The Communications Solut™

Acknowledge™ allows you to create telecommunications systems that work the Macintosh
Now you can link virtually anyone to the data they need and make information their most valu

Create Custom Information Systems

Whether you need to send documents to your local typesetter, work with current information from the corporate mainframe, or keep tabs with your distributor in Argentina, the way you move information could be the most important improvement you can make in the way you work.

Communicate Seamlessly With Anyone, Anywhere

Communicate with mainframes, PCs and Macintoshes. Get and send text and graphics by Telex, E-mail, or FAX -- all with the same familiar Macintosh interface!

Acknowledge is a platform for total communications integration.

And Acknowledge works with AppleShare™, TOPS, InBox, Microsoft Mail, and other standard Macintosh LAN products, so geography will no longer hinder your workgroup's work.

Background Processing

Acknowledge sends and retrieves information while you work or while you sleep, turning your Macintosh into a personal, strategic information resource center.

Fully MultiFinder™ compatible, Acknowledge supports background file handling, program execution and file transfers, as well as sound resources and the notification manager.

Save on Valuable...

Development Costs
Solutions are built on top of an engine.

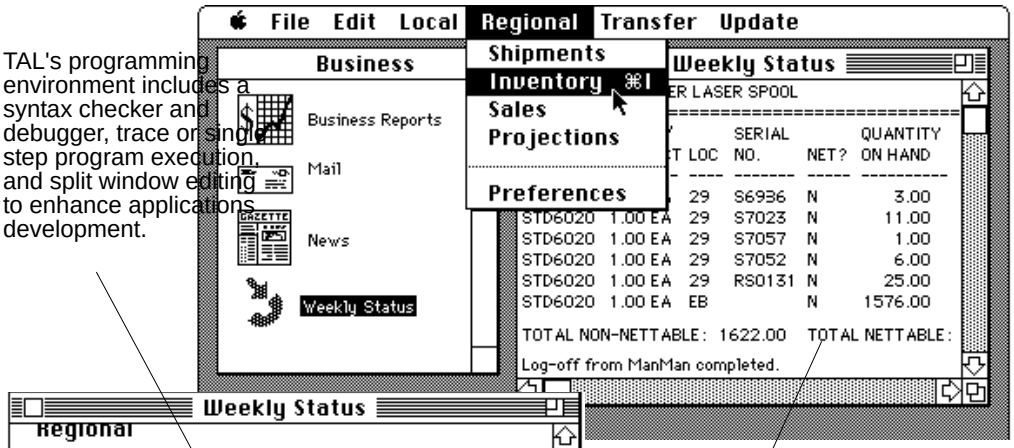
Development Time
Modular code building blocks are alrea

End-user Training
Applications work the Macintosh way.

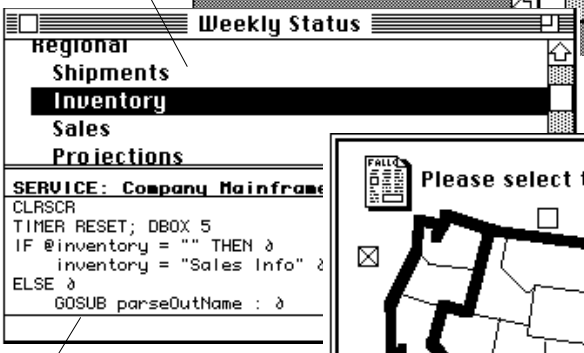
Operating Costs
Send and receive information at optim

Maintenance Costs
Applications are fully extensible -- add

TAL's programming environment includes a syntax checker and debugger, trace or single step program execution, and split window editing to enhance applications development.



