

Panorama Wizards & Demos

Panorama Wizards & Demos (Version 6.0)
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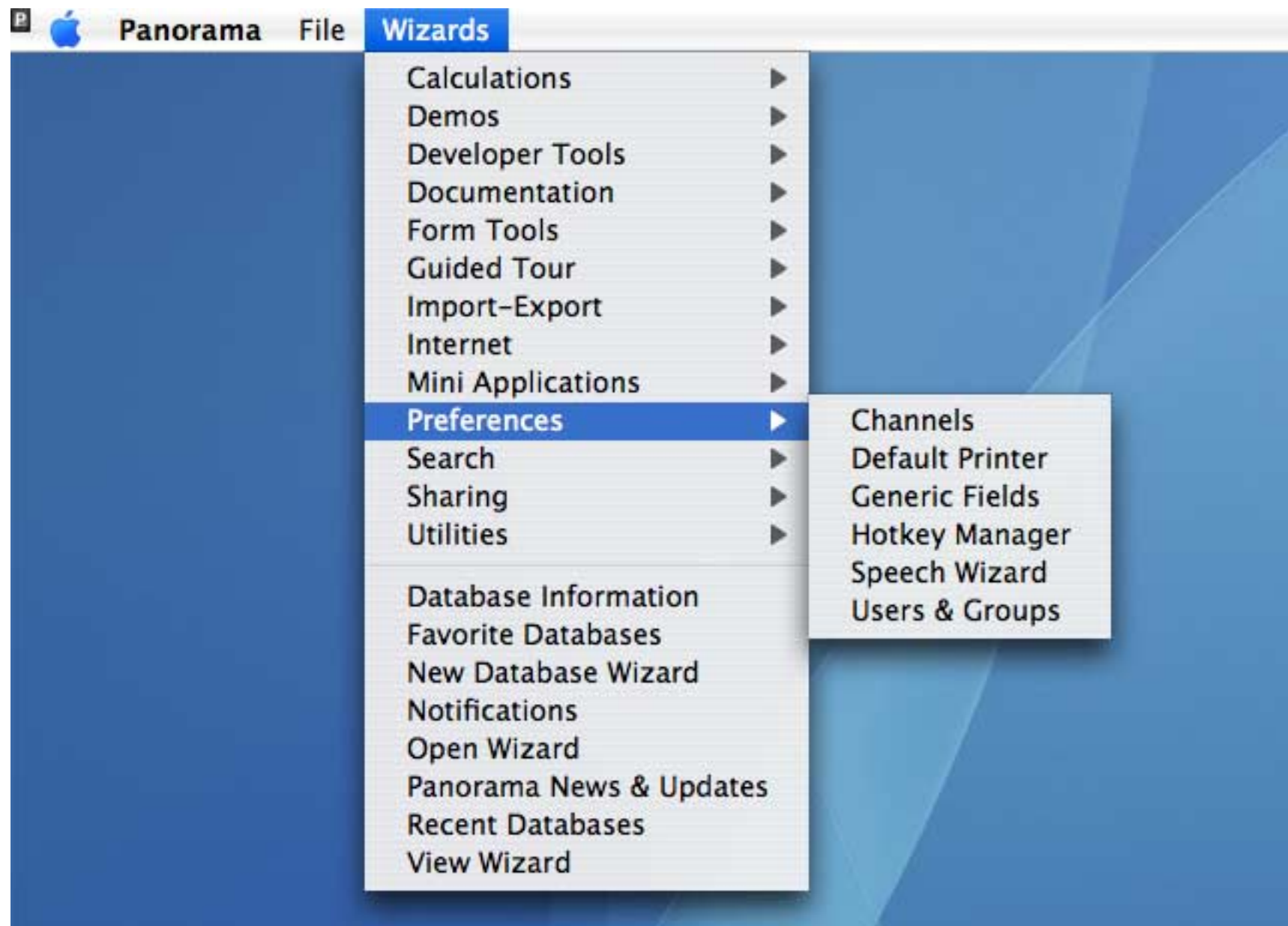
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Preferences, Wizards & Demo Files



Panorama includes a number of pre-built databases that you can use as is, modify for your own purposes, or simply use as learning tools. With only a few exceptions these pre-built databases are completely accessible so that you can not only use them as is but also take them apart and see how they work. All of these databases can be opened with the **Wizards** menu and its submenus.



Wizard & Demo File Quick Reference

The wizards and demo files provided with Panorama fall into several categories.

Submenu	Wizard	Page	Description
Main Menu	Database Information	Page 12	View and modify database metadata information
	New Database Wizard	Page 13	Helps to design and create new databases
	Notifications	Page 14	Open wizards from list (or with keyboard)
	Open Wizard	Page 22	Open wizards from list (or with keyboard)
	Panorama News & Updates	Page 18	Check for news and Panorama updates
	Recent Databases	Page 20	Re-open recently accessed databases
	View Wizard	Page 22	Open form and procedure windows
Calculations	Formula Wizard	Page 23	Workbench for experimenting with formulas
	Mini Calculator	Page 23	Basic math calculator
	RPN Programmers Calculator	Page 24	Calculator for decimal, hex, octal and binary
	Run Automatic Calculations	Page 25	Recalculate based on design sheet formulas
Demos	Example Launcher	Page 25	Quickly open Panorama example databases
	ScreenCast Demos	Page 26	Install and try out databases used in screencasts
Developer Tools	ASCII Chart	Page 28	Table of ASCII characters
	Channel Workshop	Page 29	Assists with building new channel modules
	Crash Recorder	Page 29	Record information for debugging crashes
	Cross Reference	Page 30	Organize multi-database projects
	Custom Functions (ProVUE)	Page 31	View custom functions included with Panorama
	Custom Functions (User)	Page 32	Create your own custom functions
	Custom Statements	Page 32	Create your own custom statements
	Debug Log	Page 33	Trace internal operation of a program
	Dialog Workshop	Page 34	Helps to build custom dialogs
	Dropalyzer	Page 35	Tool for analyzing drag and drop operations
	Elastic Picture Workshop	Page 36	Modify pictures so they won't distort when stretched.
	Error Detail	Page 37	Display additional information about errors
	Resource Menu Editor	Page 42	Edit custom menu resource files
	TTY	Page 43	Display "teletype" messages
	Variables	Page 43	Display and edit the contents of variables
	Web Form Converter	Page 44	Convert Panorama Forms to HTML/CSS
Documentation	Help & Documentation	Page 45	Access all types of Panorama documentation
	Programmers Reference	Page 48	Searchable reference to all statements and functions
	Screencasts	Page 49	Watch Panorama Demo & Training Movies
Form Tools	Font Usage	Page 50	Display list of fonts used in forms.
	Form Explorer	Page 50	Display/edit information about form objects
	Icons & Backgrounds	Page 51	Display images contained in Panorama itself
	Window Size	Page 51	Display size of window
	Window Tweak	Page 51	Disable window tool palettes and scroll bars

Submenu	Wizard	Page	Description
Import/Export	Excel Wizard	Page 52	Transfer data to/from Excel spreadsheets
	Financial Data Wizard	Page 60	Import financial data (QIF, OFX, QFX)
	Text Export	Page 62	Export data into text files
	Text Import	Page 63	Import data from text files
	VCard Wizard	Page 64	Import/Export VCard information
Internet	Address Info	Page 65	Check address and zip code information
	Bulk Email	Page 68	Send mass e-mails
	FedEx Tracking	Page 70	Track FedEx shipment information
	URL Wizard	Page 71	Open web/email URL's stored in current record
	White Pages	Page 73	Look up phone numbers
Mini Applications	Mini Calendar	Page 85	Basic calendar/event database
	Mini Contacts	Page 81	Basic name & address database
	Mini Correspondence	Page 87	Basic correspondence/mail merge database
	Mini Statistics	Page 88	Calculate mean, standard deviation, plot distribution.
	Stopwatch	Page 88	Simple timer
	Task Timer	Page 89	Keep track of time spent on different tasks
Preferences	Channels	Page 93	Configure channels for phone dialing, email, etc.
	Default Printer	Page 97	Specify the default printer for a form (OS X)
	Generic Fields	Page 98	Configure generic fields for contact information
	Hotkey Manager	Page 99	Configure universal and database specific hot keys
	Speech Wizard	Page 103	Configure speech templates
	Users & Groups	Page 110	Configure limited access to data and operations
Search	Live Clairvoyance	Page 111	Performs "live" searches on any database
	Quick Search	Page 112	Quick searches based on multiple fields
	Search All Fields	Page 115	Search entire database (not one field at a time)
Sharing	Available Servers	Page 117	Display available servers
	Database Sharing Options	Page 117	Change database sharing/web options
	Server Administration	Page 117	Monitor and control Panorama Enterprise Server
	Sharing Info	Page 117	Display sharing status of open databases
	Sync Conflict Resolution	Page 117	Display/modify possible conflicts after offline sync
	Verify Synchronization	Page 117	Check client database against server database
Utilities	Arrange Windows	Page 118	Tile and stack windows
	File Permissions	Page 119	Scan and fix file permissions (OS X)
	Disk Permissions	Page 122	Display disk permissions (OS X)
	Open Database	Page 123	Open database with special options
	Platform Converter	Page 124	Convert between versions and platforms
	Summaries & Outline	Page 125	Categorize and subtotal database information
	Zap Page Setup	Page 126	Reset Page Setup/Printer Info (OS X)

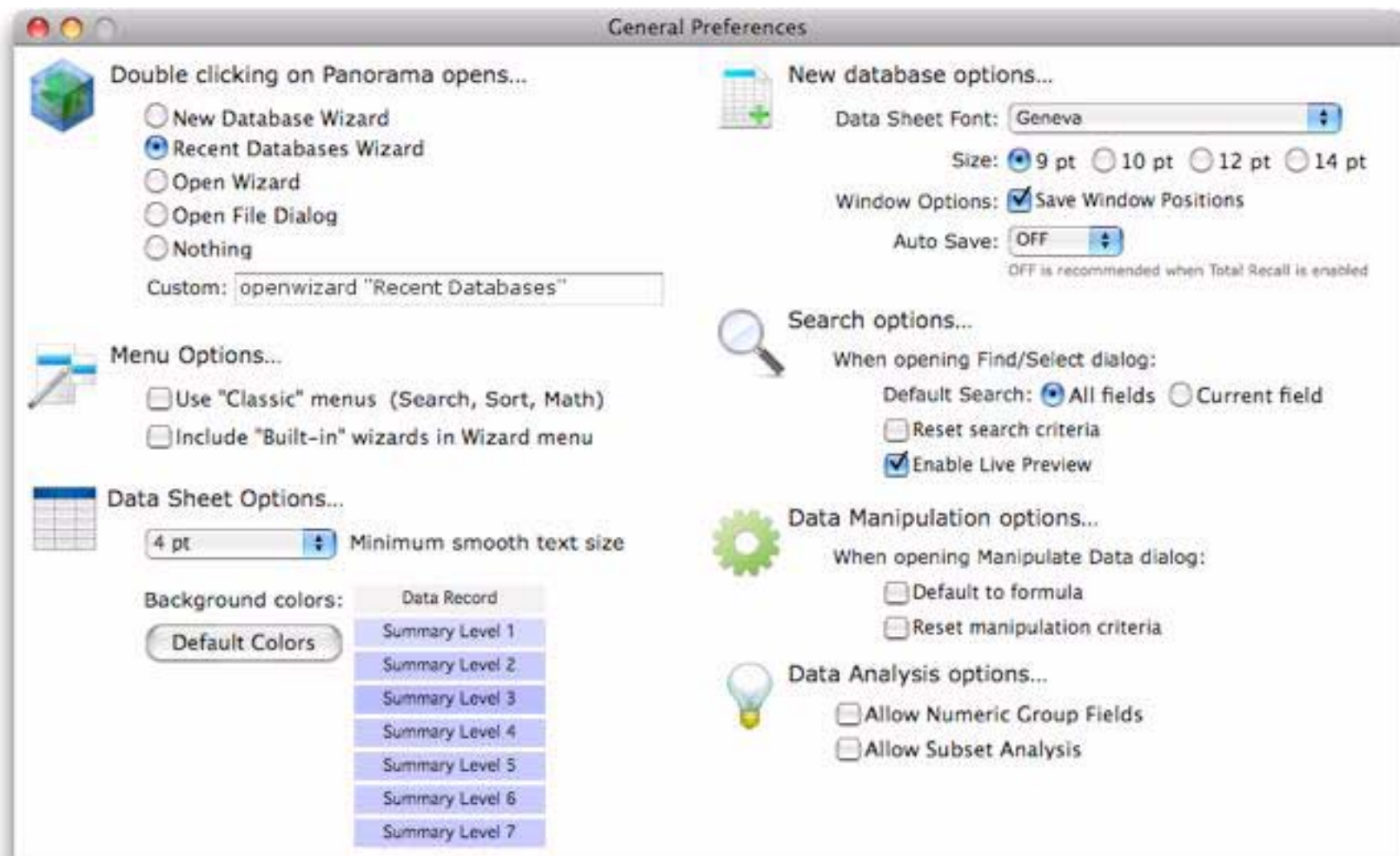
Preferences

Panorama preferences are accessible from the Panorama menu. Choosing **Panorama-> Preferences** opens the main preferences window (the exact configuration may vary somewhat):



General Preferences

The first option is always **General Preferences**.



Double clicking on Panorama opens...

This option controls what happens when you double click on the Panorama application. The most common options are the Recent Databases wizard (allowing you to quickly open previously used databases) and the Open File dialog (this was the default in earlier versions of Panorama.)

Use “Classic” menus (Search, Sort, Math)

Panorama’s menu structure remained more or less the same from Panorama 1.0 to 5.5, then were completely restructured in Panorama 6.0. Panorama 6.0 also introduced many new dialogs, including Find/Select, Formula Fill, and more. We think the new menus and dialogs are more logical, but if you like the old structure better simply check this option to get the old “classic” menus and dialogs back. The change takes place immediately and you can switch back and forth at any time.

Include “Built-in” wizards in Wizard menu

Some wizards are directly accessible from Panorama’s normal menus (see list below). Starting with Panorama 6.0, these wizards are no longer listed in the **Wizard** menu. If you would like these wizards to be listed in both the regular menus and the **Wizard** menu, check this option.

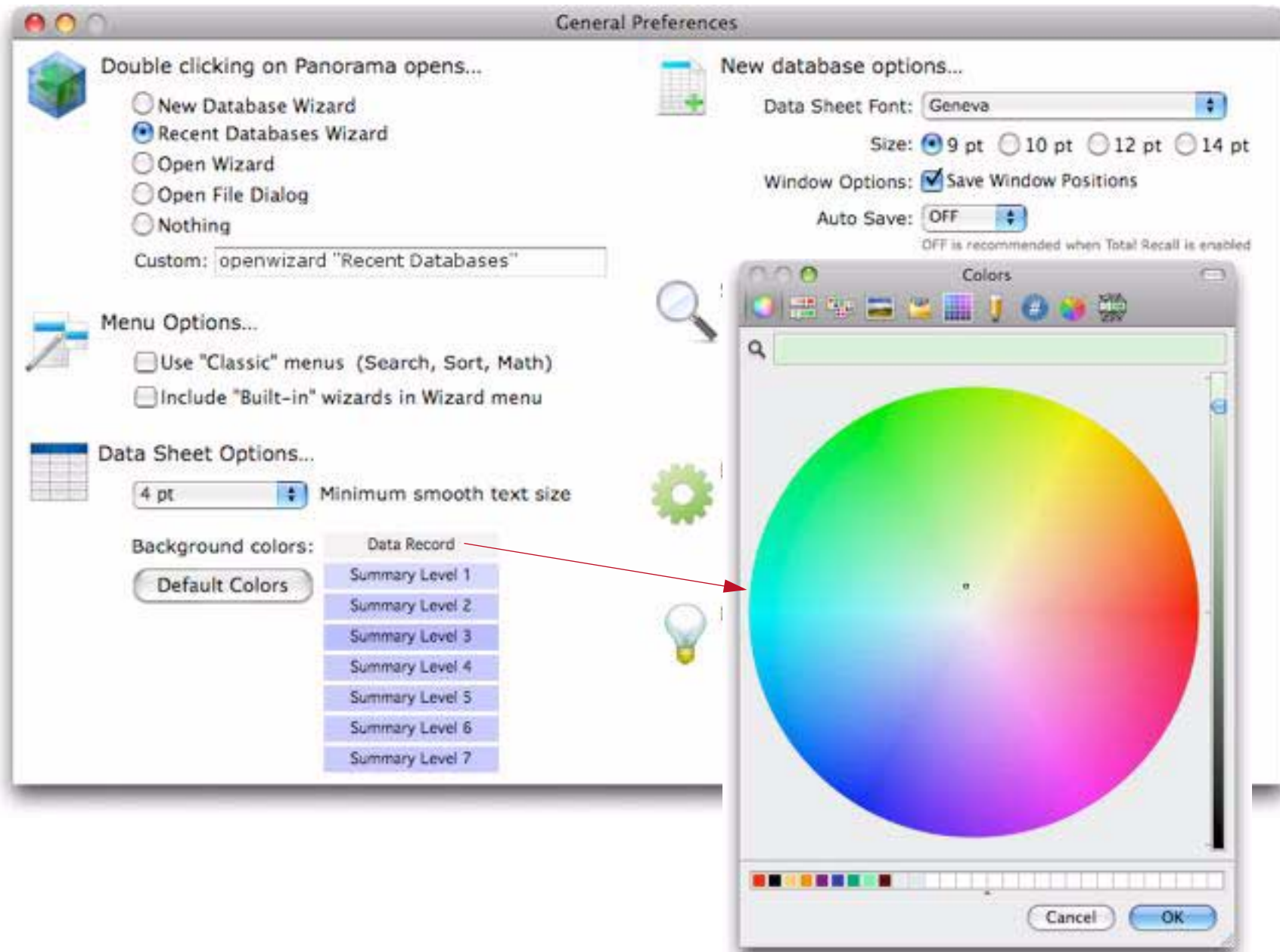
Help & Documentation	Programming Reference	New Database Wizard	Recent Databases
Time Lapse	Text Import Wizard	Text Export Wizard	Purchase Panorama
Refer-A-Friend	Summary & Outline	Zap Page Setup	Live Clairvoyance
Quick Search	Search All Fields	General Preferences	Authorize.Net
Channels	Default Printer	Generic Fields	Hotkey Manager
Speech Wizard	Total Recall	Users & Groups	

Data Sheet Options - Minimum Smooth Text Size

This option controls whether or not text in the data sheet is smoothed (this option is for Mac OS X only, on Windows systems it will always be smoothed if smooth text is available). The pop-up menu allows you to choose whether to always smooth, never smooth, or to only smooth above a specified point size.

Data Sheet Options - Background Colors

In the data sheet, Panorama normally displays data cells with a gray background and summary records with various shades of blue. This section of the preferences allows you to change these colors. For example you could change the data background to white or green. To change a color simply click on one of the eight color swatches.



Use the color picker to choose the color, then press **OK**. Any open datasheets will update to show the new color.

	First	Last	Title	Company	Address	City	State	Zip
	John	Doe	Vice President					
	Susan	Brown	Sales Manager	Power Lumber	339 Arnold Road	Newton	MA	
	Randy	Cross	Owner	Randy's Appliances	133 Hunt Rd	Chelsford	MA	01824
	Gregory	Wing	President	GW Printing	779 Arnold Rd	Newton Centre	MA	02159
	Jeffrey	Rodman			2 Cary Rd	Chestnut Hill	MA	02167
	Leslie	Bianchi			23 Oak St	Lexington	MA	02173
	Peter	Yarensky	Owner	Peter's Appliances	41 Elm St	Dover	NH	03820
	John	Draper	Sales	Exeter Video	446 Exeter Rd	Hampton	NH	03842
	Cheryll	Howell	Sales Manager	Gray Lumber	4 Fran Circle	Gray	ME	04039

New Database Options

These options control the font, text size, and window saving options for new databases. See “[New Database Options \(Font, Windows, Save As\)](#)” on page 61 of the *Panorama Handbook* for more information.

