DSNE-W93I-00

IBM® Personal Software Products (PSP)

Developer Support News

Issue 9

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Abbreviations

AUD. Austrialian Dollars

CDN. Canadian

GMT. Greenwich Mean Time

GST. Goods and Services Tax (in Canada)

US$. United States Dollars

Back Issues

The file names, dates, and number of pages for all issues thus far are:

Issue	Date	Zipped	ASCII	INF	PS	Pages
1	17 May	dsn93a.zip	dsnews.93a			52
2	15 June	dsn93b.zip	dsnews.93b			50
3	15 July	dsn93c.zip	dsnews.93c			62
4	23 July	dsn93d.zip	dsnews.93d			48
5	16 August	dsn93e.zip	dsnews.93e			29
6	15 September	dsn93f.zip	dsnews.93f	dsn93f.inf		47
7	15 October	dsn93ga.zip dsn93gi.zip dsn93gp.zip	dsnews.93g	dsn93g.inf	dsn93g.ps	63
8	15 November	dsn93ha.zip	dsnews.93h			34
9	15 December	dsn93ia.zip	dsnews.93i			46

Explanation of names of zipped files for Issues 7 and later:

DSNymA Developer Support News 199y Issue m ASCII (plain-text)

DSNymI Developer Support News 199y Issue m .INF (use OS/2 VIEW)

DSNymP Developer Support News 199y Issue m .PS (PostScript)

where y is the last digit of the year (3, 4, ...), and m is the month represented as alpha (1=A, ..., 7=G, 8=H, ...).

For example, DSN3GI is 1993 issue 7 (=G), the 15 October issue, in .INF format (after being unzipped).

Outside IBM, zipped files are found on several e-mail and BBS systems:

America Online, in the OS/2 forum, in the Newsletters library

CompuServe, in OS2DF2 forum, *DAP library section 14 and in OS2DF1 forum, OPEN FORUM library section 15

GEnie, in OS/2 Software Library 16

Gopher, in index.almaden.ibm.com, OS/2 Information menu; also in bobblair.austin.ibm.com

IBM Canada BBS, in file area 35, OS/2 Programming

IBM Europe/Middle East/Africa (EMEA) BBS, in file area DOCS.PUBS

IBM Personal Computer Company BBS, in file area 11, OS/2 Programming

IBM OS2BBS (TalkLink), in OS/2 Software Library, in Documents and Info

Internet, in anonymous FTP server software.watson.ibm.com, in directory /pub/os2/info

PRODIGY, in the OS/2 Club topic's download library under IBM Files

Note: If you cannot find files named dsn... (in lower case), look for files named DSN... (in upper case).

Within IBM, all the ASCII files and INFBIN files are in DSNEWS PACKAGE in the MKTTOOLS, OS2TOOLS, and PCWIN tools catalogs. To obtain DSNEWS PACKAGE, type

TOOLCAT catalogname GET DSNEWS PACKAGE

or

TOOLS SENDTO catalogdisk GET DSNEWS PACKAGE

where

catalogname MKTTOOLS is on catalogdisk USDIST MKTTOOLS MKTTOOLS

catalogname OS2TOOLS is on catalogdisk KGNVMCB PCTOOLS OS2TOOLS

catalogname PCWIN is on catalogdisk BCRVMMS1 PCWIN PCWIN

Examples:

TOOLCAT MKTTOOLS GET DSNEWS PACKAGE
TOOLS SENDTO USDIST MKTTOOLS MKTTOOLS GET DSNEWS PACKAGE

or request the package by typing

REQUEST DSNEWS FROM V1ENG AT BCRVM1

Note: Use a monospace font to print the ASCII version.

Formats of DSNEWS Other Than ASCII

Within IBM, other formats of DSNEWS are available. Klaus Johannes Rusch, IBM Austria, has produced DSNEWSB PACKAGE, which is in the OS2TOOLS tools catalog. DSNEWSB PACKAGE contains some issues of DSNEWS in BookMaster, PostScript, and LIST3820 formats. Klaus' assistance is greatly appreciated.

Outside IBM, the 15 September (Issue 6) was made available in .INF format, and the 15 October (Issue 7) was made available in .INF and PostScript formats. The .INF files were produced by Mike Kaply, IBM Boca Raton Information Development, whose assistance is also very much welcomed.

Future issues will be provided in formats other than ASCII as time and resources permit.

Notice to Readers Outside the USA

It is possible that the material in this newsletter may contain references to, or information about, IBM products (machines and programs), programming, or services that are not announced in your country. Such references or information must not be construed to mean that IBM intends to announce such products, programming, or services in your country.

Send Us Your Feedback!

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IBM OS/2 2.1 ServicePak Beta

A beta version of IBM OS/2 Version 2.1 ServicePak is available for customers who want the opportunity to install, test, and provide feedback on this PRE-RELEASE code. This beta version is available in the United States and Canada only.

This ServicePak contains:

Fixes for approximately 550 problems reported against the OS/2 2.1 product since it became available in June 1993

Ship-level version of the S3 64K and 16 Million Color Video Device Driver

Additional CD-ROM support, including:

- Panasonic Models 521, 522, 523, 562, 563
- Mitsumi Models LU005, FX001, FX001D
- Sony Model 31A
- Chinon Models 431, 435, 535

Additional printer device drivers

- HP Models 4P and 4MP

The ServicePak is available to you for electronic downloading from the IBM electronic bulletin board system, OS2BBS. A CD-ROM version is also available, which you can request by calling 1-800-772-0330 within the USA between 8:00 a.m. and 5:00 p.m. Eastern Time (GMT minus 5) Monday through Friday. There is a 15 US$ fee to cover shipping and handling.

In Canada, the ServicePak is available by calling 1-800-561-5293.

This beta version requires that OS/2 2.1 is already installed. **THIS BETA VERSION WILL NOT INSTALL OVER OS/2 2.1 FOR WINDOWS.**

BETA CODE SHOULD BE RUN IN A NON-PRODUCTION/NON-CRITICAL ENVIRONMENT. IT IS RECOMMENDED THAT YOU BACK-UP YOUR OS/2 PARTITION PRIOR TO INSTALLATION. Because a large number of system modules are affected by this ServicePak, an interactive installation process is being used to maximize the efficiency of the storage layout.

As a beta participant, your feedback is very valuable to IBM. Key data you can provide should include whether we regressed any functions that were working on OS/2 2.1, whether we correctly fixed the problems listed in the ServicePak README, and whether you are able to successfully take advantage of new device driver support in the ServicePak.

The vehicles for your feedback are the PSPBETA FORUM on CompuServe, the BETA FEEDBACK topic of the OS/2 Club bulletin board on PRODIGY, and the IBM electronic bulletin board system, OS2BBS, in the forum OS2BETA. In the United States, to become a member of CompuServe, call 1-800-524-3388 and ask for representative 239. To become a member of PRODIGY, call 1-800-776-0845. To become a member of OS2BBS, call 1-800-547-1283.

As a beta version, this code is subject to change, and has not completed final testing. The fact that this code is available in a beta program should not be construed or represented as a commitment on IBM's part to make it generally available to customers.

OS/2 Support for Symmetrical Multiprocessing Systems

At COMDEX/Fall '93, IBM announced that OS/2 for Symmetric Multiprocessing will begin beta testing in December.

OS/2 SMP provides users of Intel-based multiprocessing hardware systems with the capability of running compute-intensive applications faster and more efficiently. By intelligently supervising the computing operations and allocating microprocessing resources as necessary, computer users will see dramatic improvements in performance. Compute-intensive applications that would benefit most from symmetric multiprocessing include servers (database, transaction, application, and mail) and desktop applications such as database and graphics.

OS/2 SMP will extend customer investments in server software, because server systems can be scaled to handle larger and larger networks and/or to place additional server functions in a single system.

Because it is built on OS/2, SMP can run concurrently multiple DOS, Windows, and OS/2 applications in a single system. “Since the introduction of OS/2 2.1, we've been developing enhancements that will enable our customers to work more efficiently. OS/2 SMP does just that,” said Lee Reiswig, president, IBM Personal Software Products division. “It allows OS/2 to take full advantage of the multiprocessing systems in a way that results in significant performance gains. And, native applications run dramatically better, which means higher productivity for our customers.”

Under OS/2 SMP, application processes and threads are automatically dispatched by the operating system to run on any of several general-purpose processors. The result is enhanced performance, with the greatest significant improvement in multithreaded applications and multitasking environments. Even single-tasking DOS applications would benefit, because OS/2's heavy use of threads allows for overlap of systems services and application execution.

At its COMDEX/Fall '93 booth, IBM PSP showed the following demonstrations running on a five-processor computer system:

A transaction database processing environment using Database Manager/2 for OS/2 and Oracle 7,

A high-end workstation environment using AutoCAD for OS/2, and

An application database environment using Lotus 1-2-3 for OS/2.

This demonstration code will be provided in the next issue of The Developer Connection for OS/2. The Developer Connection is a yearly CD-ROM subscription offering developers the latest tools, sample source code, and information for developing OS/2 applications.

IBM PSP is working with Intel and leading multiprocessing systems vendors to demonstrate that SMP can be provided on any 486 or above Intel platform. Vendors include ALR, AST, Compaq, Everex, IBM PC Company, Tricord, and Wyse, among others.

C Set ++ for OS/2 Version 2.1 Upgrade Promotion

For a limited time, eligible customers can upgrade from C Set ++ for OS/2 Version 2.0 to C Set ++ for OS/2 Version 2.1 at a reduced price.

Customers are eligible if they acquired Version 2.0 by upgrading from either Workset/2 or C Set/2 Version 1.0, or acquired Version 2.0 after 9 September 1993. If Version 2.0 was not acquired directly from IBM, proof of acquisition (copy of invoice) will be required.

Orders must be placed on or before 31 January 1994, and can only be made through 800-3IBM-OS2. The Date of Installation, as defined in the IBM Customer Agreement, must occur on or after 30 November 1993, but no later than 31 March 1994.

This promotion applies to eligible customers who have previously acquired the following part numbers: 61G1405, 61G1402, 71G1588, 61G1435, 61G1406, and 61G1407.

This promotion is also open to eligible customers who have acquired, after 9 September 1993, the following part numbers: 61G1175, 61G1425, and 61G1412.

IBM reserves the right to modify or withdraw this promotion at any time.

Part Number	Description	Price
82G3788	C Set ++ Version 2.1 (3.5) Upgrade	99 US$
82G3789	C Set ++ Version 2.1 (CD) Upgrade	59 US$
82G3790	C Set ++ Version 2.1 (CD-PAK) Upgrade	79 US$

In Canada, a permanent price reduction will be announced during the week of 20 December. Contact IBM Direct in Canada, 1-800-465-7999, for more details.

OS/2 Device Driver Development Workshops – FREE!

Are you “OS/2 device driver ready” for 1994? Do you have the device drivers that will enable your products to exploit the explosive growth of the OS/2 marketplace?

If your answers to these questions are no, and you're wondering how to get started, read on!

The IBM Driver Development Support Center (DDSC), a group of experienced industry professionals, provides the support and training you need to get you started in acquiring your share of this increasingly lucrative marketplace. You'll have good company, too – Orchid Technology, Future Domain, NCR, and S3 are just a few of your industry peers who took this same path.

NOW is the time to start planning your 1994 attendance at the Device Driver Developer Workshops held at IBM in Boca Raton, Florida. Folks from the IBM Programming Center, experts at OS/2 development, will guide you during your extensive hands-on sessions. This help, together with the instruction you'll receive from our highly experienced staff, is an unbeatable combination ... at any price, and especially at the current price: ZERO. (But please note, we don't know how long we can maintain this bargain rate.)

If you're still not convinced, look at these sound business reasons why you should attend these workshops:

Respond to increasing market demand

Save significant dollars on development and programmer time

Gain access to the latest levels of code

Give yourself a quick start on bringing your driver to market

Open your opportunities to explosive new OS/2 market segments

YOUR COMPETITION IS DOING IT!

After you finish the workshop, be sure that you are registered with the DUDE, our device-driver bulletin board system. Registering will ensure that the DDSC team can give you support for your driver development efforts. As a bonus, when your driver is finished, you can use the DUDE's latest service, DUDE-ADS, to increase your product's visibility.