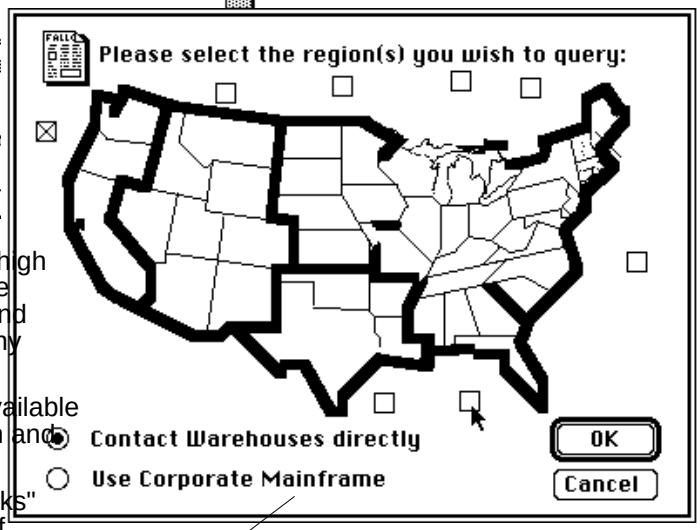
Makes retrieving corporate data an easy process.



Built into Acknowledge is a high level programming language called TAL with the power and flexibility to solve virtually any communications need.

Over 170 commands are available to provide complete session and user interface control.

Modular code "building blocks" allow independent control of session layers. For example, modem, network, service and interface code are maintained in separate files for flexible construction of applications.



Makes full use of dialog boxes and graphics -- even in color on the Macintosh II.

In this Package...

Development Software
Acknowledge for creating applications.
AckEdit for creating custom dialogs for
Acknowledge Run-Time for testing your applications.

Sample Applications
AirMail to automatically send and retrie information from multiple sources.
File Express to make point-to-point file t easy as copying a file.
Time of Day that sets your Macintosh sy clock by the National Bureau of Standa
BBS that lets you run a bulletin board s your Macintosh.
Terminal to enable you to operate remo in real time.
On-Line Services that provides you acce popular information services from a sin style menu.

TAL Source Code
Source code is provided to support the Hayes AT-class, V-series, and Telebit modems; IBX and Northern Telecom SL Tymnet, Telenet, CompuServe, GEnie, networks; Dow Jones News Retrieval; Electronic Store; MCI Mail; CompuServ Delphi; The Source; Dialog; SuperMac

Manuals
Programmers Manual, TAL Reference M Users Manual

System Requirements

Macintosh 512KE, hard disk, modem o connection.

SUPERMAC SOFTWARE
295 N. Bernardo Avenue, Mountain View, CA 9404

FOR FURTHER INFORMATION CONTACT:
Mable Yee, SuperMac
(415) 962-2494
Brian McDonnell, SuperMac Software (415) 962-2478

FOR IMMEDIATE RELEASE

SUPERMAC SHIPS ACKNOWLEDGE ™ COMMUNICATIONS TOOLKIT FOR THE MACINTOSH

Mountain View -- (July 18, 1988) -- SuperMac Software is now shipping Acknowledge™, the Apple® Macintosh™ software toolkit that opens up remote computer services to Macintosh users. Acknowledge provides the tools to create powerful solutions for communicating with mainframes, minicomputers, and personal computer networks. Acknowledge gives Macintosh users the benefits of peer-to-peer communications without requiring modifications to host systems. With Acknowledge, Apple's vision of seamless communications is available today.

"Acknowledge is to communications as dBASE is to database," said John Duhring, Business Development Manager at SuperMac Software. "As businesses continue to invest in Macintosh technology, the cost of maintaining an organization-wide information system becomes a crucial part of

their purchase decision. Acknowledge provides developers with a rich environment to create easy to use network applications that can be modified as their customer's needs change. For developers and consultants, Acknowledge is the best choice to integrate Macintoshes into an existing information network or to create an organization's information system from scratch."