Search Options

These options customize the operation of the **Find/Select** dialog. See “[Customizing the Find/Select Dialog](#)” on page 360 of the *Panorama Handbook* for more information.

Data Manipulation Options

These options customize the operation of the **Manipulate Data in Field** dialog. See “[Customizing the Manipulate Data Dialog](#)” on page 464 of the *Panorama Handbook* for more information.

Data Analysis Options

These options customize the operation of the **Summarize & Analyze** dialog (see “[The Summarize & Analyze Dialog](#)” on page 371 of the *Panorama Handbook*).

Allow Numeric Group Fields. The **Summarize & Analyze** dialog normally lists only text and date fields in the group pop-up menu. If you want to list numeric fields also, check this option.

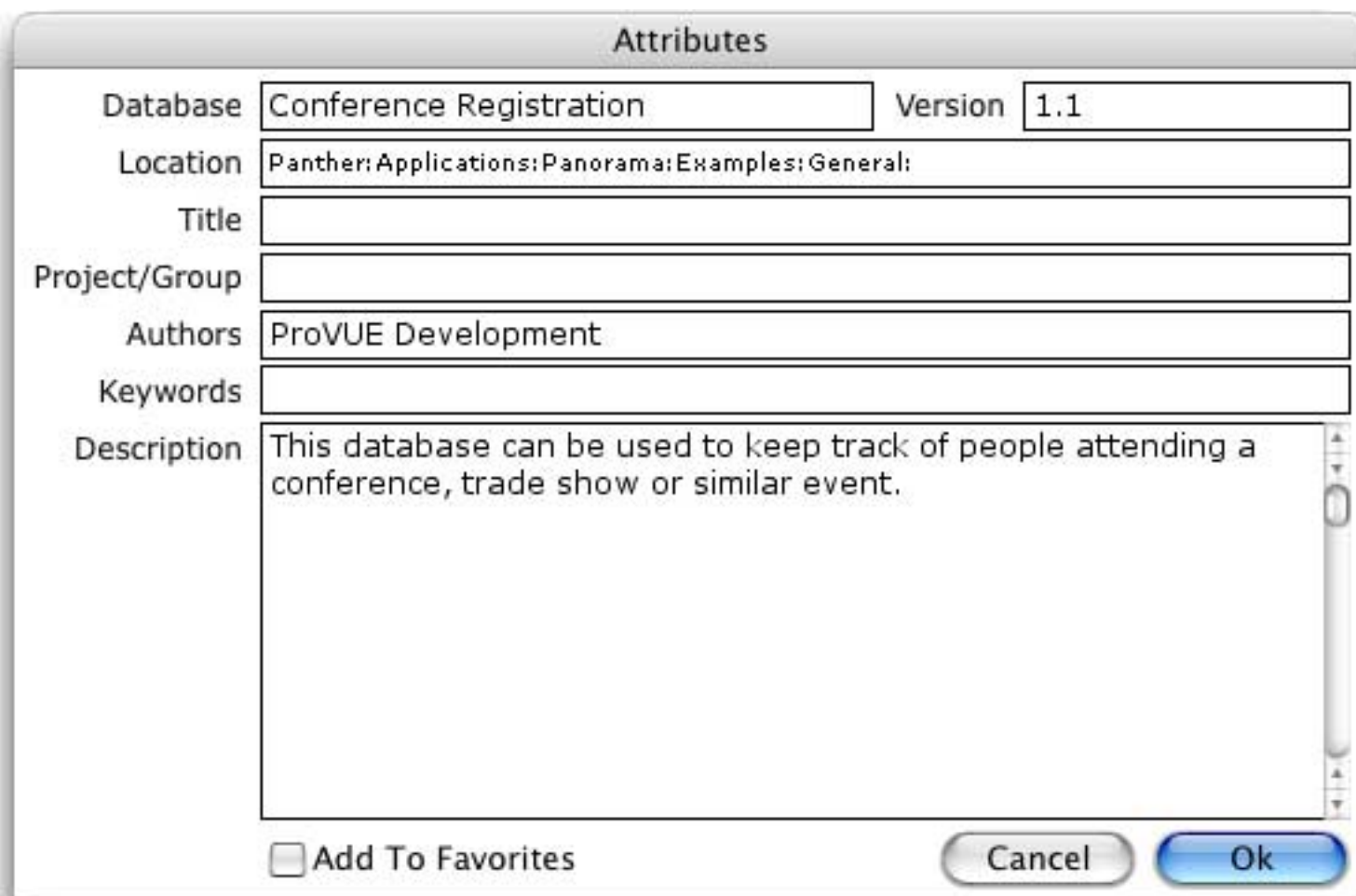
Allow Subset Analysis. The **Summarize & Analyze** dialog normally selects all of the data in the database before performing the analysis. If you want to be able to analyze a selected subset of a database check this option.

Primary Wizards

The most basic and commonly used wizards have been placed in the primary **Wizard** menu instead of in a submenu.

Database Information

The **Database Information** wizard allows you to view and modify descriptive information about any database: the title, author name, description, keywords, etc. (This wizard is normally accessible only from the **Setup** menu, but is also available in the **Wizard** menu if “built-in” wizards are enabled in General Preferences [see “[Include “Built-in” wizards in Wizard menu](#)” on page 9].)

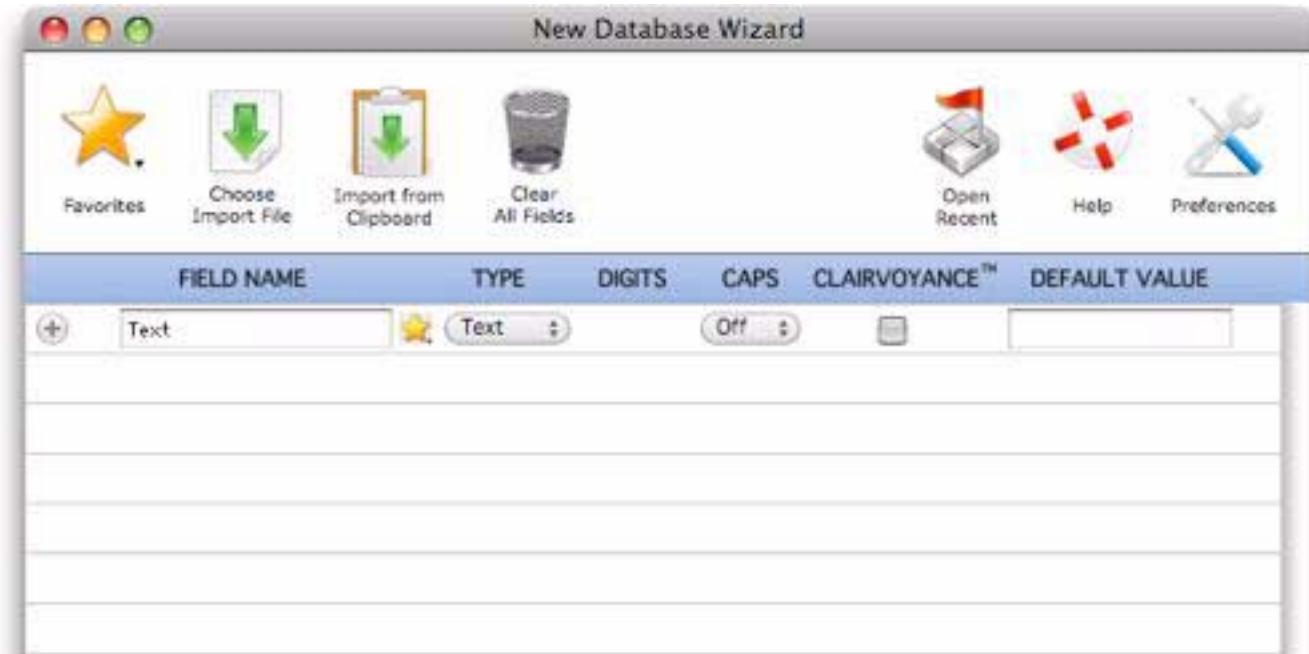


Attributes			
Database	Conference Registration	Version	1.1
Location	Panther: Applications: Panorama: Examples: General:		
Title			
Project/Group			
Authors	ProVUE Development		
Keywords			
Description	This database can be used to keep track of people attending a conference, trade show or similar event.		
<input type="checkbox"/> Add To Favorites		Cancel	Ok

To learn more about this wizard see “[Viewing and Modifying Database Metadata](#)” on page 73 of the *Panorama Handbook*.

New Database Wizard

The **New Database Wizard** makes it easy to design and set up the fields for a new database. You simply enter the names of the fields you want to create and press the **Make New Database** button. The wizard does the rest. (This wizard is normally accessible only from the **File** menu, but is also available in the **Wizard** menu if “built-in” wizards are enabled in General Preferences [see “[Include “Built-in” wizards in Wizard menu](#)” on page 9].)



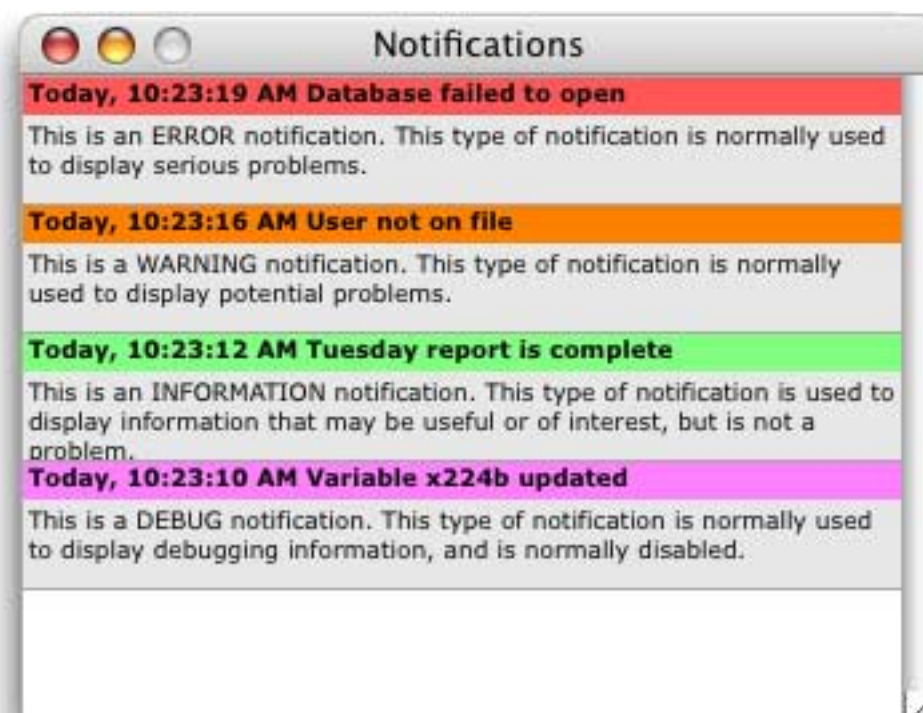
To learn more about creating databases with this wizard see “[Using the New Database Wizard](#)” on page 50 of the *Panorama Handbook*.

Notifications Wizard

In some situations Panorama will use the **Notifications** wizard to inform you when problems or situations that might require your attention occur. Unlike an alert, the **Notifications** wizard doesn't interrupt your work by requiring you to dismiss the message before continuing (this is especially true if you use the optional **Growl** package, see "[Using Growl for Notifications](#)" on page 16). You can also review problems that occurred earlier in the session.

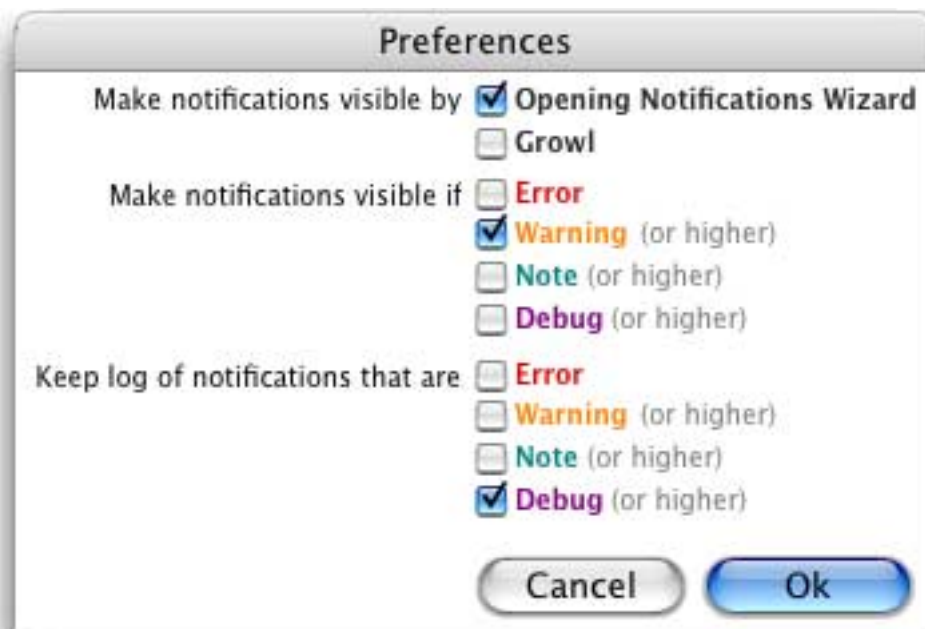
As of Panorama 5.5 the **Notifications** wizard is primarily used to let you know about problems that occur during database sharing operation. For example, if there is a connection problem when opening database this wizard will appear automatically. In future versions we expect to expand the use of the **Notifications** wizard to cover additional situations. You can also use the **Notifications** wizard in your own applications.

The **Notifications** wizard displays a list of the notifications that have occurred since Panorama was launched. The most recent notification is at the top, earlier notifications are listed below. There are four types of notifications: Errors (red), Warnings (orange), Information (green), and Debug (purple). Each notice has a title and additional detail, as shown below (the notifications shown below are just examples, and do not reflect the actual notifications you may see).

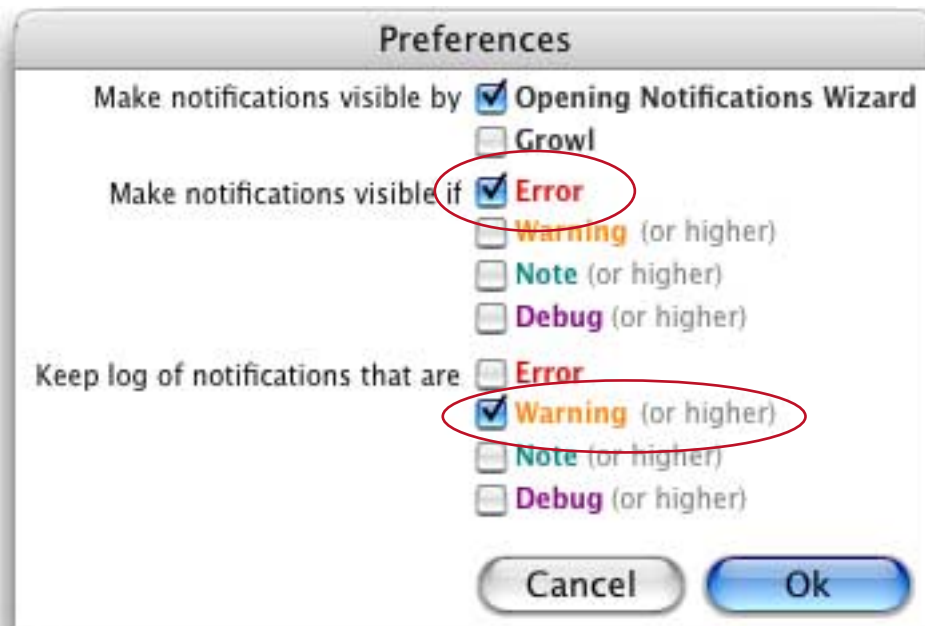


When does the Notifications Wizard appear?

By default, the **Notifications** wizard will appear automatically whenever an error or warning occurs, but not when an information or debug notice occurs. However, you can use the **Preferences** command (in the **Admin** menu) to change this behavior.



For example, you can modify the settings so that only **Errors** make the wizard appear automatically, and so that information (notes) and debug notices are simply discarded (they won't even appear in the wizard if you open it manually).



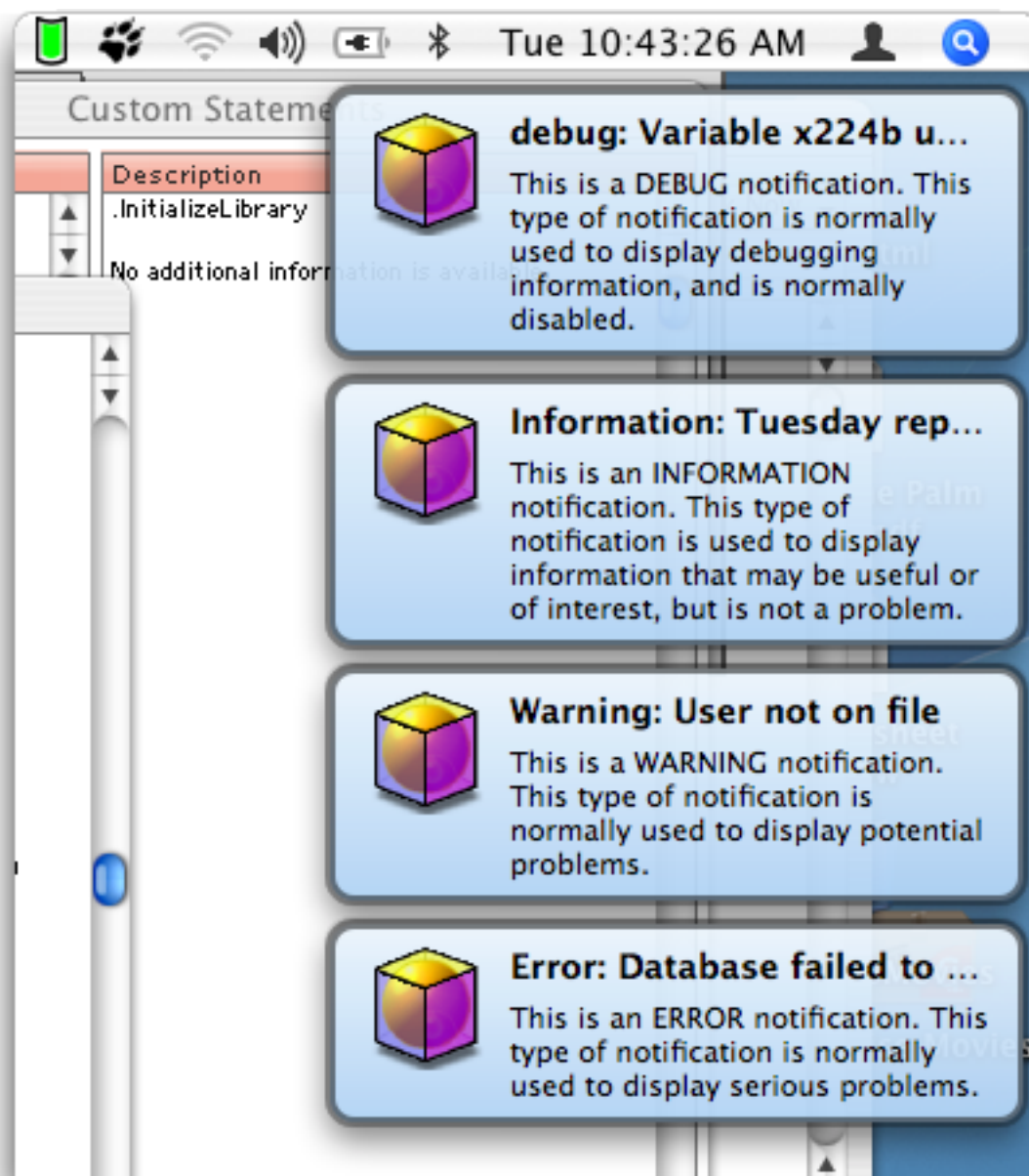
Note: The notification settings for each computer are separate. Setting the notification settings on the server has no effect on any client, and changing the notification options on any client doesn't affect the server or any other client. In other words, if you want to make a change across the network you'll need to go to each computer and make the change.