Workshop Calendar and Details

The calendar for 1994 device-driver workshops is:

Start Date	Course Number	Topic
24 Jan	OS2DD101	Physical Device Drivers (PDDs). See also 7 November.
21 Feb	OS2DD303	Adapter Device Drivers (ADDs)
21 Mar	OS2DD302	Graphics Accelerator Drivers
18 Apr	OS2DD309	Multimedia Device Drivers
9 May	OS2DD304	2.x Pointer Device Drivers
20 Jun	OS2DD201	OS/2 2.x Virtual Device Drivers (VDDs)
18 Jul	OS2DD403	NDIS-MAC Network Device Drivers

Start Date	Course Number	Topic
22 Aug	OS2DD306	PM Printer Device Drivers
19 Sep	OS2DD305	OS/2 2.x Device Managers (DMDs)
10 Oct	OS2DD401	PCMCIA
7 Nov	OS2DD101	Physical Device Drivers (PDDs). See also 24 January.
12 Dec	OS2DD402	Workplace OS

Other workshops available on a demand basis are:

	Course Number	Topic
	OS2DD301	Presentation Manager (PM) Drivers
	OS2DD307	Industrial Controller Programming

As new technology becomes available, we will respond with the appropriate workshops. But we still look to you, our customers, to let us know which workshops you need but we currently don't have. Don't be shy – send us D-MAIL!

Descriptions for five of these courses follow.

Physical Device Drivers, OS2DD101

(Serial, Parallel Port Device Drivers) This five-day workshop enables programmers to write OS/2 physical device drivers (PDDs). A PDD enables I/O ports (serial, parallel, A/D, ...) to be shared by multiple OS/2 applications.

This seminar describes how the PDD communicates with the OS/2 kernel using the DevHlp interface. Installation and debug techniques are also covered. The OS/2 Device Driver Source Kit (DDK) is used extensively to build and test the PDD.

This course is recommended as a prerequisite for all other device-driver courses except two: OS2DD302 and OS2DD306 (see course list above).

Audience

IBM or OEM programmers who code device drivers for PC hardware, such as serial, parallel, SCSI, or proprietary interfaces.

Prerequisites

1. Programming expertise in C or Macro Assembler (MASM)
2. Have written device drivers or utilities for OEM hardware (DOS device drivers, ROM BIOS, test utilities)
3. Must be a licensee of all of the following software: OS/2 2.1, OS/2 Device Driver Source Kit (DDK), Microsoft C (MSC) 6.0

Course Outline

OS/2 Structure
Device Driver Types
Physical Device Driver
  – Character Versus Block
Modes, Times
  – Init, Kernel, Interrupt, Timer
Init Sequence
  – CONFIG.SYS Processing
Utilities, Debuggers
  – Compiler, Assembler, Linker Usage
  – Symbol Generation (MAPSYM)
  – Kernel Debugger (KDB)
Processor Support
Semaphores
PDD Address Spaces
  – Memory Management
Monitor Implementations
VDD Communication
Lab: Develop OEM Physical Device Driver (PDD)

Graphics Accelerator Drivers, OS2DD302

(Seamless Windows Video Device Drivers for Video Accelerators)

This five-day workshop enables PC video-board manufacturers to write OS/2 2.1 video display drivers. This workshop upgrades an OS/2 1.x Presentation Manager device driver to OS/2 2.1. It also modifies a Windows 3.1 video device driver to provide seamless Windows support.

Audience

IBM or OEM programmers who code device drivers for video display cards.

Prerequisites

1. Programming expertise in C or 386 Assembler
2. Knowledge of OS/2 PM DDs, VDDs, Windows video device drivers
3. Intimate knowledge of OEM hardware and programming protocols
4. Have written code for video hardware (ROM BIOS, utilities)
5. Attendee must be a licensee of all of the following software: OS/2 2.1, Windows DDK, OS/2 Device Driver Source Kit (DDK) with Seamless Windows Supplement Diskette, Microsoft C (MSC) 6.0, Microsoft Assembler (MASM) 6.0

Note that course OS2DD101 is not a prerequisite for this course.

Course Outline

OS/2 Structure, Device Driver Types
PM Device Drivers
- Block Diagram – Logic, Data Flow

New Elements in 2.1 Screen Device Drivers
- Extended Vendor Support
- 32-Bit Driver Components, Palette Management
- Seamless Windows (16-Bit), VDD Support

DDK Organization, Build Tree
- Tools, Display Test Tool (DTT)

BGH-SVGA Subsystem
32-Bit SVGA Display Driver
- IBM VGA 32.DLL, IBMDEV32.DLL, DSPRES.DLL
- Background mix options, Palette Management

Supported Video Modes, Adapters
- PMI File, Chipset Identification

Screen Driver Virtual Device Driver (VDD)
- Architecture, Protocol
- Virtualization Mechanisms
- I/O Handler, Support Services, DOS Session Manager
- PM Display Driver Services, VGA Virtualization
- Emulation – Text Mode, Graphics Mode
- FG/BG Processing, Strategies

Windows Display Drivers
- Shield Layers, Semaphore Usage
- Black-Hole Creation, Palette Management

DSPINSTL – Configuration File Interpreter, Command Set
Lab: Develop OEM Adapter Device Driver (ADD)

Adapter Device Drivers, OS2DD303

(OS/2 Device Drivers for SCSI or Proprietary Interfaces)

This five-day workshop enables programmers to write OS/2 adapter device drivers (ADDs). An ADD communicates with SCSI or proprietary I/O interfaces that usually connect to DASD, CD-ROM, etc.

This course identifies the protocol with which the ADD communicates with the Device Manager (DMD) using the I/O Request Block (IORB) interface. Installation and debug techniques are also covered. The OS/2 Device Driver Kit (DDK) is used extensively to build and test the ADD.

Audience

IBM or OEM programmers who code device drivers for PC I/O interfaces such as SCSI or proprietary.

Prerequisites

1. Programming expertise in C (MASM useful)
2. Have written device drivers for DASD I/O hardware (DOS device drivers, ROM BIOS, test utilities)
3. Knowledge of OS/2 2.x PDDs; attendance at course OS2DD101 recommended
4. Attendee must be a licensee of all of the following software: OS/2 2.1, OS/2 Device Driver Source Kit (DDK), Microsoft C (MSC) 6.0

Course Outline

OS/2 Structure
Device Driver Types
Driver Stack Under OS/2 2.x
  – Adapter Device Driver (ADD)
  – Filter ADD (FLT), Device Manager (DMD)
CONFIG.SYS
  – Installation (BASEDEV=)
  – Boot Sequence
ADD Development Considerations
  – Command-Line Parameters
  – Error-Handling
IORB – Format, Control
Device Table Structure
TESTCFG.SYS
  – IOctl Functions, Parameters
CDROM Filter ADD Example
  – Sample Code Layout
Device Driver Profiles
Impact: SCSI Versus Proprietary Interfaces
Lab: Develop OEM Adapter Device Driver (ADD)

Pointer Device Drivers, OS2DD304

This five-day workshop teaches programmers to write pointer device drivers, which enable pointing devices (mice, trackballs, touch screens, light pens, tracking pens, Braille pads) to be used by OS/2, DOS, and Windows applications running under the OS/2 operating system.

This class identifies the protocol for communicating with the other device drivers, and with the kernel, using the DevHlp interface. Installation and debug techniques are also covered. The OS/2 Device Driver Kit (DDK) is used extensively to build and test the pointer device driver.

Audience

IBM or OEM programmers who code device drivers for pointing devices.

Prerequisites

1. Programming expertise in C and Microsoft Assembler (MASM)
2. Have written device drivers or utilities for OEM hardware (DOS device drivers, ROM BIOS, test utilities)
3. Knowledge of OS/2 2.x physical device drivers (PDDs); attendance at course OS2DD101 recommended
4. Attendee must be a licensee of all of the following software: OS/2 2.1, OS/2 Device Driver Source Kit (DDK), Microsoft C (MSC) 6.0

Course Outline

OS/2 Structure
Device Driver Types
Pointer Device Driver Model
- Character
- Elements: Physical, Virtual
- Device-Dependent Code Versus Device-Independent Code
- Swappable/Resident
- Physical Versus Logical
- FG/BG/Detached Request Processing

Required Functions
- Collision Check
- Pointer Positioning Logic
- Queue Processing

IOCtl Support
Request Handler Structure
Error Handling
IDC to Other Modules
Monitor Processing
Lab: Develop OEM Pointer Device Driver

Multimedia Device Drivers, OS2DD309

This five-day workshop enables programmers to write OS/2 multimedia (MM/2) device drivers. A multimedia device driver provides an easy-to-use programming interface for application developers who are interested in integrating multimedia functions into new or existing applications.

This seminar describes how the MM/2 device driver communicates with the OS/2 kernel. I/O procs for media control (MIDI), audio (wave and AMP/mixer) and video capture MM/2 drivers are reviewed. Installation and debug techniques are also covered. The OS/2 Device Driver Kit (DDK) is used extensively to build and test the MM/2 device driver.

Audience

IBM or OEM programmers who code device drivers for multimedia hardware, such as MIDI, audio, or video capture boards.

Prerequisites

1. Programming experience in C or Microsoft Assembler (MASM)
2. Have written device drivers or utilities for OEM hardware (DOS device drivers, ROM BIOS, test utilities)
3. Attendee must be a licensee of all of the following software: OS/2 2.1, OS/2 Device Driver Source Kit (DDK), Microsoft C (MSC) 6.0

Course Outline:

OS/2 Multimedia Structure
Multimedia Protocol Stacks
Device Driver Types
- Media Control
- MIDI
- Audio
- Video Capture

Modes, Times
- Init, Kernel, Interrupt, Timer

Init Sequence
- CONFIG.SYS Processing

Utilities, Debuggers
- Compiler, Assembler, Linker Usage
- Symbol Generation (MAPSYM)
- Kernel Debugger (KDB)

Semaphores
PDD Address Spaces – Memory Management
Monitor Implementations
VDD Communication
Lab: Develop OEM Multimedia Device Driver

Additional Details

Each attendee is assigned a fully configured OS/2 workstation for private use during the week of the class.

Attendees need to bring with them:

1. source code for the device driver under development;
2. their favorite text editor;
3. any third-party software required.

Attendees should not bring any software for which they are not valid licensees.

Attendees also must bring their own personal computers, with the PM and Windows source code for the device driver under development, and with development tools (editors, disk managers, etc.) installed. This is important for maintaining the continuity of your development environment before, during, and after the workshop. The following specifications are suggested for a developer's PC:

386 or 486 (25 MHz minimum recommended)

8 MB or more of RAM (16 MB suggested)

VGA, SVGA, or XGA display

100 MB or larger hard drive (200 MB suggested)

OS/2 2.1 installed

Any additional hardware to be used for development

There are two ways you can ship your PC equipment to IBM Boca Raton:

1. Baggage-handling with your airline
2. To the IBM Boca Raton receiving dock (address will be furnished upon confirmation of registration)

Attendees should bring a prepaid shipping label for return of their equipment after the class.

The workshop lab is available after scheduled activities on Monday through Thursday. Attendees who have a business need to work in the lab prior to Monday, on Friday, or afterward should contact Jim Bennett or Bob Peterson (phone numbers at the end of this story) for consideration.

Although there is currently no fee for these workshops, attendees are responsible for the cost of their transportation, hotel accommodations, dinners, and incidental expenses. Breakfast (or continental breakfast) and lunch are provided each day of the workshop. Attendees who have special dietary restrictions should contact Jim Bennett or Bob Peterson prior to arrival. The workshop environment is informal, and casual business attire is appropriate for the setting (the IBM Executive Briefing Center in Boca Raton).

The week's schedule is:

Sunday	4:00 p.m. to 6:00 p.m.	Equipment setup
Monday	7:15 a.m. to 7:45 a.m.	Seating for breakfast
	8:00 a.m. to 8:30 a.m.	Full breakfast in cafeteria
	8:30 a.m. to 5:00 p.m.	Workshop activities
Tuesday	7:30 a.m. to 8:30 a.m.	Continental breakfast
through	8:30 a.m. to 5:00 p.m.	Workshop activities
Thursday		
Friday	7:30 a.m. to 8:30 a.m.	Continental breakfast
	8:30 a.m. to 3:00 p.m.	Workshop activities

Attendees should arrive on Sunday afternoon to set up their equipment prior to the start of class on Monday.