SuperMac's Acknowledge provides an easy to use platform to create applications, known as Connections, that can tie the Macintosh into virtually any telecommunications environment. Using Acknowledge, developers can build Connections complete with icons, pull-down menus and dialog boxes to create a Macintosh interface to their network application. The Connection shields the user from the confusing command structures common to host systems and allows information to flow between unattended systems. With an Acknowledge Connection, the Macintosh user has a transparent, easy to use and time-saving interface that simplifies sending and receiving information while automatically navigating through the telecommunications network.

-more-

"Acknowledge makes communications simple because it is more than a simple communications product. It provides a platform to fully integrate remote systems into the Macintosh environment," said Ray Vizzone, President of LAMIR, Inc., the product's developer. "Historically, the complexity of telecommunications sessions has intimidated even experienced Macintosh users. We designed Acknowledge to control computer-to-computer communications while presenting the Macintosh interface to the user, thereby reducing the costs associated with applications development, end-user training, system use, and system maintenance."

Acknowledge's programming language, TAL (Telecommunication Access Language) allows information providers to develop scripts for easy information access while retaining complete security. Using TAL connections, Acknowledge automatically activates a modem, finds an available carrier and locates the appropriate network to call up the appropriate remote service. Without leaving their Macintosh environment users are transparently connected to an entire suite of predefined services. With Acknowledge, the Macintosh is the strategic resource for communications networking.

"To illustrate what network applications can look like, we include a wealth of example applications in the box," said Brian McDonnell, Acknowledge Product Manager. "AirMail lets you send and retrieve mail from MCI, CompuServe, GEnie, Delphi, and The Source without disrupting your work style. We include TAL source code to AirMail and our other sample applications so developers can easily modify them for their customers. For example, a developer could make a multi-user AirMail Server station to service an entire TOPs or AppleShare network from a single modem."

Developers can use Acknowledge in conjunction with high speed modems, digital switches, and virtually any dial-up network to access information on remote host systems.

Acknowledge adds to the spectrum of products and services available to SuperMac customers and underscores its commitment to being the leading third party vendor for the Macintosh market. It is now available, for a suggested retail price of $495. Included in the package are Acknowledge (for developing Connections), AckEdit (for adding custom dialog boxes to Connections), Acknowledge Run-Time (for testing and running finished Connections), AirMail, File Express (for sending

--more--

binary files from one Macintosh to another), Time of Day (sets the Macintosh system clock by the National Bureau of Standards), BBS (lets the Macintosh serve as a host bulletin board service), Terminal (TTY, VT100 terminal emulator), On-line Services (Easy access to Digital's Electronic Store, Dow Jones News Retrieval, MCI Mail, Telemail, CompuServe, Delphi, GEnie, The Source, Portal, and the SuperMac BBS). Run-Time modules are available exclusively through Certified Acknowledge Developers in conjunction with their products and services.

For further information about Acknowledge or becoming a Certified Acknowledge Developer, contact John Duhring, SuperMac Software, 295 N. Bernardo Avenue, Mountain View, CA 94043 (415) 962-2476. For editorial review copies of Acknowledge, contact Brian McDonnell, SuperMac Software at (415) 964-8884

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Acknowledge 1.0

The Communications Solution™

Until now, working with telecommunications meant compromising the Macintosh's point-and-click interface to match the command-driven systems used by other computers. Now there's Acknowledge: a sophisticated programming engine which makes it easy to transfer data to other computers — Macintosh style.

Acknowledge is a communications environment which allows the creation of finished programs called Connections. Connections work and behave exactly like any other Macintosh application: the user is presented with pull-down menus and dialog boxes which exactly match the requirements of the communications session.

Power

Based on a new, high-level programming language called TAL, Acknowledge allows you to precisely control your communications session. With over 190 commands, the TAL language includes variables, arguments, functions, constants, logical values, labels, and operators — as well as full user interface control.

TAL is designed to work with modular "building blocks" of code. Service files, Modem files, Network files and Lookup Tables mean that program components can be shared for a variety of applications. For example, program routines common to a specific type of modem can be stored in a Modem file — and that modem file can then be employed by any number of Connections. Source code is supplied to configure a variety of modems, and to link with a variety of on-line services.

