Introducing UserLand Frontier™

The Power Behind the Icons

They say the Macintosh is easy to use. But why is it so hard to find all the locked files in a folder and unlock them? Or delete all the random files created since the last time your network server was backed up?

With UserLand Frontier, you don't have to choose between pretty icons and the power to customize and automate your Macintosh. For the first time, you can have power <u>and</u> ease-of-use!

If you've ever written a dBASE application, a HyperTalk script, a spreadsheet macro or an MS-DOS or Unix batch script, Frontier is for you.

You can turn tedious, error-prone clicking and dragging into efficient scripts that even the most inexperienced user can easily double-click on. If you can do it in the Finder, you can probably write a Frontier script that automates it.

Frontier is the first scripting software that allows you to write your own desktop utilities to customize, automate and simplify the Macintosh. Finally, there's an easy way to write scripts to manage networks and System 7-compatible applications.

Frontier has all the development tools you need to get your scripts running quickly, including a full script debugger and structured symbol tables you can watch and edit while your scripts are running. When you're done, you can link scripts into Frontier's editable menu bar, or save them to the Finder desktop.

On the following pages we can only show the big picture — how the components of Frontier tie together to create the most powerful desktop scripting environment available on any personal computer. It's just a taste of what it's like to use Frontier. Because Frontier is a full, no-compromise scripting language, there really are no limits!
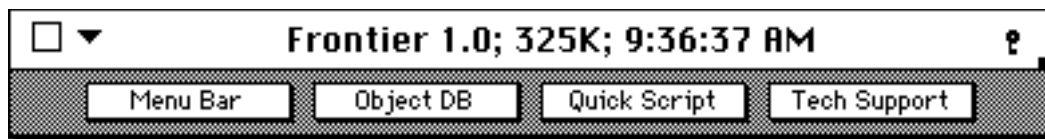

Dave Winer, President
UserLand Software, Inc.

Finally, an easy way to customize and automate your Macintosh!

Write your own utilities to control the Macintosh desktop, networks and System 7-compatible applications.
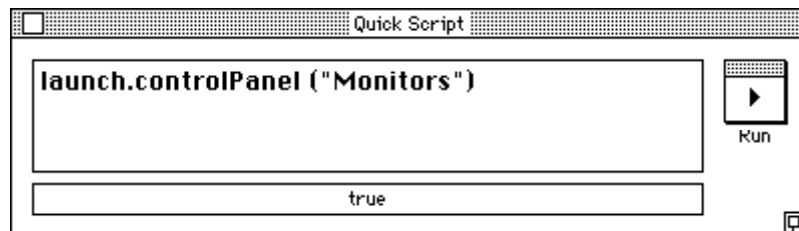
The Main Window

It's your gateway to the power of Frontier. Each of the four buttons links you to one of the powerful components of the Frontier scripting system. With the flag flipped up, Frontier's power is neatly tucked away.
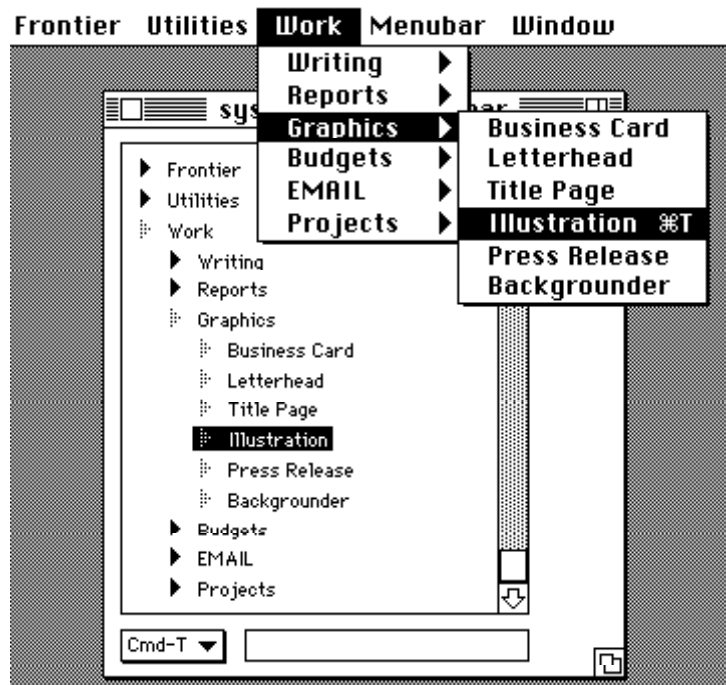
The Quick Script Window