All this information and more will be sent to registrants in their confirmation notice.

Limited Seating!

There are 14 seats available for each workshop. The number of seats is limited in order to enhance technical assistance and to provide a productive workshop session.

Registration for Workshops

To register electronically for any of the device-driver development workshops to be held in 1994, sign on to the DUDE at 1-407-982-3217, download the registration form REGISTER.TXT, fill in the blanks, and then upload the completed form to the DUDE system. Upon our receipt of your completed form, you will be sent D-MAIL (DUDE-MAIL) confirming your registration in the workshop. It's that easy! If you don't have access to the DUDE, call Jim Bennett at 1-407-982-4143 or Bob Peterson at 1-407-443-8289, or leave voice mail at 1-407-982-4239, or send a fax to 1-407-982-4218 or 1-407-443-3241.

Register now, and help your product to gain its share of the ever-expanding market for the award-winning, 32-bit operating system ... the Platform of Choice ... OS/2!

Advertise Your OS/2 Device Driver in DUDE-ADS

Are you looking for new markets for your device drivers or development services? Or, are you trying to find a company to develop a device driver for you? The DUDE has a new service for you: DUDE-ADS! That's right ... a place for you, the device-driver developer, to advertise your company's offerings.

To take advantage of this new service, access the DUDE bulletin-board system at 1-407-982-3217, download the file YELLOW.TXT from the INFO file area, fill it out, and upload the completed file to the DUDE. We will then post your advertisement in a file called DUDE.ADS. To view the ads, simply download DUDE.ADS from the INFO file area.

Put your company's offerings on-line, with the DUDE, and let the DUDE help connect you with your customers!

Developer Connection CD-ROM Volume 2 Contents

The Developer Connection for OS/2 is an annual subscription program for application developers. Its purpose is to deliver:

the latest pre-release code to developers, so they can prepare for and simulate future environments

the most up-to-date versions of technical documentation on OS/2

licenses to developers for toolkits, productivity tools, development tools, and sample code.

The Developer Connection for OS/2 consists of four CDs and four newsletters, delivered over the course of one year, plus access to The Developer Connection section of the OS2DF2 forum on CompuServe until the subscription expires.

The regular price is 199 US$ for a one-year subscription, and 75 US$ for each additional license. Discount prices are available to members of the IBM U.S. Developer Assistance Program's Commercial and Premier Services. The discount prices are 119 US$ for the first one-year subscription and 45 US$ for each additional license. To obtain the discount prices, U.S. DAP Commercial and Premier Services members MUST call 1-800-6-DEVCON (1-800-633-8266). You will be asked for your DAP member number.

In Canada, subscriptions to The Developer Connection for OS/2 are now available, beginning with Volume 2. The regular price for a subscription of four issues is 225 dollars CDN. Volume 2 by itself can be purchased for 75 dollars CDN.

Ordering The Developer Connection for OS/2

To order The Developer Connection for OS/2, call the appropriate number:

USA	
Voice Fax	1-800-6-DEVCON (1-800-633-8266) 1-800-494-3045
Canada (Voice)	1-800-561-5293
Europe[1]	
Fax England Germany France Spain Italy Netherlands	45-3-252-8203 45-3-252-6588 45-3-252-6711 45-3-252-7411 45-3-252-6311 45-3-252-7622 45-3-252-7088
Asia/Pacific (Australia)	61-2-354-7684

[1] All numbers are in Denmark, but are answered by operators who speak the respective languages.

Developer Connection for OS/2 Volume 2 Content List

Volume 2 of The Developer Connection for OS/2 CD-ROM includes limited licenses to the products listed below.[2]

Bitmaps

BITMAP32: A 32-bit bitmap viewer (I) *

Bitmap Samples: Samples of Developer Connection Bitmaps (I) *

Communication Tools

APPC Games: A collection of three games – CYCLES, REVERSI, MANDPM (I)

APPC Utilities: A collection of six APPC command-line utilities (I)

IBM: Communications Manager for OS/2 Applications (Single User): 3.5-inch diskettes (P) *

IBM: Communications Manager for OS/2 (Single User): 3.5-inch diskettes (P) *

IBM: Communications Manager for OS/2 (Single User) (P) *

DBMRPW: A Database Manager remote password administrator utility (I)

DIRSTAT: A PM application that displays LAN adapter information (I)

IBM: LAN Adapter Protocol Support (P)

IBM: Networking Services/DOS: 3.5-inch diskettes (P)

PMFTERM: An OS/2 asynchronous emulation and file transfer utility (I)

REXXAPPC: REXX communications APIs (I)

IBM: TCP/IP for OS/2 (P) *

Development Tools

IBM: 32BIT: 32-bit OS/2 toolkit utilities (P) *

ALPHA: A code browser and analysis program (I)

IBM: AnDes: Animated Design/2 Overview (Demo) **

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[2]

Keys to symbols:

*	Updated
**	New
(Demo)	Demo
(E)	Excerpts
(I)	IBM Internally Developed
(P)	Pre-Release
(R)	Release-Level

ASDT32: An application/system 32-bit debug utility (I) *

IBM: SAA CUA Controls Library/2 (Demo)

CTFORMAT: A code and text formatter (I)

IBM: Distributed Application/2 (P) **

Data Access: DataFlex 3.0 (Demo)

IBM: Kernel Debugger: 3.5-inch diskettes(R)

IBM: Kernel Debugger(R)

IBM: A Dialog Editor enhanced to support Pen for OS/2 (P)

EDITINI: An OS/2 text editor for .INI and profile files (I)

IBM: Graphic Interface Kit/2 (Demo)

HexDump: A hexadecimal display and conversion utility (I)

IBROW: An image browser utility (I)

IPFCPREP: A preprocessor for the IPF Compiler (I)

Transcendental Automation: LR by Transcendental Automation 1.0: 3.5-inch diskettes (Demo)

IBM: OBJUTIL: WPS object creation and class registration utility (P) **

IBM: The Developer's Toolkit for OS/2 2.1: 3.5-inch diskettes (R)

IBM: The Developer's Toolkit for OS/2 2.1: 5.25-inch diskettes (R)

IBM: The Developer's Toolkit for OS/2 2.1 (R)

IBM: Pen for OS/2 Developer's Toolkit (R)

IBM: Pen for OS/2 Developer's Toolkit: 3.5-inch diskettes (R)

IBM: PL/I Workstation/2: 3.5-inch diskettes (P)

ATG Enterprises: PM Debug (Demo) **

Computer Associates: CA-Realizer for OS/2: 3.5-inch diskettes (Demo) **

RxMathFN: A REXX DLL with C-language math functions (I)

RXNETB: REXX APIs for the OS/2 NetBIOS (I)

Softbridge: Softbridge Basic Language: 3.5-inch diskette (Demo)

IBM: Sniff16: A Utility to search for 16-bit objects (P) **

IBM: Software Installer for OS/2 (Demo) **

IBM: Tutorial Manager/2 Demo #1 (Demo) **

IBM: Tutorial Manager/2 Demo #2 (Demo) **

Hockware: VisPro/REXX 1.0: 3.5-inch diskette (Demo) *

Visual REXX: A library of REXX functions that provide a PM interface (I)

Editors

IBM: EPM – Enhanced Editor (P)

IBM: HyperWrite (P) *

MicroEdge: SlickEdit 2.3 (Demo)

TINYED: A Tiny OS/2 and DOS editor (I)

Multimedia Tools

CD Explorer: A compact-disc audio explorer (I) *

IBM: MMPM2 1.0 Toolkit and Base (Demo)

IBM: MMPM2 1.1 Base (Demo)

IBM: MMPM2 1.1 Toolkit(R)

IBM: MMPM2 1.1 Base: 3.5-inch diskettes (Demo)

IBM: MMPM2 1.1 Base: 5.25-inch diskettes (Demo)

BOCASoft: BOCASoft System Sounds 1.0 (Demo)

IBM: Multimedia Ultimotion (Video IN) (P)

BOCASoft: BOCASoft WipeOut 1.0 (Demo): 3.5-inch diskette

OS/2

IBM: OS/2 2.1: 3.5-inch diskettes (Demo)

IBM: OS/2 2.1: 5.25-inch diskettes (Demo)

IBM: OS/2 2.1 CD-ROM: 3.5-inch installation diskettes (Demo)

IBM: OS/2 2.1 CD-ROM: 5.25-inch installation diskettes (Demo)

IBM: OS/2 SMP: 3.5-inch diskettes (P) **

IBM: OS/2 SMP CD-ROM: 3.5-inch installation diskettes (P) **

Productivity Tools

BOOTOS2: An OS/2 bootable diskette creation utility (I) *

Central Point: Anti Virus for OS/2 (demo) (I) **

DINFO: A swapper file monitor (I)

FORBROWS: A forum browser (I)

GPSCLOCK: A digital/analog clock for your desktop (I)

GSEE: A file-search utility and batch-file builder (I)

MAGNIFY: An OS/2 desktop magnifier (I)

OS20MEMU: An OS/2 memory utilization utility (I) *

Clear & Simple: Performance 2.1 OS/2 Tuning Kit(R) **

PmDraw!: An OS/2 graphics editor (I)

PMGlobe: A display of planet Earth as a globe (I)

PMTIMER: An OS/2 program timer (I)

PMTREE: A graphical display of PM windows (I)

QCONFIG: A system configuration utility (I)

SCRAP: A screen capture utility (I)

IBM: SearchManager/2: 3.5-inch diskettes (Demo) **

TXT2PS: A text-to-PostScript conversion utility (I)

UTIL2: AIX-like utilities for OS/2 (I) *

ViewAll: An OS/2 program that displays all OS/2 books on the bookshelf (I)

Arcadia Technologies: Workplace Companion v1.53 (Demo) *

Service

IBM: C Set ++ for OS/2 (CSD Compiler): diskettes(R) **

IBM: C Set ++ for OS/2 (CSD Class Lib): diskettes(R) **

IBM: C Set ++ for OS/2 (CSD Utilities): diskettes(R) **

IBM: C Set ++ for OS/2 (CSD Compiler): CD Installation(R) **

IBM: C Set ++ for OS/2 (CSD Class Lib): CD Installation(R) **

IBM: C Set ++ for OS/2 (CSD Utilities): CD Installation(R) **

Source Code

IBM: The Developer Connection News, Volume I: Multithreading PM Applications (I) **

IBM: The Developer Connection News, Volume II: New Tricks for Dynamic Linking (I) **

IBM: The Developer Connection News, Volume II: 32-Bit Exception Management (I) **

IBM: The Developer Connection News, Volume II: Communicating Between OS/2 and Win-OS/2 (I) **

IBM: Multimedia Double Buffering Playlist (P) **

GBM: Generalized Bitmap Module (I) **

IBM: Multimedia RIFF (P) **

UTIL2: AIX-like utilities for OS/2, source code (I) *

IBM: WPShell: A collection of Workplace Shell samples (P) *

Test Tools

Softbridge: Automated Test Facility WorkStation and ATF Networked: 3.5-inch diskettes (Demo)

PMATE: An automated test environment with user input captured (I)

IBM: Workstation Interactive Test Tool: 3.5-inch diskette (Demo) *

On-Line Documentation

IBM: The Developer Connection News, Volume 1 **

ComputerWorld On CD: Selected Articles, 1989-1993 **

Wiley Professional Computing: Designing OS/2 Applications, by David Reich (E)

Van Nostrand Reinhold: The OS/2 2.1 Corporate Programmer's Handbook, by Nora Sholin, Martin Sullivan, and Robin Scragg (E)

SAMS Publishing: OS/2 2.1 Unleashed, by David Moskowitz and David Kerr (E) **

SAMS Publishing: Real-World Programming for OS/2 2.1, by Derrel Blain, Kurt Delimon, and Jeff English (E) **

Van Nostrand Reinhold: Using Workplace OS/2, by Lori Brown and Jeff Howard (E)

Van Nostrand Reinhold: Writing OS/2 2.1 Device Drivers in C, by Steven Mastrianni (E)

OpenDoc White Paper **

OpenDoc White Paper Developer's Overview **

IBM: OS/2 Application Developer Training

IBM: Application Design Guide

IBM: CP Guide and Reference

IBM: Debug Kernel Reference

IBM: IPF Reference

IBM: OS/2 Command Reference

IBM: OS/2 2.1 Physical Device Driver Reference

IBM: OS/2 2.1 Presentation Driver Reference

IBM: OS/2 2.1 Technical Update

IBM: OS/2 2.1 Virtual Device Driver Reference

IBM: REXX Reference

IBM: REXX User's Guide

IBM: SOM Reference

IBM: Tools Reference

IBM: PM Programming Guide, Volumes 1, 2, and 3

IBM: PM Programming Reference

IBM: Red Book, Volume 1: Control Program

IBM: Red Book, Volume 2: DOS and Windows Environment

IBM: Red Book, Volume 3: PM and Workplace Shell **

IBM: Red Book, Volume 4: Application Development **

IBM: Communications Manager/2: ACDI Programming Reference

IBM: Communications Manager/2: Application Programming Guide

IBM: Communications Manager/2: Command Reference

IBM: Communications Manager/2: Message Reference

IBM: Communications Manager/2: Overview

IBM: Communications Manager/2: Problem Determination Guide

DAPTOOLS – Through CompuServe and Advantis/IIN

DAPTOOLS is a private tools repository available to members of the IBM Developer Assistance Program. The tools include various utilities, debugging tools, small applications with source examples, and programming documentation. The tools were originally developed for IBM internal use only, and have been relicensed for the exclusive use of DAP members.