Using Growl for Notifications

Growl is a very cool free open source add-on for OS X that displays temporary messages that fade away automatically after a few seconds. In other words, a perfect way to display notifications! If Growl is installed on your computer then the **Notifications** wizard Preferences dialog gives you the option of displaying notifications via Growl instead of by opening the **Notifications** wizard (you can always open the **Notifications** wizard manually from the **Wizard** menu). If you don't already have a copy of Growl you can download it from this web site.

<http://growl.info/>

It's a small download (2 mb) and installs easily. Once it's installed you can enable the Growl option and your notices will appear in floating "bubbles" while you can continue to work. (In the example below we also set the visible notification level to "Debug".)



After a short delay the notices will fade away, or they will disappear immediately if you click on them.

Using the Notification Wizard in your own database applications

Using the `notify` statement your applications can create their own notifications for errors and significant events. See the **Programming Reference** wizard for details on how to use this statement.

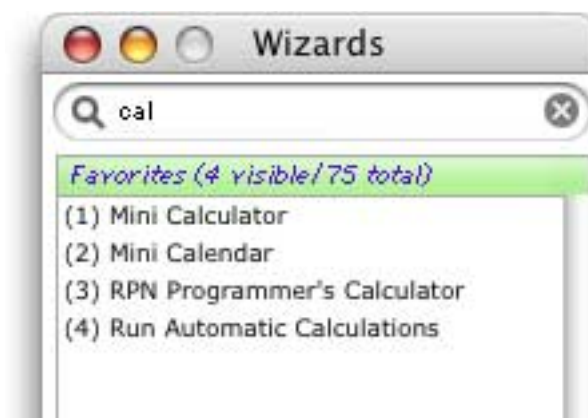
Open Wizard

As of version 5.5 Panorama now includes 75 wizards spread across a dozen submenus of the **Wizard** menu. The **Open Wizard** wizard provides an alternate method to quickly open any of these 75 wizards. When you open this wizard it initially displays an alphabetical list of all available wizards.



To open a wizard simply double click its name on the list. You can also open the first nine items simply by pressing the **1** thru **9** keys on your keyboard. There's no need to press **Return**, **Enter**, or anything else, just press the number and the wizard will launch.

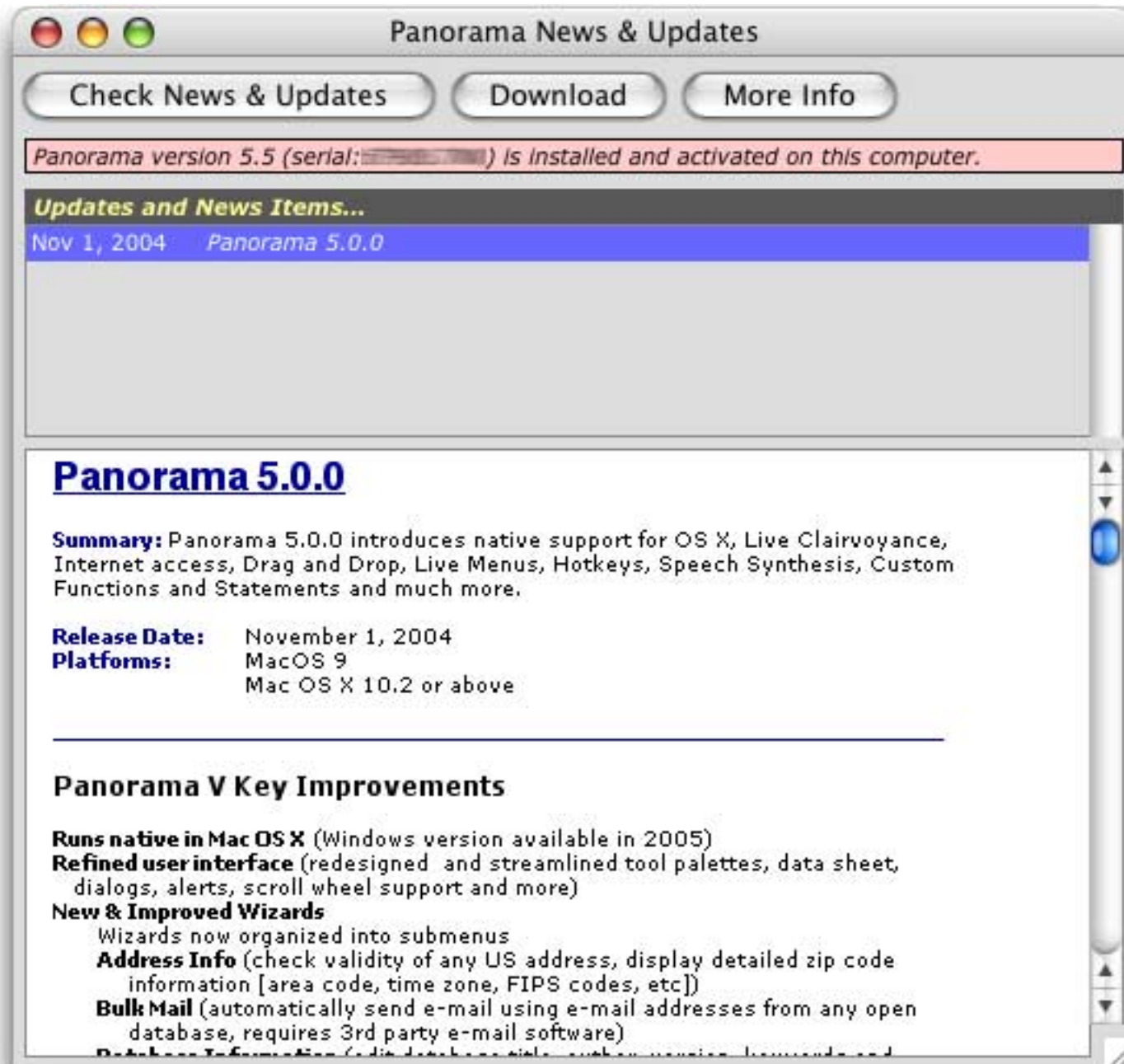
To search for a particular wizard simply type into the search box at the top of the wizard.



At any time you can press the **1** thru **9** keys to launch a wizard. For example type **cal1** to launch the **Mini Calculator**, **cal2** to launch the **Mini Calendar**, etc. You can launch any wizard with just a few keystrokes.

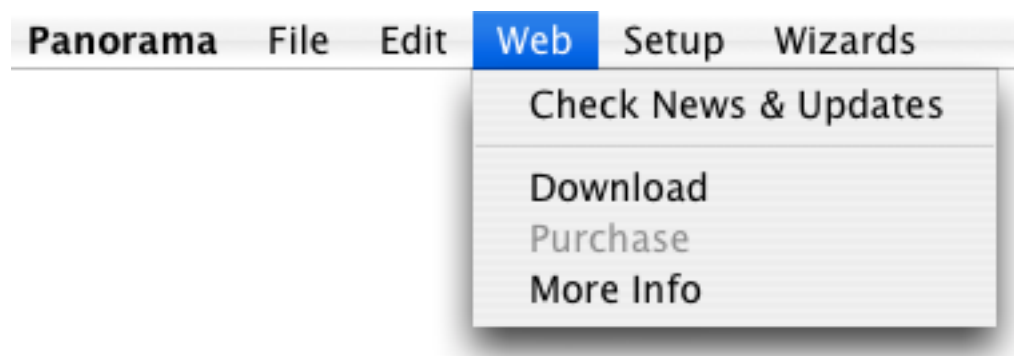
Panorama News & Updates

This wizard checks for new versions of Panorama, and notifies you if there is a new version available. The wizard displays a list of recent updates and news items, with the most recent items listed at the top. Click on an item to see more information about it in the lower half of the window. (This wizard is normally accessible only from the **Panorama** menu, but is also available in the **Wizard** menu if “built-in” wizards are enabled in General Preferences [see “[Include “Built-in” wizards in Wizard menu](#)” on page 9].)



The Web Menu

The **Web** menu automatically accesses ProVUE's web server for more information about a news item. The contents of this menu will change depending on the item — for example if you have already purchased an update the **Purchase** item will be disabled. The commands in the Web menu are also available as buttons at the top of the wizard's window. Like the menu, these buttons automatically adjust depending on the news item.



Panorama periodically checks for news and updates (see below), but if you want to check right now for the latest news press the **Check News & Updates** button or choose this item from the menu.

To find out more detailed information about this news item select the **More Info** item (or click on the **More Info** button). This will open your web browser to display a page with additional information about this item.

To download a new version of the software mentioned in this news item select the **Download** item (or click on the **Download** button). This will open your web browser to the download page for this software. You'll still have to manually start the download and install the new software.

To purchase a new version of the software mentioned in this news item select the **Purchase** item (or click on the **Purchase** button). This will open your web browser to the order page for this software. You can then review the price and other ordering information for this upgrade.

Changing the Check for Update Frequency

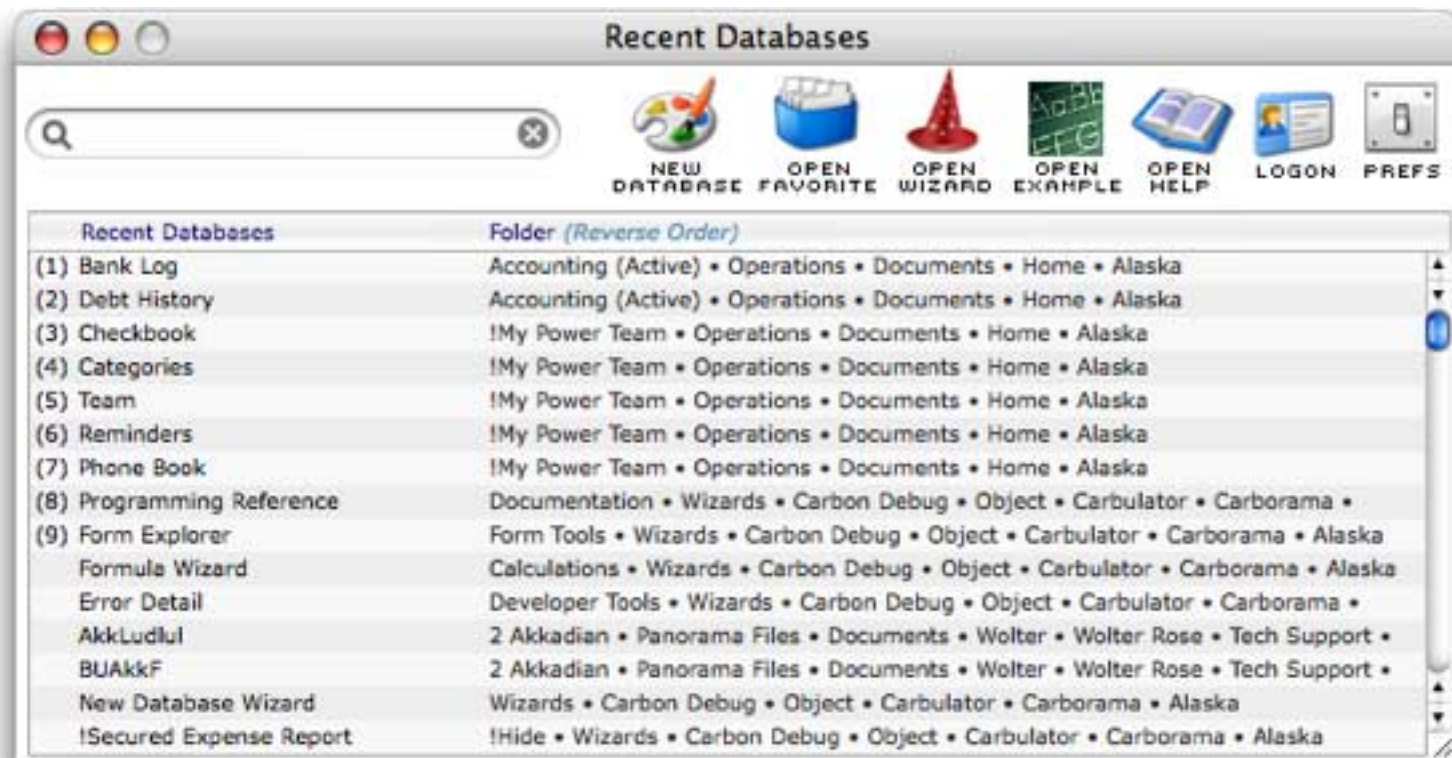
Panorama normally checks to see if there is any new news items or updates once a week. To adjust this frequency use the **Preferences** command in the **Setup** menu.



The frequency may be set to Every Launch, Daily, Weekly, Monthly, Quarterly, Annually or Never.

Recent Databases Wizard

This wizard makes it easy to re-open recently opened databases. It can be opened by choosing **Recent Databases** from the **File** menu in addition to being listed in the **Wizard** menu. The wizard lists the databases that have been opened recently. (This wizard is normally accessible only from the **File** menu, but is also available in the **Wizard** menu if “built-in” wizards are enabled in General Preferences [see “[Include “Built-in” wizards in Wizard menu](#)” on page 9].)



To re-open a database simply double click its name on the list. You can also open the first nine items simply by pressing the **1** thru **9** keys on your keyboard. There’s no need to press **Return**, **Enter**, or anything else, just press the number and the database will open.

To search for a particular database simply type into the search box at the top of the wizard.



At any time you can press the **1** thru **9** keys to re-open a database. For example type **boo1** to open the **Checkbook** database, **boo2** to launch the **Phone Book** database, etc. You can re-open any previously opened database with just a few keystrokes.

The Prefs dialog allows you to exclude specified folders and files from the list of recent databases. By default wizards are excluded.








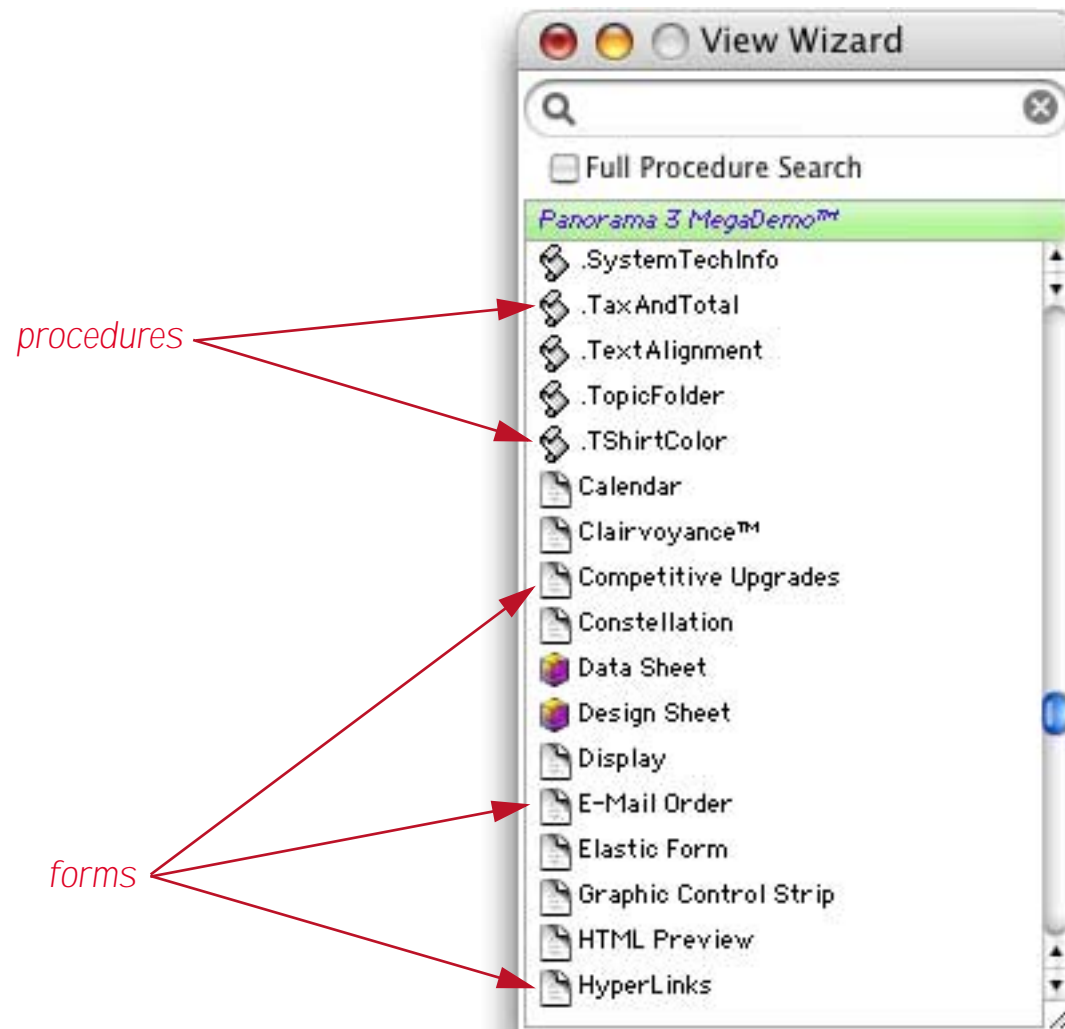
If you want to include other folders or files simply list them in the dialog, one per line. You can use the `@` symbol (Option-D) to specify the current Panorama folder.



With the setting shown above any databases in the Accounting folder will be excluded.

View Wizard

The **View** menu works well for most databases, but when a database grows to dozens of forms and hundreds of procedures it can get a bit unwieldy. For these situations the **View Wizard** comes in handy. This wizard can help you locate and open any view within any open database. The wizard displays a list of the views in any database, including  forms,  procedures,  crosstabs, the  data sheet and the  design sheet. The list is searchable, and you can even search all of the procedure source code to search for a field, variable, or other program element. You can easily open any view by double clicking on it.



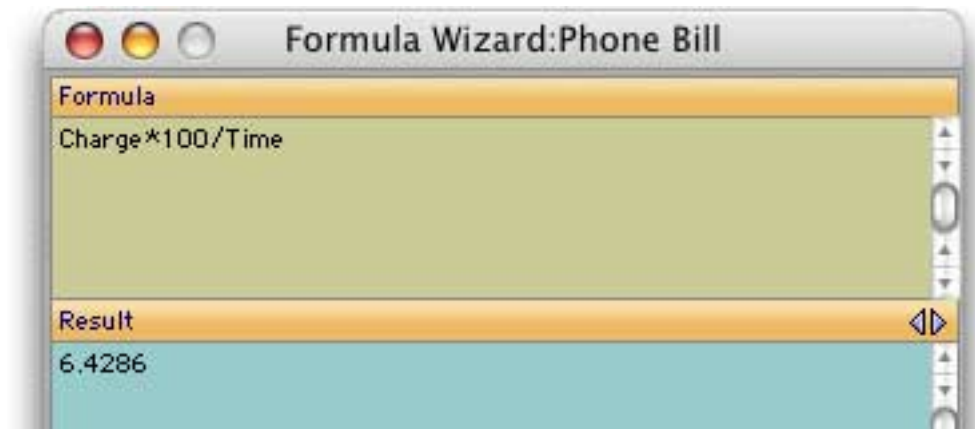
To learn more about this wizard see [“The View Wizard”](#) on page 173 of the *Panorama Handbook* and [“Using the View Wizard with Procedures”](#) on page 344 of *Formulas & Programming*.

