Z-NOTEFLEX family of computers will lead the year-end marketplace in affordable flexibility and premium performance. Z-NOTEFLEX notebooks feature unprecedented user-configurable components and an unparalleled modular design that enables the system to be used longer and in more productive ways than most notebooks. To enhance overall performance of the high-end notebook product line, ZDS combined the benefits of local-bus video and local-bus IDE hard disk drive subsystems for maximum data throughput.

The series of premium-performance Z-NOTEFLEX upgrades and configurations announced by ZDS include support for the new 100MHz version of the Intel DX4 microprocessor. One of the first portable systems on the market with a fully user-upgradeable CPU design, the Z-NOTEFLEX also supports a full range of Intel 3.3-volt 486 SL-Enhanced processors including Intel's 33Mhz 486SX, 50MHz iDX2, and the 75MHz iDX4 processors.

Street pricing for the new Intel DX4/100-based systems start at \$2,969 with first customer shipments expected later this month.

ZDS also added a 700MB IDE hard drive to the list of 200, 340, 450 and 520MB configurations currently available for the Z-NOTEFLEX. All of the 2.5-inch IDE disks carry an advanced local-bus interface for improved performance, and are easily removed for shared use, data security or upgrading purposes.

"The Z-NOTEFLEX was designed to provide mobile users with all the computing resources normally found on desktop PCs," said David O'Conner, executive vice president of ZDS' worldwide product group. "The addition of 100MHz processing power and higher capacity hard drives moves us closer to that reality."

### Extended Service, Support and LCD Protection

In addition to price drops and new high performance models, ZDS announced the availability of 24-hours-a-day, seven-days-a-week Z-NOTEFLEX product support. With the extension of corporate support hours, ZDS' Customer Assistance Center is now prepared to respond to the needs of customers on a continuous and toll-free basis.

To further enhance customer service and satisfaction, ZDS is also offering a new Z-NOTEFLEX "no-fault" LCD protection policy. The company's Z-CARE warranty service program has been broadened to include an optional plan targeted at protecting the customer's investment in the Z-NOTEFLEX video display panel. Under the terms of the annual policy, ZDS will replace up to two LCD panels per year, at no cost to the customer to cover accidental damage.

"The powerful combination of unbeatable savings, service, performance and investment protection will make purchasing decisions a lot easier for a lot of people as the year closes," commented Jenks. "The standard configuration flexibility and innovative accessory options of the Z-NOTEFLEX made it a great deal even before we added more value. Now it's a can't-pass-it-up package."

### Standard Features

The Z-NOTEFLEX offers a range of high-quality, interchangeable VGA video displays, including the largest monochrome and dual-scan color LCDs currently available for notebook computers. Users may select from a 9.5-inch 256-color TFT active-matrix, a 10.3-inch 256-color DSTN color LCD, or a 10.4-inch 64-grey shade monochrome LCD. Simultaneous VGA video support is available on all Z-NOTEFLEX systems, including DSTN color models.

The notebook comes standard with a 3.5-inch, 1.44MB floppy disk drive which can be swapped for a second battery pack, upgradeable FLASH BIOS, two Type II PCMCIA slots forming a single Type III slot, one serial port, one EPP/ECP enhanced parallel port, an external video port, and a PS/2-style mouse/keyboard/keypad port. It also integrates 1MB of video RAM and a bit aligned block transfer (BITBLT) hardware graphics accelerator.

The standard 4MB or 8MB of 3.3-volt, 32-bit system memory of the Z-NOTEFLEX can be easily upgraded by users to a maximum of 24MB using 4MB, 8MB or 16MB memory modules.

The Z-NOTEFLEX is also ready to tap the full potential of the multimedia computing frontier, with a range of leading-edge features including a built-in, high-quality 16-bit sound system and the option to add a self-contained double-speed CD-ROM drive and amplified stereo audio enhancement.

MS-DOS, Microsoft Windows for Workgroups, Microsoft Sound System 2.0 and PCMCIA Card and Socket Services come preinstalled on all Z-NOTEFLEX notebook computers.

### About Zenith Data Systems

Zenith Data Systems, a Bull company, is a leading supplier of notebook, small notebook and desktop PCs, servers, wireless mobile products, monitors and related peripherals. With headquarters in Buffalo Grove, Ill., the company has engineering facilities in St. Joseph, Mich., Santa Clara, Calif., Billerica, Mass., and Buffalo Grove; manufacturing facilities in St. Joseph, Mich.; and sales locations in more than 30 countries.

Zenith Data Systems  
2150 East Lake Cook Rd  
Buffalo Grove, IL 60089  
708-808-5000, Fax 708-808-4434

## SYBASE ESTABLISHES SUBSIDIARIES IN AUSTRALIA, NEW ZEALAND

Acquired as part of aggressive expansion plan in Asia Pacific

EMERYVILLE, CA, December 19, 1994 -- Sybase, Inc., The Enterprise Client/Server Company, today announced two new subsidiaries in Australia and New Zealand. The subsidiaries were formed through the acquisition of the assets of Open Vision Systems (OVS) in Australia and Object Technology, Ltd in New Zealand, both former Sybase distributors. The acquisitions are part of Sybase's aggressive Asia-Pacific expansion plan, making Sybase Australia and Sybase New Zealand the company's fifth and sixth subsidiaries in this region.

OVS, headquartered in Sydney, Australia, and Object Technology, in Auckland, New Zealand, have been distributors of SYBASE products since 1990. Gary Jackson, who has been named general manager of Sybase Australia, replaces Steve Clark, former president of OVS. Previously, Jackson held executive positions at Microsoft Australia and Pyramid Technology Corporation. Object Technology's president, Mark Lunt, has assumed a new role as managing director of Sybase New Zealand.

"This acquisition is an important step to further our commitment to a global business strategy and to continue aggressive growth in Asia-Pacific," said Wain Beard, Sybase vice president, Asia Pacific operations. "The Asia-Pacific client/server market is one of the fastest growing markets worldwide. This is reflected by the fact that Sybase's third quarter revenues in this region grew at over 200 percent compared to Q3 earnings in 1993."

"The use of client/server technology in Australia is growing at a tremendous speed, and Sybase Australia is perfectly placed to take advantage of this growth," commented Jackson. "We plan to double our market share in Australia within the next 24 months by supplying the services and support necessary to help our customers successfully implement client/server solutions. This is an exciting opportunity for Sybase."

"News of the acquisition is being received very favorably in the New Zealand market," said Lunt. "Our prospective customers are glad to be able to deal directly with Sybase, and our existing customers, some of them early adopters of SYBASE technology, are happy to see their confidence in Sybase validated by its success in New Zealand."

Sybase in Asia-Pacific

Sybase first established Asia-Pacific operations over six years ago, and the Asia Pacific business unit currently consists of six subsidiaries, with eight distributors throughout the rest of region. Sybase continues to show strong

development in this region, where the company has concentrated on management expansion and infrastructure. Sybase revenues in Asia Pacific for the fiscal year 1993 were up 200% over 1992.

Sybase, Inc.

Sybase, Inc. (NASDAQ: SYBS) develops and markets a leading family of client/server-based software products and services for on-line, enterprise-wide applications. Sybase's integrated family of software includes servers, tools, connectivity, and administration/control products that provide complete desktop to mainframe solutions. Headquartered in Emeryville, CA, Sybase markets its products worldwide through its direct sales force, telesales, distributors, OEMs, VARs, and Systems Integrators.

Sybase Inc  
6475 Christie Ave  
Emeryville, CA 04608  
510-596-3500; Fax: 510-658-9441

## ARIZONA STATE UNIVERSITY TO STANDARDIZE ON SYBASE

### Sybase's Client/Server Database and Interoperability Software Central to University's Information Technology Strategy

EMERYVILLE, CA, December 22, 1994 -- Sybase, Inc., The Enterprise Client/Server Company, today announced that Arizona State University (ASU) has chosen SYBASE client/server software as the standard for its relational database implementation, which includes existing mainframe databases and new client/server-based databases. ASU selected Sybase's SQL Server 10, OmniSQL Gateway, Open Server, and Replication Server products that will play pivotal roles in providing interoperability to existing heterogeneous mainframe databases and improving information access. ASU is ranked as the nation's fifth largest university, providing educational services to more than 45,000 students and professionals.

"We were impressed with the comprehensive approach Sybase has taken in addressing interoperability, which enables us to gather information from multiple, heterogeneous databases and make it easily accessible to users," stated Dr. William Lewis, vice provost for information technology at ASU. "As we migrate to newer technologies, SYBASE enables us to leverage legacy systems and data, smoothly and cost-effectively, while improving information access to meet the growing needs of our users."

ASU wants to make its centralized databases more accessible to its users, but its current systems lack critical interoperability solutions to provide a link between mainframe and client/server technologies. Alternatively, moving legacy data off the mainframe was not a practical solution for ASU. With Sybase software, the Information Technology (IT) department was able to expand data availability beyond the mainframe into departments throughout its campuses.

"Arizona State University's approach to leveraging legacy systems and data demonstrates an integral need for solutions that support interoperability across heterogeneous platforms and databases," stated Richard Yanowitch, vice president of corporate marketing at Sybase. "Its decision to choose SYBASE as the backbone for its new computing environment demonstrates that Sybase's database and interoperability solutions meet the university's needs to integrate existing mainframe data with newer relational data."

### Why ASU Selected Sybase

During its evaluation, ASU narrowed its selection to three vendors including Oracle, Informix, and Sybase. Ultimately, ASU found the SYBASE family of products offered the most comprehensive interoperability solutions and technically superior software. Sybase's stored procedures technology will

allow ASU to safely embed its business rules within SQL Server 10, where users can only reference but not modify the rules. ASU's IT department can improve its productivity by writing commonly used functions and transactions into stored procedures for faster processing.

### Benefits ASU Expects To Gain

Using SQL Server 10 and SYBASE interoperability solutions, ASU will be able to extend data access throughout its campuses and expand system support quickly to meet peak demand periods, which take place the week prior to classes beginning, the first week of classes, and the periods when financial aid disbursements occur. As the university expands its application portfolio, it will be able to offer students a broader range of user-friendly services such as touch-tone technology, which already allows ASU students to enroll in classes, check grades, pay student fees, and check class availability via telephone instead of in person.

### Sybase Solutions Provide Interoperability and Data Accessibility

Using SQL Server 10 and OmniSQL Gateway, ASU can tie into DB2 and IDMS mainframe data, extract the data, and download it to their data warehouse. Administrative staff and users can query the data warehouse and receive personnel, financial, and student information immediately. Sybase's Open Server will soon work in conjunction with Kerberos, a commonly used UNIX-based security system, to protect sensitive information within the data warehouse. With Replication Server, ASU will be able to distribute real-time copies of key administrative application databases.

The SQL Server 10 client/server database will serve as the backbone for the university's new computing environment. OmniSQL Gateway, an enterprise client/server gateway, will provide completely transparent distributed processing among heterogeneous databases. Open Server is an application program interface (API) that integrates non-SYBASE data, applications and application services. Replication Server manages multiple data copies for corporate-wide locations, providing reliable delivery of data and transactions in a distributed environment.

### Migrating Off the Mainframe

ASU is migrating segments of its mainframe database and applications to a client/server platform. Among the first applications to be deployed are a constituent and an affiliate application, currently in development, that track information about students, employees, vendors, donors, and other affiliates. A 14 gigabyte student information application will be migrated over a two-to-four year period. In an effort to offer users more timely services on less expensive platforms, ASU has already begun to move pieces of this

application to a Sun server running SQL Server 10. Eventually the new applications accessing data in Sybase's SQL Servers will support up to 1,500 concurrent Macintosh or PC users. The front-end tools that will be used to build and access the new applications include Texas Instrument's IEF development tool, Powersoft's PowerBuilder, Microsoft Access and Brio Technology's DataPrism.

### Arizona State University

Established in 1885, Arizona State University is ranked as the nation's fifth largest university, serving more than 45,000 students and professionals. Located in Tempe, Arizona, the university provides information technology support to the main campus as well as four remote sites that include an east campus, a west campus, a downtown Phoenix center, and the Arizona Board of Regents.

### Sybase, Inc.

Sybase, Inc. (NASDAQ: SYBS) is one of the fastest growing suppliers of client/server-based software products and services for on-line enterprise-wide applications. Sybase's integrated family of software includes database servers, tools, connectivity and systems management products, providing complete desktop-to-mainframe solutions. Headquartered in Emeryville, CA, Sybase markets its products worldwide through its direct sales force, telesales, distributors, OEMs, VARs and Systems Integrators.

Sybase Inc  
6475 Christie Ave  
Emeryville, CA 04608  
510-596-3500; Fax: 510-658-9441

## KORN SHELL REFERENCE

December 15, 1994 -- Specialized Systems Consultants, Inc. (SSC) announces the Korn Shell has been documented in a new Pocket Reference, written by Arnold Robbins and reviewed by David Korn. The Korn Shell Reference provides a concise summary of the Korn Shell as an interactive command language and as a programming language. This reference is the newest addition to SSC's line of pocket-sized command summaries and tutorials for UNIX and other computer-related topics.

The card describes the new POSIX Korn Shell (PKSH), informally called KSH-93 during development; the card also includes the 1988 version with colors used to highlight the differences between the two versions. For example, the command search order differences between the two shells and the PKSH order is denoted in blue print and 1988 Korn Shell is shown in red print.

This 24-page pocket-sized reference card is for Korn Shell users of all experience levels. It is priced at \$4.50, less in quantity.

ISBN: 0-916151-72-7.

Specialized Systems Consultants, Inc.  
P.O. Box 55549  
Seattle, WA 98155  
Phone: (206) 527-3385, FAX: (206) 527-2806

## Federal and STATE EH&S Regulations on CD-ROM

Effective March 1995 the SOLUTIONS CD-ROM will include optional access to ALL 50 States Environmental Health and Safety (EH&S) Regulations in addition to all Federal Environmental Regulations.