This is Frontier's command line. Type one-line scripts to launch applications, copy and delete files and manage your Macintosh network.
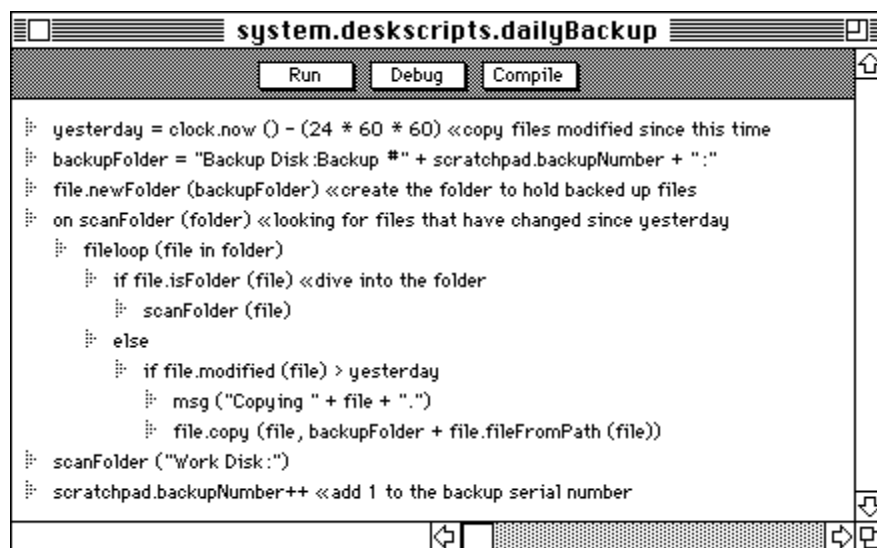
The Menu Bar Editor

Frontier lets you edit its menu bar as an outline! Change command names and keystrokes, reorganize the menus so the commands you use most often are easy to reach for. Because the menu editor is "hot-wired," your changes are immediately reflected in the Macintosh's system menu bar.