Calculation Wizards

The wizards in this submenu perform various types of calculations.

Formula Wizard

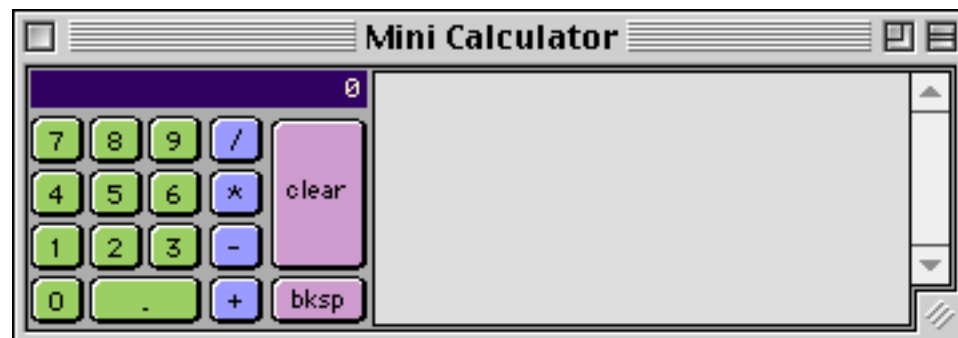
The **Formula Wizard** can be used as a workbench for working with formulas. You can experiment with formulas here before you actually use them in your database. The formula wizard can handle formulas that use numeric, text and date calculations (the illustration below shows a text calculation).



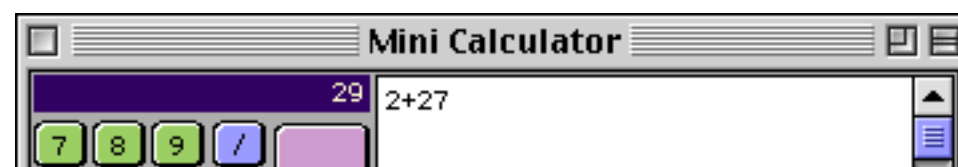
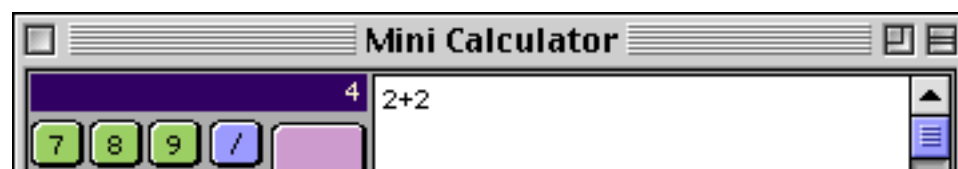
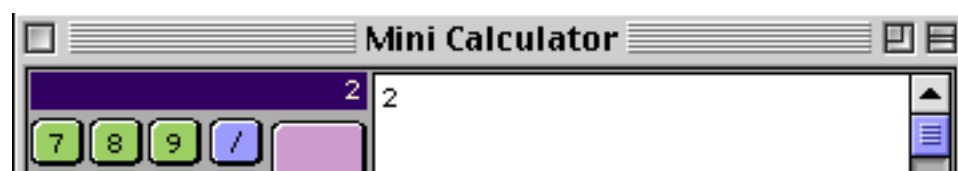
To get the complete scoop on this very useful wizard see [“Using the Formula Wizard”](#) on page 29 of *Formulas & Programming*.

Mini Calculator Wizard

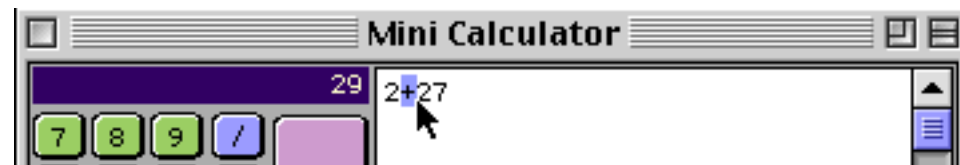
The **Mini Calculator** wizard performs basic math calculations. You can enter calculations with either the buttons on the form or with keyboard (or both).



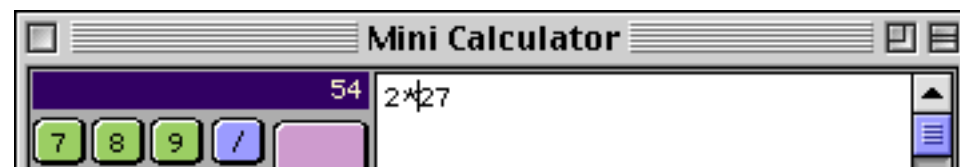
As you press each button or key the calculator immediately shows the new result.



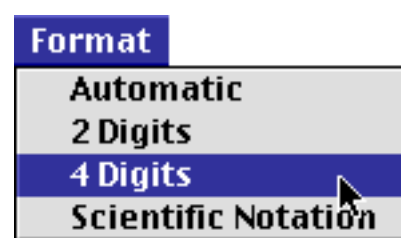
You can click on the formula to edit it.



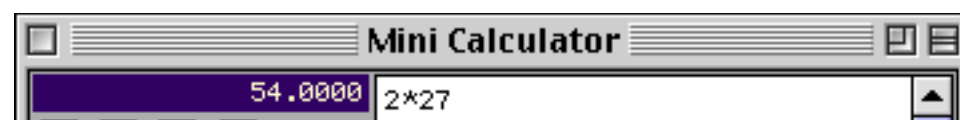
The wizard recalculates the newly edited formula immediately. In this case the new answer is 54.



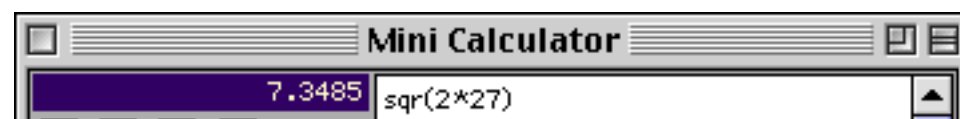
You can use the **Format** menu to choose the format used to display the calculation result.



The **4 Digits** format displays four digits after the decimal point.



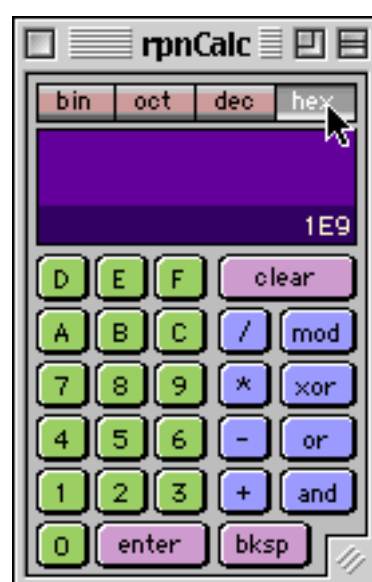
You can type in any numeric function supported by Panorama. This example calculates the square root of 54.



To learn more about the numeric functions supported by Panorama see "[Arithmetic Formulas](#)" on page 60 of *Formulas & Programming*.

RPN Programmers Calculator

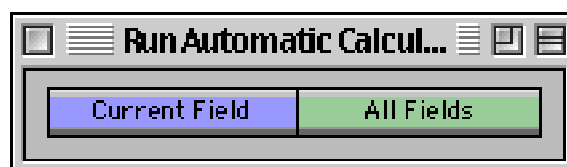
The **RPN Programmer's Calculator** can be used to perform numeric calculations and to convert numbers between decimal, hexadecimal, octal and binary.



See “[The RPN Programmer’s Calculator](#)” on page 161 of *Formulas & Programming* to learn more about this wizard.

Run Automatic Calculations Wizard

When you set up an automatic calculation that calculation is automatically applied when new data is entered or existing data is modified. The calculation is not applied to any existing data. One way to apply a calculation to existing data is to use the **Manipulate Data in Field** command in the Field menu (see “[The Manipulate Data Dialog](#)” on page 434 of the *Panorama Handbook*). Another method is to use the **Run Automatic Calculations** wizard. This wizard will perform calculations based on the formulas you have entered into the design sheet (see “[Automatic Calculations](#)” on page 303 of the *Panorama Handbook*). You can recalculate all fields with formulas, or just the current field.



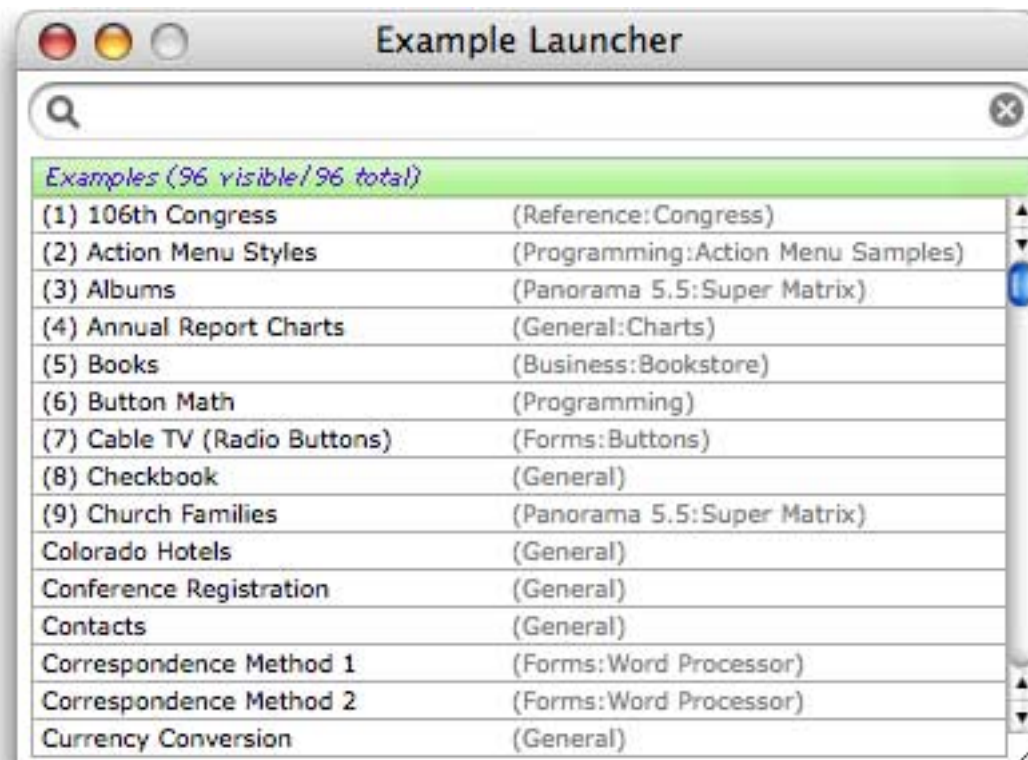
To learn more about this wizard see “[The Run Automatic Calculations Wizard](#)” on page 316 of the *Panorama Handbook*.

Demos

The wizards in this submenu help you to access the examples and demos included with Panorama.

Example Launcher

This database lists all of the demos included in Panorama’s [Example](#) folder.



To open one of these example databases simply double click its name on the list. You can also open the first nine items simply by pressing the **[1]** thru **[9]** keys on your keyboard. There’s no need to press **Return**, **Enter**, or anything else, just press the number and the database will open.

To search for a particular database simply type into the search box at the top of the wizard.



At any time you can press the **[1]** thru **[9]** keys to open a database. For example type **con1** to open the **106th Congress** database, **con2** to launch the **Conference Registration** database, etc. You can open any example database with just a few keystrokes.

ScreenCast Demos

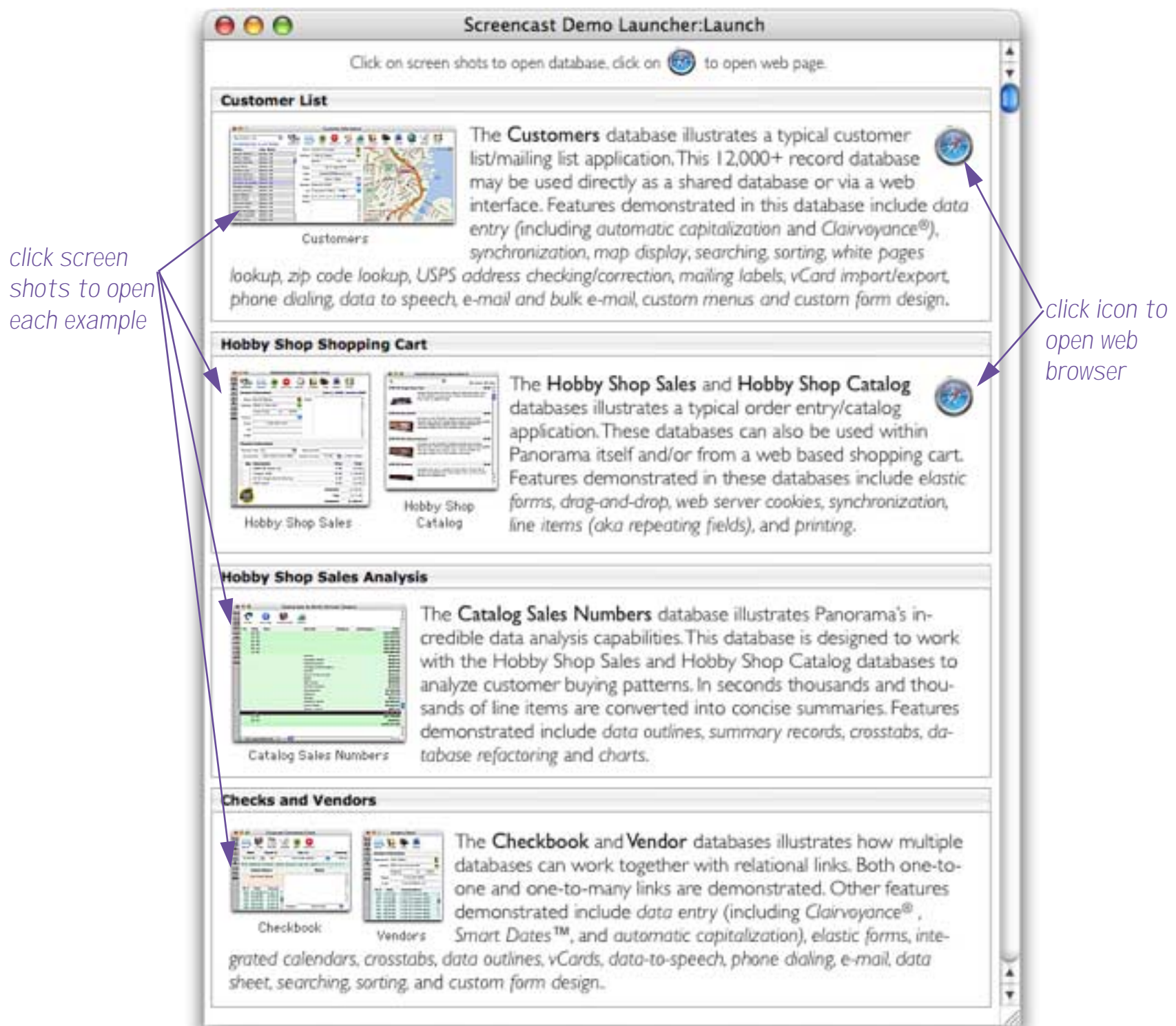
After watching the Panorama screencasts on the ProVUE web site you may want to play with and examine the databases used in these screencasts. This wizard helps to do this. Most of these screencasts rely on the Panorama Enterprise server to operate, so you must install a copy of the Panorama Server before you can install and use these databases. See Chapter 2 of the Panorama Enterprise Handbook to learn how to install a server.

The first time you open this wizard it will offer to install the screencast demos for you.



The first step is to select the server to use. If you have only one Panorama server available it should be selected automatically. Next select the demos to install. By default all of the demos will be installed, but you can choose to install only a subset. Finally, press the **Install** button. Installing the complete set of demos will take five to ten minutes.

Once the install is complete the wizard will switch to “Launch” mode, which allows you to open the demo databases. (If you later need to go back to install additional demos use the Mode menu to go back to Install mode.) From this window you can launch



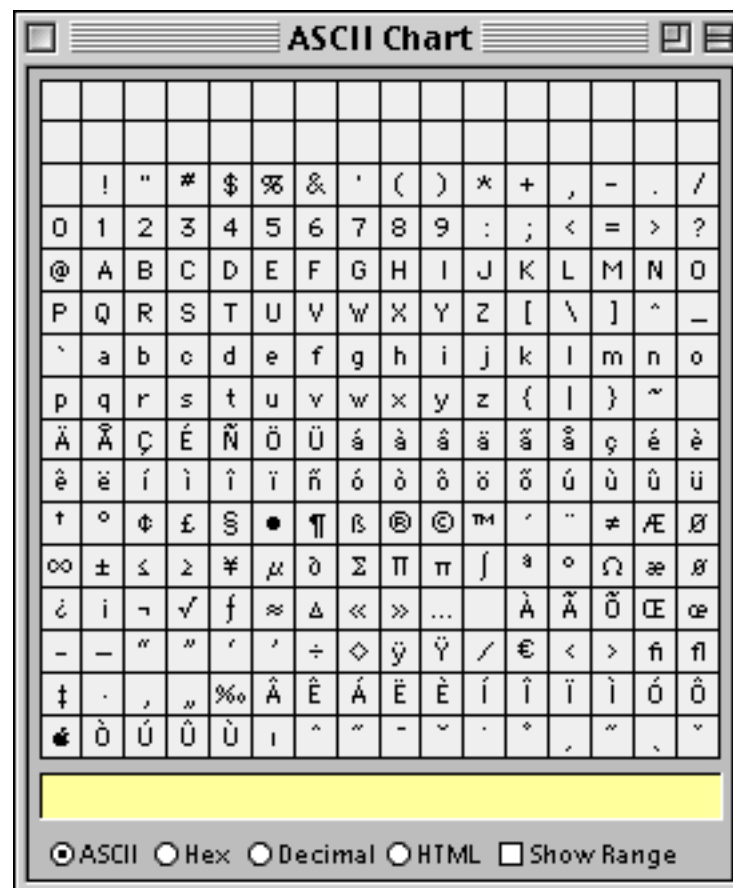
For more information on each specific demo watch the screencasts!

Developer Tool Wizards

The wizards in this submenu are designed to help design, build and debug complex applications with Panorama.