The SOLUTIONS Environmental CD-ROM is updated quarterly with user on-line access to DAILY updates including all Federal Register history.

The Full Regulatory Package includes: Title 10 Energy + Title 29 OSHA + Title 40 Environment + Title 49 HazMat + Environmental Statutes PLUS the Environment Health and Safety Regulations for ALL Fifty states PLUS the TSCA Chemical Inventory.

All Federal and State Regulations are Full Text including Tables, Charts, Graphs and Formulas. A powerful linguistic-based Search and Retrieve engine (IBM BookManager) is included for DOS, Windows, OS/2 and LAN installation. All State and Federal Regulations may be searched with a single inquiry.

The SOLUTIONS Environmental CD-ROM is a cost efficient Regulatory alternative that has been engineered for PC, workstation, LAN and mainframe use by business, industry, library, legal and governments.

For a Free Information Package please contact SOLUTIONS Software Corporation.

SOLUTIONS Software Corporation  
1795 Turtle Hill Road  
Enterprise, Florida 32725 USA  
(407) 321-7912  
FAX: (407) 323-4898 or (407) 321-3098  
BBS: (407) 321-6119

## Microsoft Selects AnswerSet for Solution Provider Program

### The Alliance Strengthens AnswerSet's Microsoft Windows-based Customer Support/Help Desk Software Package

Lake Oswego, OR -- Dec. 23 --AnswerSet has been chosen to join Microsoft's Solutions Provider Program, the company announced today. The program expands the relationship between AnswerSet and Microsoft, providing AnswerSet with marketing support, advance access to products and technical information, certification and ongoing business development support.

AnswerSet was selected for participation in the program based on its proven commitment to Windows, its technical expertise and product revenues and technical expertise . This alliance will enable AnswerSet to quickly incorporate new Microsoft standards and product enhancements in product development for Clientele for Windows, its customer support and help desk system.

"We are pleased to have been chosen for this program," said Bill Mulert, president of AnswerSet. "We selected the Microsoft Windows platform because of Microsoft's broad market acceptance and commitment to open standards such as ODBC (Open Data Base Connectivity). We look forward to working even more closely with Microsoft in the future, as an accredited Solutions Provider."

AnswerSet is a market leader in PC LAN-based customer information and help desk systems. Its products automate customer service and marketing functions, maintaining a central repository of critical customer information for easy accessibility company-wide. Clientele is available for both DOS and Windows with prices ranging from \$695 per concurrent user, to \$6195 for each group of 10 concurrent users.

For more information, contact AnswerSet at 5335 S. W. Meadows Road, Suite 450, Lake Oswego, OR 97035, phone: 503-598-4500, fax: 503-598-4515

## Teltone Introduces Revamped Two line Telephone line Simulator

December 20, 1994 -- BOTHELL, WASH.: Teltone has introduced a redesigned version of its TLS-3 Telephone Line Simulator. The new version, the TLS-3A, is offered in a compact package which fits into a briefcase for portability. The TLS-3A replaces the TLS-3, which has become the standard for reliability and accuracy in telephone line simulation over the last decade.

The TLS-3A simulates a two-line central office or PBX. It is used for testing or demonstrating two analog telecom devices, such as phones, fax machines, modems, etc. It is also useful for testing PBX or key system installations prior to central office line connection.

Key features of the TLS-3A include precise call progress tones (dial, busy, reorder, and ringback), typical central office battery feed, AC ringing voltage, two loop start lines with single talk path, and AC powering. New features available on the TLS-3A include dial-up test tones, forced disconnect pulse (COD), and secondary dial tone. Telecom devices connect to the TLS-3A with standard modular connectors, with each line providing two telephone numbers. Any seven digit number dialed on one port will ring the other port.

The TLS-3A is list priced at \$375.

Teltone designs and manufactures products for secure access to business phone systems, for telecommuting, for cable-telephony, and for personal computer-telephone integration; alternate 9-1-1 access equipment; telephone line simulators for telecom equipment test and demos; and a line of integrated circuits for telecom product design.

Teltone Corporation  
22121-20th Avenue SE  
Bothell, WA 98021-4408  
206-487-1515, Fax: 206-487-2288

## Design Science Introduces MathType 3.1

New version adds native Power Macintosh support and new commands for Microsoft Word 6.0

Long Beach, CA, December 16, 1994, - Design Science is introducing MathType 3.1 for the Macintosh. The new version will make its debut at the USA MACWORLD Expo in San Francisco. MathType 3.1 which adds native Power Macintosh support, new commands for Microsoft Word 6.0 and EGO support, is expected to be shipping at the time of the show.

"If you own a new Apple Power Mac, MathType 3.1 will give you the ultimate in speed and compatibility," said Paul R. Topping, President of Design Science. "We are happy to offer Word 6.0 users some particularly useful features, in addition to EGO support for EGO-aware applications like WordPerfect, MacWrite Pro, FullWrite and Nisus Writer. Creating and editing perfect equations is now faster and easier." MathType is compatible with Apple's System 7.5.

Since its introduction in 1987, MathType has gained recognition among scientists, engineers, teachers, students and others as the dominant application for creating and editing mathematical equations for Macintosh and Microsoft Windows computers. MathType's easy-to-use graphical interface and its ability to work with a wide variety of applications are primary reasons for its success. MathType equations can be inserted into virtually any Macintosh or Windows word processor, desktop publishing or graphics application. Editing is accomplished via OLE (Object Linking and Embedding), EGO (Edit Graphic Object), or by using the clipboard.

MathType 3.1 provides users of previous versions, the following additional features:

- Power Mac Support
- Microsoft Word 6.0 Commands for working with equations
- EGO Technology (Edit Graphic Object)

Power Macintosh owners can install a native Power Macintosh version or the "fat" binary version to run on both processor types. MathType 3.1 is now compatible with System 7.5.

MathType 3.1 features new commands which can be added to Word's menus. The Update Equations command enables users to change fonts, styles and sizes of all existing equations in a document or selection. It can also be used to convert old Word formulas to MathType equations and convert MathType equations to the TeX typesetting language.

The MathType Preferences command enables the user to maintain consistency among equations by associating a set of MathType font, style and size preferences with any Word document.

The Equation Numbering command can be used to insert numbers next to equations, charts and illustrations, supporting several different numbering formats. References may be inserted into equations that when doubleclicked, scroll the document to the referenced equations. After inserting new equations, a single command renumbers all equations and updates all references.

EGO is an Apple Event-based interface. When MathType 3.1 is used with an EGO-aware application such as WordPerfect, MacWrite Pro, FullWrite or Nisus Writer, equations in a document can be edited by simply doubleclicking, eliminating the need to use cut-and-paste.

MathType's slimmed down sister, Equation Editor, is firmly established as a value added feature for OEM's selling word processing, desktop publishing and graphics programs. Although Equation Editor has fewer features than MathType, users of Microsoft Word, Corel Ventura 5, and FullWrite, (to name a few) can easily create and edit typeset quality math equations for their documents. Design Science offers a specially priced upgrade for Equation Editor users who want the more powerful, full-featured, MathType.

MathType 3.1 carries a list price of \$199.00. Upgrades to MathType 3.1 are \$29.95 for registered 3.0 users, \$49.95 for registered 2.x and 1.x users and free for 3.0 users who purchased MathType after October 1, 1994.

Design Science Inc  
4028 Broadway  
Long Beach, CA 90803  
310-433-0685, fax 310-433-6969

## ONTRACK ANNOUNCES RELEASE OF DISK MANAGER MAC WITH IDE SUPPORT

### Boosts IDE and SCSI device performance

December 13, 1994 -- Minneapolis, MN -- Ontrack Computer Systems today announced the release of Disk Manager Mac 4.0. This upgraded version is the first third party Macintosh installation program in the industry to support IDE drives. Disk Manager Mac easily installs and completely prepares virtually any IDE or SCSI drive, read/write optical or floptical device into a Macintosh computer. Version 4.0 increases performance, installation, and diagnostic capabilities for both IDE and SCSI devices.

Ontrack President John Pence says of the upgrade, "With the emergence of IDE disk drives into the Macintosh marketplace, Macintosh users are finally able to reap the benefits of Ontrack's years of IDE technology research. Disk Manager Mac 4.0 gives users the added performance they desire, and allows them to take advantage of the options offered exclusively by IDE technology."

By boosting the rate at which IDE drives read and write data, the Disk Manager Mac driver can significantly increase the speed at which data is processed and allow drives to process and transfer data at their maximum performance levels. Lab tests show that the Disk Manager Mac 4.0 driver often allows users to process data up to 40% or more faster than the current Apple driver. In addition, it contains expanded driver options to increase performance of both IDE and SCSI devices, including magneto-optical disk drives.

Disk Manager Mac 4.0 offers users expanded installation options. Disk Manager Mac 4.0 has the ability to install virtually any IDE drive and, in some cases, increase storage capacity. Unlike Apple's installer, Disk Manager Mac allows IDE users to create many custom partitions, each with their own partition options and sizes. All Disk Manager Mac utilities take advantage of the features offered by the IDE ATA Manager and SCSI Manager 4.3.

Disk Manager Mac version 4.0 supports virtually any Macintosh model running System 6.x and above. The product retails for \$69.95 and may be purchased directly from Ontrack, as well as through dealers, distributors, and retailers. Current owners of the product may upgrade for \$25.00. Ontrack's GSA number for software purchases is GSOOK94AGS5481. Disk Manager products are also available for use in the DOS and Novell environments.

Ontrack Computer Systems specializes in hard disk utility software for more effective system management and data protection in the Macintosh, DOS, Novell, and Unix environments. Ontrack's subsidiary, Ontrack Data Recovery, specializes in recapturing data from any hard drive, tape backup, network,

floppy diskette, or alternative media suffering from electro-mechanical failure and/or data corruption. Both companies' headquarters are located at 6321 Bury Drive, Minneapolis, MN 55346 1-800-752-1333 (612-937-1107). A sales office and lab are also located in Los Angeles, California 1-800-752-7557 (714-263-9245). European headquarters are in the United Kingdom +44 81 974 5522. Customers in Germany may call toll-free 0130-815198. Customers in France may call toll-free 05 90 72 42.

## 1995 EDITION OF THE INTERNET YELLOW PAGES AVAILABLE NOW

First Edition Sold More Than 300,000 in Ten Months

Berkeley, CA, December 29, 1994 -- Osborne/McGraw-Hill has revised its best-selling Internet Yellow Pages for 1995 to cover the latest additions and most popular sites on the Internet. The Internet Yellow Pages, Second Edition, written by renowned Net experts Harley Hahn and Rick Stout, contains more than 5,000 separate entries compared to only 2,400 in the previous edition.

Much more than a mere listing of subjects and appropriate Internet addresses, The Internet Yellow Pages, Second Edition gives readers detailed information about the topics listed, hints about what to expect when accessing the posted information, and "advertisements" highlighting interesting services or features that might otherwise be overlooked.

The Internet Yellow Pages, Second Edition is ideal as a reference when roaming the Net and for browsing before turning on the computer. Most importantly, The Internet Yellow Pages, Second Edition has a comprehensive table of contents and index, making it easy for readers to find what they want.

The original Internet Yellow Pages was the first guide to the Internet to be published in the familiar yellow pages format, making it immediately useful to everyone on the Net, regardless of their expertise or interests. Because of its user-friendly format--as well as its many other features, including a fully annotated list of Usenet newsgroups -- The Internet Yellow Pages has become an indispensable directory for Internet users who are interested in taking full advantage of everything the Net has to offer.

Don't start 1995 without the one essential guide to the Internet's vast resources. With The Internet Yellow Pages, Second Edition, Net surfers anywhere can find what they are looking for quickly and easily.

The Internet Yellow Pages, Second Edition, is soft cover, 560 pages, and illustrated throughout. Suggested retail price: \$29.95. ISBN: 0-07-88098-7. For orders only, phone 1-800-227-0900, Monday through Friday, 8:30AM - 4:30PM Pacific Time.

Harley Hahn is an internationally recognized author, analyst, and consultant. He is the author or coauthor of more than 12 books, including Osborne's best-selling The Internet Complete Reference, the recently released Unix Unbound, and other titles, such as Assembler Inside & Out, A Student's Guide to Unix, and the well-known Peter Norton's Guide to Unix. Hahn has a degree in mathematics and computer science from the University of Waterloo, Canada, and a graduate degree in computer science from the University of

California at San Diego.

Rick Stout is the co-author of Osborne's acclaimed The Internet Complete Reference. Stout is a Certified Public Accountant and holds degrees in business administration and accounting. Formerly a consulting manager at the accounting firm of Ernst & Young, Stout is a specialist in business computer and accounting systems. He is the author of several books, including The Peter Norton Introduction to Computers, and numerous articles for computer magazines. Stout lives in the San Diego area, where he works on literary projects, develops software and consults.

Osborne/McGraw-Hill, headquartered in Berkeley, California, is a leading publisher of books about computers, software, and technology for people at all levels of computer and software proficiency. While all Osborne/McGraw-Hill books offer specific and timely information, selected books also include diskettes or CD-ROMs containing valuable software directly related to the text. Known for its best-selling Internet titles as well as its Made Easy and Complete Reference books, Osborne/McGraw-Hill also has established strategic publishing relationships with Corporate Software, Inc., Oracle Corp., and several well-known McGraw-Hill magazines including Business Week and BYTE. A division of McGraw-Hill's Professional Publishing Group, Osborne/McGraw-Hill is targeting consumer support, emerging technologies, and innovative applications for future computer books.