A Script Window

Scripts can be launched from the Finder desktop, from Frontier's user-editable menu bar, or from compatible application software. Or run as background processes or "agents." Frontier scripts are easy because they're outlines. Collapse details to get the big picture. Reorganize whole sections of code with a single command. Scripts can drive the Macintosh operating system or Apple event "wires" in System-7 compatible applications.

```
≡□≡≡≡≡≡≡ system.deskscripts.dailyBackup ≡≡≡≡□≡
                [ Run ]  [ Debug ]  [ Compile ]                    ⇧

⊪  yesterday = clock.now () - (24 * 60 * 60) «copy files modified since this time
⊪  backupFolder = "Backup Disk :Backup #" + scratchpad.backupNumber + ":"
⊪  file.newFolder (backupFolder) «create the folder to hold backed up files
⊪  on scanFolder (folder) «looking for files that have changed since yesterday
   ⊪  fileloop (file in folder)
      ⊪  if file.isFolder (file) «dive into the folder
         ⊪  scanFolder (file)
      ⊪  else
         ⊪  if file.modified (file) > yesterday
            ⊪  msg ("Copying " + file + ".")
            ⊪  file.copy (file, backupFolder + file.fileFromPath (file))
⊪  scanFolder ("Work Disk :")
⊪  scratchpad.backupNumber++ «add 1 to the backup serial number              ⇩
⇦▯░░░░░░░░░░░░░░░░░░░░░░░░░░░⇨⊡
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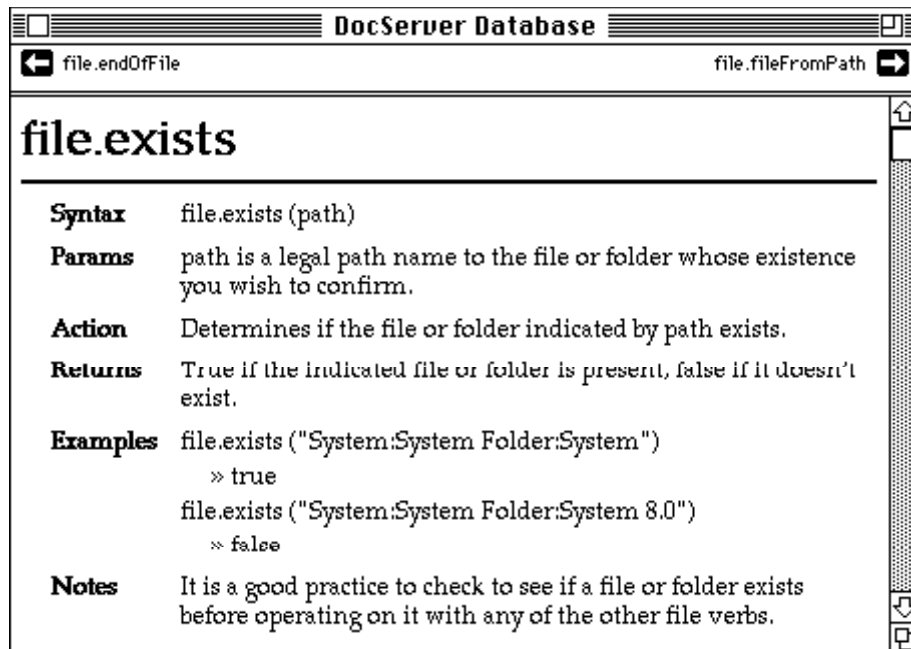
A Full Scripting Language

Frontier's scripting language, UserTalk, is a no-compromise yet streamlined programming language, allowing full logic, looping, case statements, sub-scripts, local variables, and special constructs, with over 350 built-in verbs to give users new power to automate and customize the Macintosh. It's easy to get started scripting with Frontier, but you won't hit a lot of dead-ends.
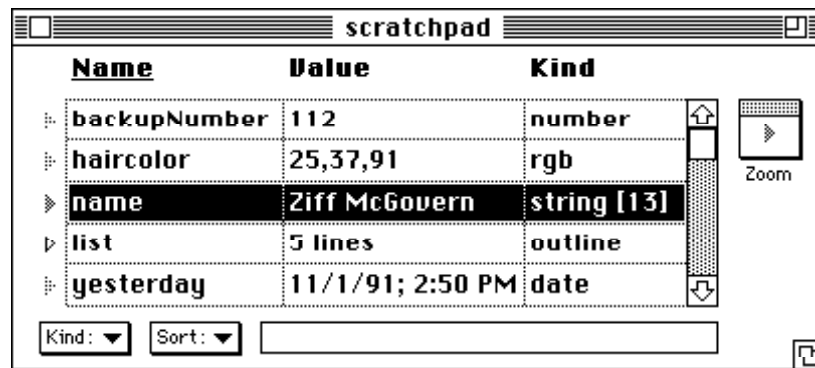
Easy, On-Line Documentation

Want to know how a UserTalk verb works? Double-click on it to get a complete description with examples.

DocServer Database

⬅ file.endOfFile   file.fileFromPath ➡

file.exists

Syntax	file.exists (path)
Params	path is a legal path name to the file or folder whose existence you wish to confirm.
Action	Determines if the file or folder indicated by path exists.
Returns	True if the indicated file or folder is present, false if it doesn't exist.

Examples	file.exists ("System:System Folder:System")
	    » true
	file.exists ("System:System Folder:System 8.0")
	    » false

Notes	It is a good practice to check to see if a file or folder exists before operating on it with any of the other file verbs.

Object Database

Stores small objects like a user's name, or the time you last did a backup. Or larger objects like a list of users, a standard form letter, or a sub-table of electronic mail accounts. Makes it easy for scripts to communicate with each other. The Object Database is a permanent data structure, so you don't have to worry about complicated file formats for your scripts. Great for network server applications!