DAPTOOLS Access Through CompuServe

Worldwide DAP members (members through CompuServe) automatically have access to the private DAP section (forum OS2DF1, library 14). DAPTOOLS are identified with the file description "DAPTOOLS – Restricted Software." To get a full description of the files in this section, use the BROwse command in the LIB section. All DAP members who use DAPTOOLS software are expected to adhere to the DAPTOOLS LIBRARY license agreement in this section.

To become a member of the Worldwide Developer Assistance Program, simply type: GO OS2DAP at a CompuServe command prompt, and fill in the questionnaire. Membership applications are processed within 72 business hours. All CompuServe membership access problems should be addressed to Ron Boyajian (72400,2746).

DAPTOOLS Access Through the IBM Information Network (IIN)

Premier and Expedite DAP members, who have access to IBMLink through LNK7, must fill out a form that was included on the "DAP Notebook" diskette that they received when they joined the program. Once the form has been signed and returned to the DAPTOOLS Coordinator, the account is processed, and an option is added to the Advantis/IIN menu that the user sees at logon time.

Contacts

For IBMLink membership or access questions, call 1-407-982-6408, option 4. DAPTOOLS membership and access questions should be directed to Joe Polizzi at 1-407-982-6408, option 5.

DAPTOOLS List as of 13 December 1993

From time to time, this newsletter will carry the complete list of tools available through DAPTOOLS. The list below is current as of 13 December 1993.

The date shown with each file is the date of last update.

The items in the list are available from DAPTOOLS both on CompuServe and IBMLink.

The following file is an ASCII file.

TOOLIC.TXT 738 bytes, 5 August 1993

This is the license agreement for using the tools in DAPTOOLS. This license agreement must be read and adhered to *before* downloading and/or using any files labelled “DAPTOOLS LIBRARY Restricted Software.”

The remaining files, the actual tools, are binary files. The most recently posted tools are listed first.

MSHELL.ZIP 8 281 bytes, 28 October 1993

An alternative, mini PM shell for OS/2 2.x. Shows replaceable shell architecture of the Workplace Shell. Allocates less memory, so may be faster on 4 MB machines. Sorry, no folders or objects. README changed in latest release.

NETADR.ZIP 1411 bytes, 27 October 1993

A utility to identify network adapter and address.

LOKMAP.ZIP 41375 bytes, 27 October 1993

LockMap is a PM program that is used to display a list of bitmaps, and to select one for display as the WPS backround image. The WPS lockup program can also be invoked directly from this program.

FOR2NS.ZIP 93462 bytes, 27 October 1993

FOR2NSF is a tool that intelligently converts FORUM files from TOOLSRUN- controlled conference disks into Lotus Notes databases.

DXTREF.ZIP 24887 bytes, 27 October 1993

This package contains a softcopy of the DXT version 2 Release 5 Reference manual. It may be viewed using the OS/2 VIEW facility.

CPEDIT.ZIP 456941 bytes, 27 October 1993

A subset of the VM XEDIT text editor for the PC, including REXX interface, split screen, and many of the most useful commands and prefix commands.

BRFPDS.ZIP 53254 bytes, 27 October 1993

BRAFPDS is an OS/2 2.x application that will allow one to browse (A)dvanced (F)unction (P)rint (D)ata (S)tream documents on the workstation. It avoids the use of GDDM on the host, and thus the rather slow

drawing caused by I/O intensity. It is especially useful when you are connected via a slow (not coax and not Token Ring) communications link.

RIPL.ZIP 2 442 bytes, 2 October 1993

This program will enable/disable RIPL under OS/2. To find out all the valid parameters, just type RIPLE_D ? <Enter>

MBFLDR.ZIP 32913 bytes, 2 October 1993

MbFolder is a subclass of WPFolder with a menu bar. Its class name is MbFolder, and its module name is MBFOLDER.DLL.

IFSDOC.ZIP 147967 bytes, 2 October 1993

VIEWable IFS documentation

EXCEPT.ZIP 233961 bytes: 2 October 1993

EXCEPT is sample source to set and use an exception handler from both C/2 and C Set/2. This exception handler dumps the registers to a file, together with the loaded modules, data, code object addresses, and the dump of the stack, in word and ASCII format.

DSKVEW.ZIP 38666 bytes, 2 October 1993

This utility shows a graphical display of the relative content of the harddisks in your system. The display is refreshed at an interval which can be changed within the range of 10 to 600 seconds. The display of network drives can be toggled on or off. Drives that you do not wish to show can be entered as command-line parameters.

DSKUSE.ZIP 8216 bytes, 2 October 1993

DISKUSE is a 32-bit, multi-threaded OS/2 Presentation Manager application that displays the drive information in a color pie chart.

DIRUTL.ZIP 79592 bytes, 2 October 1993

Three utilities meant to be used at any OS/2 command prompt to delete (DELDIR) or move (MOVEDIR) a directory and all the subdirectories under it, and show (SHOWDIR) the subdirectory contents.

TIMEXE.ZIP 44552 bytes, 1 October 1993

A facility to allow for TIMed EXECution of programs, born from the idea that one needs to perform certain actions periodically without manual intervention. For OS/2 1.3+.

PMQUEU.ZIP 13762 bytes, 1 October 1993

A sample program demonstrating the functions of a spool queue processor. Source code is included.

MSTAIL.ZIP 41652 bytes, 1 October 1993

MousTail makes your mouse livelier by letting it wag its tail. Mouse mood (speed of movement) is adjustable. Source included.

MSG.ZIP 54383 bytes, 1 October 1993

From a single message description file, this package can generate a .h header with message labels, a .c message table and lookup function, a text-string table for an OS/2 resource file, or a separate message lookup file.

MMPOTP.ZIP 56725 bytes, 1 October 1993

A collection of trivial updates and REXX files to demonstrate REXX support for MMPM/2 Media Control Interface commands and looping on multimedia file playback by the MMPM/2 media player. For OS/2 2.1.

MMEDIA.ZIP 7473 bytes, 1 October 1993

Object-oriented PARTS MMPM/2 Multimedia. This package contains the source for the Multimedia sample parts, the executable versions of the samples, and the report on building the tools using MMPM/2 and PARTS.

INTSRV.ZIP 4 8242 bytes, 1 October 1993

INTSRV allows to test C function calls with all their arguments without writing C programs for each test case. Function/arguments defined only once. Test performed interactively in window or PM mode. With recording, playback, monitoring. With C Set/2 support.

IBSTRG.ZIP 61619 bytes, 1 October 1993

C++ REXX string unbounded-strings associative-addressing C++ REXX string class. Unlimited length (4 gigabytes), no reserved codepoints. Arrays indexed on string; Most REXX built-in string functions. ATT 2.1 C++ code compliance was intended. Function-rich, not fast.

HELPER.ZIP 55211 bytes, 1 October 1993

This subroutine can be used by programmers debugging .IPF screens. It explains the ulErrorCode, and also shows the idTopic and SubTopic of the message that caused the error.

GQFCHG.ZIP 479 1 bytes, 1 October 1993

A simple program to add, change, delete text entries in OS2.INI. For GQFFILE host printing.

E2BOS2.ZIP 394 1 bytes, 1 October 1993

This program is an OS/2 version of the conventional EXE2BIN utility. EXEHDR-like header information is also available from the standard output. Users must take responsibility for the risk in applying this to any program products.

DCLGEN.ZIP 12357 bytes, 1 October 1993

DCLGEN2 creates a source file in COBOL or C language that maps a table of a given database.

CPPSQL.ZIP 11 317 bytes, 1 October 1993

C++SQL are classes that will allow a C++ programmer to use SQL without knowing the SQL statements.

CPANL2.ZIP 1 98358 bytes, 1 October 1993

C_PANELS is an easy-to-learn and -use screen definition language that is interpreted by the C_PANELS C Functions. The definition language allows you to easily define full or partial screen panels for use with

your C programs. The C_PANELS C Functions, in addition to interpreting the screen definitions, also provide you with an easy-to-use call interface for controlling the man/machine interactions.

CMXLAT.ZIP 14456 bytes: 1 October 1993

Provides MYTE-like code page translations for Communications Manager (CM). Communications Manager is part of OS/2 Extended Services (ES). The main usage of this package is to make the 3270 emulator and file transfer programs translate square brackets such that they work with host-based compilers. It also provides translations that are compatible with the MYTE emulator and ALMCOPY file transfer program.

CIDRED.ZIP 35168 bytes, 1 October 1993

REXX procedures and other control files as documented in IBM Redbook GG24-3781: Automated Installation of CID-Enabled ES, LS V3.0, and NTS/2.

BGIMGE.ZIP 3 38 bytes, 1 October 1993

This is a selector of a background image for the OS/2 Desktop. This also has a capability to select an image file randomly, and to replace an image file periodically.

LAPDMP.ZIP 194852 bytes, 15 September 1993

This is a tools for assisting in solving connectivity problems with OS/2 stations on a local area network. It dumps and formats the shared RAM on a token-ring adapter and the internal work areas for the 802.2 and NetBIOS protocol drivers. For OS/2 1.3 and 2.x.

DEBUGO.ZIP 79319 bytes, 15 September 1993

A PM terminal program tailored for use with the OS/2 debug kernel. Has command retrieve, REXX, F-key macros, PM clipboard, logging, C-struct dumps. Point-and-shoot typing. Click on address in window, copy to next command. For OS/2 2.x.

AXCOPY.ZIP 16142 bytes, 15 September 1993

A REXX program for OS/2 2.x to make incremental backups of directories, to synchronize directories, updating only the files with a different date of last modification.

X-LATE.ZIP 69632 bytes, 7 September 1993

Assists in translation of dialogs to other national languages.

WINORG.ZIP 4 96 bytes, 7 September 1993

WinOrg is a DLL that allows an application to create windows with iconic buttons which can perform some window organizing functions (tile, cascade...) and even user-defined functions.

VMFTFR.ZIP 39936 bytes, 7 September 1993

VMFT is a simple-to-use PM ↔ VM file transfer program using the EHLLAPI interface. It greatly simplifies the send/receive process with a point-and-shoot interface. Good for multiple file transfers.

QSYSTM.ZIP 1495 4 bytes, 7 September 1993

Determines system configuration, much like QCONFIG on PCTOOLS. Information includes machine name, serial and parallel ports, diskettes, fixed disks, Micro Channel adapters, memory, keyboard, video, processor, coprocessor, and logical drives.