Osborne/McGraw-Hill, 2600 Tenth St, Berkeley, CA 94710  
510-549-6600, Fax: 510-549-6603, orders: 800-227-0900

## Expert Takes the Grinch out of the Holiday Season

Company Ships Two New Products CORAL GABLES, Fla. (December 20, 1994 -- Expert Software, Inc. announced today two new Windows products that consumers can buy as gifts and share with friends and family this holiday season. Expert Birthday Newsletters and Favorite Games have just hit the holiday shelves and are available at a suggested retail price of \$14.95.

The holidays are generally viewed as a time for giving, celebration and togetherness and we figured what better time of year could there be to introduce these programs," said Sue Currier, president of Expert Software. "Birthday Newsletters and Favorite Games let friends and family share in the fun, and that is what this season is all about."

### Birthday Newsletters

Add even more fun to any birthday celebration with Expert Birthday Newsletters, a program that lets users create newsletters and certificates in honor of this annual celebration. Birthday Newsletters contains historical information on everything from politics to TV to sports events, (thanks to information provided by United Press International).

Once users enter a name and birthdate (day, month and year), Birthday Newsletters goes to work searching for date specific information such as celebrity birthdays, historical events and interesting tidbits like the price of bread when the user was born. Both the newsletter and the certificate can be customized using the clip art images and different borders and fonts included in the program. Users can also preview their layouts on screen before printing.

### Favorite Games

Expert is inviting families to sit down to a good old game of Checkers and Hearts this holiday season without having to search for missing checker pieces or disappearing cards. Favorite Games puts five popular table games (and their pieces) easily within reach. Backgammon, Checkers, Rummy, Hearts and Yacht can provide users of all ages with hours of entertainment.

Whether playing against the computer or taking advantage of the program's multiplayer capabilities, users are treated to detailed game boards and pieces, which can be seen in 16 or 256 colors. Favorite Games also includes features such as a status bar (that informs a player of their turn), a "show moves" button (that identifies all of a user's legal moves), and an "undo option" (that lets users investigate the results of various moves).

### System Requirements

Birthday Newsletters and Favorite Games require a 386DX or higher DOS-compatible PC with DOS 3.3 or higher, Microsoft Windows 3.1, 4MB of RAM and a VGA or SVGA graphics adapter card and monitor. These programs also require hard drives with at least 5MB and 7MB, respectively.

#### About Expert Software

Expert Software is a leading consumer software publisher of more than 80 Windows, CD-ROM, and Macintosh titles appearing on many of the industry's hot and best seller lists. Expert's products are available at more than 15,000 retail outlets nationwide, including Computer City and CompUSA.

#### Expert Software

800 Douglas Rd, Executive Tower

Coral Gables, FL 33134-3160

305-567-9990, 800-759-2562, fax 305-443-0786

## THE POWER AND EASE OF MOSAIC ARE REVEALED IN NEW OPEN COMPUTING BOOK

Berkeley, CA, December 29, 1994 -- Mosaic might just be the hottest thing since the Internet itself. With its graphical user interface (GUI) designed for information discovery and retrieval over the Internet, Mosaic allows people to access information without the convoluted syntax and esoteric commands normally needed on the Internet. Everyone can learn to take advantage of Mosaic's power and ease of use with Osborne/McGraw-Hill's latest publication, Open Computing Guide to Mosaic.

One of the books in the Osborne's Open Computing series, the Open Computing Guide to Mosaic covers all the basic ins and outs of using Mosaic, including installation and set-up. Readers will discover how to access text, graphical, and audio files from the World Wide Web, Gopher, and ftp servers on the Internet. Using Mosaic's hypertext capabilities and troubleshooting problems are also discussed.

Most importantly, Net surfers will learn how to access an exclusive utility via the Internet that creates a custom Home Page. The Home Page provides speedy access to a user's favorite World Wide Web servers (there are thousands currently on the Internet). Additionally, there is information about how to access an updated list of World Wide Web providers on the network at any time.

If people are using Mosaic from either Windows or X-Window, an icon throughout the book will point to the appropriate information needed for each interface. For people who have never cruised around the Internet before, the Open Computing Guide to Mosaic provides the information to get them up-and-running on the Net and then guides them through Mosaic step-by-step.

Written in easy-to-understand language and loaded with tips and illustrations, the Open Computing Guide to Mosaic is the perfect place to start learning about the application that everyone is talking about--Mosaic.

Open Computing Guide to Mosaic is soft cover, 352 pages, and has examples and illustrations throughout. Suggested retail price: \$19.95. ISBN: 0-07-882088-X. For orders only, phone (800) 227-0900, Monday through Friday, 8:30am - 4:30pm, Pacific Time.

Levi Reiss has been working with computers since 1972 and has designed training materials and taught courses on subjects such as computer information systems, operating system architecture, systems analysis and design, telecommunications, and programming languages. He has published several textbooks and holds a master's degree in computer science from the

University of Paris.

Joseph Radin, currently at DEC, is a senior software specialist and a Mosaic expert. He holds a master of science degree from the Technion, Israel Institute of Technology, which he received upon completing his thesis at the University of California, Berkeley. He and Levi Reiss have collaborated on X-Window Inside & Out and the Unix System Administration Guide. They also authored part of the LAN Times Guide to Interoperability.

Osborne/McGraw-Hill, headquartered in Berkeley, California, is a leading publisher of books about computers, software, and technology for people at all levels of computer and software proficiency. While all Osborne/McGraw-Hill books offer specific and timely information, selected books also include diskettes or CD-ROMs containing valuable software directly related to the text. Known for its best-selling Internet titles as well as its Made Easy and Complete Reference books, Osborne/McGraw-Hill also has established strategic publishing relationships with Corporate Software, Inc., Oracle Corp., and several well-known McGraw-Hill magazines including Business Week and BYTE. A division of McGraw-Hill's Professional Publishing Group, Osborne/McGraw-Hill is targeting consumer support, emerging technologies, and innovative applications for future computer books.

Osborne/McGraw-Hill, 2600 Tenth St, Berkeley, CA 94710  
510-549-6600, Fax: 510-549-6603, orders: 800-227-0900

## DATABASE DEVELOPERS GET CONSTRUCTION HELP WITH NEW POWERBUILDER BOOK

Berkeley, CA, December 29, 1994 -- PowerBuilder is a potent tool used by information systems managers and developers for creating custom database applications. Now The PowerBuilder Construction Kit allows beginners and intermediate users alike to harness PowerBuilder's full potential to create dynamic and effective applications--all without the assistance of professional software programmers.

This book, written by experts L. John Ribar and Steven Nameroff, covers fundamental database concepts to advanced PowerBuilder version 4 features. Readers will learn how to design, create, and maintain executable programs using PowerBuilder's object-oriented, client-server tools for creating front-ends, querying, and building reports for databases.

The PowerBuilder Construction Kit explains

- \* Database concepts and buzzwords
- \* Object-oriented programming and Windows programming basics
- \* PowerBuilder basics
- \* Building an application with PowerBuilder
- \* Advanced topics, such as using ODBC with external databases, coverage of WATCOM SQL, and a discussion of PowerScript
- \* ERwin/ERX, the graphical database design tool from Logic Works that functions seamlessly with PowerBuilder

Written for database "do-it-yourselfers" everywhere, The PowerBuilder Construction Kit lets people take control of their databases and information and push their applications to the limit.

The PowerBuilder Construction Kit is soft cover, 318 pages, and has examples and illustrations throughout. Suggested retail price: \$24.95. ISBN: 0-07-882079-0. For orders only, phone (800) 227-0900, Monday through Friday, 8:30am - 4:30pm, Pacific Time.

L. John Ribar is a programmer and the author of several acclaimed books on C programming, including BYTE's Windows Programmer's Cookbook, C DiskTutor, and FORTRAN Programming for Windows. Ribar is the president of Picasso Software Group, a software development firm in York, Pennsylvania, specializing in the creation of custom applications and programming tools.

Steve Nameroff is the author of QuickBASIC: The Complete Reference, and co-author of WordPerfect 6: The Complete Reference and Turbo Pascal 7: The Complete Reference. Steve works as a consultant for Rational Software Corporation, specializing in complex software development using object-

oriented methodologies.

Osborne/McGraw-Hill, headquartered in Berkeley, California, is a leading publisher of books about computers, software, and technology for people at all levels of computer and software proficiency. While all Osborne/McGraw-Hill books offer specific and timely information, selected books also include diskettes or CD-ROMs containing valuable software directly related to the text. Known for its best-selling Internet Yellow Pages as well as its Made Easy and Complete Reference books, Osborne/McGraw-Hill also has established strategic publishing relationships with Corporate Software, Inc., Oracle Corp., and several well-known McGraw-Hill magazines including Business Week and BYTE. A division of McGraw-Hill's Professional Publishing Group, Osborne/McGraw-Hill is targeting consumer support, emerging technologies, and innovative applications for future computer books.

Osborne/McGraw-Hill, 2600 Tenth St, Berkeley, CA 94710  
510-549-6600, Fax: 510-549-6603, orders: 800-227-0900

## IBM Offers Sports Fans a Preview of the OS/2 Fiesta Bowl via the Information Highway

AUSTIN, Texas, Dec. 23, 1994 . . . IBM today launched an OS/2 Fiesta Bowl Home Page on the Internet and announced a two-hour CompuServe "chat session" to allow sports fans to communicate directly with coaches and stars of the Notre Dame and Colorado football teams.

OS/2 Warp users can connect directly to these forums using the easy access software that comes with OS/2 Warp's BonusPak of applications.

The OS/2 Fiesta Bowl Home Page offers a detailed schedule of the events surrounding the Jan. 2 contest between the Notre Dame Fighting Irish and the Colorado Buffaloes. A Home Page is an area of the Internet set up by an individual or organization with information about themselves. From the Fiesta Bowl Home Page, IBM has placed pointers to the Notre Dame, Colorado, Arizona State University and City of Tempe, Arizona, home pages, allowing users to jump easily to information about each.

The OS/2 Fiesta Bowl Home Page can be accessed via normal Internet channels or through on-line services offering a Web browser or explorer. The address on the Internet is <http://www.austin.ibm.com/pspinfo/fiesta.html>.

Fiesta Bowl fans also can send good luck messages to their favorite team via the newsgroup area of the Internet. IBM will make the messages available to players and coaches of both teams, and keep a tally of messages for each team. The mail addresses for the newsgroups are: alt.fiesta-bowl.buf (for Colorado) and alt.fiesta-bowl.irish (for Notre Dame.) The path to these newsgroups is [awdprime.austin.ibm.com!news](mailto:awdprime.austin.ibm.com!news).

On Thursday, Dec. 29, fans can join in a two-hour, real-time forum on CompuServe where they can ask questions on the game build-up and strategy directly of the coaches, quarterbacks and players, including Heisman Trophy winner Rashaan Salaam, the Colorado runningback. Fans can ask questions and receive replies in "conversation" fashion during the session, from 11 a.m. to 1 p.m. CST. Fans can gain access to this forum by typing `Go OS2Fiesta`.

OS/2 Warp is the third generation of IBM's award-winning 32-bit operating system. It features impressive new usability features, slimmed-down memory requirements and comes with a BonusPak of more than a dozen exploitive OS/2 applications, including easy access to Internet and CompuServe via the Information Superhighway.

## INTERGRAPH COMPUTER SYSTEMS SHIPPING COMPUTERS WITH UPDATED PENTIUMS JANUARY 2

HUNTSVILLE, Ala., Dec. 22, 1994 -- Intergraph Computer Systems announced today that it will start shipping personal workstations and servers containing the updated version of the Intel Pentium microprocessor on January 2, 1995. Two weeks later the company will begin implementing a program to replace Pentium microprocessors in systems previously shipped.

"Our customers are concerned that the floating point flaw introduces an element of uncertainty in their work," said Wade Patterson, vice president of Intergraph Computer Systems. "Though no customer has reported any errors, we are moving as rapidly as possible to ensure that our customers can rely on the results of their computer systems, especially for technical applications where accuracy is critical."

"Meeting customers' technical needs has always been our primary goal," said Patterson. Industry analysts such as Daratech Inc. have rated Intergraph No. 1 in customer satisfaction for the past five years. A customer responding to a Daratech survey says of Intergraph, "Maintenance and support are excellent. They're always there . . . (CAD/CAM, CAE Industry Update, January, 1994, page 9401-6)."

### Intergraph Background Information

Intergraph Computer Systems develops, manufactures, sells, and supports computer systems for the Technical Desktop -- the combination of compatible technical applications and personal productivity tools in a single desktop computer. Hardware products include personal workstations and servers. A member of the Fortune 500, Intergraph is the world's largest company dedicated to supplying interactive computer graphics systems.

For additional information, call: 800-763-0242

We would like to announce the availability of PrintForm, a printout formatting tool for MFC programmers.

There are three kinds of information available:  
(Note: The filenames might be lowercase)

- PFO10T.\*  
The short description.  
This ASCII text contains an overview of the PrintForm features.
- PFO10H.\*  
The online reference in form of a Windows Help file.  
This contains pictures of some sample reports and the complete description of the programming interface.
- PFO10D.\*  
The demo application.  
It shows most of the features of PrintForm. It contains three types of documents, each of which shows another report style. Some of the reports are quite large.

How to order PrintForm:

Just send a FAX to:

KWG Software  
- PrintForm -  
FAX: +49 531 74501

Payment is done via an AMEX or VISA card. The fax must contain the credit card information, the address of the owner of the credit card, his signature and the shipment address.

The prices are:

\$ 80 for the object modules.  
\$ 400 for the source.

The product is normally distributed via CompuServe or the Internet. We can also send you a disk, if you request it.

The product is shipped as soon as the credit card order has been certified. (It will normally arrive on the next working day)

[kwg@xmp.escape.de](mailto:kwg@xmp.escape.de)

kwg@assi.s-link.de  
CIS: 100010,204  
FAX: +49-531-74501  
TEL: +49-531-72982

## Isn't It Time Your Devices Got Warped?

December 28, 1994 -- After all, it's going to be a warped world in 1995 and you'll want to stay ahead of your competition. The time is NOW, for you to reap the benefits of the exploding acceptance of OS/2 as the 32-Bit operating system for personal computers! The opportunity is here and increasing daily. Join the ranks of your colleagues in the industry who already have device support for OS/2, and are exploiting this market explosion.