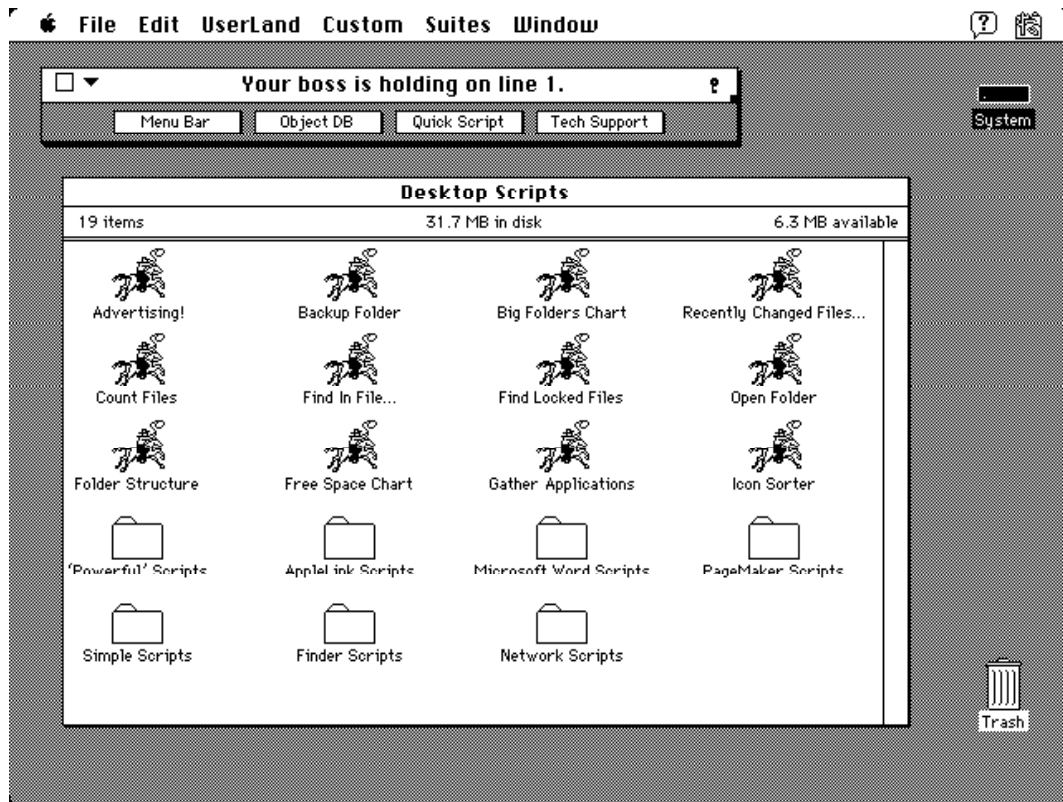
Name	Value	Kind
backupNumber	112	number
haircolor	25,37,91	rgb
name	Ziff McGovern	string [13]
list	5 lines	outline
yesterday	11/1/91; 2:50 PM	date

Desktop Scripts

Scripts that live on the Finder desktop are called "desktop scripts." Double-click on the icon to run the script. Hold down the Command-key to edit the script's source code.

Major Discovery: Macintosh has an Operating System!

It may come as a suprise that underneath all its pretty icons, the Macintosh has a real operating system that rivals minicomputer and mainframe operating systems in depth and flexibility. With System 7, it has even more gutsy power. Without Frontier, there was no way to tap that power.

The Importance of "Apple Events"

While both Frontier and System 7 were in development, UserLand consulted with Apple Computer to be sure that their operating system would support UserLand's vision for scriptable applications. The resulting technology, known as "Apple Events" is a perfect fit for Frontier script writing. As more developers add interapplication Apple Events to their software, Frontier scripts will be able to do more and more.

If you can do it in the Finder…

…you can probably write a Frontier script that automates it. Frontier fills the gap that's always existed on the Macintosh – no system-level scripting language. Power users can simplify the system for less sophisticated users. Frontier is just like "batch" or "shell" languages on character based machines, with the graphic difference. You can write scripts to automate all the repetitive dragging and clicking you'd do in the Macintosh Finder.

If you can use a spreadsheet…

…you can customize your Mac desktop with Frontier. Or, if you have experience writing HyperTalk scripts, dBASE applications, MS-DOS batch files or Unix shell scripts. Frontier is a gutsy script development system, so the more experience you have programming, the more power you'll get from Frontier.

If you ever think about

how you use your Macintosh,

then Frontier is for you!

Features

- Scripts can be launched from the Finder desktop, from Frontier's user-editable menu bar, or from compatible application software. Or run as background processes or "agents."

- The most complete and powerful scripting language available on any desktop computer.

- Scripts can send interapplication messages to System 7-compatible software, including the System 7 Finder.

- Over 350 built-in verbs offer complete file management, text processing, system operations and much more.

- Built-in, fully scriptable word processor and outline processor.

- Complete outline-based script editor and debugger.

- Frontier's object database allows scripts to communicate with each other and store information permanently. It's a combined language symbol table and computer filing system. Great for network server applications.

- Over 100 sample scripts get you started and show you how to make Frontier perform.