TXT2PS.ZIP 57488 bytes, 19 August 1993

Allows PostScript datastreams and ASCII text datastreams to be sent to a PostScript printer without mode switching; allows font, margin selection, etc. For OS/2 1.3 and 2.x.

SPRBKS.ZIP 9 445 bytes, 19 August 1993

Replacement for OS/2 Base Keyboard Subsystem for personalizing function keys and aliases for frequently used phrases. For OS/2 1.x.

SNPDMP.ZIP 328873 bytes, 19 August 1993

The SnapDump and the SnapDump Formatter are tools for software defect support on OS/2 product. They provide the ability to easily capture a wide variety of data and data types into a single file, and display this data in a formatted, user-friendly fashion.

SE2 BT.ZIP 33574 bytes, 19 August 1993

The SE20BOOT program is a utility that allows you to build a boot disk using an existing OS/2 2.x system. The boot system can be any valid medium including, but not limited to, floppies and hard disks. There are three types of boot systems you can install. For OS/2 2.x.

PROGRS.ZIP 64581 bytes, 19 August 1993

A generic CUA Progress Indicator DLL with a message interface to include and use a variety of useful progress indication fields. Driver program source included, which demos use of message interface. For OS/2 1.1+.

PROCPM.ZIP 18 117 bytes, 19 August 1993

Graphically displays status of all processes running in OS/2. Both 16- and 32-bit programs included. For OS/2 1.3 and 2.x.

PMSEEK.ZIP 67381 bytes, 19 August 1993

PMSEEK allows searching of one or more disks or subdirectories for files, or for text within files. Any matches found are listed, and can be selected for browsing, editing, or execution. A fairly flexible PM-based whereis/find utility. For OS/2 1.2 and higher.

ASDT32.ZIP 19264 bytes, 19 August 1993

ASDT32 is a full-screen software debugger. Features: hot-key or interrupt into code, step, set breakpoints, alter registers and memory and disassembly, search, compare, copy, fill, disassemble, evaluate expressions, and display separate screens and LDT/GDT/IDT/page windows. For OS/2 2.1.

SLOCC2.ZIP 252873 bytes, 5 August 1993

A tool for counting source lines of code in many different languages. Languages currently supported are C, FORTRAN, Pascal, Ada, REXX, command files, C++, PL/I, Jovial, CMS2, Modula-2, etc. It is easy to add more languages to the tool. Version 4.2. Requires OS/2 2.x.

PMMORE.ZIP 22 26 bytes, 5 August 1993

This program reads from the standard input device and displays what it reads in a PM listbox. Example of usage: dir | pmmore. Version 1.2 for OS/2 1.3.

PMBRWS.ZIP 131912 bytes, 5 August 1993

PMBROWSE is a PM File Browser with search, multiple color, and multiple fonts capabilities. Version 2.40 for OS/2 1.2, 1.3, 2.x.

PM-SPY.ZIP 163321 bytes, 5 August 1993

A debugging tool for OS/2 PM programs that allows tracing of PM and/or application messages received by a specific window or queue. (No additional coding inside the program to spy!). The executables and source files. Version 3.00 for OS/2 1.2+.

PM-MON.ZIP 6 569 bytes, 5 August 1993

Allows programmers to post messages to a separate window without the use of message boxes. This will allow processes to continue without halting for user interaction. Version 3.1 for OS/2 1.2+.

MRFILE.ZIP 284586 bytes, 5 August 1993

OS/2 1.2+ and 2.x (32-bit). A simple, configurable file manager for OS/2 PM. Allows configuration of pull-down menus, and direct entry of OS/2 or DOS commands. Easily starts other programs in other OS/2 or DOS sessions. Includes: drag/drop, configurable fonts, and Clipboard functions. Supports the OS/2 2.0 Workplace Shell drag/drop and program start functions.

MDITEM.ZIP 113971 bytes, 5 August 1993

A template for providing a Multi-Document Interface for an OS/2 Presentation Manager program. Includes commented source. For OS/2 1.2+.

MAGNIF.ZIP 5 233 bytes, 5 August 1993

MAGNIFY magnifies the portion of the desktop under the mouse. Zooming in and out is provided. Help is provided for the OS/2 1.2 Help Manager. Source code is included. Version 1.10 for OS/2 1.1+.

KILPID.ZIP 17271 bytes, 5 August 1993

PID = process identifier. An option allows user to kill only a given process or all of its descendants. Version 1.1 for OS/2 1.1+.

ICONEA.ZIP 12376 bytes, 5 August 1993

ICONEA is a REXX command file that attaches an icon, a bitmap, or a metafile to a file or set of files in Extended Attributes. For OS/2 2.x.

HLPDMO.ZIP 2493 5 bytes, 5 August 1993

This is a demonstration of the IPFC tags, how they are used, and how they appear. There are many examples of the IPFC tag syntax and markup. For OS.2 1.2 or greater.

HEXZAP.ZIP 46748 bytes, 5 August 1993

An easy-to-use hex editor/browser for OS/2 or DOS, with string search and individual change back-out features. Useful for all PC binary files, especially if your file has fixed-length records. Version 1.01 for OS/2 1.x.

FINDSG.ZIP 341 3 bytes, 5 August 1993

This program searches the specified segments from executable files. The search keyword is the length of a segment. It is useful to search the module in which TRAP-D occurs. Version 1.30 for OS/2 1.x.

FAST-C.ZIP 65698 bytes, 5 August 1993

Control your software by using FASTC to make master files describing your disk/directory contents, and later using FASTC to find any changes (additions, deletions) to your software by comparing the master file with the current disk or directory – fast! Version 5.20. Package includes both DOS and OS/2 versions.

DELITE.ZIP 9859 bytes, 5 August 1993

OS/2 device driver to display disk activity on PS/2 Model 95 system information display panel. Version 1.1 for OS/2 1.2 or 1.3.

DDESAM.ZIP 74331 bytes, 5 August 1993

Example client and server using Dynamic Data Exchange. Illustrates some basics. DDE gives the user the ability to create work flows between applications never really designed to work together. Version 1.1 for OS/2 1.2, 1.3.

CTLPLS.ZIP 49148 bytes, 5 August 1993

Control+ is a collection of controls in a .DLL that may be created from any C application. Includes source for a test program that allows you to create one of each control. Version 1.40B for OS/2 1.1+.

CPUMON.ZIP 185 bytes, 5 August 1993

A monitor that runs in a VIO window, showing the percentage of CPU availability. Version 1.6a for OS/2 1.2+.

CNTRST.ZIP 73126 bytes, 5 August 1993

Compares two files and draws a PM diagram showing how blocks of text in the two files match, highlighting changes and moves. Beside the diagram is the text of either file or a composite of the two, colored to match the diagram. 1.2 version with help file for OS/2 1.2 or higher.

CLPVEW.ZIP 212 7 bytes, 5 August 1993

Clipview will allow you to view the contents of OS/2 PM's system clipboard. Version 1.4 for OS/2 PM.

CLPSAV.ZIP 163 8 bytes, 5 August 1993

Save the Clipboard Text contents into a file. Version 1.0.

CLIENV.ZIP 1 6952 bytes, 5 August 1993

Demonstrate managing controls in client window. Includes support for scrolling, sizing, tab, keybd, mnemonic focus management. Plus several macros for data extraction, and REXX exec to convert dialog box editor output to C using WinCreateWindow(). Version.1.1 for OS/2 1.2, 1.3, 2.x.

CHKPTR.ZIP 19625 bytes, 5 August 1993

A MASM subroutine to check the validity of an address passed by another process. A sample program in C is included to demonstrate the use of the subroutine. Protect mode only. Version 1.02 for OS/2 1.0, 1.1, 1.2.

CHK4DL.ZIP 19129 bytes, 5 August 1993

CHK4DLLS verifies that the DLLs needed to run an EXE or load a DLL are present. It can be used to identify the offending DLL when OS/2 gives the message 'The system cannot find the file.' Version 1.2 for OS/2 1.1+.

BUTNIT.ZIP 33144 bytes, 5 August 1993

ButtonIt allows you to attach a window full of “soft” mouse-button functions (PFkeys, Esc, PgUp/Dn, cursor buttons) to other windows, such as the OS/2 Communications Manager emulation window. Configurable via profiles. OS/2 PM 1.2+.

BGRID2.ZIP 22558 bytes, 5 August 1993

Displays a grid on your PM desktop background, and displays current mouse position. Used to get estimates for window size and position values. (For PM application developers.) For OS/2 SE 1.1+.

BALOON.ZIP 323 bytes, 5 August 1993

Balloon creates an “inflatable” file in the root of any drive to test scenarios where the disk space left is critical. This version was written for PM and has help included. For OS/2 1.1 or above.

386STP.ZIP 23396 bytes, 5 August 1993

386STEP displays the microprocessor stepping level for 386/486-based IBM PS/2 models that save the information in CMOS during POST. For OS/2 1.x DOS 3.3 or higher.

Reminder – Free Watch Offer for Joining IBM's READY! for LAN Server Program Expires Soon

Are you certified for LAN Server yet? If you join IBM's READY! for LAN Server Program before the end of 1993, you'll receive a free READY! watch. For details, call 1-800-285-2936 within the USA and Canada.

Spring 1994 IBM PSP Technical Interchange Combines with Next Device-Driver Conference

The Spring 1994 IBM Personal Software Products (PSP) Technical Interchange is heading for the Bay Area, and you won't want to miss it!

The conference will be held at the San Francisco Hilton from 25 through 29 April, and it offers more than the previous Technical Interchange in Orlando. The 1970s-flavored show includes even more exhibits, technical sessions, and – for the first time ever – device-driver tracks, which were previously available only at the Device Driver Conference. OS/2 professionals can choose from a wide variety of sessions without paying for two conferences. This combined conference is sure to attract a record-setting crowd!

All conference sessions discuss the growing importance and popularity of OS/2 and LAN Systems. Over a dozen tracks are offered, including Application Development, C Set ++, Object-Oriented Programming, 32-Bit Graphics, Workplace OS, and Distributed Systems Management. Device- driver sessions include Display, Storage, Printer, LAN Networks, Multimedia/Input Devices, and much more.

This conference features all the technologies, products, strategies, and demonstrations you need to remain current as an OS/2 professional. Over a hundred sessions have been tailored to meet the growing technology-specific needs of attendees like yourself.

You'll hear from IBM Personal Software executives David Proctor, Vice President of Products, and John Soyring, Director of Software Development Programs, as guest speakers, with the industry keynote given by Charles B. Wang, Chairman and CEO, Computer Associates International, Inc.

Surveys from the Orlando PSP Technical Interchange showed that 93 percent of attendees increased their organization's productivity by attending the conference. Don't pass up this opportunity to increase your productivity! The Spring 1994 IBM PSP Technical Interchange is your ticket to the future of OS/2 computing – your best opportunity to expand your technical expertise and to get the most out of your latest software development.

The early registration fee, until 21 March 1994, is 795 US$ per person. After 21 March 1994, the registration fee becomes 895 US$. Attendees will receive special bonuses, participate in product raffles, and take part in a busy social agenda, including receptions and a very special event.

Attendance is limited, and we expect a complete sellout, so register today! To register, call 1-800-872-7109 within the USA, or 1-508-443-4990 from elsewhere.

Join us for several days of technical enlightenment – and a lot of fun – in everybody's favorite city, San Francisco!

LAN NetView Software Developers Workshop

If you agree that management of distributed heterogeneous systems is the challenge of the 1990s, and if you see an opportunity in the development of a system management solution, then take a look at IBM LAN NetView as a network management platform, and the LAN NetView Software Developer Workshop as a method to jump-start the development of your management application.

The IBM LAN NetView platform implements major portions of the Open Software Foundation/Distributed Management Environment (OSF/DME) and of IBM's SystemView. The LAN NetView framework also supports industry standards such as the Common Management Information Protocol (CMIP) and Simple Network Management Protocol (SNMP).

In this five-day workshop, students become familiar with the components of the framework by developing basic managing applications using:

An open Application Programming Interface (API) based on X/Open's Management Protocol (XMP), which uses the same technology as the OSF Consolidated Management Application Programming Interface (CM-API) and SystemView's Common Management Interface (CMI).