The list of OS/2 compatible graphics accelerators, DASD, SCSI and multimedia products that exist today is constantly expanding. Are YOU on that list? If not, then NOW is the time to make a change and get your share of the market. And here's how to do it.

The DUDE Team, of the IBM Driver Development Support Center, is standing ready to provide you with training and support to help you expedite your OS/2 driver development efforts. Just take a look at how the DUDE Team provides one-stop shopping for worldwide device driver development support:

- \* The DUDE Team

- Support for your questions and training needs
- Voice-Mail - 24 hours - 407-982-4239

- \* The DUDE, a dedicated BBS

- Latest information focused on driver developer needs
- Development problem assistance
- Timely news of interest and Technical Conference bulletins
- 407-982-3217 - N,8,1 @ 14.4KBPS

- \* Education

- Specialized driver developer workshops
- Expertise of highly experienced instructors
- Intensive, hands-on technical sessions
- Access to IBM Boca Programming Center technical personnel

Now that you know how extensive the on-going technical support is, just look at the sound BUSINESS reasons why you need to begin your OS/2 driver development efforts, right away!

- \* Ride the crest of rapidly increasing OS/2 market acceptance
- \* Save significantly on programmer development time & costs
- \* Gain access to the latest levels of code

- \* Give yourself a "Quick Start" on bringing your driver to market
- \* Open your opportunities to new, explosive OS/2 market segments
- \* Your competition is doing it!

OK, now you need to take the first step toward acquiring your market share! First, connect to the "DUDE" at 407-982-3217 and complete the registration form. Downloading the file DDSC\_DES.TXT provides the information that will guide you through the array of services available on The DUDE. Within one business day your access level will be upgraded and you may sign up for one of the Device Driver Developer Workshops, held at the IBM Boca Raton facility. To register for any of the workshops, DOWNLOAD the registration file, REGISTER.TXT, fill in the blanks, and then UPLOAD the completed file to the DUDE. Upon UPLOAD of your form, you will receive a D-MAIL (DUDE-MAIL) confirming your registration in the DDSC Workshop. IT'S THAT EASY !!

And, if you don't have immediate access to The DUDE, call our Voice-Mail number (407-982-4239) and leave a message requesting help and your call will be returned within 2 business hours.

Your registration on The DUDE will ensure that The DUDE Team can continue to provide you with the on-going support that you may need during your driver development efforts.

Additionally, if you're looking for someone to write device drivers, then look at this bonus offered by the DUDE. You can use DUDE-ADS to help increase your chances of finding the right developer for the job.

Now that you know how to get started, put your plan together, enroll now, and prepare to WARP into the future with OS/2, the award winning 32-bit operating system of choice!

OS/2  
Device Driver  
Workshops

IBM  
1000 NW 51st Street  
Boca Raton, FL 33431  
DUDE (BBS) (407) 982-3217  
Voice Mail: (407) 982-4239

Team Lead = Rudy Pietro

Bob Peterson	Gary Gerke
Jim Bennett	Charles Devries
Richard Golasky	Peggy Pecora

Cathy Riggins      Carlo Ligotti

We expedite OS/2 support of your product!

-----  
General information

- o Utilize our DDSC Laboratory
- o Public courses scheduled for 1995
- o Onsite courses available
- o Designed for C or MASM programmers
- o Morning lecture covers topics listed in course outlines
- o Afternoon lab sessions concentrate on developing your customer device drivers

All workshop schedules may be subject to change based upon customer demand and technology availability

Workshop Schedule 1995  
-----

Date      Topic  
----      -----

01/16 -- OS2DD303 Adapter Device Drivers (ADD)  
02/13 -- OS2DD101 Physical Device Drivers (PDD)  
03/13 -- OS2DD201 Virtual Device Drivers (VDD)  
04/10 -- OS2DD302 Graphics Accelerator Device Drivers  
05/08 -- OS2DD309 Multimedia Device Drivers  
06/05 -- OS2DD101 Physical Device Drivers (PDD)  
07/10 -- OS2DD305 Device Managers (DMD)  
08/07 -- OS2DD402 SMP Device Drivers  
09/11 -- OS2DD201 Virtual Device Drivers (VDD)  
10/02 -- OS2DD101 Physical Device Drivers (PDD)  
11/06 -- OS2DD308 Lan Device Drivers (NDIS-MAC)  
12/04 -- OS2DD309 Multimedia Device Drivers

PROTECT YOUR INVESTMENT IN  
OS/2 BY PROVIDING DD SUPPORT!

The EPA estimates that more than 35 million PCs are in use today consuming 5% of all electric energy produced in the US, and nearly two-thirds of them are left on unattended! Software controlled screen savers don't save energy. Idle-Off does, and it also extends the life of your monitor.

The Idle-Off power interrupter for monitors (patent pending) is a simple way to automatically shutdown PC monitors when not in use. Press any key, and power is quickly and smoothly restored to your monitor.

#### FEATURES:

- o NO software required
- o installs in-line with the computer monitors power cord
- o solid-state controlled switching to prolong monitor life
- o auxillary port for pointing devices like a mouse or light pen
- o key-blanking circuit to protect running programs from unintentional data entry

The longer PC monitors are on, the sooner they are apt to fail. And remember, switching off monitors reduces VDT radiation.

Idle-Off power interrupters install on almost all brands, models, and arrangements of PCs and monitors.

#### TECHNICAL SPECIFICATIONS:

LxWxH(in.): 1.5 x 1.5 x 7.0  
Voltage: 115VAC  
Switch control: solid-state, zero-crossing  
Switch current: 3A max. continuous  
Time delay: 20 minutes  
One year warranty.  
Made in USA.

PRICE: US\$ 59

Energy Concepts, Inc.  
PO Box 331, Rockland, DE 19732  
(302) 798-2981, FAX: (302) 798-4803

IBM Network Performance Modeler (NetModeler) for OS/2 is a modeling application providing performance results quickly and accurately using advanced analytics, developed with several leading universities. Its object-oriented design advances the state-of-the-art in modeling.

Network specialists and administrators, service providers, consultants, and developers can use NetModeler to assist them in capacity planning and performance analysis. NetModeler supports all types of networks, including client/server, distributed, and mainframe-based environments.

To reduce the investment in complex systems and networks, it is important to predict performance, and plan for needed resources at the right time. NetModeler allows users to validate designs before they become reality. It helps identify potential network bottlenecks, analyze the impact of changes to the network, determine when and where upgrades are needed, answer 'what if' questions, and shortens development cycles.

With NetModeler, users easily create, modify, share, and execute models at various levels of complexity. For example, users create models to represent components, devices, collections of devices, or networks. Users also take advantage of the many models provided with the product including both generic and product specific models. NetModeler automatically builds workloads based on actual network traffic through a data import feature from several leading network analyzers. There is also a data export facility for exporting statistics to ASCII files for use in a spreadsheet or other application.

NetModeler increases the ability for persons to perform:

Capacity Planning - Plan network requirements and analyze changes to the network before implementation.

Performance Analysis - Pinpoint network bottlenecks, determine areas of slow response, and benchmark the network's devices and applications.

Software/Hardware Design & Analysis - Identify performance problems during design when the cost associated with fixing such problems is low. Evaluate different designs and avoid costly changes later.

Network Design - Analyze and evaluate network design alternatives and identify critical network paths. This simplifies the network design process, thus reducing required skills and lowering cost.

Price: \$20,000 per copy. Universities and Colleges who qualify for IBM's National Education License Fee (NELF) discount may buy the product for \$5,000. (Figures represent US dollars.)

Information: IBM - NetModeler Marketing Support Team  
1-919-254-7826 phone, 1-919-254-5295 fax  
Dept. B55A / Bldg. 502  
4205 South Miami Boulevard  
Research Triangle Park, NC 27709  
E-Mail: [netmodeler@vnet.ibm.com](mailto:netmodeler@vnet.ibm.com)

Demonstration disks available upon request.

December 29, 1994. C2C Systems, the E-Mail enhancement software leader, has answered the growing need for a simple, low cost system to redirect or forward Microsoft Mail messages. Many mail users spend a significant amount of time away from their desks, and standard MS Mail facilities often fall short of users' needs to be able to receive their mail at another location or to tell co-workers where they are or when they will return.

Departing from earlier generation, rules-based mail forwarding systems, C2C Systems has developed a new, simpler solution to mail redirection that provides an almost instant, but above all, reliable way to divert mail to another E-mail user. No complex rule routines are required.

C2C Systems Redirection Server version 3.0 enables incoming electronic mail to be re-routed by the e-mail user, without any administrative involvement. Redirection is set up via pull down window menus integrated into Microsoft Mail. As soon as the redirection instruction has

been given, all incoming mail is forwarded automatically and securely to another authorized mail user.

The C2C Microsoft Mail Redirection Server offers these important features:

- \* Fully automatic, "PC-off" redirection.
- \* User-defined "Out of Office" messages.
- \* "Mail Forwarding" and "Mail Holding" functions.
- \* Secretarial mail "Screening".
- \* Redirection through Gateways (x.400, SMTP, etc.).
- \* Optional, automatic deletion of redirected mail (ideal for permanent redirection).

Another key benefit of the system is that the originator of the mail redirection request does not need to be on the same Mail network or even be a user of Microsoft Mail.

Redirection Server, which operates on its own PC or on an NT or OS/2 server, monitors user mailboxes that have been marked for redirection, and when new mail arrives, it implements the user's instructions.

Redirection Server provides full security and is available for Windows, DOS, MAC and OS/2 mail clients. Assistants supporting a group of executives, attendees of training courses, managers who need mail responded to by their assistants or those traveling who need access to another mailbox, will all find the Microsoft Redirection Server from C2C invaluable.

For further press information about C2C Systems, including guidance on E-Mail topics please contact:

Don Bottoms: tel.: +1 206 885 7888 Internet: [c2cusa@delphi.com](mailto:c2cusa@delphi.com)  
fax:: +1 206 885 9191 CompuServe: 76100,2305  
15600 Redmond Way, Suite 200  
Redmond, WA 98052 USA

## COMPAQ CONTINUES TO SATISFY DEMAND FOR HIGH-PERFORMANCE PENTIUM-BASED PCS AND SERVERS

HOUSTON, December 15, 1994 -- Compaq Computer Corporation (NYSE: CPQ) has been thoroughly examining all available data and studies relating to the flaw in the Intel Pentium microprocessor. The company has decided to continue shipping Pentium-based PCs and servers to satisfy those customers who require the higher level of performance offered by the Pentium. "In fact, our examination has only reinforced our belief that the vast majority of our customers are unlikely to encounter the flaw in their calculations. For those who are affected, we will work with them to replace the Pentiums in their Compaq PCs," said John Rose, Senior Vice President and General Manager, Desktop PC Division, Compaq Computer Corporation.

"Our approach is to help our customers evaluate their situation, reassure them that we will replace the Pentium processors if they are affected by the flaw, and provide some software tools to help them in the meantime," Rose said.

Recent reports in the news media and in the worldwide on-line communications services (Internet, CompuServe, Prodigy and America On Line) have indicated concern over a flaw in all current Intel Pentium microprocessors. The flaw is in the "floating point unit" (FPU) of the microprocessor and can have an effect on combinations of certain numbers divided by certain numbers. The flaw does not affect non-numeric applications like word processing, but has some possibility of error for numeric applications like spreadsheets, engineering, and graphics. Because of the remote likelihood of dividing one of the affected pairs of numbers, even users doing extensive spreadsheet calculations will rarely be affected.

As soon as early news of the Intel Pentium flaw began to appear in November, Compaq reached into its extensive research and development resource pool to dedicate a "tiger team" of experienced software and hardware engineers. They were tasked to leverage their unique understanding of hardware and software integration to understand the nature of the flaw and to develop interim software tools that can allow customers to evaluate their situation and continue to use their Pentium PCs in most applications.

The Compaq software tools -- with different implementations for different operating environments -- effectively disable the Pentium FPU. The tools can then be used to determine the extent to which the customers' applications use the flawed floating point operations and -- where appropriate -- enable the use of software floating point libraries to perform floating point calculations. Most applications affected by the Intel Pentium flaw can use these available software libraries (instead of the Pentium FPU) to perform

floating point calculations.

Based on its own research and testing, Compaq is also publishing informational reports to help customers evaluate the Intel Pentium flaw and its implications to their applications. These reports and software tools will be available from the public Compaq forums on CompuServe and the Internet. Each will be released and posted as soon as possible. (The software tools have been tested on Compaq PCs only, and they may or may not work with other PC brands. Other customers should call their own PC manufacturers for information and support.)

Customers with other questions or concerns may call the Compaq Technical Support Hotline at 800-345-1518. Compaq will help them evaluate their potential problems and make sure their concerns are addressed adequately.

### Company Background

Compaq Computer Corporation is a world leader in the manufacture of desktop and notebook personal computers, and servers. Founded in 1982, the Company reported 1993 worldwide revenues of \$7.2 billion. Compaq products are sold and supported in more than 100 countries through a network of more than 31,000 Compaq marketing partners. Compaq also sells directly to customers through Compaq DirectPlus at 800-888-5858. For Compaq Customer Support and Information, call 800-345-1518.

## Digital Mobilized To Exchange Pentium Processors

MAYNARD, Mass. -- December 20, 1994 -- Digital Equipment Corporation said today that the company has started shipping and installing replacement Pentium chips for its customers this week, and expects the exchange rate to accelerate as more replacement parts become available.