ASCII Chart

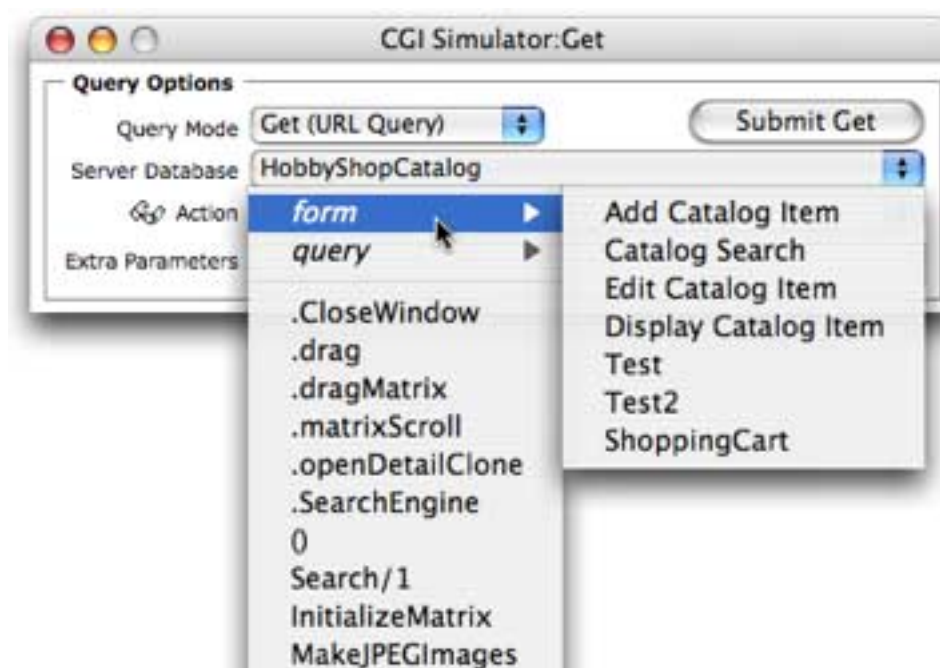
The **ASCII Chart** wizard allows you to displays a matrix showing all 256 ASCII characters. When you click on a character it types that character into the box at the bottom.



To learn more about this wizard see [“The ASCII Chart Wizard”](#) on page 89 of *Formulas & Programming*.

CGI Simulator

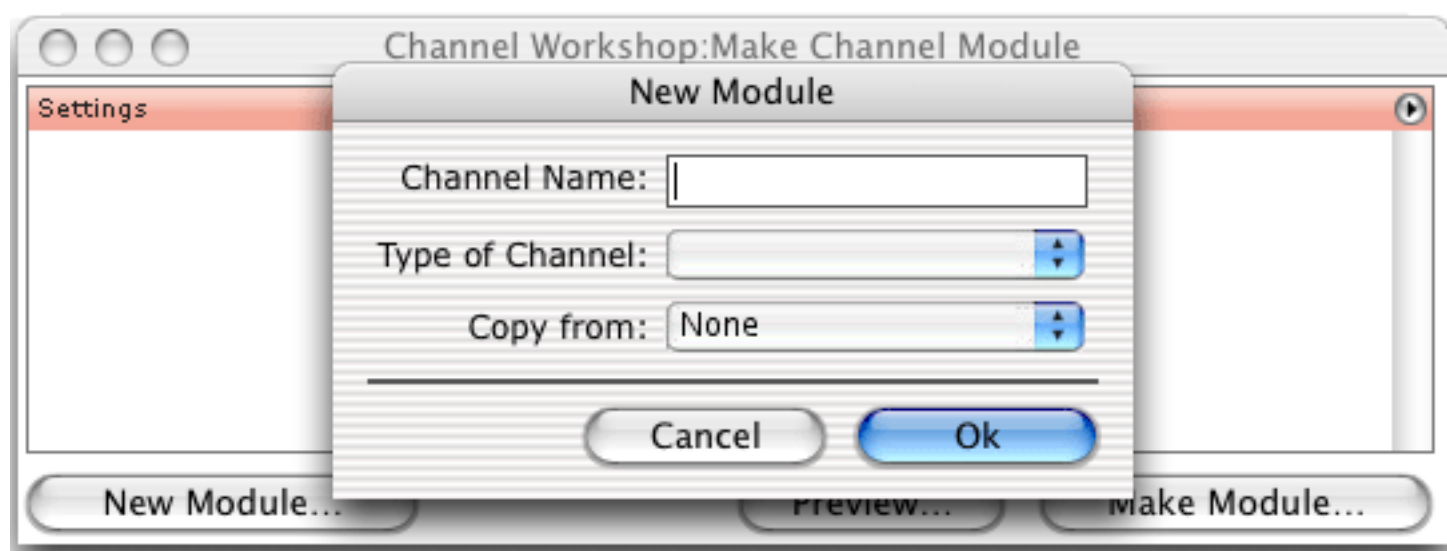
The **CGI Simulator** wizard is designed to help debug web procedures for use with the Panorama Enterprise server. This wizard simulates the operation of your web browser and server, allowing you to test procedures in Panorama’s normal environment.



For more information about this wizard see Chapter 8 of the **Panorama Enterprise Handbook**.

Channel Workshop

Panorama comes with a number of channel modules for sending e-mail, dialing the phone, and interfacing with other web sites and third party software. If you have programming experience you can write your own channel modules. To help make this easier we have created a **Channel Workshop** wizard that will create the core of your new module for you.

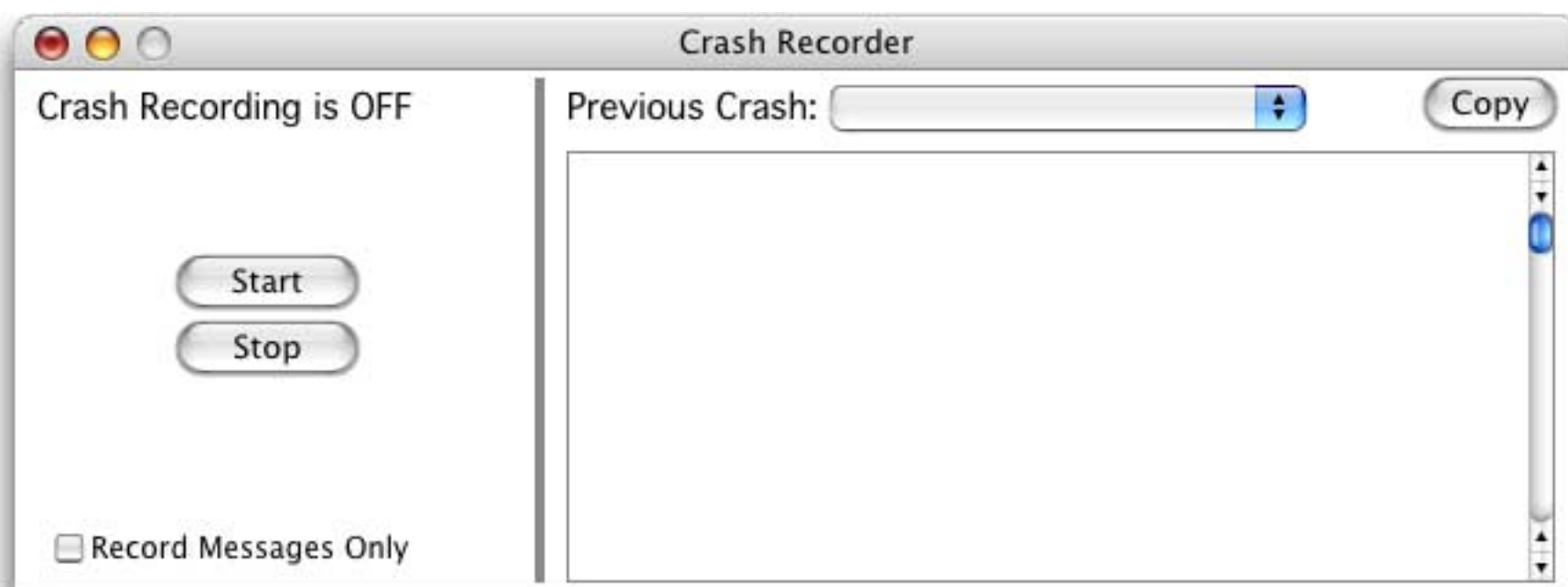


To learn more about this wizard see “[Writing Your Own Channel Modules](#)” on page 739 of *Formulas & Programming*.

Crash Recorder

The **Crash Recorder** wizard can be used to help track down problems in Panorama itself. In a perfect world Panorama would never crash, and many users will never experience a Panorama crash. Sometimes, however, you may encounter a situation where Panorama does crash. If you can repeat the process leading up to the crash, the crash recorder can often provide useful information to ProVUE engineers to help them track down the problem.

Here’s what the wizard looks like when you first open it.



To try to track down a crash, press the **Start** button. The first time you do this there will be a delay of ten seconds or so, then the wizard will indicate that crash recording is turned on.



Now use Panorama normally until it crashes. You can leave the wizard open or close it — recording will continue either way. Note: While crash recording is turned on Panorama will run approximately ten times slower than normal.

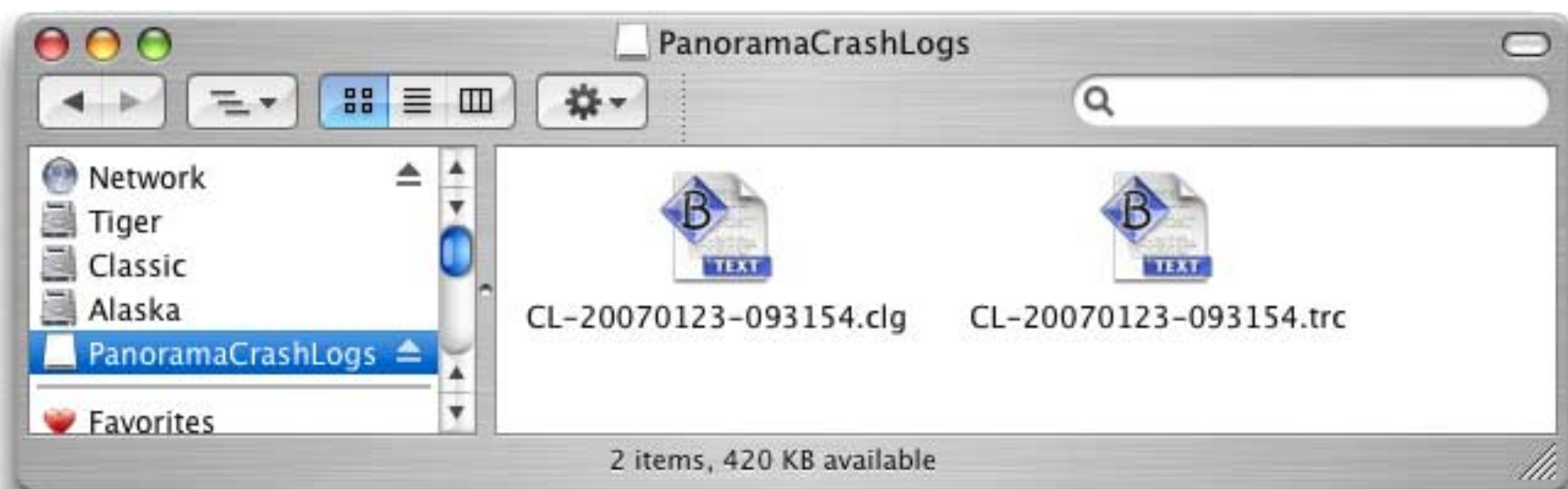
After the Crash

If Panorama crashes while the crash recorder is on, re-launch Panorama and re-open the **Crash Recorder** wizard. You will see some information about the crash in the right half of the window. Press the **Copy** button to copy detailed information about the crash to the clipboard. You should then paste this information into an e-mail or technical support incident form and send it to ProVUE. Please also include a description of what you were doing at the time the crash occurred — the engineers usually find that crash reports are much more helpful when the context is known.

If you want to continue recording additional crashes press the **Start** button, otherwise simply close the wizard.

The Panorama Crash Logs RAM Disk

You may notice that the Crash Recorder wizard creates a RAM disk named PanoramaCrashLogs. This disk will contain temporary files used by the recorder. Please do not send these files to ProVUE — instead use the **Copy** button as described in the previous section.



When you are done recording crashes you may wish to eject this RAM disk.

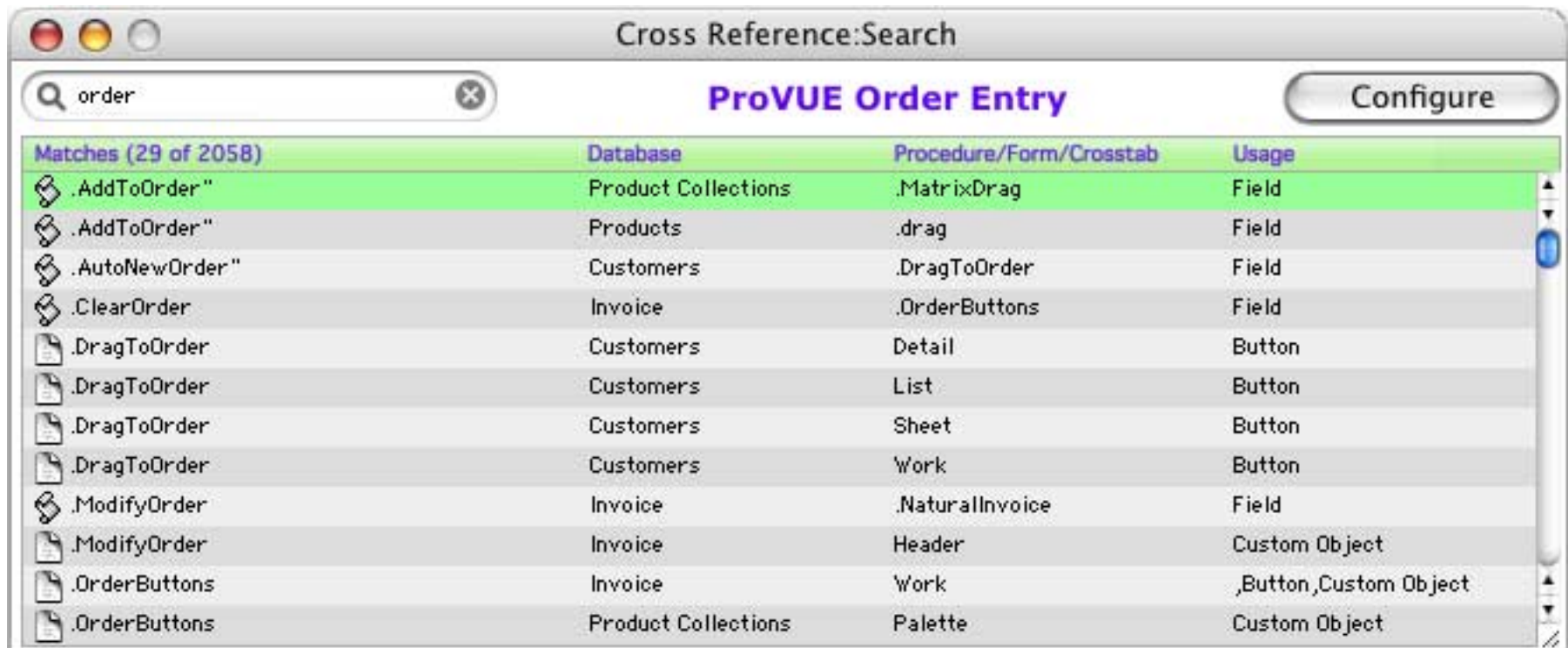
The Record Messages Only option

This option changes the operation of the recorder. You may be asked by a ProVUE technician to turn this option on before recording. Normally this option should be left unchecked.

Cross Reference

A complex real world system (accounting, reservations, order entry, etc.) created with Panorama may involve a dozen files with hundreds of fields, variables, procedures, forms, etc. Keeping track of all this information in your head can be a monumental task.

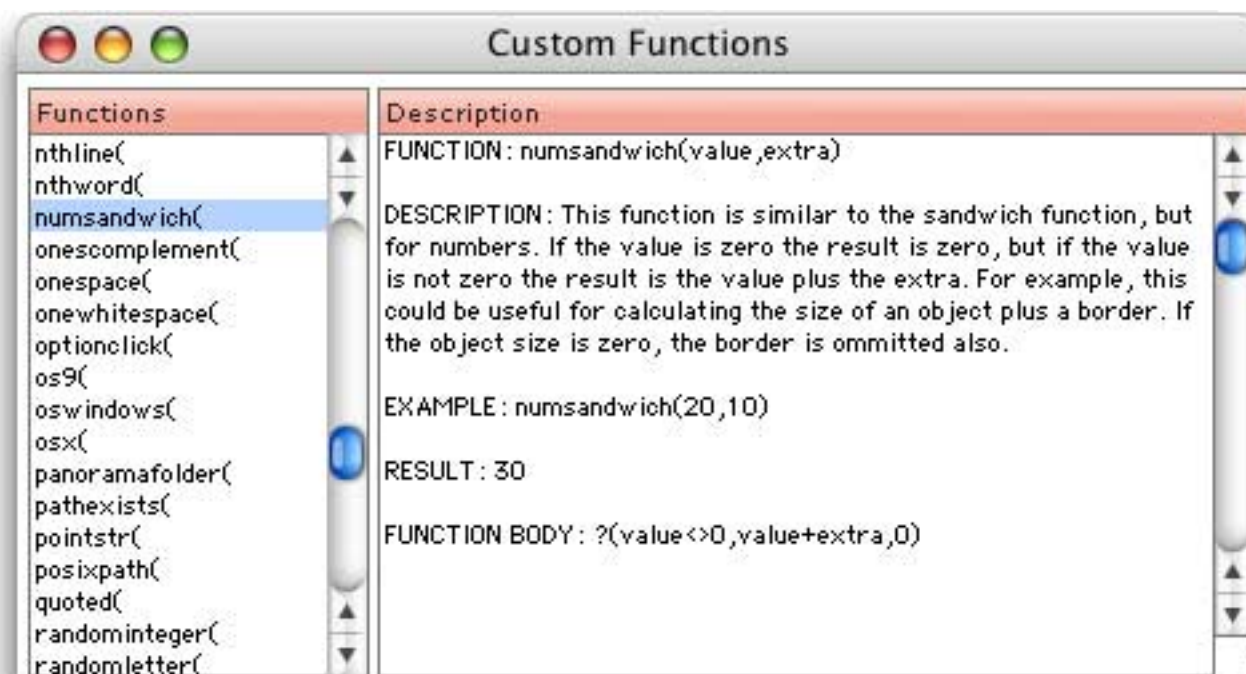
Panorama's **Cross Reference** database feature can help make this task manageable. A cross reference database keeps track of all the items in one or more databases: every field, every variable, every procedure, every form—every everything. Not only does the cross reference database keep track of where these items are defined, but also everywhere they are used. For example, suppose your database has a field named **Title**. A cross reference database can tell you that this field is used in the **Entry**, **List**, and **Label** forms, and is also used in the procedures **.NewRecord** and **Search**. Or you could use a cross reference database to find out that the **.LastYear** procedure is triggered by buttons in the **Entry** and **Annual Report** forms. As your database applications become more complicated you'll find that a cross reference database is an invaluable tool to help you sift through a mountain of databases and programming.



To learn more about this wizard see "[Cross Referencing](#)" on page 349 of *Formulas & Programming*.

Custom Functions (ProVUE)

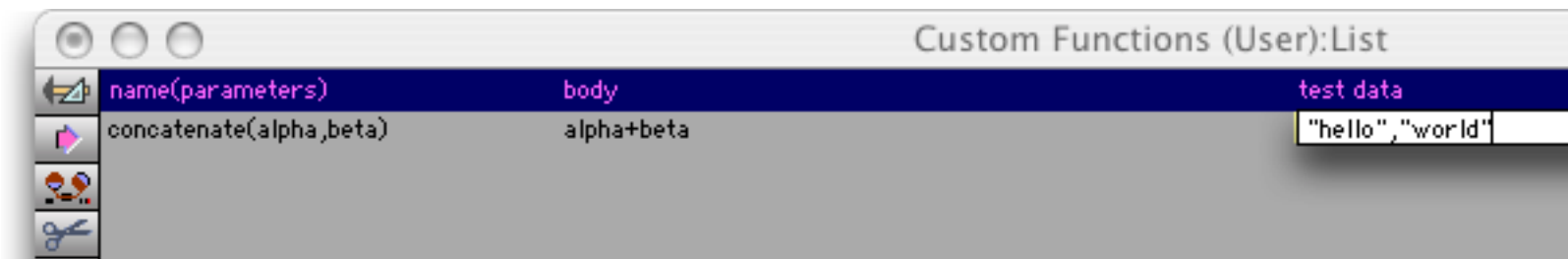
Panorama includes a number of custom functions that have already been defined for you. To see a list of these functions open the **Custom Functions (ProVUE)** wizard.