An object-oriented API based on IBM's System Object Model (SOM) technology.

The workshop combines classroom lectures with hands-on lab work. Students spend a significant portion of the week writing basic management applications in the OS/2 2.x 32-bit environment.

Audience

OS/2 application programmers who want to learn the X/Open Management Protocol (XMP) and OSI-Abstract-Data-Manipulation API (XOM), to assist them in creating managing applications now, or in understanding the framework for future designs.

Benefits

This workshop provides a broad base for understanding the development of managing applications in the LAN NetView environment. This includes the integration of the managing application with the topology display of the View graphical user interface through the use of its object-oriented APIs based on the System Object Model.

Prerequisites

Experienced C-language programmers who have written or intend to write managing applications, or who have application programming experience. Familiarity with object-oriented programming concepts and a basic understanding of networking and communication protocols (TCP/IP) is also helpful.

Topics

Understanding the LAN NetView framework and family of products

Reading a managed-object catalog

Translating XOM specifications into appropriate code structures

Using XMP to communicate management requests/responses

Examining the naming tree and scoping

Creating/deleting event sieves and processing event reports

Using OIDL to define a managing application as a SOM class

Integrating managing applications with the graphical user interface

Cost

1800 US$ per student, which includes lab fees, materials, and breakfast and lunch for the week.

1Q94 Schedule

7 – 11 February, Austin TX
21 – 25 March, Austin TX

Location

IBM Corporation
Building 808, Room 1M-100
11100 Metric Blvd.
Austin TX 78758

Registration

Within the USA, call 1-800-IBM-TEACh (1-800-426-8322), and ask for course G3855. Elsewhere, call 1-602-629-2731, and ask for education enrollment. IBM employees should enroll through MSE.

For additional information, contact:

Jennifer Shipley
Workshop Administrator
1-512-823-1815 (IBM tie line 793)
1-512-823-3047 (fax)
IBM internal node/userid AUSVM1/SCOS2ADM

DCE Hands-On Application Programming for OS/2 and AIX Workshop

The Distributed Computing Environment (DCE) was developed by the Open Software Foundation to provide the basic services required to produce secure client/server application programs. In this five-day workshop, formerly known as “OS/2 DCE for Software Developers Workshop,” students become familiar with the components of OSF DCE by following the development of a basic distributed application using the full complement of DCE tools and services. This workshop is a combination of classroom lectures and hands-on lab work. The student spends a significant portion of the week writing basic DCE client/server programs in the OS/2 2.1 32-bit environment.

Audience

OS/2 application programmers who want to learn the Application Programming Interface (API) of the OSF DCE, either to assist them in creating DCE applications now or to assist them in understanding the issues involved with DCE for future designs.

Benefits

This workshop provides a broad base of understanding of the development of DCE applications in an OS/2 environment. The instruction includes the basic design and distribution issues faced by client/server programmers in a DCE environment using DCE Remote Procedure Calls (RPCs). The course covers the various aspects of the DCE programming model, including security, naming, time service, interface definitions, etc. The knowledge gained enables the student to modify existing applications to take advantage of the DCE client/server models.

Prerequisites

Experienced C-language programmers who have written, or intend to write, distributed applications, or who have application programming experience.

Topics

Application development in a distributed environment

Developing an application using remote procedure calls

Design and distribution issues

Using IDL to define a basic interface

Developing a basic server and basic client

RPC programming topics

Using the DCE security service

Using the DCE threads service

Using the DCE distributed time service

Using the DCE directory service

Cost

1800 US$ per student (includes lab fees, materials, and breakfast and lunch for the week)

1Q94 Schedule

31 January – 4 February, Austin TX
21 – 25 February, Endicott NY
7 – 11 March, Austin TX

Registration

Within the USA, call 1-800-IBM-TEACh (1-800-426-8322), and ask for course P1064. Elsewhere, call 1-602-629-2731, and ask for education enrollment. IBM employees should enroll through MSE. For additional information, contact:

Jennifer Shipley
Workshop Administrator
1-512-823-1815 (IBM tie line 793)
1-512-823-3047 (fax)
IBM internal node/userid AUSVM1/SCOS2ADM

OS/2 DCE Administration Workshop

The Distributed Computing Environment (DCE) was developed by the Open Software Foundation to provide the basic services required to produce secure client/server application programs. In this five-day workshop, students become familiar with the components of OSF DCE Administration through installation, configuration, and administration of DCE for OS/2. The workshop reinforces key principles, topics, and methods by using diagrams, examples, and coded applications. The workshop combines classroom lectures and hands-on lab work (a 50/50 ratio between lecture and lab) to build and maintain an OS/2 DCE cell.

Audience

This workshop is for personnel responsible for the administration of Distributed Software Computing (DCE). The knowledge gained will assist the administrator in installation, configuration, and administration of DCE for OS/2. It is also of benefit to DCE application programmers.

Prerequisites

C-language programming is a plus.

Topics

Installation of DCE components

Configuration of single/multiple machine cells

Principle, group, organization, and account management

Directory service management and replication

Cell security implementation and management

Cost

1800 US$ per student (includes lab fees, materials, and breakfast and lunch for the week)

1Q94 Schedule

7 – 11 February, Arlington VA

Registration

Within the USA, call 1-800-IBM-TEACh (1-800-426-8322), and ask for course G3835. Elsewhere, call 1-602-629-2731, and ask for education enrollment. IBM employees should enroll through MSE.

For additional information, contact:

Jennifer Shipley
Workshop Administrator
1-512-823-1815 (IBM tie line 793)
1-512-823-3047 (fax)
IBM internal node/userid AUSVM1/SCOS2ADM

ISV Technical Support in 1994 from the IBM Software Vendor Systems Center

The focus for 1994 at the IBM Software Vendor Systems Center (SVSC) is technology enablement. Communications Manager/2 (CM/2) and Database Manager 2/2 (DB2/2) are no longer beta-level code, but have matured into full-function products. This means that even more options are available for application developers to explore and exploit.

1994 will see the discontinuation of defect support for OS/2 1.3 and for all products that run only on the OS/2 1.3 platform.

DB2/2 and CM/2 defect support will be handled, as usual, by calling 1-800-992-4777.

DB2/2 AND CM/2 technology enablement support programs are available to DAP members through the SVSC. Terms and conditions of these support contracts may be obtained by contacting the SVSC via any of the following methods:

1-800-553-1623, in the USA and Canada, 7:00 AM to 7:00 PM Central time (GMT minus 6). Select option 3 for OS/2 Products.

1-800-241-1369, in the USA and Canada, for Bulletin Board System. This number is changed from the one listed in the 15 October 1993 issue of this newsletter.

1-817-961-8410, fax, worldwide, 24 hours every day.

IBMMAIL userid USIB24XT

Internet userid JMOATES@VNET.IBM.COM

Once you have enrolled in a program, these are also the methods you will use to obtain technical support for technology enablement.

Object-Oriented Programming Course List

Education in object-oriented (OO) programming is currently a very hot topic, since the software industry is migrating toward OO programming at a rapid pace. The following is a list of some courses in OO programming that are available from IBM and other vendors. Additional courses will be added to the list as information about those courses becomes available. If your company offers object-oriented programming courses not listed below, you are invited to send your information to the editor of this newsletter, or to the person who is compiling the list: Viktors Berstis, internal zip 2999, IBM Corp., 11400 Burnet Rd., Austin TX 78758 USA, 1-512-823-2110 (fax), viktors@vnet.ibm.com.

* * * * *

This is a listing of object-oriented courses, lectures, and videotapes assembled from literature, discussions, faxes, etc. from the respective corporations. The list contains their addresses, phone number(s), and summaries of each course or offering. There may be some inaccuracies, omissions, etc. If you have anything to add, delete, or correct, please let me know.

Borland Corporation

Borland Corporation
1800 Green Hills Road
PO Box 660001
Scotts Valley CA 95067-0001
1-408-438-5300

Videotapes: Good study-at-your-own-pace videos, broken up into sessions usable (in come cases) with products from other vendors.

"The World of C++, The Fastest Way to Become a C++ Programmer." Instructor: David Intersimone

A two-tape course that can be used with any C++ compiler to get hands-on training.

"World of Objects" video

"World of ObjectVision" video

Digitalk

Digitalk
5 Hutton Centre Drive
Santa Ana CA 92707
1-714-513-3000
1-800-922-8255 within the USA
1-714-513-3100 fax

Digitalk
7585 SW Mohawk Street
Tualatin OR 97062
1-503-691-0800
1-800-888-6892
1-503-691-2742 fax

Courses to complement their OO software products:

"Building Applications Using Smalltalk/V"

Four-day course with some Smalltalk experience. Covers building interactive Smalltalk/V applications, hands-on lab.

"Building Distributed Systems: Objects, Transactions and How to Connect Them"

Three-day course for managers, designers, and implementers of distributed client/server systems. Covers client/server model, transaction processing, and how these fit with OO design.

"Beginning Smalltalk/V: An Introduction to Objects"

Four-day course for programmers through technical managers who want to become familiar with OO programming using Smalltalk. Covers OO concepts: classes, objects, messages, encapsulation, inheritance, applying the concepts, using Smalltalk, hands-on.

"Designing Object-Oriented Software: An Introduction"

Three-day course for those familiar with the software development process and some experience with an OO language. Hands-on course covering OO concepts, design, and development.

"Introduction to Parts Workbench"

Four-day course for programmers though technical managers. Covers visual application construction and decomposition, with a hands-on course using the subject product.

"Object Design Workshop"

One-day workshop for those who have gone though basic OO courses. Customized to customer requirements.

Semaphore

Semaphore
800 Turnpike Street
North Andover MA 01845
1-508-794-3366
1-508-794-3427 fax

Courses: Comprehensive set of object-oriented technology courses, with good sequences defined for various kinds of audiences. From the materials submitted by the vendor, it is not clear to what extent they discuss topics such as debugging and performance improvement, although performance is mentioned in some of their courses.

"Advanced C++ and Object-Oriented Design"

Five-day course for experienced C++ programmers. Covers advanced features of C++, OO design, and the underlying mechanisms implementing them, with many programming exercises.

"C++ and Object-Oriented Design for Non-C Programmers"

Five- to ten-day course for programmers who are considering using C++. Covers C++, its syntax, OO fundamentals, mapping OO concepts to C++. Case studies in lab assignments.

"The C++ Language"

Three-day course for C programmers. Covers C++ additions to the C language using hands-on lab exercises.

"Common Object Request Broker Architecture (CORBA)"

Five-day course for system integrators and application developers. Provides practical experience in development using CORBA, with hands-on usage of actual CORBA implementation(s). Surveys IDL, CORBA products, and other topics.

“Developing Object-Oriented Software”

Five-day course for people interested in OO technology. Survey of OO development process, concepts, analysis, and preparation for introducing OO technology to others in their workplaces.

“Developing User Interfaces in Smalltalk”

Two-day course for Smalltalk programmers. Covers Model-View-Controller (MVC) framework, its implementation, and use in Smalltalk environment.

“Efficient Implementation of Object-Oriented Design in C++”

One-day course for current C++ developers. Learn how to evaluate different OO designs in terms of performance, re-use, maintenance. Includes information for improving C++ design efficiency.

“Integrating Applications Using CORBA”

One-day course for programmers who will use CORBA. Introduces CORBA, IDL, static and dynamic invocations in CORBA; presents real-world CORBA example.

“Integrating Object Databases Into Heterogeneous Environments”

Two-day course for designers and programmers. Shows how object databases can be used with traditional versions, converting strategies and integration.

“Intermediate C++ and Object-Oriented Design”

Five-day course for self-taught C++ programmers with OO experience. Thorough presentation of C++ and application of C++ to OO design via challenging exercises.

“Introduction to C++ and Object-Oriented Design”

Five-day course for programmers who desire to start using C++. Discusses advantages of OO and its concepts; covers procedural, data abstraction and OO programming with C++; gives hands-on experience developing realistic application(s).

“Introduction to MS Windows Programming Using Borland's ObjectWindows Library (OWL)”

Five-day course for programmers and technical managers. Teaches how to write Windows applications using C++ and OWL, and the use of Borland programming tools.