"Although the number of calls has been low, Digital has mobilized our support teams to help ensure customer satisfaction. Customers have always looked to Digital to provide an industry standard for quality. We are honoring any and all requests for replacement Pentium chips by our customers. Digital's worldwide Multivendor Customer Services organization will replace the processor in customers' Pentium systems at no cost, as the new chips become available," said Howard Elias, Vice President of Desktop Systems for Digital's Personal Computer Business Unit.

"Since learning about the issue, Digital has been working closely with Intel. Our goal is to make sure that our customers are satisfied with the Pentium chip replacement process. Intel's announcement today helps us to effectively respond and ensure that satisfaction," he added.

Digital PC customers can call Digital Multivendor Customer Services at 1-800-354-9000, or Intel at 1-800-628-8686 for details.

Digital Equipment Corporation is the world's leader in open client/server solutions from personal computing to integrated worldwide information systems. Digital's scalable Alpha platforms, storage, networking, software and services, together with industry-focused solutions from business partners, help organizations compete and win in today's global marketplace.

## Basic Guide to FCC Compliance

by: Dennis P. Rollinger  
Chief Executive Officer of Radiometrics Midwest Corporation

### The FCC Regulations:

Since 1934, the FCC has had the authority to regulate the electromagnetic emissions from electronic devices. A Notice of Proposed Rule Making (Docket 20780) was issued in 1976. This Docket introduced Part 15, Sub-Part J for control of unintentional emissions. There was a period of time for manufacturers of computer devices to sell existing systems and design new compliant systems. Since October 1, 1983 all computer devices are required to be compliant with the Rules and Regulations. These Regulations can be found in the Code of Federal Regulations, Title 47 Parts 2 and 15. They are available through the Superintendent of Documents, Government Printing Office, Washington, D.C. 20402 telephone (202) 783-3238.

A "digital device" as defined by the FCC is any device that generates and uses timing signals greater than 9 kHz using digital techniques. There are some exemptions for equipment. Medical devices, Industrial Process Controllers, and Scientific instruments are exempt. Subassemblies like internal power supplies and Hard Drive Controllers that do not connect to Drives outside the computer housing are exempt. Generally, all other computers and peripherals are required to be compliant with the regulations.

Computers and peripheral devices fall into two categories. They are either a Class A or a Class B device. A Class A device is "a digital device that is marketed for use in a commercial, industrial or business environment, exclusive of a device that is marketed for use by the general public or intended to be used in the home." A Class B device is "a digital device that is marketed for use in a residential environment notwithstanding use in commercial, business and industrial environments."

The FCC encourages responsible manufacturers of commercial, industrial or business product to comply with the Class B requirements if possible. They note that "In the event that a particular type of device has been found to repeatedly cause harmful interference to radio communications, the Commission may classify such a digital device as a Class B digital device, regardless of its intended use."

A Class A device must be Verified to be compliant. A Class B device must be Certified by the Commission. Initiation of marketing of any digital device is prohibited before Verification or Certification. The advertisement or display of a device will not be considered an offer for sale if the advertisement contains and the display is accompanied by the following conspicuous notice:

This device has not been approved by the Commission. This device is not, and may not be, offered for sale or lease, or sold or leased until the approval of the FCC has been obtained.

#### Penalties:

Compliance with the regulations is a Federal Law. The FCC has several methods of "administrative remedies" available to them. A company that is marketing a noncompliant piece of equipment will first be issued a "Marketing Citation." This tells to the company that the FCC has found the company violating the marketing regulations. It may be accompanied by a "Notice of Forfeiture" that is a fine not to exceed \$10,000.00 per day for each violation.

A request for a sample of the product in question may be made by the Commission. If the sample is violating the regulations a "Notice of Apparent Liability" will be issued. It will be accompanied by a fine not to exceed \$75,000.00 per day per violation.

These sanctions may be imposed on "Any person who is determined by the Commission to have willfully or repeatedly failed to comply with any rule, regulation or order issued by the Commission." The regulation reads "any person." Not only the manufacturers but their distributors, designers, sales people or even the end user may be held liable.

In the extreme case the Justice Department may be brought in to levy "Judicial Remedies". Any person found guilty of willful violation may be facing imprisonment for a term not to exceed one year and a monetary fine not to exceed \$100,000.00 per violation. The FCC can and will seize all equipment and facilities owned by the companies guilty of repeated offenses.

#### Complying with the Regulations:

Compliance with the regulations can be simple. The cost of compliance can be controlled by good engineering and early involvement of a competent EMI laboratory. It always costs more to fix a problem after the development cycle is complete. Start testing as soon as possible.

The tests required for verification and certification are rather straight forward. A series of emissions measurements are made to determine the level of Conducted Emissions and Radiated Emissions from the Equipment Under Test (EUT). Conducted emissions are the emissions found on the power cords attached to the EUT. They would be the source of interference that would be found on the AC power lines attached to the same branch circuit as

the device. These emissions are determined by connecting a receiver or spectrum analyzer to a Line Impedance Stabilization Network (LISN). The LISN stabilizes the power to the EUT and provides a proper RF connection for the analyzer.

The Radiated Emissions test is conducted by connecting a antenna to the receiver or spectrum analyzer. The frequency spectrum is scanned on a Open Area Test Site (OATS). This is done to provide reliable, traceable data under controlled conditions. The emissions must be maximized by rotating the EUT, raising and lowering the antenna, and by varying the position of the EUT's cables. These tests typically help reduce interference to licensed broadcast.

#### Class A Verification:

A Class A verification can be obtained by having the computer system tested using FCC accepted techniques. The site used for the testing should meet the requirement established by the FCC for Open Area Test Sites (OATS). The data must be traceable to the National Institute of Standards and Technology (NIST). A report of compliance should be written and kept available for the FCC if requested. A formal submittal to the FCC is not required for Class A devices. Systems compliant with the specifications are required to have a label in a conspicuous location stating the following:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference that may cause undesired operation.

In addition to the above label the following information must be placed in a prominent location in the text of the manual.

This equipment has been found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be

required to correct the interference at his own expense.

#### Class B Certification:

The Certification of a Class B device is somewhat more involved. The data traceability requirements for Class B devices are the same as for Class A devices. The test site used for Certifications is also similar to the site used for verification with the exception that the site must have a ground plane. The test procedures are the same as for Class A devices but the limits are considerably tighter.

#### Grantee Code:

Before submitting a product for Certification the manufacturer must be assigned a "Grantee Code." This code can be obtained by requesting it from the FCC. A letter requesting the code should be attached to the "FCC Remittance Advice" form number 159. Send it with \$45.00 to:

Federal Communications Commission  
Equipment Approval Services  
P.O. Box 358315  
Pittsburgh, PA 15251-3315

Remember to include the fee type code EAG in the 159 form. The three letter code received from the FCC will become the first three letters in your FCC ID number.

#### Submittal for Certification:

A FCC "Application for Equipment Authorization" form 731 is required with the submission for Certification. It comes with a list of instructions for completing the form. Send it, \$845.00, and the following information to the FCC Equipment Approval Service as above. This time use the Fee Code "EGC" on the form to show that this submittal is for Certification.

1. Detailed report of measurements. Data must be traceable to the NIST. A description of Open Area Test Site and a description of the test method used for testing is required.
2. Block diagram or circuit diagrams of the system.
3. A narrative describing how the device operates.
4. The instruction manual furnished to the purchaser.
5. Photographs showing the general appearance and component layout of the equipment. Photos are preferred to be 8x10. Show both sides of all circuit boards.
6. An engineering drawing or photograph of the proposed equipment

identification nameplate.

The labeling must be according to section 2.1045 and 15.19 of the CFR. The label must include the Grantee Code and a Equipment Product Code. The Equipment Product Code is determined by the applicant and must not be longer than 14 character. The label including a compliance statement should look like the following:

FCC ID: XXX12345

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: XXX=Grantee Code and 12345=Equipment Product Code

The user manual must include the information listed in CFR section 15.105. It states that the user guide should include the following statement:

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an output on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

When the submission package is complete remember to mail to entire package with the above documents, the list of exhibits and the Fee Processing Form to the following address.

Federal Communications Commission  
Equipment Approval Service  
P.O. Box 358315  
Pittsburgh, PA 15251-5315

The FCC will answer any questions you may have about the submittal by calling them at 301-725-1585. This number is a direct phone number for the FCC Sampling and Measurement Branch in Columbia Maryland. This is the office that will certify the item or call in a sample to be tested before certification.

The submittal package seems involved. Actually everything the FCC is asking for should already be in place before selling your product.

Once the submittal is filed with the FCC, expect approximately a six to eight week period to receive your Certification. Please consult the current CFR Title 47 to make sure that there have not been any changes to the submittal process since the publication of this guide.

Radiometrics Midwest Corporation has been performing FCC compliance testing since 1983. Our business philosophy is simply to go beyond just testing. If there is a problem Radiometrics is part of the solution. Our sole goal is to have your product approved by the FCC. If there is anything that we at Radiometrics can do to be of assistance, please contact us at 708-932-7262 or by fax 708-932-7271.

Send your product for testing to:

Radiometrics Midwest Corporation  
55 West 22nd Street  
Lombard, IL 60148

Specialists in solving a wave of FCC compliance problems.

## Microsoft Unveils Its Strategy for a New Interactive Online Service

### The Microsoft Network Is Designed to Expand the Market for Customers and Content Providers

LAS VEGAS -- Nov. 14, 1994 -- Microsoft Chairman and CEO Bill Gates today outlined the company's strategy for its new interactive online service called The Microsoft Network. Gates detailed the key elements of the strategy, which include providing a compelling business model and platform for content providers, easy and inexpensive access for users, and availability of rich and powerful development tools. The Microsoft Network, scheduled to go into beta testing this month, is designed to provide easy, affordable access to the rapidly expanding world of electronic information and communication for users of the Windows 95 operating system.

"Microsoft has long believed in the promise of personal computers enabling new ways of thinking and communicating. We call this vision 'Information At Your Fingertips,'" said Gates. "The Microsoft Network online service will represent a significant step toward the realization of this vision."

The Microsoft Network's technology and business model is designed to help content and service providers fully realize the potential of the online market. The Microsoft Network uses a platform model in which content and service providers will have maximum flexibility in creating products and pricing their services. Microsoft anticipates that providers will offer various pricing options, such as subscriptions, online transactions and ticketed events. Other services will be supported by advertising and commerce.

Content and service providers also will have control over the look of their services. To enable the easy creation of rich multimedia content and services, Microsoft plans to provide a complete tool set and sponsor developer and design conferences to educate providers on how to make best use of the online medium.

"We believe that the success of The Microsoft Network depends on our ability to deliver a comprehensive platform that enables successful online businesses for our providers," said Russ Siegelman, general manager of the online services group at Microsoft. "While 40 percent of users of Windows have modems, only 10 percent of them, and only 4 percent of U.S. households overall, subscribe to any online service. That's a huge opportunity for content providers."

Access to The Microsoft Network will be offered as a feature to users of Microsoft Windows 95. The Microsoft Network is designed to fully harness the power and ease of use of Windows 95.

When The Microsoft Network becomes available in 1995, it will offer interactive online communities built around ideas, people, products and brands. It is designed to bring customers affordable and easy-to-use access to electronic mail, bulletin boards and "chat rooms" on a variety of topics, file libraries, and Internet newsgroups. Members will be able to access online tips, add-ons, tools, product information and technical support directly from the Microsoft area of the service.

The Microsoft Network will be accessible in more than 35 countries, and its client application will be localized in 20 languages. In conjunction with today's announcement, four of the world's leading telecommunications carriers announced they are providing the worldwide network infrastructure to enable access to The Microsoft Network. Members of The Microsoft Network will be able to access the service with a local phone call and connect at speeds of up to 14.4 kilobits per second. The data center for The Microsoft Network, located in the Seattle area, uses scalable technology based on PCs running the Microsoft Windows NT Server operating system.

Beta testing for The Microsoft Network will begin with the shipment of Windows 95 beta version M7, which is slated for mid-November.

"We're excited about this first beta phase," said Siegelman. "This is just the first step in what we plan to be a long-term investment for Microsoft's information-highway efforts."

Founded in 1975, Microsoft (NASDAQ "MSFT") is the worldwide leader in software for personal computers. The company offers a wide range of products and services for business and personal use, each designed with the mission of making it easier and more enjoyable for people to take advantage of the full power of personal computing every day.

## IBM and the University of Alabama Win RealWare Award for Desktop and Workgroup Computing Solution

SOMERS, N.Y., Dec. 19, 1994 . . . IBM Corporation and its customer, the University of Alabama, were honored with a RealWare Award at a recent awards ceremony at DB/EXPO '94 in New York City. The award recognizes IBM and the University of Alabama as providing the most outstanding solution in the Desktop Database and Workgroup Computing category.

IBM's DATABASE 2 (DB2) for OS/2 was selected by the University of Alabama as the database of choice for an application that utilizes relational database and multimedia technology for improving the process of campus voting for student elections.

The kiosks that are used in the election process run IBM's OS/2 in multimedia applications and are connected to a DB2/2 database server for the purpose of capturing voter information. Prior to the election, the kiosks are used by potential voters to review candidates who promote their platform by means of a digitized video segment. On election day, the kiosks serve as voting devices that communicate with the database server. This solution has addressed the University's need for accurate, secure elections with results delivered in a timely fashion.

"We are very pleased to receive this award, which recognizes IBM's commitment to providing customers with solutions that meet their needs," said Janet Perna, director of database technology, IBM Software Solutions.

"IBM had the solutions for us when we decided to implement a multimedia kiosk that provided students with campus information," said Dr. Rod Riley, associate director of the Seebeck Computer Center, and head of the center's Advanced Technology Group (ATG) at the University of Alabama. "We are excited to be recognized with IBM as providing advanced and innovative technology to our students."