Automation

Acknowledge has the power to completely automate the communications process. For example, Connections can be created to exchange electronic mail with a series of on-line services — all with a single menu command. With TAL's sophisticated date and time functions, a Connection could automatically contact a remote mainframe once a week to collect sales reports.

Another example is File Express: a sample Connection supplied with Acknowledge. With File Express, sending a file is as easy as dragging a file into a folder; Acknowledge detects the presence of the file, and automatically sends the file to the specified remote system. Running File Express under MultiFinder means being able to send and receive files automatically, while working with other applications.

Speed

As well as providing the most elegant and easy-to-use telecommunications environment, Acknowledge is fast. In recent tests with the Telebit Trailblazer Plus modem, Acknowledge completed file transfers 20% faster than its nearest competition — and nearly twice as fast as some other telecommunications

software.

Features:

- Provides a true Macintosh interface to telecommunications. Pull-down menus, and menu items can be created for specific applications. Dialog boxes, buttons and check boxes can all be used to control a communications session.

- Includes an automatic program generator (Record feature) to capture on-line interaction, and automatically translate it into TAL code.

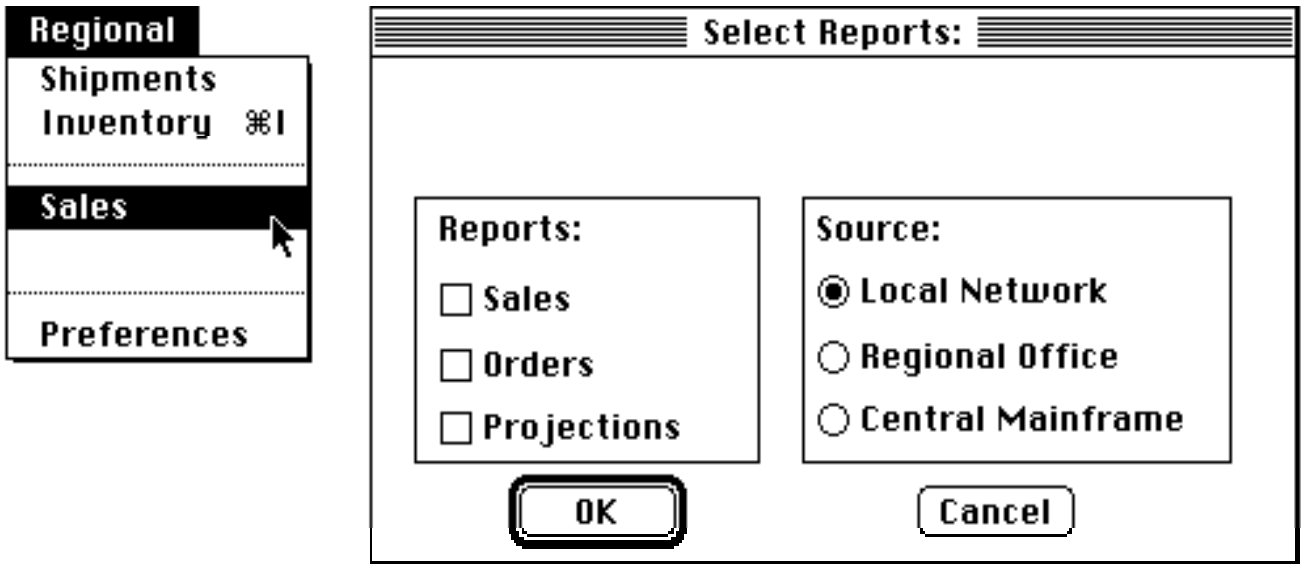
- Communicates with DEC VAX, UNIX, Mac Workstation, IBM and other hosts that support TTY, VT-52, or VT-100 terminals at speeds of 300 to 57,600 BPS. No host programming is required.