“An Introduction to Object-Oriented COBOL”

Five-day course for programmers through project managers. Covers OO principles, analysis, and design; how this is implemented in OO COBOL; its syntax; and the Micro Focus OO environment with comprehensive hands-on development.

“Introduction to Smalltalk and Object-Oriented Design”

Five-day course for anyone wanting to learn about OO programming. Introduction to OO programming using the Smalltalk environment, with hands-on exploration.

“Management Decisions in Object Technology”

One-day course with consulting discussions for executives, project leaders, managers, ... Compares OO principles with conventional software development; discusses impact of OO on quality, flexibility, and maintainability; how classic systems can be part of OO technology; and how OO has increased company competitiveness.

“Object Database Application Development”

Three-day course for programmers and designers. Presents the structure of object databases (ODB); compares them to traditional databases; designing ODB applications; familiarizes the student with ODB vendors; gives specific examples in C++.

“Object Database Technology for Technical Managers”

One-day course for technical managers. Presents advantages of object databases over traditional databases. Covers various object database products, the emerging standards, and how to integrate them into various environments.

“Object-Oriented Analysis”

Three-day course for developers and technical managers. Includes introduction to OO, techniques for OO analysis, and working out a complete, real-world problem through analysis specification in a hands-on lab.

“Object-Oriented Analysis and Design”

Five-day course for developers, analysts, technical managers. Gives understanding of OO approach to software specification, tradeoffs of different representations. In-class exercises.

“Object-Oriented Analysis and Design Using the Object Modeling Technique (OMT)”

Five-day course for developers, analysts, technical managers. Introduces OO, comprehensive OO development cycle analysis, design and implementation; discusses the three views (object, dynamic, and functional models) used by OMT; OMT notation. Hands-on problems.

“Object-Oriented Design”

Three-day course for analysts, developers, and technical managers. Covers OO fundamentals outside any particular language; identifies design trade-offs considering reusability, extensibility, efficiency, and correctness. Includes practical lab exercises.

“The Object-Oriented Paradigm (1-day)”

One-day course for programmers, analysts and managers. Covers OO concepts and benefits; how applications are developed with, and what technology supports, OO; software reuse through OO.

“The Object-Oriented Paradigm (2-day)”

Two-day course for programmers and managers. More complete version of one-day course above.

“The Object-Oriented Paradigm for Technical Managers”

One-day course for technical managers. Covers OO concepts and benefits, how applications are developed with, and what technology supports, OO; software reuse through OO.

“An Overview of Borland's ObjectWindows Library”

Three-day course for programmers and managers. Overview and working knowledge of ObjectWindows Library, with simple Windows applications using C++.

Skill Dynamics, an IBM company

Skill Dynamics, an IBM company
500 Columbus Ave.
Thornwood NY 10594
1-914-742-6400
1-800-IBM-TEACh – to sign up for courses
1-800-426-2255

To order the Skill Dynamics Catalog of Education, use IBM order number G320-1244.

“C++ Programming Language,” course number Q1072

4.5-day course.

“OO Analysis and Design,” N1603

3.5-day course for those with solid understanding of OO concepts. Hands-on lab covers front-end development, problem definition, class choices, and moving to design.

“OO Analysis,” N1604

Three-day course for those with solid understanding of OO concepts. Similar to N1603, except for those intending to follow Ivar Jacobson's methods covered in the subsequent course, N1499.

“Design of OO User Interfaces,” N1600

One-day course for those with OO experience. Covers methods and principles of UI design, particularly for graphical interfaces.

“OO Database Management Systems,” N1729

Two-day course for those familiar with a database management system. Compares OO and extended relational database systems, and how to evaluate suitability for applications.

“OO Design with Use Cases,” N1499

3.5-day course for those experienced in modeling with Coad or Rumbaugh notation, or some OO analysis experience. Covers transforming an object model obtained from analysis into a robust OO design.

“OO Principles and their Application,” Q1022

Two-day course for those with no prior OO experience. Covers OO design and programming principles, tradeoffs, and reading simple Smalltalk programs.

“OO Programming and Design with C++” Q1073

4.5-day course for those with C programming experience. Covers design of C++ programs using OO, flexibility, dynamic binding, and other OO issues.

“OO Programming and Design with Smalltalk,” K3612

4.5-day course for programmers with no prior OO experience. Covers OO design and programming; hands-on design of OS/2 PM applications in Smalltalk; OO interfaces; and comparison to C++.

“OO Software Engineering,” N1498

4.5-day course those with some software development experience. Discusses methods for OO analysis and design, working with classes, using hands-on Smalltalk browser.

“OO Technology for Managers,” N1605

One-day course for managers with no prior OO experience. Covers key aspects of OO, project management, language issues, CASE tools, benefits, and risk.

“OO Topics w/Smalltalk,” N1496

Five-day course for those having taken K3612 or equivalent. Covers implementing client/server applications using Smalltalk, APPC/CPI-C, SQL databases, drag-drop, concurrency issues, and more.

“OO Workshop for Managers” N1606

Two-day course for managers with some programming but no OO experience. Overview of OO programming, CASE, project management. More in-depth than course N1605.

“Topics in C++ Programming and Design” N1601

Five-day course for those with equivalent of 6 months' experience programming in C++. Covers how C++ features can be used to solve important structuring issues, ObjectStore, C++ idioms, XLC++ class library for concurrency. Features extensive hands-on work.

"SOMobjects Developer Toolkit Workshop," N1602

3.5-day course for those with C or C++ experience. Teaches how to build OO applications using SOM; covers persistence and replication frameworks, and DSOM.

"Workplace Shell Programming with SOM," N1745

Five-day course for those with PM, C and basic OO knowledge. Hands-on experience writing WP Shell classes using SOM, and how to program Workplace Shell objects.

Software Quality Institute

Software Quality Institute
University of Texas at Austin
Division of Continuing Education
PO Box 7879
Austin TX 78713-7879
1-512-471-4874
1-512-471-9677 fax

Occasional seminars such as:

"Managing Object-Oriented Software Development"

Instructor: Desmond D'Souza of ICON Computing Inc., Austin TX

One-day course for technical managers. Covers how to manage OO software development. Includes an introduction to OO and its benefits; analysis and implementation in the OO software life-cycle; how to plan, schedule, and track iterative development.

Technology Exchange Co.

Technology Exchange Co.
One Jacob Way
Reading, MA 01867
1-800-662-4282
1-617-944-3700 x2611

Courses on various computing subject areas, probably in the AIX environment.

"Database Design: Relational, Distributed and Object-Oriented Concepts"

Four-day course for programmers through technical managers. Studies the state-of-the-art database systems, in the context of object-oriented design, the client/server model, database distribution.

"Object-Oriented Analysis and Design"

Four-day course. Teaches OO approach to analysis and design, OO design notation, and conversion from structured methods to OO.

"Object-Oriented Concepts and Design: Advanced C++ Workshop"

Four-day course for C++ programmers interested in mastering C++. Covers advanced C++ features in conjunction with OO design. Hands-on course.

“Object-Oriented Concepts and Design: C++ for Non-C Programmers”

Four-day course for programmers with other language experience. Covers OO concepts and design in C++, with hands-on training.

“Object-Oriented Concepts and Design: C++ Programming Workshop”

Four-day course for programmers experienced with C. Hands-on course covering OO concepts via C++.

Three New FREE Training Guides: OS/2, Multimedia, Object

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Nationwide Poll

Nationwide Poll Reveals Consumers More Likely to Buy PCs with Features that are Simple, Comfortable, and Responsible

A recent national survey reveals that the majority of the general public would buy and use PCs if they were simpler, more comfortable, and responsible. Conducted by the independent polling organization Roper Starch Worldwide for the IBM Personal Computer Company, the survey examines the attitudes of Americans toward using and purchasing technology.

Simple, comfortable, and responsible are attributes of Natural Computing, a multi-pronged strategy designed to propel the IBM PC Company through the next phases of the turnaround of IBM's PC business.

The survey shows that more than half of the respondents have no interest in buying a PC at this time, because they feel they will never fully learn how to use or control these powerful machines. Natural Computing aims to dispel this fear by using the power of technology and the elegance of design to make PCs conform to users' needs.

During the survey, consumers were asked whether 25 different features, which might one day be part of a PC, would make them more likely to buy a computer, or more often use the one they own. Twenty-three of the 25 features asked about were desirable to more than half of those interested in owning a PC.

Based on interviews with 1,002 respondents, 78 percent of the American public are more likely to buy or use a PC if it were easily upgradeable, allowing them to keep up with new technology; 68 percent if it could be operated by voice; and 66 percent if it used less electricity. These three features exemplify simple, comfortable, and responsible.

The majority of Americans are receptive to Natural Computing features that may one day be a part of personal computers. Features that would help the computer adapt to the user, rather than the user having to adapt to the computer, are cited by an overwhelming majority as more likely to make them buy a PC. Some of the most desired features are:

Ease of upgradeability (93 percent)

Automatically saves work when shut off (92 percent)

Explains how to set it up when it is plugged in (89 percent)

Adjusts its level of help to your skill (88 percent)

Emits little or no radiation (88 percent)

Uses less electricity (80 percent)

Recognizes you and pulls up the files you use (80 percent)

Operates by voice in addition to a keyboard or mouse (79 percent)

Nearly half (42 percent) of all consumers still do not use a PC at home or at work. Some of the primary reasons non-users do not want to buy a PC are fear of obsolescence, not being able to get the PC to do what they want it to do, difficulty operating a computer, and the fact that interacting with it is complex and uncomfortable.

Demonstrating a desire for PCs that more naturally fit into their lives, the top three features that non-users said would make them more likely to buy a computer were: (1) a PC that could explain how to set it up

when you plug it in (60 percent); (2) a PC that automatically adjusts its level of help to your skill (60 percent); and (3) a system that is easily upgradeable in order to keep up with new technology (59 percent).

Many of the features presented to consumers as more likely to make them purchase or use a PC are not widely available today, and are futuristic in nature. For example, the majority (63 percent) said they would be more likely to buy or use a PC if the user interface could automatically customize itself to their vocabulary and thought processes. More than half of the respondents (67 percent) said they would buy or use a PC that could recognize their face or voice, and pull up their files.

IBM Latin America Developer Assistance Program

IBM Latin America announces its Developer Assistance Program (DAP).

The mission of this program is to provide a wide range of services supporting OS/2 developers all around Latin America.

Although this program applies to all Latin American countries, each country manages its own resources, providing first- and second-level support on a local basis.

Brazil and Mexico already have Developer Assistance Programs, and are distributing The Developer Connection for OS/2 (DevCon) as an important element of the program. Both Brazil and Mexico sell DevCon subscriptions through IBM Direct.

DAP phone numbers in Mexico	
(525) 627-1846	Juan Carlos Fernandez
(525) 627-1937	Carlos Mendoza
(525) 580-4267	fax
DAP phone numbers in Brazil	
(55-192) 65-7737	Geovah Cabral
(55-192) 65-8057	fax
IBM Direct phone numbers in Mexico	
(525) 627-2444	In Mexico City and outside the country
91-800-00-639	Outside Mexico City
IBM Direct phone number in Brazil	
0800-111205	

Multimedia Asia Summit, 22-24 February, Hong Kong

The Pan-Asian Telecommunications Information Task Force, a division of the Institute for International Research, is organizing a Multimedia Asia Summit on 22-24 February in Hong Kong. Day one of the summit focuses on market development and distribution, day two on multimedia applications, and day three on strategy. The keynote address, “Influences Driving the Asia-Pacific Multimedia Market – Current and Future Trends for Multimedia Services,” will be given by Kenneth Wirt, Director of Marketing, Personal Interactive Electronics Division, Apple Computer Inc., USA.

To register, contact IIR Hong Kong at +852 549 5618 or fax +852 547 3836. The fee for all three days of the summit is 1895 US$, which includes conference lunches, refreshments, cocktail party, and documentation. This fee excludes accommodation, airfare, and the banquet.

All exhibition inquiries should be directed to Terri Tyree, General Manager, Sponsorship & Exhibitions, IIR Conferences, Level 9, 33 Berry Street, North Sydney NSW 2060, Australia, phone +61 2 929 5366, fax +61 2 959 4835. Booth space is available for 5,000 US$ for a 3m x 2m area.