Founded in 1831 in Tuscaloosa, the University of Alabama is the state's first university. With an enrollment of 19,300, University of Alabama is a comprehensive residential university housing its academic program in 17 colleges, divisions and schools.

IBM's world-class relational database family is built on the industrial-strength foundation of DB2. Eighty percent of the FORTUNE 500, including the top 100 companies, rely on DB2 database solutions to manage data on mainframes, minicomputers, RISC workstations and personal computers.

IBM is the largest producer of database management software in the industry today.

Based in Somers, N.Y. IBM's Software Solutions Division develops, markets, and services a broad line of database management, application development, and workgroup computing solutions for a variety of industry-standard operating systems and hardware platforms, both IBM and others.

## Industrial Strength OS/2 Communications Available

### RhinoCom -- Presentation Manager Communications with an Object Oriented Approach

Columbia, MD -- Rhintek Incorporated announces RhinoCom v1.0, an OS/2\* general purpose communications package. Developed for use with Presentation Manager, RhinoCom targets the business and professional user, emphasizing reliability, versatility, and ease-of-use.

RhinoCom makes full use of multi-threading, accommodates multi-session work, and provides a uniquely OS/2 object-oriented approach to communications. RhinoCom's user-friendly interface and intuitive defaults conceal a strong and versatile package that both power and novice users will equally cherish.

Incorporated in 1977, Rhintek has always taken a strong stand on reliability. "Too many companies blind us with features that look great on the box, but are not properly implemented," exclaims president Rainer McCown, "Rhintek will not produce such a product. Our products are known for their reliability -- RhinoCom will continue this tradition!"

RhinoCom's charge is directed at the corporate sector. Easy yet powerful customization is the key, where incredible functionality can be encapsulated within a single mouse click. Scripts and macros can be accessed by key strokes, buttons, mouse clicks, events, even the menu bar!

Scripts are available using communications-enabled REXX while user-defined macros can execute REXX commands, run REXX scripts, select menu items, send keys to the comport, hold comments, implement delays, and execute other macros.

To simplify the learning process, complete context-sensitive help is implemented as well as an online "How To" reference and a tutorial "Coach." With all of these tools at their fingertips, RhinoCom users are able to quickly and effectively achieve the personalized communications they require.

RhinoCom is available for sale at a MSRP of \$199.

Rhintek is a member of IBM's Developer Assistance Program. For more information, please contact them directly at:

Phone: (410) 730-2575  
CompuServe (71333.3443@compuserve.com) or  
America On-line (rhintek@aol.com).

## An Advanced GUI Builder based on Semantic Interface Technology

Provo Utah, 1994 -- ViewSoft recently announced the release of UTAH 1.1, a C/C++ application development tool that allows programmers to interactively create sophisticated GUIs without adding interface dependencies to their program objects or writing interface code. UTAH for Windows is available at \$495. UTAH for Windows and UTAH for Windows NT are sold with a 30-day money back guarantee, and there are no royalties for distribution of the executables created with them.

UTAH helps build GUIs for applications quickly and easily by automating the assembly, testing and maintenance of graphical user interfaces UTAH provides several new technologies that make it unique among GUI builders, including:

The Editable Object System (EOS), which is a C++ class library with platform-independent extensions. EOS provides reflection (self-describing objects), run-time binding and data call-back probes. User objects inherit this extended functionality from base EOS objects.

Semantic Interface Technology uses 'smart components' that eliminate interface dependencies from the program objects. UTAH automatically and transparently performs type conversion and synchronization of interface objects with program data whenever either interface or program variables change. This automatic synchronization frees users from routine user interface event management, at the same time preserving event access for performance or custom control.

UTAH's User Extensible Toolkit lets users easily create new interactors that are used, like the components supplied with UTAH, to build even more complex user interfaces. This is done without learning the interactor's API or subclassing to get control. Similarly, existing VBX controls can be imported into UTAH and used as if they were native UTAH components.

UTAH for MOTIF, UTAH for MAC, UTAH for OS/2, UTAH for Databases (SQL and ODBC), and ObjectStore UTAH (seamless support of Object Design's object oriented database) will ship in early 1995.

Future versions of UTAH will also support OLE 2.0, OpenDoc, and SOM.

ViewSoft, Inc., is a privately held company with headquarters in Provo, Utah. ViewSoft, Semantic Interface Technology, EOS, UTAH and UTAH for Windows are trademarks of ViewSoft, Inc.

Email: [viewsoft@itsnet.com](mailto:viewsoft@itsnet.com)

Toll Free: (800) 843-9763 Inside the USA

Local/Long Distance: (801) 377-0787 Inside or outside the USA  
Fax: (801) 377-0788  
Address: 60 N 300 W, Provo, UT 84601, USA

WINGate Technologies has just released a suite of DOS-Windows interprocess communication tools, that will be of interest to many DOS and Windows programmers and end-users who need to integrate existing DOS (or host) legacy applications with MS-Windows. They are all implemented as VxD, and based on WINGate's new interprocess communication technology.

With \*WinTunnel\*, you can now integrate your existing DOS applications with MS-Windows. From your DOS app, with the touch of a hotkey, you can have screen data merged with your choice of Windows applications. This is easy-to-use for endusers and other non-programmers.

The \*WINGate Developer's Toolkit\* allows programmers to establish fast VxD-based peer-to-peer and client-server transactions between virtual machines under Windows 3x/4. The toolkit includes a 36-function API, DOS libraries (i.e., C/C++, Pascal, BASIC, FORTRAN Clipper, FoxPro, etc.) and our Windows DLL. You can create virtually any transaction to achieve real-time integrated Windows-DOS application objectives.

The \*RobinHood Developer's Toolkit\* enables you to remote control any DOS application from Windows using DDE or our DLL. Use VB to wrap a Windows front-end around.... or Excel to produce real-time reports for... your DOS (or VT100, IBM 3270, 5250, etc.) programs.

So, if you would like to get more information on these products...

World Wide Web: <http://www.wingate.com>

Email auto-responder: [info@wingate.com](mailto:info@wingate.com)  
(just email a blank message for full product info by email)

Anonymous FTP: <ftp://ftp.digex.net/pub/access/wingate>

Any other questions: [csk@wingate.com](mailto:csk@wingate.com)  
(or call or fax)

WINGate Technologies  
High Street Court, Suite 303  
Morristown, NJ 07960  
(800) 946-7435, (201) 539-2727, Fax: (201) 539-2838

## iNNOVATION! Customer Management

### An Effective Follow-Up System Instant Lotus Notes Productivity

iNNOVATION! Customer Management is a Lotus Notes based product for tracking and managing customer information. It provides an easy way to document, access and follow-up on all customer related activities, e.g., calls, letters, E-mails, proposals, meetings, incoming letters, and more. Customer Management has proven flexibility in allowing the end users to view and manage information in a large number of ways.

- \* Immediate Access to All Customer Information
  - Provides an efficient way to document and track all interactions/activities with customers, vendors, etc.
  - Keeps all customer related information in one place.
  - Gives both groups and individual immediate access to customer history and all activities that have taken place with that customer.
  
- \* Shows Follow-Ups and Next Activity
  - Features views that alert the user when to follow up, and what type of action is required.
  - Manages sales calls and related activities for the salesperson.
  
- \* A Complete Tool For Online Customer Management
  - Displays views by company, by location, by category, by individual, by first name, by last name, by category, by status, by next contact date, by person responsible, etc.
  - Allows customization through "information identifiers" that gives the users facilities to sort and track information, based on their own criteria.
  - Effective tool for managing sales teams and accessing customer results by team, by salesperson, by day, month, week, etc.
  - Provides macros to easily manage multiple activities without opening individual documents.
  
- \* Designed to leverage your capabilities:
  - Takes full advantage of Lotus Notes
  - Runs on all Notes supported platforms
  - Provides Full Local/Remote transparency

Retail Price - \$1595.00

WorkFlow Technologies, Inc  
P.O. Box 201686

Austin, TX 78720-1686  
512-331-8850

From SISCO's HOST Newsletter, Vol 5, No. 1, Fall 1994

---

AX-S4: Access For... MMS  
A "Window" to the MMS World

What do a 1-2-3 spreadsheet graphically displaying part counts from a MMS CNC, a Word report on temperature fluctuations from a MMS PLC, and an In-Touch diagram showing electric current flows from a MMS application have in common? ... AX-S4 MMS for Windows.

AX-S4 MMS provides real-time data from MMS devices for Microsoft Windows applications that support DDE (Dynamic Data Exchange). The AX-S4 MMS DDE interface provides access to a MMS-based Ethernet network for any Windows DDE Client Application such as Excel and In-Touch. DDE messages are sent by the DDE Client Application to AX-S4 MMS in order to access the following MMS services:

- Read
- Write
- InformationReport
- FileGet
- FilePut
- FileRename
- FileDelete
- FileDirectory
- Identify

Software Application Packages that support the DDE Advise command can use AX-S4 MMS to create "hot links" that update automatically when data in the MMS device changes. A Check Progress function is also supplied that uses an advise to follow the progress of a write or file transfer.

AX-S4 MMS is compatible with many Windows DDE Software Application Packages including:

- M/S Excel, Word, Access
- Lotus 1-2-3, AmiPro
- Wonderware In-Touch
- Borland QuattroPro
- Real-Time VisionPro

AX-S4 MMS also provides MMS server functionality for read and write. Local variables stored on the AX-S4 MMS PC can be read and written by remote MMS devices as well as DDE Client Applications. Local variables sent as MMS InformationReports from MMS devices are also supported.

Using AX-S4 MMS is as easy as clicking on a Windows icon. The easy-to-use Configuration client simplifies network configuration. Even DDE Command item strings can be configured by an alias name.

---

### MMS-EASE Now Available for Windows 3.1

SISCO has recently released a new version of MMS-EASE and a host-based SISCO OSI Stack for Windows 3.1. This new product complements our existing PC based software products for Interactive Unix, OS/2 and the AX-S4 MMS DDE server (see above). Some of the salient features of our new Windows based product are:

- \* Runs over low-cost NDIS Ethernet adapters from 3Com, SMC and Boca Research
- \* MMS-EASE interface portable to all SISCO supported platforms from PCs to workstations
- \* Supports multiple MMS-EASE tasks under Windows 3.1
- \* Uses Microsoft's Visual C++ Professional compiler
- \* MMS-EASE applications are compatible with and can share the same OSI stack used by AX-S4 MMS
- \* OSI stack supports dual protocols (i.e. TCP/IP or Novell) over the same Ethernet adapter
- \* Development, Run-Time and OEM licenses available

A MMS-EASE development license includes the MMS-EASE libraries and include files on 3.5" floppies, source code to the MMS-EASE demo program, source code to a simple file transfer application using the Microsoft Foundation Class libraries, a complete programmers reference manual, and one full year of support and maintenance. Please contact SISCO or your local representative for ordering information.

---

### Other MMS-EASE News:

In addition to the recent Windows 3.1 release, MMS-EASE has undergone other substantial enhancements and platform improvements. V6.02 or greater of MMS-EASE includes support for the following:

- \* Alternate Access which allows partial access to large data structures and arrays and allows you to reorder the members of complex data structures.
- \* New Data Structure Alignment Mechanism which provides virtual machine support for complex data structures on 32-bit RISC based machines without any padding elements to ensure proper element alignment on word boundaries.
- \* Complete ANSI C compliance for all function and variable declarations to

improve the use of the LINT function to detect programming errors early in the development cycle.

- \* New and improved debug logging functions which provide extensive support to assist in troubleshooting systems and applications.

Additionally, SISCO is working on a number of new releases for MMS-EASE on various platforms:

- \* A new OS/2 version is being released with a new OSI stack that will support multiple MMS tasks.
- \* MMS-EASE is now available for the IBM RS/6000
- \* We plan on porting to the Solaris 2.4 operating system for Sun SPARC CPUs in early 1995. SunOS support is currently available.
- \* Our Interactive UNIX offering has been updated with a new OSI stack.
- \* A Windows NT version for DEC Alpha CPUs will be available in early 1995.

---

#### New Electronic BBS for Product Support

SISCO has now added to its technical support by offering a bulletin board system. The newly added BBS has many features:

**File Libraries:** With proper privilege and permission, product enhancements and corrections can be obtained. Also, protocols such as ZMODEM, YMODEM, XMODEM, Kermit and ASCII are supported.

**E-Mail:** Messages can be sent and received, including those with data files attached. A text editor is also supplied.

**Forums:** The user will be able to conduct interactive conversations on a particular SISCO topic with other users on the system.

**Questionnaires:** Occasionally, SISCO will conduct a survey asking our customers to fill out a questionnaire concerning our products and services.

**Quik Mail:** This will allow downloading of E-Mail, product information, and forum messages in bulk.

Using the BBS is easy. Simply dial the phone number 810-254-1578. You then need to logon with your user id, which is your first and last name, and your password. After answering a series of questions, you will be assigned a privilege level of PROSPECT. To move from the PROSPECT privilege level, certain conditions must be fulfilled. Current SUPPORT customers, after verification, will have the ability to upload/download files and read/write access to forums on their products. PARTNERS will be able to retrieve the

latest information on SISCO products. For more information regarding the new BBS, contact SISCO Technical Support.

-----  
SISCO  
Systems Integration Specialists Company Inc  
6605 19 1/2 Mile Road  
Sterling Heights, MI 48314  
810-254-0020, fax 810-254-0053

## OS/2 Wins Seal Of Approval at RJR Packaging

December 9, 1994 -- The next time you peel the foil lid off a yogurt container, or tear open a foil pack containing film, or open a pack of effervescent headache tablets, think of IBM and R.J. Reynolds. These two unlikely corporate giants are probably responsible for the freshness of the products. That's because RJR Packaging (a division of R.J. Reynolds) makes much of the laminated packaging used to ensure product freshness, and IBM's OS/2 2.1 is the system that keeps everything running smoothly at their manufacturing plants.