You can also find these functions in the Programming Reference Wizard. For more information on Custom Functions see “[Custom Functions](#)” on page 197 of *Formulas & Programming*.

Custom Functions (User)

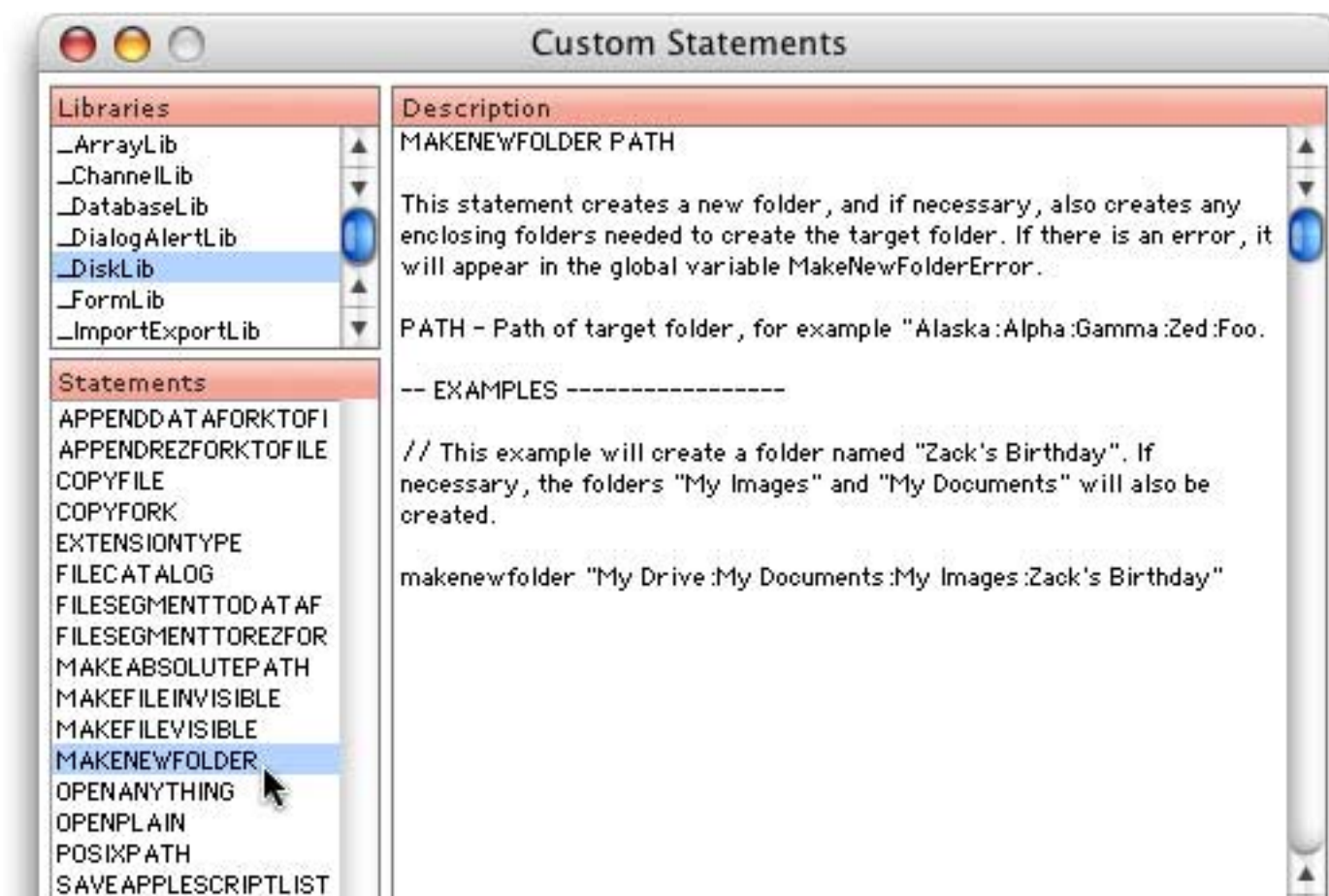
Panorama doesn't limit you to the built-in functions that are supplied with a Panorama. In fact using the **Custom Functions (User)** wizard you can actually create your own functions that can be used in any formula.



For more information on Custom Function see “[Custom Functions](#)” on page 197 of *Formulas & Programming*.

Custom Statements

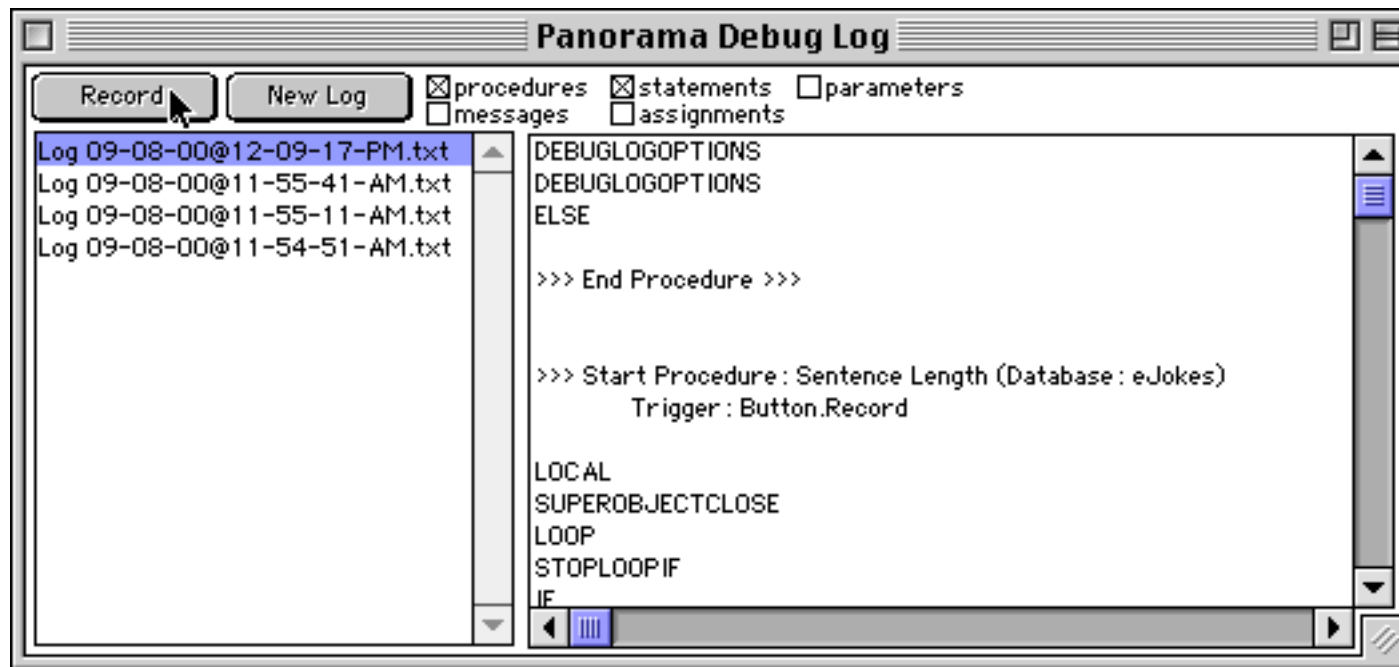
This wizard allows you to extend Panorama's programming language by writing your own custom statements. You can also examine (and even modify) the hundreds of custom statements that come with Panorama.



For more information on Custom Statements see “[Custom Statements](#)” on page 289 of *Formulas & Programming*.

Debug Log

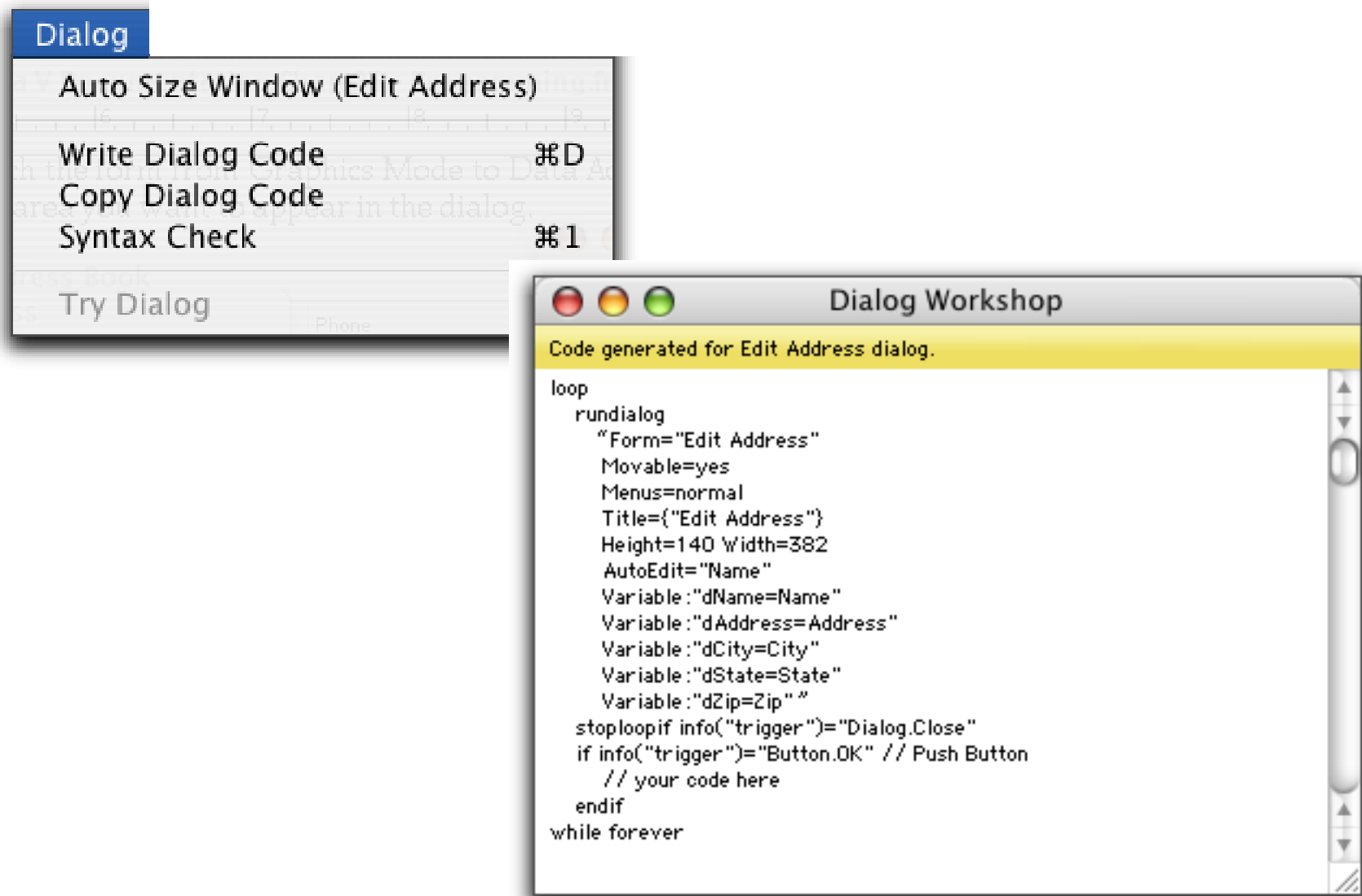
The procedure debug log was originally developed as an “in house” tool to help debug Panorama itself. It has proved so useful that we have decided to document and make it available for general use. When the debug log is in use Panorama records procedure activity in a text file. Later you can review the text file to trace the actions of your procedure.



To learn more about tracking procedures with this wizard see “[Procedure Debug Log](#)” on page 336 of *Formulas & Programming*.

Dialog Workshop

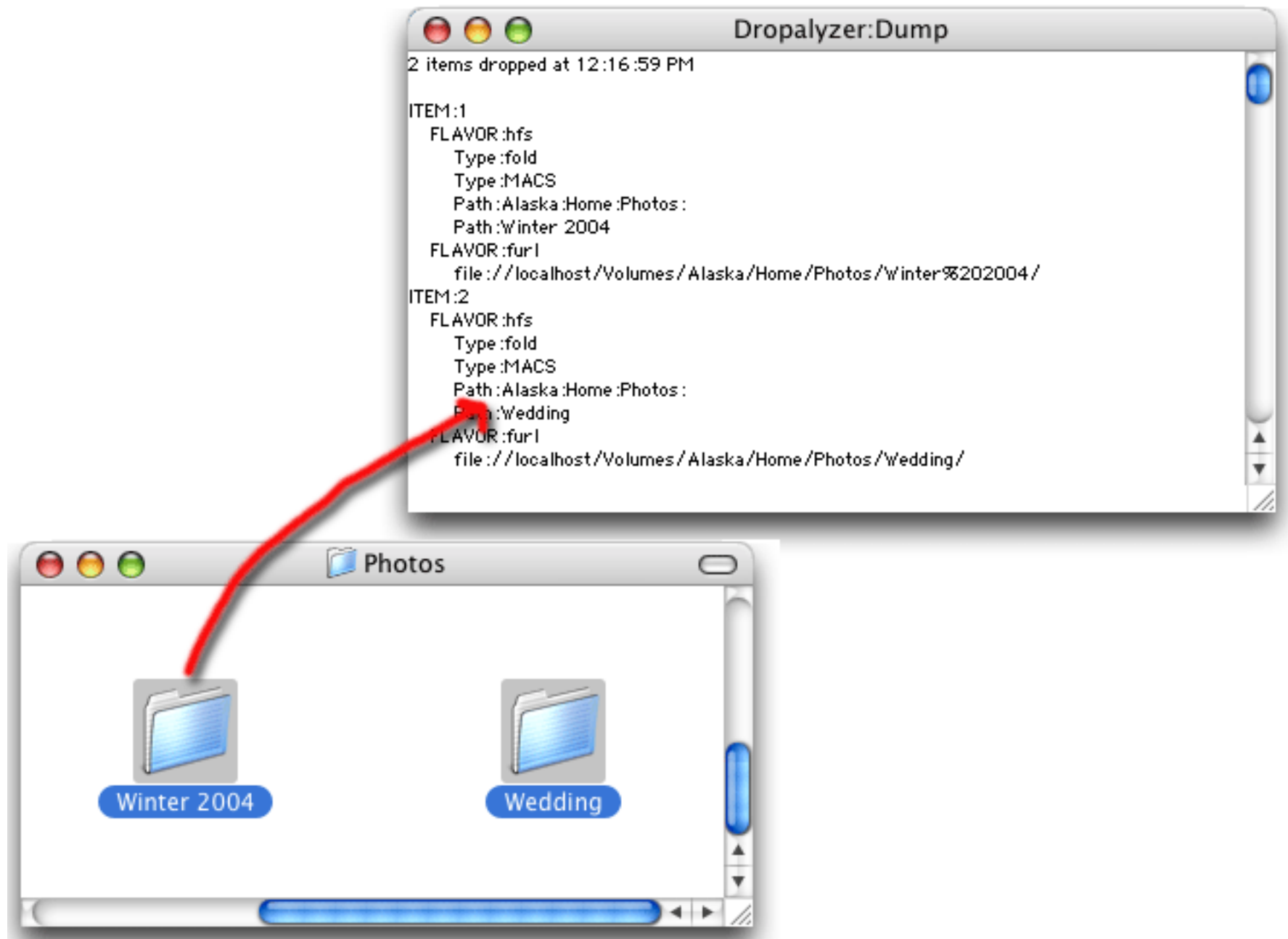
When an off the shelf dialog won't cut do, you can build your own using dialogs using standard Panorama forms and the **Dialog Workshop** wizard. This wizard analyzes your form and writes the basic code for that form for you. It also let's you try out your dialog before you actually commit the code to your database.



To learn more about this wizard see "[Custom Dialogs](#)" on page 489 of *Formulas & Programming*.

Dropalyzer

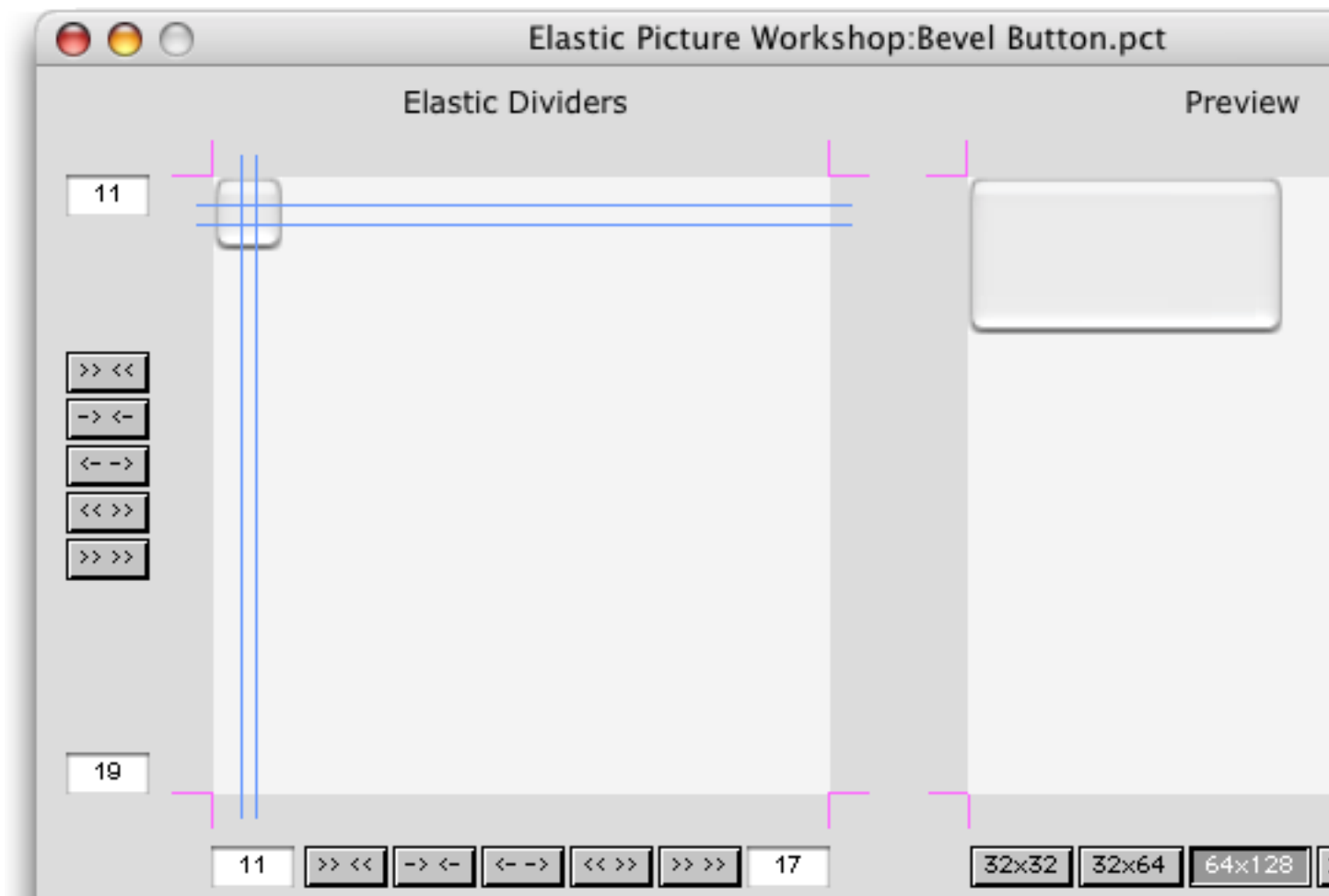
The **Dropalyzer** wizard is a handy tool for analyzing, writing and testing drag and drop procedures. When you first open this wizard it is completely blank, but you can drag anything you want onto this wizard and it will display some information about what was dropped. The illustration below shows the display if you drop two folders from the Finder onto the **Dropalyzer** wizard.