- Fully MultiFinder compatible: supports background file transfer *and* program execution. Allows full use of System sound resources and the Notification manager.

- Automatic Phone Journal records the number called, name of the remote system, date of the call, call duration, and comments.

- AirMail, File Express, Time of Day, BBS, Terminal, and On-Line Services sample applications are supplied with Acknowledge.

- Program modules supplied to support Hayes AT-class, Hayes V-series, and the Telebit Trailblazer modems; IBX and Northern Telecom SL-1 PBX's; Tymnet, Telenet, CompuServe, GEnie, and MCI networks; Dow Jones News Retrieval; Digital's Electronic Store; MCI Mail; Delphi; The Source; Dialog; SuperMac BBS.



Acknowledge allows the creation of custom pull-down menus and dialog boxes to precisely control data exchange with a remote computer. In the example to the left, the Sales menu item activated the Select Reports box, which would allow the user to select the reports desired, and the source of those reports.

What early users are saying about Acknowledge:

Ed Spiegel: "Acknowledge will do for telecommunications what the Macintosh has done for Personal Computers."

"Acknowledge is a revolutionary product. No other single product has all of the features of Acknowledge. It opens up the entire world of telecommunications to Macintosh users by providing an easy to use interface to navigate through any communications network. It effectively shields the user from communications problems and the confusing command structure common to host systems."

Tony Oppenheim (Developer): "Acknowledge is the first product since 4th Dimension that provides developers with a uniquely powerful, flexible and rich development environment . It opens up myriads of possibilities by providing a platform for developers to fully integrate telecommunications in the Macintosh enviroment. Since Acknowledge is always running in the background, it is one of the best ways to automate the interchange of data between remote data bases."

Alan Warshaw (Developer): "Acknowledge is the first communications product to provide just the right combination of powerful communications functions. It's integrated environment allows for ease of developing business applications on the Macintosh."

Steve Painter (Marketing Manager, Digital's Electronic Store, Digital Equipment Corporation): "Acknowledge is a powerful tool that opens up Digital computers and services to Macintosh users."

Jon Gilbert (Marketing Manager, Delphi): "Acknowledge is an exciting product because it provides Macintosh users with the Macintosh interface for online services. By using Acknowledge, Macintosh remote system subscribers can obtain the best use from their network services. "

Sharon Baker (Software Marketing Manager, CompuServe): "Acknowledge provides an easy to use development environment which gives end users the the ability to customize their network applications interface. Acknowledge will be successful because it fully integrates communications for Macintosh users to remote services and different systems."

Greg Gerdy (Software Product Manager, Dow Jones & Co): "Acknowledge is an important step forward in the area of information retrieval from remote data sources. We hope that it makes a contribution to the growth of the online industry, and, of course, that users will create innovative and useful scripts for accessing Dow Jones News/Retrieval."

Steve Layne (Manager of PC Support Services, Telenet): "Acknowledge creates a very user friendly way to connect to the Telenet E-mail service. It's power should yield some very interesting and creative integrations of applications and distributed information.

Ronald Raffensperger (Director of Product Marketing, Telebit Corporation): "With the introduction of Acknowledge, SuperMac Software has developed the first communications toolkit for creating applications that take advantage of the Macintosh interface while providing the flexibility and functionality that power users demand. SuperMac will unleash the communications potential of the Macintosh when developers combine the power of Acknowledge with the high speed of the TrailBlazer Plus modem."

Trends in Online Services

by Phil Sih
Portal Communications Company
Cupertino, California
(408) 973-9111

Summary
The online industry has been held back by its inability to present personal computer users with a powerful and familiar way to use its services. While companies such as Portal Communications have known this and made design decisions to allow for the development of such interfaces, there has been limited progress to date. Supermac Software fortunately anticipated this trend toward intelligent "user agents" for online services and introduced Acknowledge™, a communications program capable of acting as a fully-customized user agent. The existence of a service like Portal and a product like Acknowledge indicate a key trend in the online services market and demonstrate the potential of the next level of popularity of both computing and communications.