Through the use of IBM's OS/2, LAN Server, and an application called "Factory Link for OS/2" from U.S. Data, plant employees can keep track of orders (on a real-time basis), monitor machine output, and have easy access to data kept on remote mainframe computers. When an order is received at RJR Packaging, it is placed in a mainframe production order and scheduling system. This makes it instantly available to the operator on the production floor via IBM Communications Manager/2. FactoryLink for OS/2 then steps in to load machine setpoints for the order, then monitors actual process conditions and passes this data back to OS/2 Database Manager 2/2 for later analysis, if necessary.

Problems and solutions concerning an order or machine are frequently entered by the operator into Lotus Notes mail or added to a Notes discussion database...enhancing communications across shifts and between plants. No more "reinventing the wheel" when a similar problem occurs on another press or at another plant.

Should an order change at any time prior to final shipment, the new information is instantly relayed to the PC controlling the machine assigned to the job. Need a hard copy of the change? Production planning or the operator simply prints the new changed order at the machine's printer using OS/2's LAN printing utility program. No more lost order adjustments or changes getting to the manufacturing floor too late to act upon. That's the advantage of real-time processing. Perhaps the biggest advantage of this OS/2-based solution, however, is that it has resulted in significant savings for RJR and, especially, its customers.

If you have an OS/2 success story to tell, write to:  
JTIESZEN@VNET.IBM.COM.

## SAFARI SOFTWARE RELEASES HIGHWAY HUNTER

**\*\* Fast Paced Shooter Burns up the P.C. \*\***

Rockville, Maryland -- November 23, 1994 -- Safari Software, a division of Epic MegaGames, Inc., announces the release of HIGHWAY HUNTER, a fast paced arcade style shooting game for the PC.

You're a fugitive on a futuristic earth, where the Axis of Allied planets has taken control of the entire world. Seizing the opportunity for escape, you steal the MASTER, a Multi-Attack Super Turbo Energy Ranger and head out on the highway, where the hunted becomes the hunter, and there are no rules.

HIGHWAY HUNTER is a top-view action game featuring awesome 256-color graphics, music and sound effects, and the type of action you would only expect from a coin-operated arcade machine.

Highway Hunter System Requirements:

- 386 or faster IBM compatible computer, VGA graphics
- 570Kb Conventional RAM
- Supports SoundBlaster and 100% compatible Sound Cards
- Supports Joystick, Gravis PC Gamepad
- 4 Megs hard disk space (Full Version),  
2 Megs hard disk space (Shareware)

HIGHWAY HUNTER can be purchased directly from Safari Software. To order with Visa or Mastercard, call 1-800-238-1393 or fax (301)-299-3841. Orders may also be placed through the mail to Safari Software, 10406 Holbrook Drive, Potomac, MD 20854. Checks and money orders are accepted, but they must be drawn on or routed through a U.S. bank. The full version of HIGHWAY HUNTER is \$29 US. Please add \$4 S&H, MD residents add 5% sales tax.

Safari software is a small division of Epic MegaGames dedicated to bringing small, high quality releases to the PC platform.

Safari Software  
10406 Holbrook Drive  
Potomac, Maryland 20854.  
CompuServe 70451,633  
Phone: 800-238-1393 or (301)-468-2492, Fax: (301)-299-3841

## AGE Logic and Tomen Electronics Have Shipped Over 200 Copies throughout Japan of its localized Xoftware/32 for Windows

San Diego, CA, December 19, 1994 -- Working in conjunction with Tomen Electronics, a leading Japanese developer and supplier of electronics and electronic systems, AGE Logic has shipped over 200 copies of its Xoftware/32 for Windows -- a comprehensive Kanji Version complete with Kanji text, error messages, application drivers and documentation.

First announced in Spring, 1994, AGE's localized Japanize X Server began shipping in August, 1994. Currently, Tomen Electronics ships two versions of the full Kanji product -- DOS for Intel processors and NEC PC98 for NEC processors. Both products feature AGE's core 32-bit X server and have been customized to include full cut-and-paste capabilities for compound Japanese characters. As such, compound Japanese characters are effortlessly converted and transferred between Unix and MS Windows applications.

AGE Logic, Inc.

AGE Logic, Inc., headquartered in San Diego, Calif., is a leading developer and supplier of X Window System software, and provides a full family of high-performance X server products for PCs and embedded systems designed to enhance PC-to-UNIX and Macintosh-to-UNIX connectivity. Offered under the Xoftware brand name, AGE's X server software products are available for Microsoft Windows, Windows NT, Macintosh, Power Macintosh, PowerPC, OS/2 and DOS-based PCs. AGE's embedded products include ATX, a multi-tasking kernel for X based graphical environments, and are available on a wide variety of 32 and 64 bit RISC microprocessors. AGE was selected by the X Consortium to develop the sample implementation of the X Image Extension (XIE) for UNIX-based imaging.

AGE Logic Inc  
9985 Pacific Heights Blvd, Suite 200  
San Diego, CA 92121  
619-455-8600

## AGE LOGIC INTRODUCES NEW PC X SERVERS OPTIMIZED FOR MENTOR GRAPHICS APPLICATIONS

San Diego, CA, December 13, 1994 -- AGE Logic (AGE) introduces its newest X connectivity products, XoftWare/32 for Windows, EDA Edition and XoftWare/32 for Windows NT, EDA Edition. Engineered to facilitate the use of Mentor Graphics applications, including Design Architect and Design Manager, both new EDA Edition products provide high-performance access to Mentor Graphics applications running on virtually any UNIX system. In addition, both products include customized features such as complex cursor support, expanded font capabilities and pre-defined start up icons which allow the user to minimize set-up time while maximizing productivity.

XoftWare/32 for Windows, EDA Edition is a full-function full-function 32-bit X Server which comes bundled with TCP/IP network software, AGE Logic's Professional Utilities and remote access capabilities -- a complete connectivity package with specialized support for Mentor Graphics applications. Additional features include a Concurrent Window Manager mode, serial-X technology capable of transmitting compressed data over Internet Protocols (IP) on modem or serial lines and a network file manager that allows users to easily transfer files between Unix and PCs.

XoftWare/32 for Windows NT, EDA Edition features full 32-bit performance coupled with user-oriented features such as Window Panning, Multi-Process Start-up System (MPSS()) to start multiple applications simultaneously, CascadeX( window cascading option, Automatic Font Substitution and a Concurrent Window Management. In addition, XoftWare/32 for Windows NT, EDA Edition includes a versatile Font Manager with PCF & BDF to FON Format Font Compiler and enhanced cursor support.

### Pricing and Availability

Both XoftWare/32 for Windows, EDA Edition and XoftWare/32 for Windows NT, EDA Edition will be released within 30 days. The suggested retail price for XoftWare/32 for Windows, EDA Edition is \$495, with XoftWare/32 for Windows NT, EDA Edition priced at \$495, for a single user license.

For information regarding Mentor Graphics' line of Electronic Design Automation (EDA) tools, contact David Garrison, Mentor Graphics Corporation, at 8005 SW Boeckman Road, Wilsonville, OR 97070-7777. Phone: (503)-685-4727.

### Company Information

AGE Logic, Inc., headquartered in San Diego, Calif., is a leading developer and supplier of X Window System software and provides a full family of high-

performance X server products for PCs and embedded systems designed to enhance PC-to-UNIX and Macintosh-to-UNIX connectivity. Offered under the XoftWare brand name, AGE's X server software products are available for Microsoft Windows, Windows NT, Macintosh, Power Macintosh, PowerPC, OS/2 and DOS-based PCs. AGE's embedded products include ATX, a multi-tasking kernel for X based graphical environments, and are available on a wide variety of 32 and 64 bit RISC microprocessors. AGE was selected by the X Consortium to develop the sample implementation of the X Image Extension (XIE) for UNIX-based imaging.

## Apple Introduces An Easy-to-Use Software Bridge for Connecting LocalTalk to Ethernet or Token Ring Networks

CUPERTINO, California--December 19, 1994--As part of its continuing strategy to provide easy-to-use and cost-effective networking solutions, Apple Computer, Inc. today announced the Apple LocalTalk Bridge. The LocalTalk Bridge software is designed to allow customers with Macintosh computers, printers or Newton MessagePad personal digital assistants, connected on a LocalTalk network, to connect to other computers and services on Ethernet or Token Ring networks easily and effectively--without the hassle of switching network connections.

"With the new bridge software, our networking customers can easily upgrade their Macintosh systems to enjoy the speed benefits from using Ethernet or Token Ring networking solutions while maintaining a seamless connection to LocalTalk-based systems and LaserWriter printers," said Karen Quek, product line manager for Apple Business Systems' Connectivity Division. "Many of our customers have been looking for an affordable way to extend the networking reach of their current systems and our LocalTalk Bridge helps them to do this."

The new software performs AppleTalk-based bridging between the LocalTalk port and one other selected network connection, such as a built-in EtherTalk connection. The second network connection can be a built-in Ethernet port or another network interface card such as an Apple Ethernet or Token Ring card.

The Apple LocalTalk Bridge, which is as easy to install as dragging a file into a folder, can be configured to allow "private" or "public" access to LocalTalk network segment. This allows users to dynamically control access to devices on the attached LocalTalk segment such as an Apple PowerBook computer or a LaserWriter printer. At the same time, all users will be able to connect to the Ethernet- or Token Ring-based network resources such as file servers, databases and electronic mail.

Apple today also introduced the Apple LaserWriter Bridge, which allows Macintosh computers on Ethernet or Token Ring networks to print on LaserWriter printers on a LocalTalk network. Apple intends to make the LaserWriter Bridge available on its Network Software Installer Disk (version 1.5), which contains the latest AppleTalk files, and Apple Ethernet and Apple Token Ring card network software.

### Availability and Pricing

The Apple LocalTalk Bridge is expected to be available through Apple authorized resellers by the end of February. It is Apple priced at \$99 in the U.S. Pricing and availability may vary outside the U.S. Customers can locate

a nearby Apple reseller by calling the Apple Reseller Referral Line at (800) 538-9696.

The Network Software Installer (version 1.5), including the Apple LaserWriter Bridge software, is also expected to be available by the end of February. It will be available free-of-charge on several on-line services, including AppleLink, eWorld and the Internet (ftp.apple.com). Requests for the Network Software Installer can also be made by fax to the Apple Network Information Fax Line at (408) 974-7977. Customers who want more information on the Apple LocalTalk Bridge or Apple LaserWriter Bridge can contact the Apple Network Information Line at (408) 862-3385, or by AppleLink at ABS.NETINFO.

Apple Computer, Inc., a recognized pioneer and innovator in the information industry, creates powerful solutions based on easy to use personal computers, servers, peripherals, software, online services, and personal digital assistants. Headquartered in Cupertino, California, Apple (NASDAQ:AAPL) develops, manufactures, licenses and markets products, technologies and services for the business, education, consumer, scientific & engineering and government markets in over 140 countries.

Apple Computer Inc  
20525 Mariana Ave  
Cupertino, CA 95014  
408-996-1010

## ASPEN SYSTEMS NOW SHIPPING THE ALPHA AXP-BASED ALPINE LINE OF PROFESSIONAL WORKSTATIONS AND SERVERS

Aspen Systems is now shipping its entire line of ALPINE high-performance RISC workstations and servers. The ALPINE's "pop out chip and oscillator" design supports processor speeds of 166-, 200-, 233- and 275-MHz and allows for unusually flexible upgrading. The ALPINE, based on Digital Equipment Corporation's Alpha AXP microprocessor, combines Digital's 21064 processor and 21072 PCI core logic chip set with a 128-bit RAM bus engineered for maximum computing performance. Secondary cache RAM of 2 megabytes is standard in the 275 MHz and 233 MHz configurations; 200 MHz and 166 MHz versions are equipped with 512K RAM. All ALPINEs are expandable up to 1 Gigabyte of RAM using 72-pin SIMMs.

The ALPINE is engineered to fully support Windows NT, VMS, and OSF/1 operating systems. Standard systems include a 2MB PCI video adapter; an Ethernet PCI adapter for networking solutions; and a professional 17" monitor which, combined with the ALPINE's PCI video card, displays up to 16.7 million colors in resolutions up to 1600x1200. An ALPINE systems manual, a Windows NT manual, and a catalogue of the 5000-plus software packages supported by the ALPINE are included.

The ALPINE has three PCI expansion slots that allow high-speed I/O throughput of up to 132 megabytes/second; onboard FAST SCSI II interface with internal and external connectors; three ISA expansion slots; floppy drive interface; onboard bi-directional parallel port; two high-speed serial ports; PS/2 mouse port; AT keyboard connector; remote diagnostics port; CD-ROM and a 3.3 volt power supply. Complete systems are available in desktop and tower configurations (baby-AT form factor of 8.8" x 13").

The ALPINE offers one of the best price/performance ratios on the market. A fully loaded 166MHz system retails for \$6,295.00 and the 275MHz configuration is priced at \$11,395.00. Aspen Systems offers unlimited toll-free technical support and a full two-year warranty for registered owners. OEM, VAR and embedded controller support includes free sales literature and marketing material, free software demos and an OEM/VAR co-op advertising program.

Aspen Systems, Inc.  
4026 Youngfield Street  
Wheat Ridge, CO 80033-3862  
Phone: 303/431-4606  
Fax: 303/431-7196  
Internet: [aspen@aspsys.com](mailto:aspen@aspsys.com)  
WWW address: <http://www.aspsys.com>

## COMPAQ POSITION PAPER -- INTEL PENTIUM FLOATING POINT UNIT FLAW December 05, 1994

(From Compaq Corp's World Wide Web Server, redistributed with permission  
-- see copyright notice below)

---

### BACKGROUND

Recent reports in the news media and in the worldwide on-line communications services (Internet, CompuServe, Prodigy and America Online) have voiced a growing concern over a flaw in all current Intel Pentium microprocessors. The flaw is in the "floating point unit" (FPU) of the microprocessor and can have an effect on combinations of certain numbers divided by certain numbers. The flaw does not affect non-numeric applications like word processors, but has some possibility of error for numeric applications like spreadsheets, engineering, and graphics applications. Like a safecracker randomly spinning for the right combination of a bank vault, the chance of a user hitting on just the right numbers to divide is extremely remote.