To learn more about this wizard see "[The Dropalyzer Wizard](#)" on page 651 of *Formulas & Programming*.

Elastic Picture Workshop

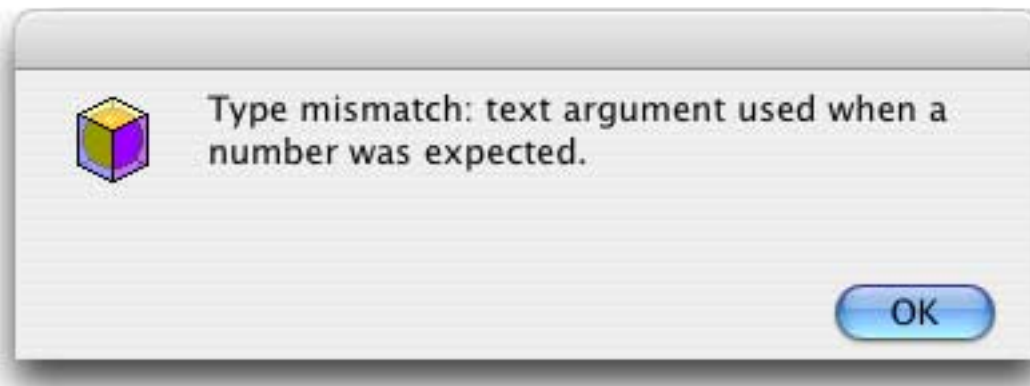
Many forms require borders, buttons and widgets need to be used over and over again but with different sizes. Any image can be stretched with the **Scale to Fit** option, but the result is often a distorted image. The **Elastic Picture Workshop** wizard can be used to add stretching information to an image so that it won't be distorted when it is stretched.



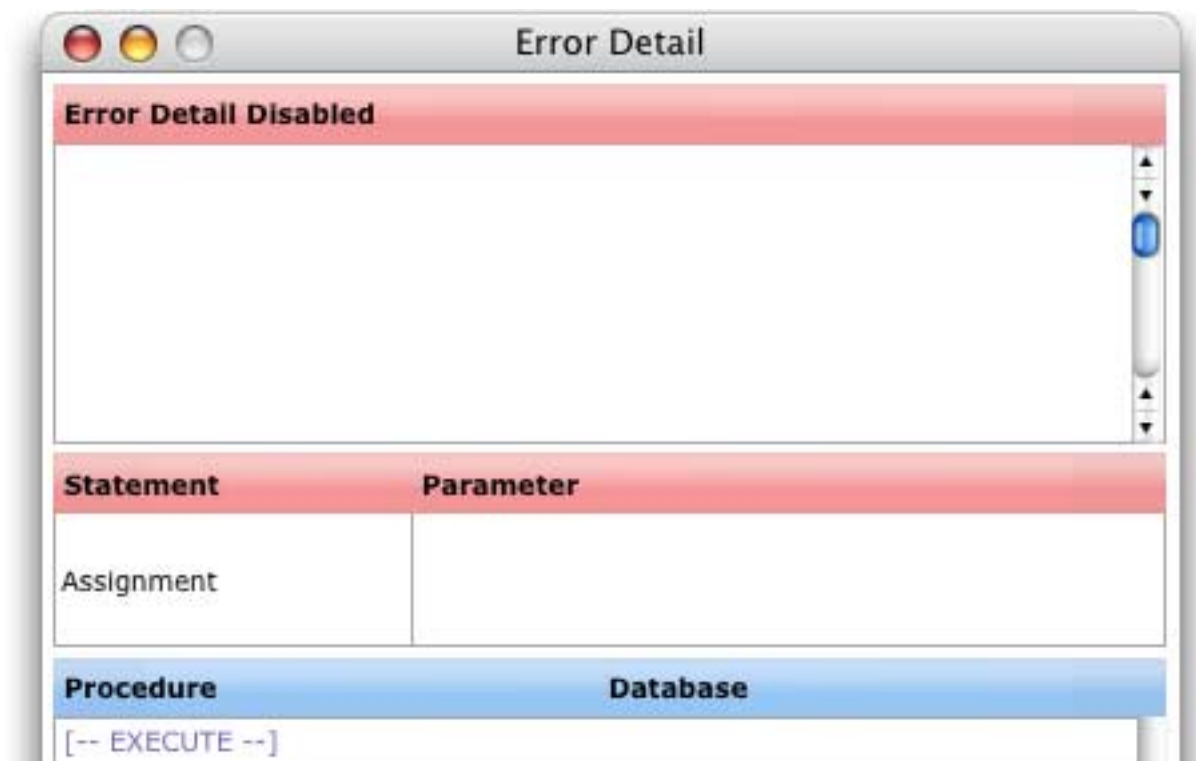
To learn more about this wizard see “[Elastic Pictures](#)” on page 809 of the *Panorama Handbook*.

Error Detail Wizard

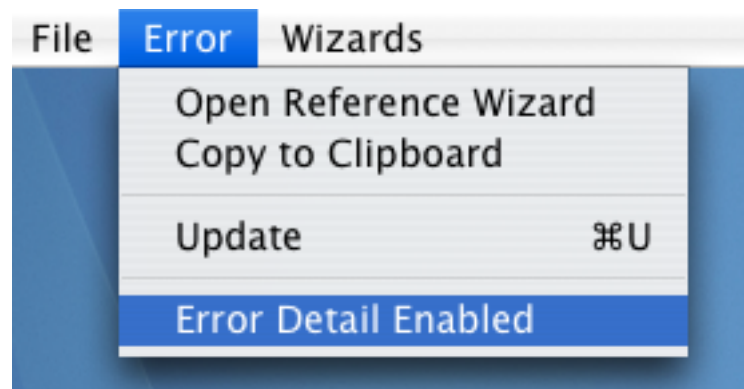
The **Error Detail** wizard can help track down the source of an error in a procedure or formula. When an error occurs, Panorama normally displays an alert, like this:



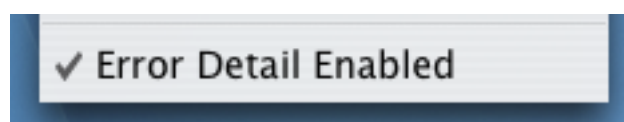
Once it is enabled the **Error Detail** wizard can give you more help in tracking down errors like this. Start by opening the wizard. As you can see, it is initially disabled.



To enable the wizard choose the **Error Detail Enabled** command in the Error menu.



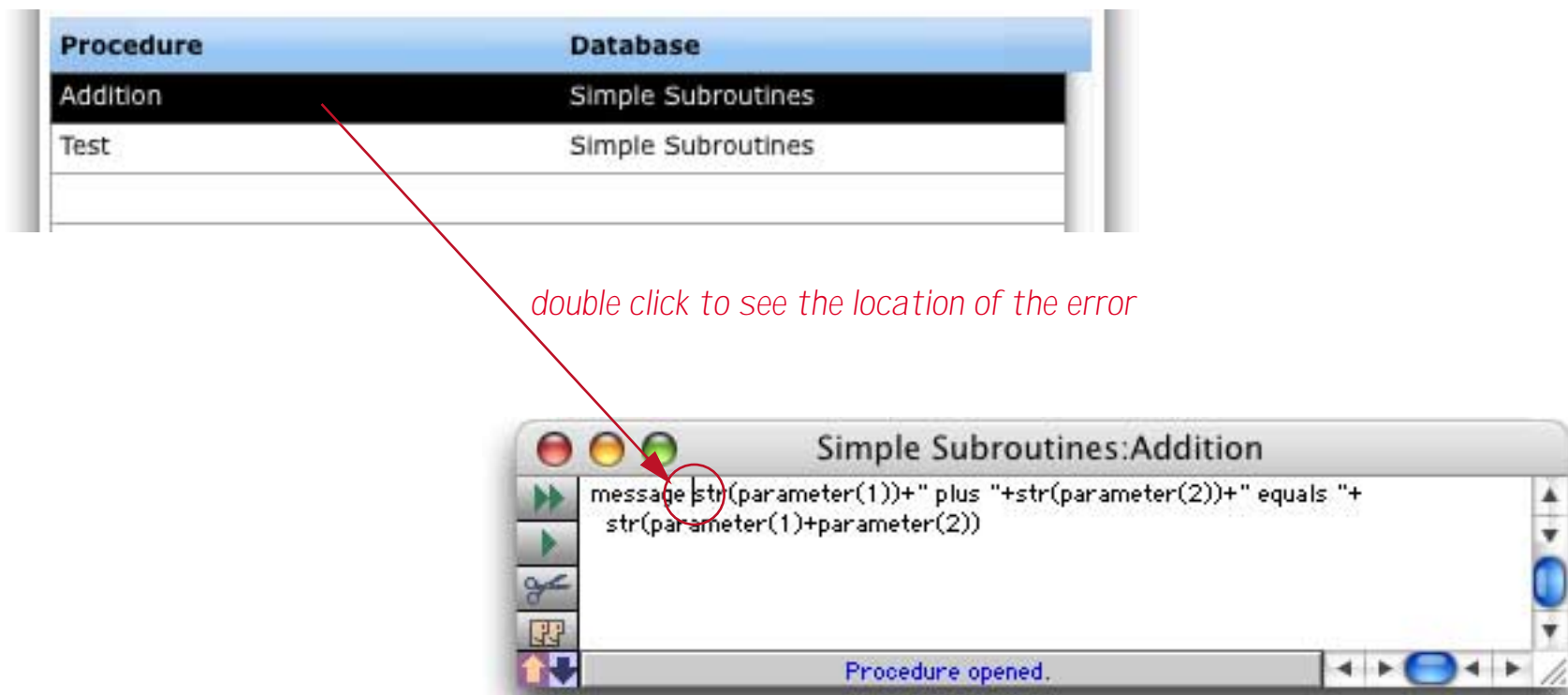
The menu always shows the current status.



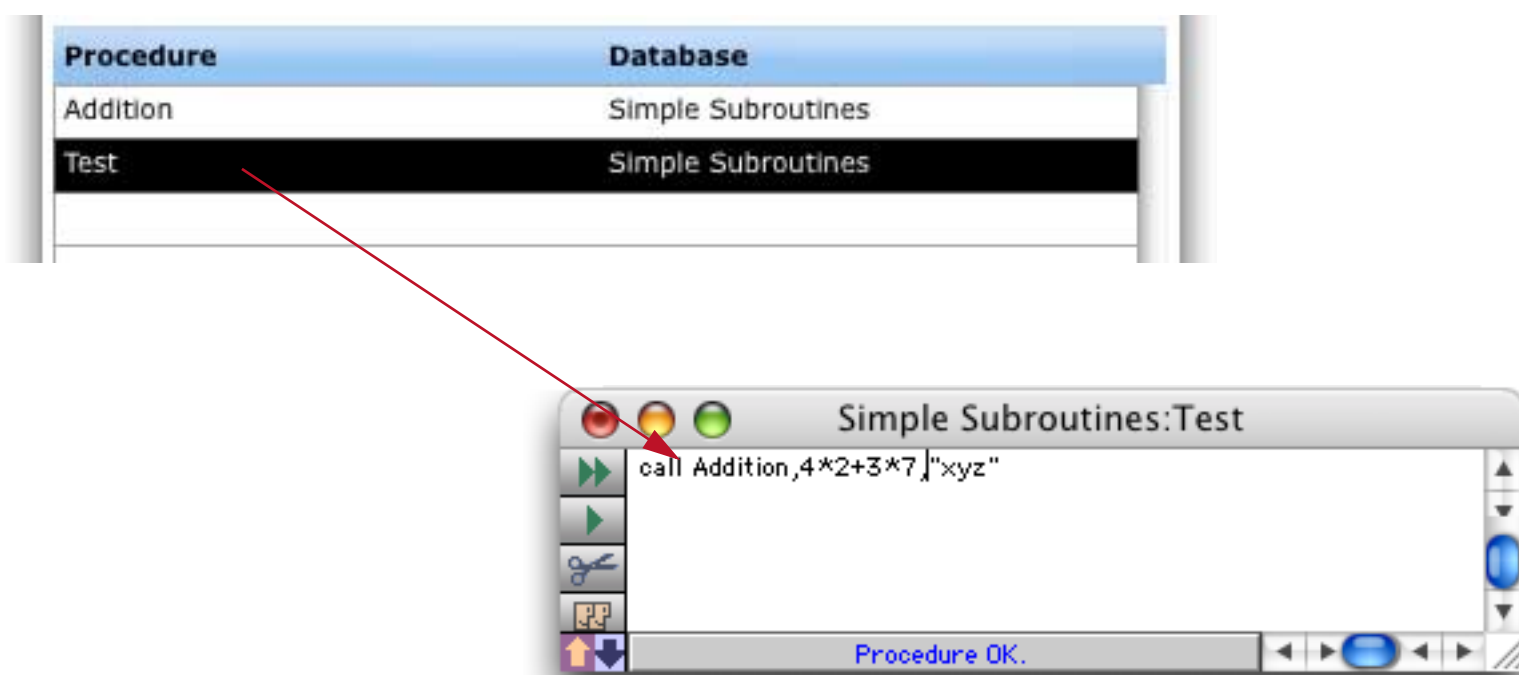
Once you enable **Error Detail** it will remain on until you explicitly turn it off (even if you close the wizard or completely quit and relaunch Panorama).

Finding the Source of the Error

In addition to providing more information about an error the Error Detail wizard can also pinpoint the exact location where the error occurred. To find the exact location double click on the procedure name.

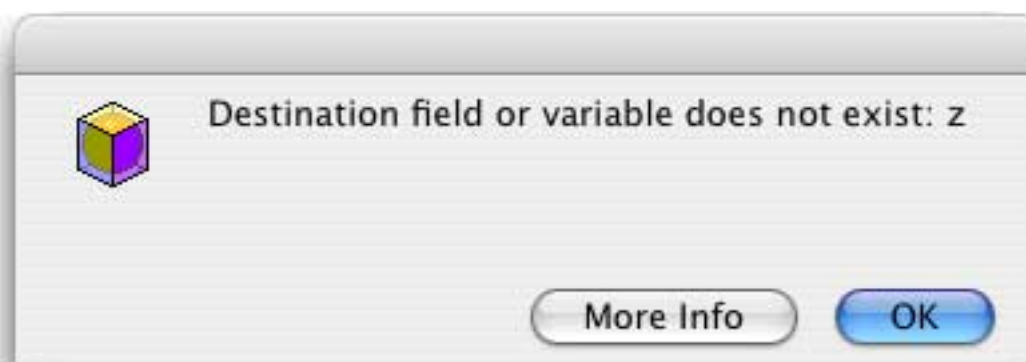


In some cases (like the example above) the actual problem isn't at the location where the error occurred, but further up the "call chain", where the procedure was called. You can double any procedure in the "call chain" to see where the procedure containing the error was called.

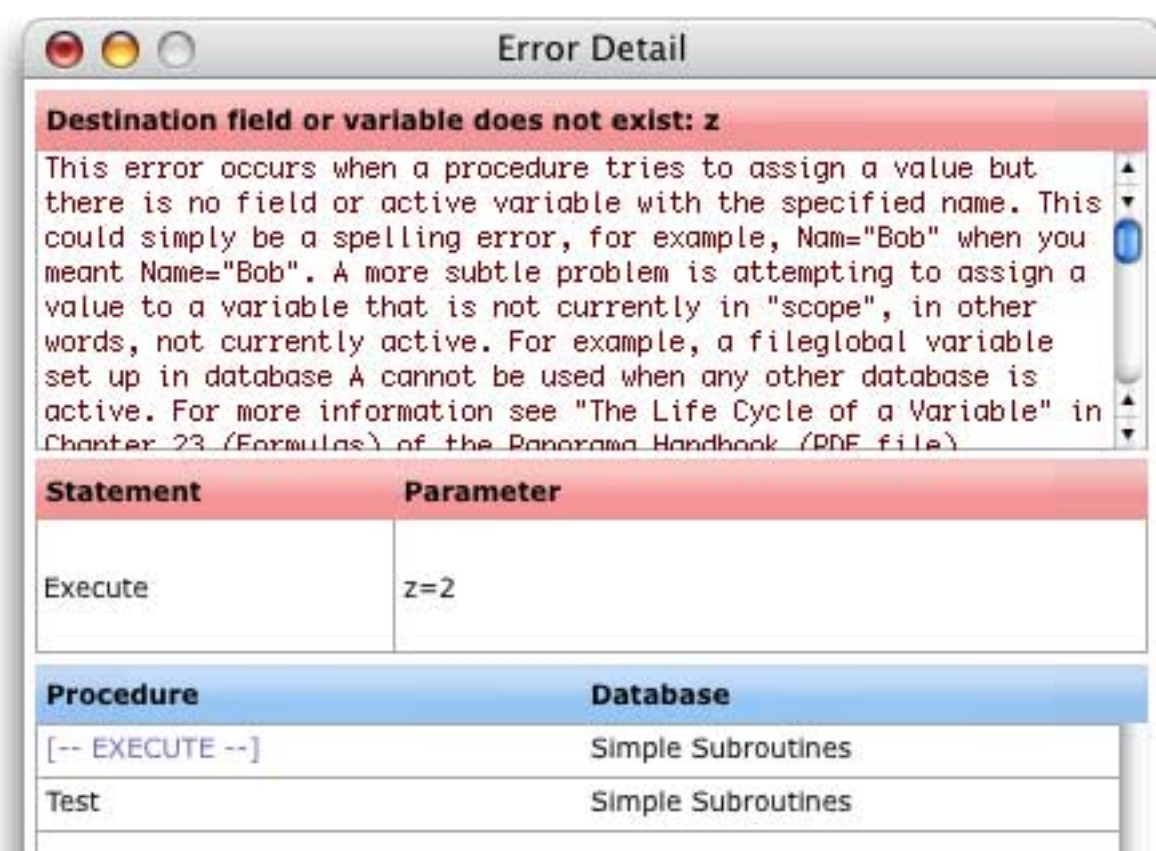


Now we can see the problem — the call statement is passing the text "xyz" when it needs to be passing a number like 123. Changing "xyz" to a number will fix the problem.

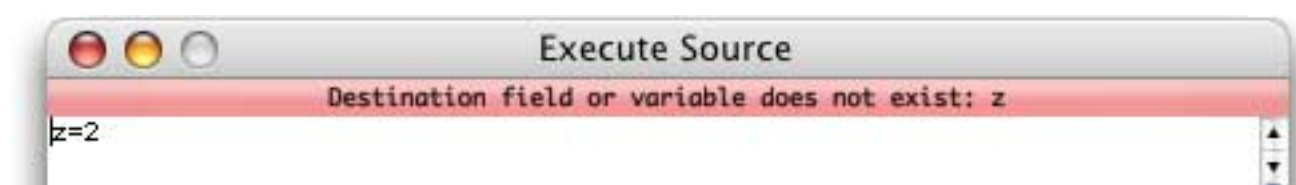
The wizard can also help track down problems that occur in an `execute` statement. Suppose you see an error message like this:



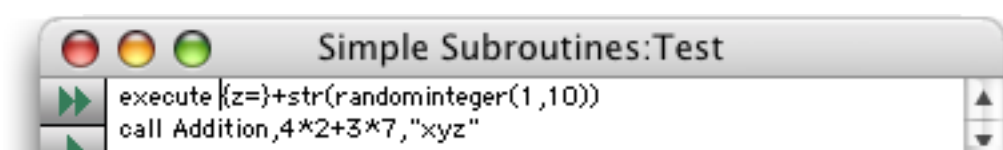
Press the **More Info** button to see the additional detail.