The Start

Online services have for many years provided useful and powerful tools for people to communicate and get information. Services such as electronic mail, computer conferencing and databases have already gained some popularity with many businesses and consumers. Unfortunately, these tools have been almost the exclusive domain of the highly trained or techically sophisticated because two key components to greater market development were missing.

In 1984 when Portal first started work on The Portal System™, most online services were accessed through dialup connections at the now slow speeds of either 300 or 1200 bits per second (bps). The standard interface was something that resembled a telet ype (TTY) or terminal, often restricted to displaying information a line at a time and each line limited to only 40 characters.
Furthermore, most online services had been conceived as secondary businesses of the timesharing services started in the 60's and 70's. Their interface and design were based on the assumption that all users were connected to central mainframe computers with a TTY or terminal device. The idea of a personal computer which could support a separate program to act as an intellingent user agent did not exist then.

The founders of Portal, having had personal computer experience, saw both the need and potential for personal computer-based, intelligent user interfaces. It was clear to them that personal computer users were going to require familiar interfaces and both higher performance and ease of use before they would widely accept and use online services. The Portal System™ was designed from the start to support intellingent, personal computer-based user agents so that the full potential of the online communications medium could be realized.

Trend Influence Factors

Progress in the presentation quality of the entire personal computer products market has been the biggest factor in driving the trend toward user agents like Acknowledge and supporting systems like Portal. Since 1984 the personal computer market has made major improvements in the area of user interfaces. High resolution monitors, color, and mice are now commonplace. Products such as Lotus and DBase as well as factors like the standardized "look and feel" of the Macintosh computer have created a very high level of user expectation for product presentation. Computer users have become accustomed to their own specific "language" for using their computers making them even less amenable to adopting the TTY or terminal-like presentation and performance characteristics of online services. The personal computer world with its icons, buttons, and menu bars is far ahead of the online world which still relies on extensive typing and use of commands.

Personal computers have also become far more intelligent and are now capable of performing unattended tasks based on time of day or in the "background". Users expect to get their electronic mail or exchange computer files while they are doing other work on the computer or during off-hours when rates for services like telephone calls are lower. Online services need to be able to support intelligent user agents that will perform these tasks for users.

Personal computer users also expect performance. Personal computers are several times faster now then they were in 1984. Compare a now archaic PC/XT with the latest 386 clones. Datacommunications gear has also been doing its part in increasing speeds (the de facto speed of dialup modems has increased from 300 and 1200 bps to 2400 bps), but users are now demanding even higher speeds such as 9600 and 19,200 bps. All this is like saying that the top speed of your average sedan is now 140mph and the speed limit has been raised to 110 but there are no roads between cities where the design of the roads let you go faster than 55.

Higher speed computers and dialup equipment put pressure on the online services to adopt user agents because user agents are currently the best way for online services to increase their overall performance for users.

Finally, computer users are used to another trend which is also pushing the online industry: low cost. As users gain more influence, the prices they are willing to pay for online time declines.

The Current Industry Convention

The online industry recognizes the personal computer user is where the next opportunity for market growth lies and that the user is not going to settle for outdated interfaces. Examples of existing systems which have service-specific user interfaces include AppleLink from GEISCO, Prodigy from Trintex, Navigator from CompuServe, and MacNet from Connect.

The existence of these service-specific interfaces shows the realization of the trend toward user agents but lacks the full vision of user agents and services which can be configured by the user to be job specific and make the use of online communications transparent.

Portal and Acknowledge represent the emergence of the next generation of cooperation and integration of function between software vendors and online services.

Why Portal and Acknowledge Are Important

Portal and Acknowledge now make it possible for a user to have a low cost, fast, job specific solution to wide area communications that makes the online communications service appear to be an extension of the user's computer. A user can now run a customized program on a Macintosh that operates just like other familiar Macintosh programs, and gets a specific job done without requiring any knowledge of the online system.