### TECHNICAL SUMMARY

The Intel Pentium processors' flaw in their floating point unit can result in reduced precision when performing floating point divide operations using some pairs of operands (one number divided by another). The specific pairs of operands that exhibit this reduced precision are extremely rare -- about one in nine billion.

The actual cause and conditions to encounter the flaw are very well understood at the "bit and byte" hardware level. What is harder to quantify and to communicate is how this flaw affects applications and how they are used. In general, if it can be assumed that two numbers being divided are randomly selected, then precision is affected in about 1 out of every 9 billion operations. The question then becomes, "how many division operations does an application perform in a given amount of time, and how significant is the effect of lost precision?" Intel has stated that the average spreadsheet user would experience a loss in precision once in 27,000 years. This is derived from Intel's assumption that the average spreadsheet user performs about 1000 divide operations per day. Assuming 333 days of use per year, 9 billion divided by 1000 and then by 333 yields the 27,000 year result. Intel has done a more elaborate study for more scientific applications that yields other MTBF (mean time to failure) time periods.

### COMPAQ POSITION

The Compaq brand has always been synonymous with customer satisfaction.

We stand behind our products and our customers and will work with our customers to resolve any concerns with their Compaq products that contain flawed Pentium microprocessors from Intel.

We have already undertaken some steps to assist customers, and we will continue to work with them to ensure their satisfaction with our products. Compaq has developed a range of alternatives available to customers that are tailored to address their specific needs.

First, Compaq will replace free of charge flawed Pentium microprocessors in its products for any customer that may be affected. We have been working with our customers to identify products being used in critical numeric-intensive calculation environments, and we have already begun to replace flawed Pentium processors for customers with such units.

Second, Compaq has set up a separate telephone hotline option for its customers to call for information relating to the flawed Pentium processor and to resolve specific issues or concerns they may have regarding their Compaq products. The hotline number is 1-800-345-1518.

Finally, Compaq will be disseminating informational materials along with recommendations based on Compaq's own testing and research on the worldwide on-line services (such as Internet, CompuServe, Prodigy, America OnLine, PaqFax, etc.). Please check back with our on-line services for these documents.

-----  
Copyright 1994 Compaq Computer Corporation.

Permission to use, copy and distribute documents delivered from this Worldwide Web server and related graphics is hereby granted, provided that the above copyright notice appear in all copies and that both that copyright notice and this permission notice appear. All other rights reserved.

## OBJECT DESIGN FORMS TECHNOLOGY PARTNERSHIP WITH DHARMA SYSTEMS

BURLINGTON, Mass., December 29, 1994 -- Object Design, Inc. today announced a technology partnership with Dharma Systems, Inc. to jointly develop database productivity and connectivity tools. The partnership will result in a series of software products tightly integrated with ObjectStore, Object Design's industry leading object database management system.

"Access to information throughout the enterprise is of major importance to corporations today -- as exemplified by Object Design's decision to work with us," said Dennis Coraccio, director, sales & marketing of Dharma Systems. "Dharma's expertise in database access technology, coupled with Object Design's command of database software, will result in a powerful set of development tools for ObjectStore customers."

"We are eager to work with Dharma Systems in developing tools specially designed to enhance ObjectStore," said William Blundon, vice president, marketing at Object Design. "We did an exhaustive evaluation of competing technologies and found Dharma's to be truly world-class software."

Headquartered in Nahsua, New Hampshire, Dharma Systems develops SQL-based solutions that open databases. Its family of products enable non-SQL database environments to interoperate with relational databases, as well as ODBC compatible tools.

Object Design is the market leader in the object database industry according to Framingham-based International Data Corporation, and holds the #1 ranking in Inc. Magazine's annual Inc. 500 list of the nation's fastest growing private companies.

Object Design, Inc., the leader in bringing objects to the database market, delivers real world solutions to organizations in the telecommunications, manufacturing and financial service industries. Its products support C, C++ and Smalltalk. Headquartered in Burlington, Mass., Object Design maintains a development facility in San Mateo, Calif., sales offices throughout the U.S. and sell directly to end users, as well as through a worldwide network of distributors. International subsidiaries include the United Kingdom, France, Germany, Australia, and Japan

## EDIF delivers on PCB Standard

Standard addresses issues critical to PCB industry

December 23, 1994 -- Arlington, VA - The Electronic Industries Association's (EIA) Electronic Design Interchange Format (EDIF) Division announced today its release of the EDIF Printed Circuit Board standard, EDIF Version 3.5.0. With the release of PCB, the process of transporting PCB layouts from one CAD system to another has been dramatically simplified and is now far more efficient.

EDIF PCB enhances the existing EDIF release beyond connectivity and schematics to encompass support for printed circuit board design, manufacturing and assembly. It includes support for parts, packages, bare boards and assembled boards. Like previous EDIF releases, PCB consists of a formal model of the information it uses to represent a PCB/PCA, and a reference manual describing the syntax and examples. In total, EDIF V3.5.0 is of high quality and represents many high-level PCB constructs as well as the currently addressed artwork features.

"As a customer and as Chair of EDIF's Steering Committee, I feel very good about this announced release and what it says to the PCB community," stated Jeri Crowley, Senior Member, Technical Staff, for Texas Instruments and Chair of EDIF's Steering Committee. "The EDIF division of the EIA did its homework and has addressed key issues that the industry said would make a difference," she concluded.

Key features of EDIF V3.5.0 are its ability to handle simple layout features, complex sub-layouts, padstack usages, physical nets, sub/nets, layout text, power plane templates, and probe point references. Another key section, assembled board, will address component netlist definition, component placement, route and wirebond assembled physical nets, association between components and their footprints, and function allocation information.

"Industry interest in a PCB standard for EDA has been clear for some time," offered Patti Rusher, director of the Electronic Information Group for EIA. "Since the release schedule for PCB was announced at the Design Automation Conference in San Diego this year, we have received overwhelming contact from individuals expressing interest in the standard. Coupled with the tremendous financial and technological support we've received from corporate participants, it says to me loud and clear that the time for a PCB standard release is now," concluded Ms. Rusher.

EDIF V4.0.0, which will include coverage for MCM (multichip modules) representation, design rules and assembly drawings, is due out at a later

date and will further expand on EDIF V3 5 0. MCM's might be thought of as small PCB's, or large chips, or a mix. It is a goal to be able to extend the PCB representation facilities to allow for a more generic layered product, covering both PCB's and MCM's.

Copies of EDIF V3 5 0 are available in electronic format for \$100 and may be obtained from Ms. Patti Rusher, Electronic Industries Association (EIA), Tel: (703) 527-7002, Fax: (703) 527-0685.

For 70 years, the Electronic Industries Association has been the national trade association representing U.S. electronics manufacturers. EIA represents the entire spectrum of companies involved in the manufacture and design of electronic components, parts, systems and equipment for communications, industrial, government and consumer-end uses.

For further information, please contact Ms. Patti Rusher, Electronic Industries Association, 2500 Wilson Boulevard, Suite 203, Arlington, VA 22201; Tel: (703) 527-7002, Fax: (703) 527-0685. After January 10th, Ms. Rusher may be reached at her new telephone and facsimile numbers: Tel: (703) 907-7545, Fax: (703) 9077501.

Electronic Industries Association  
2001 Pennsylvania Ave, NW  
Washington, D.C. 20006-1813  
202-457-4900, fax 202-457-4985

## Software Development '95 Features Highlights of Borland's Delphi95

December 21, 1994 -- San Francisco--Software Development '95 will be hosting highlights and free packages of one of the industry's most talked about products, Borland's new client/server application development environment, code named Delphi95, at the 1995 West coast conference and exhibition at the Moscone Center in San Francisco, February 14-16.

"Software Development is among one of the most prestigious development tools exhibitions in the world," said Paul H. Gross, vice president and general manager of the Languages and Client/Server business unit at Borland. "We value the opportunity to highlight our latest technology and products at Software Development '95. SD consistently attracts high quality attendees who are focused on using the most leading-edge development tools. Software Development offers Borland a great opportunity to gather feedback and comments from some of the world's most experienced software developers."

As is traditional for Borland, they will be hosting a special party on February 14 and will include "never seen in public before" highlights of its upcoming Delphi95 product. Borland will also be offering conference attendees an opportunity for more in-depth discussions of Delphi95 at free technical classes the morning of February 15. In addition, Borland plans to give away 1000 packages of Delphi each day of the show.

In related news, Borland's founder and Chairman, Philippe Kahn will give the keynote address at SD '95, February 14 at 6pm. Kahn, outspoken and often controversial visionary, will present his perspective on open computing: "Is Open Computing Really Delivering on It's Promise?" In his address, Kahn will outline a number of technology trends in corporate computing, such as end-user access, application development, workgroup computing, and utilization of mission-critical data for long-term strategic analysis, and discuss how the technology community is addressing these issues.

Borland and Delphi continue to garner attention from the industry. By integrating the world's fastest compiler technology, Delphi is the only client/server development tool to combine the productivity of an object-oriented 4GL with the performance of an optimizing compiler. Delphi's unique features include: unlimited scalability between local database tables and external database servers; a visual development environment that facilitates component-based design and code reuse; and an open architecture that supports easy integration of external products such as CASE tools, VBX components and version control.

For more information on Borland, Delphi and Philippe Kahn, contact Gillian Webster, Public Relations Manager for Borland's Languages and Client/Server

products at 408431-5862.

Software Development '95, featuring 4 powerful conferences and an exhibition dedicated to the application development industry, is produced by Miller Freeman, Inc. For more information, contact Cynthia Blair, Marketing Manager, Software Development Conference & Show Group at 415-905-2210.

Miller Freeman Inc  
600 Harrison St  
San Francisco, CA 94107  
415-905-2784, fax 415-905-2222

## Windows Software Ensures Fair Employee Evaluations

### Paradigm Software Development Releases Version 2.0 of WorkWise-Evaluations

Seattle, Washington--November 14, 1994--Paradigm Software Development, Inc. announced today version 2.0 of WorkWise-Evaluations, a Windows program that provides extensive tools to keep track of employees' work history, monitor employees' progress, and conduct thorough, objective employee reviews and evaluations.

WorkWise-Evaluations is unique because it supports both single-rater and multi-rater reviews and evaluations. Like many other evaluation programs, the program helps managers keep detailed employee histories and provides the tools to conduct single-rater reviews. But unlike other evaluation software, WorkWise-Evaluations provides the capability to conduct multi-rater reviews such as Peer-to-Peer reviews, Three Sixty reviews, Bottom-up reviews, and then process the results to flag potential areas of reviewer bias according to EEO classifications..

Because the employee can be reviewed both by his supervisor and by other employees, coupled with the fact that the program allows the supervisor to be reviewed by employees, reviews are more accurate, more objective, and less biased. The large number and type of reviews available also allows thorough tracking of an employee's historical progress and development in specific performance areas. Managers will find "Management by Objective" easier to accomplish due to the program's ability to track goals and measure levels of accomplishment. The program features an airtight security system that allows employees to receive feedback from their files without accessing sensitive or private information.

The program works alone or integrates seamlessly with Paradigm Software's WorkWise-Employee File (a program which keeps detailed, extensive employee records and information). WorkWise-Evaluations supports the import and export of data with major accounting and human resource programs, as well as with dBASE, Microsoft FoxPro, Microsoft Access, Btrieve, Paradox and ASCII formats and is ideal for workgroup use on networks.

WorkWise-Evaluations requires a '386sx processor, 2 Mb of RAM, Windows 3.1 and 5 Mb of hard disk space for single user systems; and a '386dx, 4 Mb of RAM, Windows 3.1 and network software that supports the NETBIOS interface for multi-user systems.

The program is available through the retail and VAR channel including Egghead and suggested retail pricing ranges from \$129 to \$279 per user. Corporate offices are located at 2510 Western Avenue, Suite 500, Seattle,

Washington, 98121. Phone numbers are: (206) 728-2281, sales: (800) 967-5947 ext 206, fax: (206) 728-8401.

## Growing Publishing Firm Diversifies Sees new opportunities in print-digital connections

Chapel Hill, NC; November 2, 1994 -- Ventana Press announced an aggressive new expansion of its core computer book publishing business into electronic publishing, Internet-supported content and book/software combinations. The newly-restructured Ventana Communications Group, Inc., will operate through three divisions: Ventana Press, its traditional trade book publisher; Ventana Media, which will develop software/book sets; and Ventana Online, the company's interactive telecommunications research, development and distribution arm.

In 1992, Ventana Press was among the first trade publishers to address the online market via a partnership with America Online, providing AOL's retail presence with Mac, Windows and DOS editions of The Official America Online Membership Kit & Tour Guide. These popular titles encouraged the 1993 launch of Ventana's highly successful Internet Tour Guide series, leading in turn to the formation of Ventana Media and the May, 1994 introduction of its first product, the Internet Membership Kit, which has quickly attained bestseller status.

Emerging opportunities on the Internet's World Wide Web triggered Ventana's acquisition of DreamTech, an innovative provider of Internet content and tools, in summer 1994. This acquisition formed the basis for VCG's newest division, Ventana Online.

"As Ventana Press, we were at the publishing forefront in addressing computer users' needs for readable guides to their new tools," VCG President Josef Woodman said. "Our new structure will allow us to more directly compete as the Internet creates expanded interactive communications opportunities."

Ventana Communications Group, Inc. is located at 110 E. Main Street, Carrboro, NC 27510, USA.