The IBM International Seminar, 1-2 March, Santa Clara CA

The IBM International Seminar is scheduled for 1 and 2 March 1994 at the Santa Clara (California) Marriott Hotel. The target audience includes software engineers and technical managers who design and develop software for international markets. Both national-language support (NLS) and double-byte character set (DBCS) considerations are covered.

A host of technical speakers from the major IBM laboratories and several independent consultants provide detailed programming design guidelines for internationalizing software. Topics range from a description of worldwide writing systems and national language-dependent functions to translation and NLS specifications. Platform-specific information about OS/2, AIX, DOS, AS/400, and System/390 is given in individual breakout sessions. Four demos enhance the presentations, with a focus on current topics such as Unicode and POSIX.

The 500 US$ fee includes meals, as well as the opportunity for small discussion groups in the evening. Ample time is allowed for individual dialogue with the instructors.

A hands-on programming lab for OS/2 is also offered as an optional third day (3 March 1994). This workshop uses programming exercises to illustrate what needs to be done to OS/2 applications to support DBCS enabling and NLS implementation. Students code, compile, link, and execute simple OS/2 Presentation Manager programs that use standard windows and dialog boxes. Transportation will be provided to the IBM Santa Teresa Laboratory, where a maximum of 10 students will work with two instructors. Subsequent classes may be scheduled for 4 March and later if required. The fee for the programming lab is 450 US$.

For further information, or to receive an invitation package containing the registration form, a complete description of each module, and the agenda, contact Dory Miller at 1-203-262-4034 (voice) or 1-203-262-2141 (fax). (IBM tie line 376.)

OS/2 T2.1 Among Ten Best Chinese Information Products

The Traditional Chinese version of OS/2 2.1 was recognized as one of the “Ten Best Chinese Information Products, 1993” out of about 100 candidates.

Traditional Chinese OS/2 2.1 is the only PC system software among the ten best Chinese information products. There were seven system software competitors in the contest. The selection criteria included localization, contribution, value to Chinese people, and innovation.

Traditional Chinese OS/2 2.1 provides more friendly input methods; Big-5 code and code conversion utility; outline font; TrueType font manager; Epson ESC/P, HP PCL/4, and HP PCL/5 Chinese printing; and Chinese Windows environment, on top of excellent multi-thread, multi-tasking, and MVDM capability. The vivid presentation and demonstration convinced the arbitrators that OS/2 2.1 is the best Chinese system product for personal users.

The contest was held by the Taiwan Information Month Activity Executive Committee, executed by CMEX (Chinese Micro-Computer Extended Foundation) and supported by III (Institute for Information Industry), China Daily, and InfoPro magazine. The voters were a group of 15 reputable arbitrators coming from research, education, development, industry, and press.

China – Asia's Fastest-Growing PC Market

(Reprinted with permission of IDG Asia Support Center, San Mateo, California, from their monthly newsletter, Asia IT Market Update, 15 November 1993 issue.)

Hugo X. Hsiung, Director of IDG Asia Business Development, reports on the IT boom in China.

By now, most high-tech marketers are clued in to the golden opportunities afforded by the PC market in Asia. But, what part of that vast and mysterious continent, about which many Americans know little, will bear the most fruit for companies interested in selling product abroad?

Believe it or not, the fastest-growing PC market in Asia over the past two years has been the People's Republic of China. 1992 was a tough year for the United States economy, as well as for most European countries. But China, the most populous nation on this planet, recorded a healthy 12.7 percent GNP growth for 1992. This increase bore fruit for the domestic PC market, which witnessed a surprising 65 percent annual growth.

One obvious reason for this unbelievably high growth is that the improved GNP has strengthened China's purchasing power. Sharp price-cutting made U.S.-built PC models more affordable to Chinese customers. The 1991 signing of the Sino-American agreement has attracted some U.S. PC software companies to China, giving users more access to their products.

According to an IDC Beijing report, China's domestic PC sales soared to 250,000 units in 1992 from the 85,000 units sold in 1990. In fact, some of our industry's leading software companies have already seized their opportunity, with good results. Last year, Compaq and AST jointly held an impressive 50 percent share of the Chinese import market, and Microsoft opened up its first shop in Beijing.

To do business in China, American companies need to avoid the expectation of short-term profit. Instead, they must assume a long-term approach if they wish to successfully market and sell product there. Because of the vast cultural and language differences that exist between China and the U.S., strategic alliances are imperative. A key issue in marketing high-tech product in China is the adaptation of software and hardware products to Chinese languages.

The Taiwanese currently manufacture software that is compatible with Chinese characters. In order to secure their position against Taiwan rivals, who have the inherent advantage of proximity and language, it's essential that U.S. companies partner with Chinese developers.

Similarly, by forming relationships with Chinese PC vendors, U.S. companies can localize their presence in distribution channels, and consequently will be fit to compete with the world's “king of PC clones.” Yet, U.S. software and hardware companies have a distinct edge over Taiwanese companies. Brand-name and technologically superior products are in high demand by Chinese consumers. This poses quite a problem for clone makers, who don't enjoy the benefits of brand awareness.

Of the 250,000 PCs sold in China in 1992, 167,000 units (or 67 percent) were imported models, while 83,000 units (or 33 percent) had been made domestically, according to the IDC Beijing report. Although Taiwan-made PCs do not constitute a large portion of the imported models sold, the Chinese-made machines incorporated many components designed or manufactured by Taiwanese PC makers. This high demand for imported hardware bodes well for American manufacturers.

(Several paragraphs about the relationship of Taiwanese PC makers to the Chinese market have been deleted.)

One of the most economically fertile regions in the world is Shenzhen, in the Guangdong province. Located 17 miles north of Hong Kong, Shenzhen is inhabited by a population of 2 million. As the fastest-growing city in China, it produced $1.44 billion in computers, telecommunications, and electronic equipment in 1991. U.S. manufacturers of PC hardware and software would do well to keep a close watch on Shenzhen. American PC makers should consider putting down roots in China, as well. An analyst at IDC Beijing recently projected: "In addition to the double-digit economic growth, China, with an urban population of more than 250 million of above 75 percent literacy rate, will certainly become a tremendous market for the PC industry in the next three to five years."

(A bar chart accompanying this article contains these statistics:

IT Spending Growth in Asia

Including Japan: in 1991, $ 76.1 billion US$
in 1996, $115 billion US$

Excluding Japan: in 1991, $ 13.4 billion US$
in 1996, $ 24.2 billion US$

Source: International Data Corporation)

Text accompanying the bar chart:

IDC predicts a 50 percent growth in Asia/Pacific IT spending from 1991-1996. The region accounted for well over a fifth (21.5 percent) of world IT spending in 1991 ($76.1 billion); this will increase to nearly one quarter (24 percent) by 1996. This growth rate jumps to 81 percent when excluding Japan, which is now in a recession.

Two New Newsletters About OS/2

Productivity Solutions of Norristown PA announces two new quarterly newsletters for marketers and users of OS/2 and its applications.

The OS/2 Marketing Report is devoted exclusively to marketing and sales issues. Each issue will include columns about how to demonstrate OS/2, and how to improve selling skills. The first issue has news about OS/2 sales, a success story about a small software developer, an article about how to stage a company-sponsored OS/2 conference, book reviews, and frequently asked questions. Future issues will cover how to sell OS/2 in client/server environments, more ideas for demonstrating OS/2, OS/2 software success stories, book reviews, how to improve selling skills, how OS/2 helps small businesses, and companies making major commitments to OS/2.

The OS/2 Advisory is devoted to helping OS/2 users optimize their systems. Each issue will include the latest fixes and tuning tips. The first issue includes articles about troubleshooting tips for printing, navigating IBM's support offerings, software reviews, tips for swap files and icons, REXX, and where to find OS/2 software. Future issues will contain tips about troubleshooting OS/2 in a LAN environment, ideas for new users, tips for supporting OS/2 users, and book and product reviews.

Each newsletter has 8 pages. Charter subscription prices are valid until 31 December 1993. Prices for annual subscriptions (four issues) are:

The OS/2 Marketing Report, 79 US$ until 31 December, 89 US$ thereafter

The OS/2 Advisory, 39 US$ until 31 December, 89 US$ thereafter.

Both newsletters, 99 US$ until 31 December, 119 US$ thereafter.

IBM employees are offered charter subscription rates of 75 US$ for The OS/2 Marketing Report and 95 US$ for both newsletters.

All charter subscribers who prepay will receive a free T-shirt that says “Unleash the Power of OS/2.”

Subscriptions and information can be obtained by calling 1-800-695-8642 within the USA, or 1-215-631-0339 from elsewhere. The fax number is 1-215-631-0414. For advertising rates, call 1-215-631-5685.

AGORA Services Guide Offers Free Listings to Service Providers

The AGORA Custom Solutions and Services Guide (circulation: 40,000) is offering free listings to qualified computer-related service providers.

The AGORA Services Guide is a listing of thousands of multiplatform computer service providers from around the country and the world. Buyers of computer-related services use the Guide to locate appropriate service providers for their projects. Computer service providers use the Guide to showcase their unique capabilities to more than 100,000 readers and prospective clients.

To receive a free-listing application, contact:

MZ Group, Inc.
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San Francisco CA 94105
1-415-543-8290, x146 (voice)
1-415-543-8232 (fax)
Internet: agora@delphi.com

800 Phone Numbers

The 800 phone numbers below come from two sources:

1. This issue and preceding issues of PSP Developer Support News
2. Information posted on IBM internal forums.

Common Desktop Environment Developers Conference	1-800-225-4698
OS/2 Multimedia Tools	1-800-228-8584
IBM PSP Developer Support Marketing Center	1-800-285-2936[3]
OS/2 2.0 Software Support	1-800-288-8737
OS/2 Sales (in Canada, 1-800-465-7999)	1-800-342-6672
IBM National Telesales Marketing (IBMCALL)	1-800-426-2255
IBM Software Installer 1.2 for OS/2	1-800-426-2279
Boca Raton Technical Services Software System Test	1-800-426-2622
IBM Direct (in Canada, 1-800-465-7999)	1-800-426-2968
DCE Client for Windows Beta Program (in Canada, 1-800-561-5293)	1-800-426-3040
LAN NetView Extended Beta Test (in Canada, 1-800-561-5293)	1-800-426-3040
IBM Business Partner Locator (PS/2 Dealers)	1-800-426-3377
IBM FAX Information Service (in Canada, HELPFAX, 1-800-465-3299)	1-800-426-4329
OEM Sales	1-800-426-4579
Skill Dynamics (Education) (in Canada, 1-800-661-2131)	1-800-426-8322
Ultimedia Developer Assistance Program	1-800-426-9402
The Corner Store	1-800-428-9672
Programmer's Paradise	1-800-445-7899
Integrated Systems Solutions Corporation	1-800-472-4772
CompuServe Membership	1-800-524-3388
OS/2 Application Assistance Center + TalkLink (OS2BBS) (in Canada: IBMLink, 1-800-268-3100; Customer Assistance group, 1-800-465-1234)	1-800-547-1283
Personal Systems Technical Solutions magazine	1-800-551-2832
Software Vendor Systems Center	1-800-553-1623
several Developer Assistance Programs	1-800-627-8363[3]
Berlitz Translation Services (in Canada, 1-800-387-5500)	1-800-628-4808
IBM Developer Connection for OS/2 (in Canada, 1-800-561-5293)	1-800-633-8266
IBM Direct Response Marketing	1-800-633-8266
GEnie	1-800-638-8369
IBM Redemption Center (OS/2 2.0 Upgrade)	1-800-677-2581
IBM Porting and Technical Consulting Workshops	1-800-678-31UP
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Personal Systems HelpCenter	1-800-772-2227
PRODIGY	1-800-776-0845 and 1-800-776-3449
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OS/2 Developer magazine	1-800-926-8672

OS/2 Free Seminar Enrollment	1-800-937-3737
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Drake Training and Technologies (for Professional Certification Program from IBM)	1-800-959-3926[3]
IBM Customer Support Center	1-800-967-7882
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[3] Number works in Canada also

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