- 700-page combined User's Guide and UserTalk Reference Guide written by Dan Shafer, noted scripting expert and Frontier script writer. On-line DocServer application documents all Frontier verbs.

- CompuServe forum for script writing support. Enter GO USERLAND at any CompuServe ! prompt.

Benefits

- For the first time you can customize, automate and simplify the Macintosh operating system, file system and System 7-compatible application software.

- Because Frontier lives outside any application, you can write scripts that combine the features of several programs.

- You learn one language. With Frontier you won't have to learn a different language to write scripts for each of your programs.

• For the first time you can write scripts to drive graphics, page layout, file management, electronic mail and utility software.

The Reviewers & Users Love Frontier!

"The Macintosh's easy-to-use graphical interface, while sophisticated, hides the underlying operating system so well that tasks DOS users take for granted – running batch files, for example – are extremely difficult for Macintosh users to perform. Frontier changes all that." — PC WEEK.

"Frontier can perform a myriad of useful tasks." — MacWEEK.

"It provides easy access to virtually every capability of the Macintosh – an impressive feat." — PC WEEK.

"Frontier lets Mac users write batch scripts to handle an army of chores. With abilities like these, it doesn't take long to write scripts to handle everything." — BYTE.

"It's an amazing time saver." — Dan Shafer, author, consultant, Frontier script writer.

"Mac users have wanted something like this since 1984, whether they called it user scripting, batch files, macros or command-line programming." — MacUser.

"Winer's team has done a masterful job of using the outline paradigm to make the script writing as painless as possible." — MacWorld.

"Stunning achievement!" — Eugene Evans, ICOM Simulations, Frontier user.

"UserLand is leading the industry towards a whole new way of using personal computers." — Randy Battat, Vice-President for Portable Computing, Apple Computer, Frontier script writer.

"Frontier could be a phenomenon like dBASE." — Bove and Rhodes Inside Report.

"A big step in an important direction." — Infoworld.

System Requirements

• Requires Macintosh System 7.0 or higher.

• 1024K RAM.

• A hard disk.

• Compatible with AppleShare and System 7.0 File Sharing.

• Prints on all LaserWriter and ImageWriter compatible printers.

Orders: CompuServe 76703,4047; AppleLink userland.dts; Internet userland.dts@applelink.apple.com. Include VISA/MC info, mailing address. Or call 1-800-845-1772.

Shipping and Handling: $10 US, $15 Canada, $70 International. California and Massachusetts residents add sales tax.

Call or Email for special 5-pack, 10-pack and 25-pack discount info.

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AppleLink: UserLand Discussion Board under the Third Parties icon. CompuServe: GO USERLAND at any ! prompt.