An example would be an application that field sales reps would use to send orders, receive confirmations, share sales tips and browse daily factory announcements without ever having to leave the Macintosh environment.

The distinctions of Portal are its low cost, speed, and architecture. At $10/month all you can use, Portal is the online bargain of the industry. Portal also has the lowest costs and the fastest ability for setting up support for user applications. Portal is fast because it permits a user agent to bypass the transmission of unnecessary data. The Portal architecture separates information transmission from presentation and makes it possible for progams like Acknowledge to handle all of the functions of presentation at personal computer speeds, while still getting the information from the network.

Another unique contribution of Portal, a service already popular among users familiar with wide area, interconnected networks, is it opens up this world to the Macintosh community. Macintosh users can now reach users on many wide area networks including Usenet, UUCP, Bitnet, and ARPA, while still using their familiar interface.

Acknowledge gives Portal a user agent for the Macintosh community immediately. Not just a "scripting terminal emulator", Acknowledge essentially provides the functions Portal intended to implement in a "remote front end" user agent since the system was originally designed in 1984. This remote front end was to have performed many of the tasks now done by the Portal System itself, including all user interaction, session handling, parsing, and error checking. Additionally, this extension of the system would have been able to operate unattended, automatically sending and receiving messages on behalf of the user, and be able to maintain locally and automatically keep current some system information to speed performance.

What Next?

With Acknowledge, availability of a Portal user agent is well ahead of plan. Portal Communications and Supermac are currently working to define an even more efficient protocol-based method of interaction between the Portal System and Acknowledge. When this is complete it will make the Portal-Acknowledge pair the highest performance, most closely coupled online service and user agent combination available.

In the long term, users are going to continue to demand more performance and more advanced features all for a lower price. For the online service industry to do this there will be a migration to an overall architecture that supports local, personal computer-based presentation via user agents and efficient computer-to-computer data transfer, mediated on the user side by the user agent. Online systems will provide more generalized facilities to support the functions of sophisticated user agents and the user agent will be configured to specific user tasks.

In short, a "mass market" for online communications, called by any number of other names such as videotext, will emerge only when on-line service vendors first provide true value to the consumer. The Portal System and Acknowledge are the tools and the technology from which such value can be created in the online industry.

Acknowledge™ 1.0

The Communications Solution

Performance without compromise.

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Acknowledge is a communications environment which allows the creation of finished programs called Connections. Connections work and behave exactly like any other Macintosh application: the user is presented with pull-down menus and dialog boxes which exactly match the requirements of the communications session.

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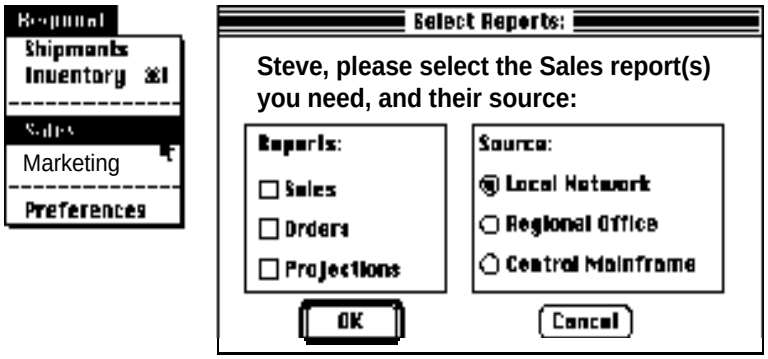
SUPERMAC SOFTWARE



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FEATURES:

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HARDWARE COMPATIBILITY

Compatibility:

- Macintosh 512Ke
- Macintosh Plus
- Macintosh SE
- Macintosh II

Printer Compatibility:

- LaserWriter
- LaserWriter Plus
- LaserWriter II
- ImageWriter I, II
- ImageWriter LQ

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