As you can see, the procedure containing the error has no name because it was built on the fly by an `execute` statement. Double click on this line to see the statement itself.



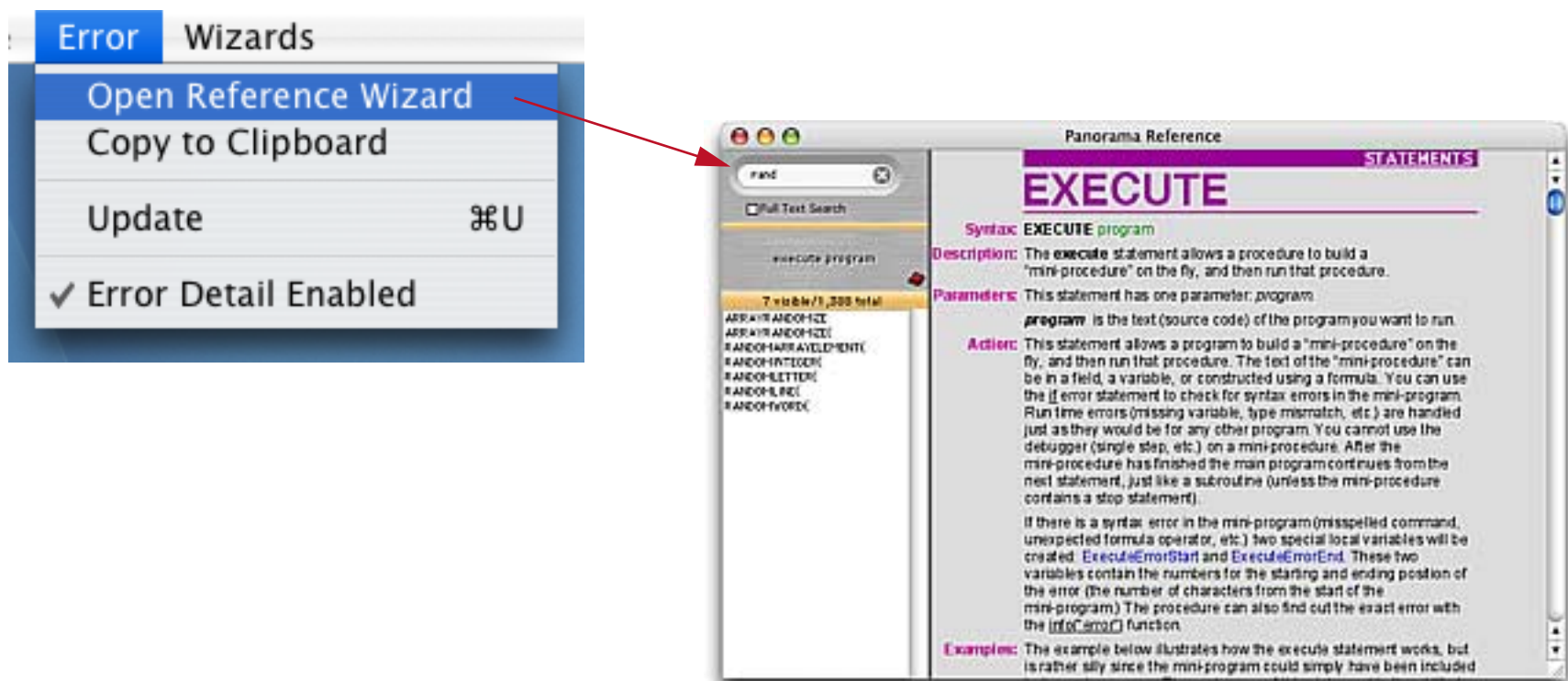
But where is this in the original program? Double click on the second line to see the procedure that contains the `execute` statement.



Ok, now the problem should be easy to fix. Notice that the actual statement in the two windows does not match. This is because the **Execute Source** window shows the statement after the formula has been evaluated. This can be very useful if the formula used to build the statement on the fly contains an error.

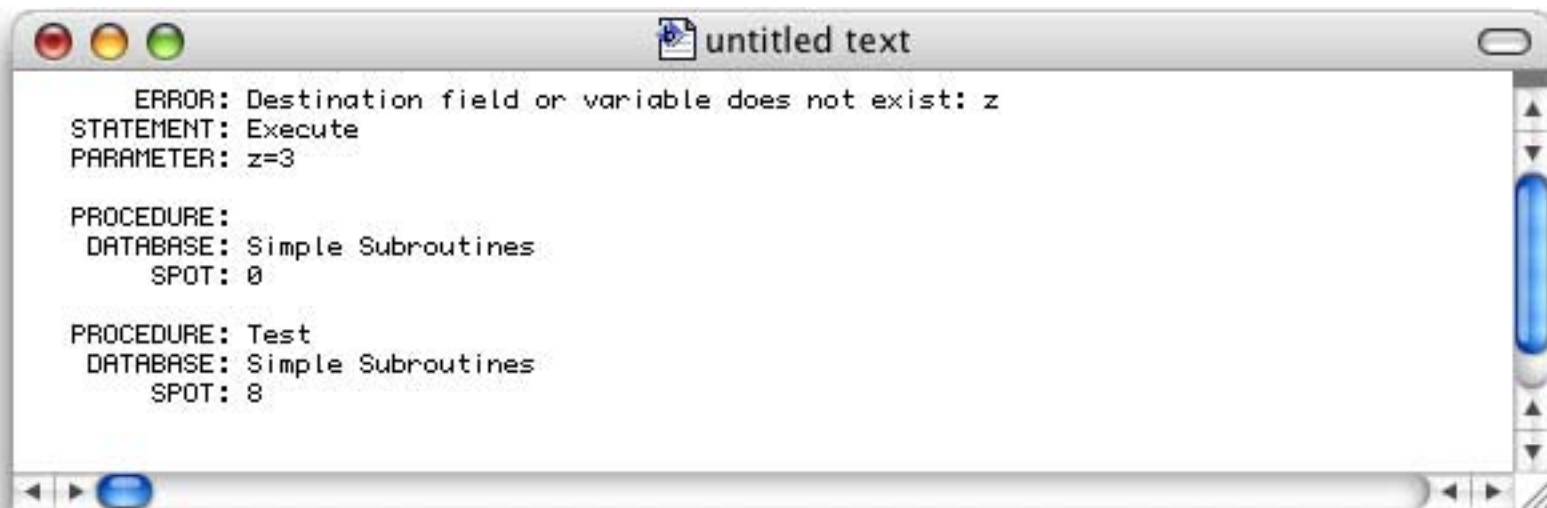
Open Reference Wizard

Need more information about the statement that the error occurred in? Simply choose **Open Reference Wizard** from the **Error** menu. The **Programming Reference** wizard will automatically open and display the page for the statement in question.



Copy to Clipboard

This command copies the error detail so that it can be pasted into an e-mail, allowing it to be sent to someone else. Here's what the error detail looks like in text format.



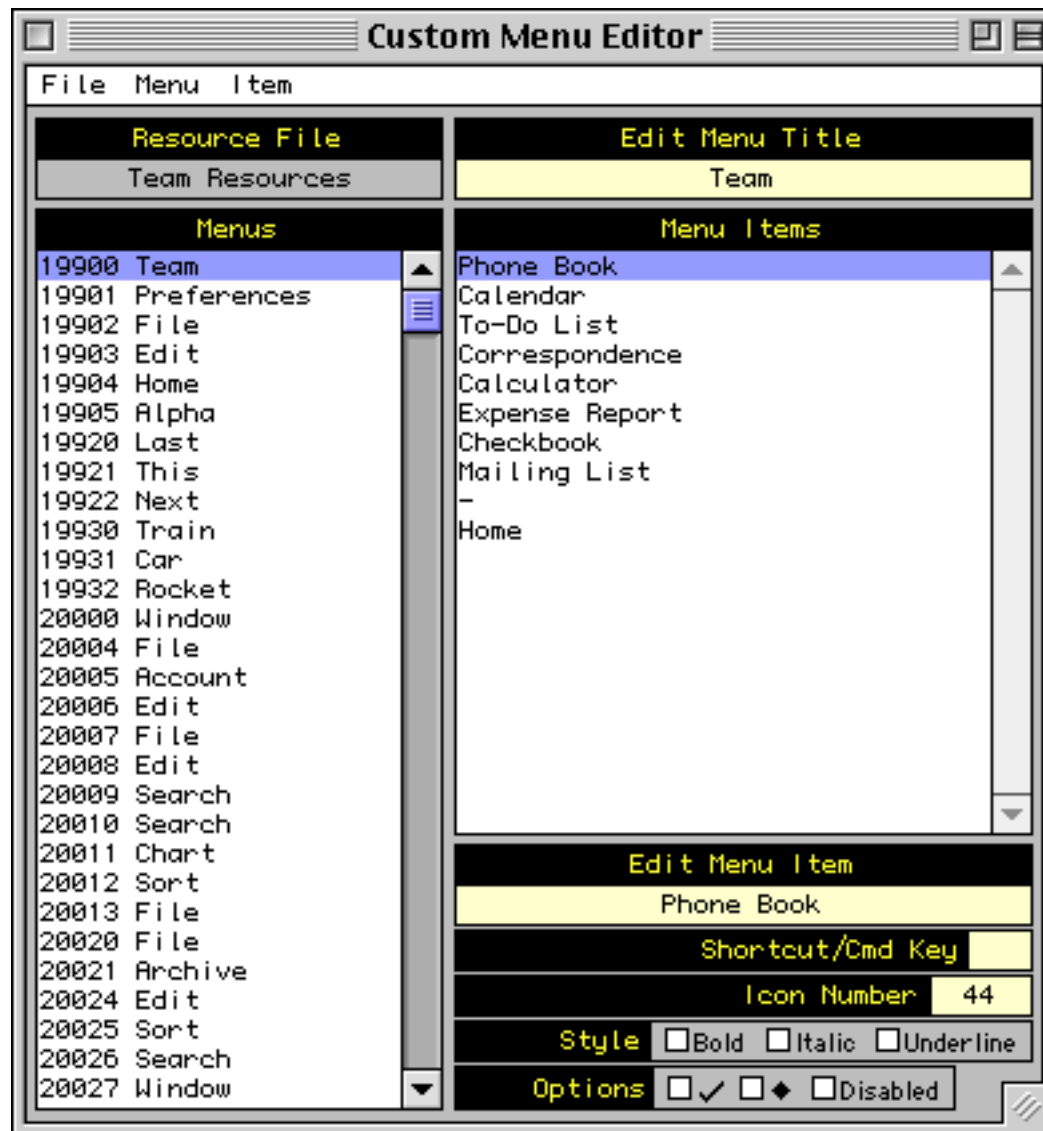
If the PROCEDURE name is blank this code is in an **execute** statement. The SPOT indicates the location of the error within the source code. The spot is in characters, so for example the **call** statement in the test procedure is 8 characters from the start of that procedure (or in this case, the start of the statement defined by the **execute** statement).

Error Detail Problems

The **Error Detail** wizard works well in almost all situations, but there are a few advanced programming techniques can trip it up and prevent it from providing accurate information. Panorama was not originally designed to support this wizard, and in some situations we were simply unable to retrofit it to do so. The good news is that it will be immediately obvious when this happens, so you won't waste time tracking down bogus information. However in these cases you'll have to resort to more old-fashioned methods for tracking down the problem, for example inserting **message** statements into your code.

Resource Menu Editor

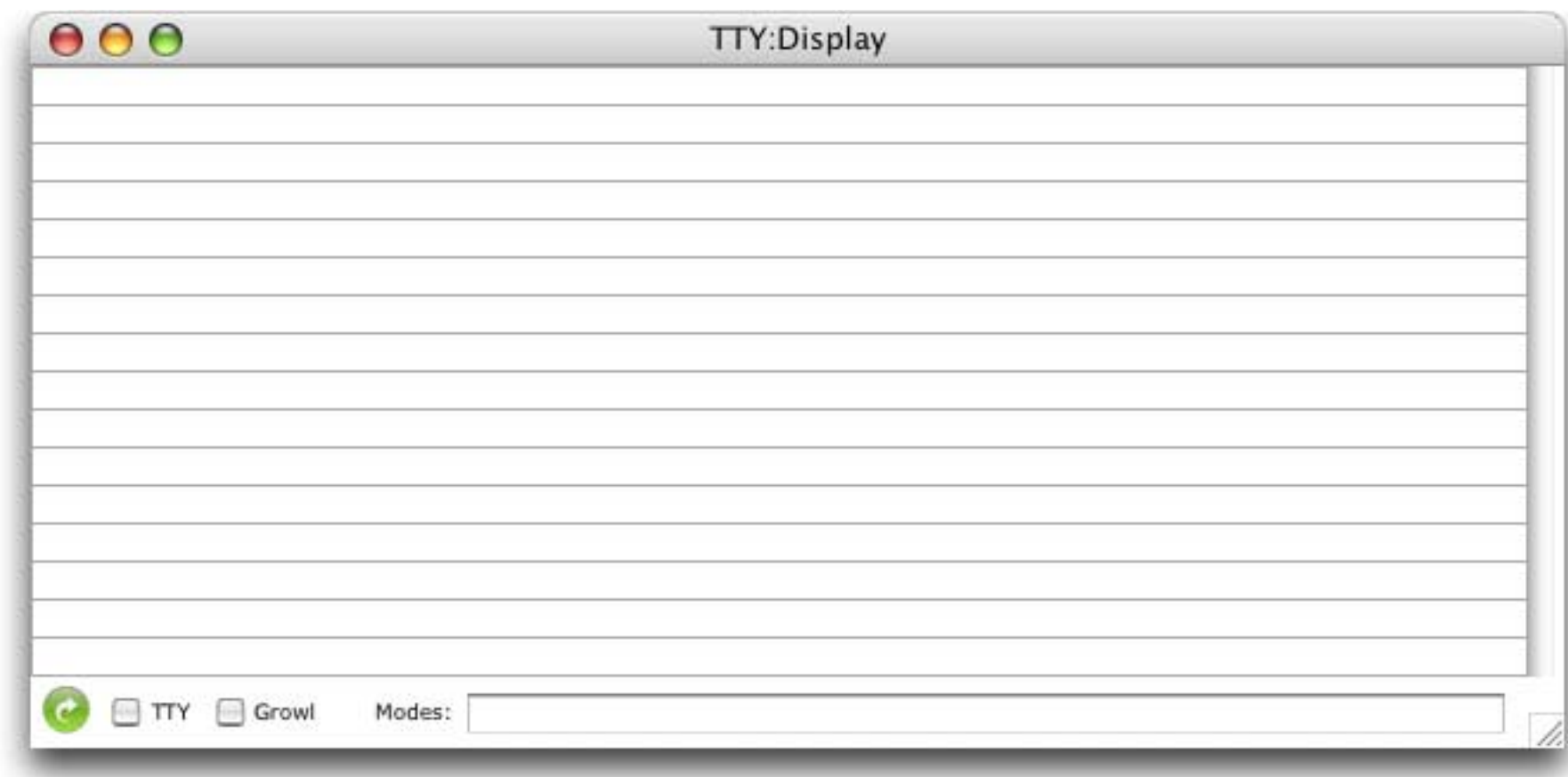
Resource based custom menus allow you to completely or partially override Panorama's standard menus. They also allow you to create submenus, attach icons, checkmarks, and other graphics to a menu, and to change menus on the fly. To create custom menus you'll need to create menu resources in a resource file. One way to do this is with Panorama's **Resource Menu Editor**, a database that is installed along with Panorama.



This wizard is obsolete. To learn more about this wizard see Chapter 24 of the Panorama 5.5 Handbook.

TTY (Virtual Teletype)

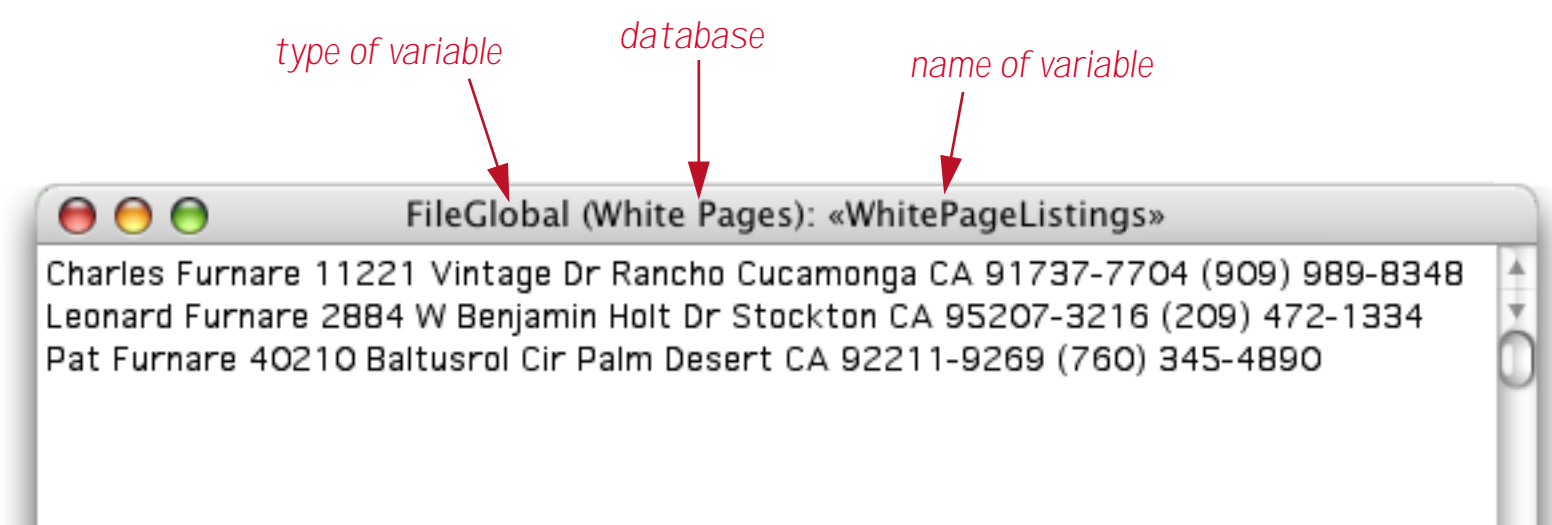
Back in the dark ages of computer history (before 1980) computers generally didn't have fancy debugging systems, and the most common method for finding bugs was inserting "print" statements in the code to type messages on the teletype printer attached to the computer. By looking at the output of the print statements the programmer could monitor the operation of the program in question. Though we now have many other options for debugging, sometimes simply "printing" can still be the most effective way to monitor program operation. Of course most of us no longer have actual teletypes connected to our computers any more, so Panorama now includes a virtual teletype — the TTY wizard. (Back in the day *TTY* was frequently used as an abbreviation for *teletype*.)



To use this wizard you need to insert one or more `tty` statements in your code. The `tty` statement is kind of like the `message` statement, but instead of displaying an alert it sends the message to the TTY wizard. To learn more about this wizard see "[Debugging with the TTY \(Virtual Teletype\) Wizard](#)" on page 330 of *Formulas & Programming* in the Panorama Handbook.

Variables

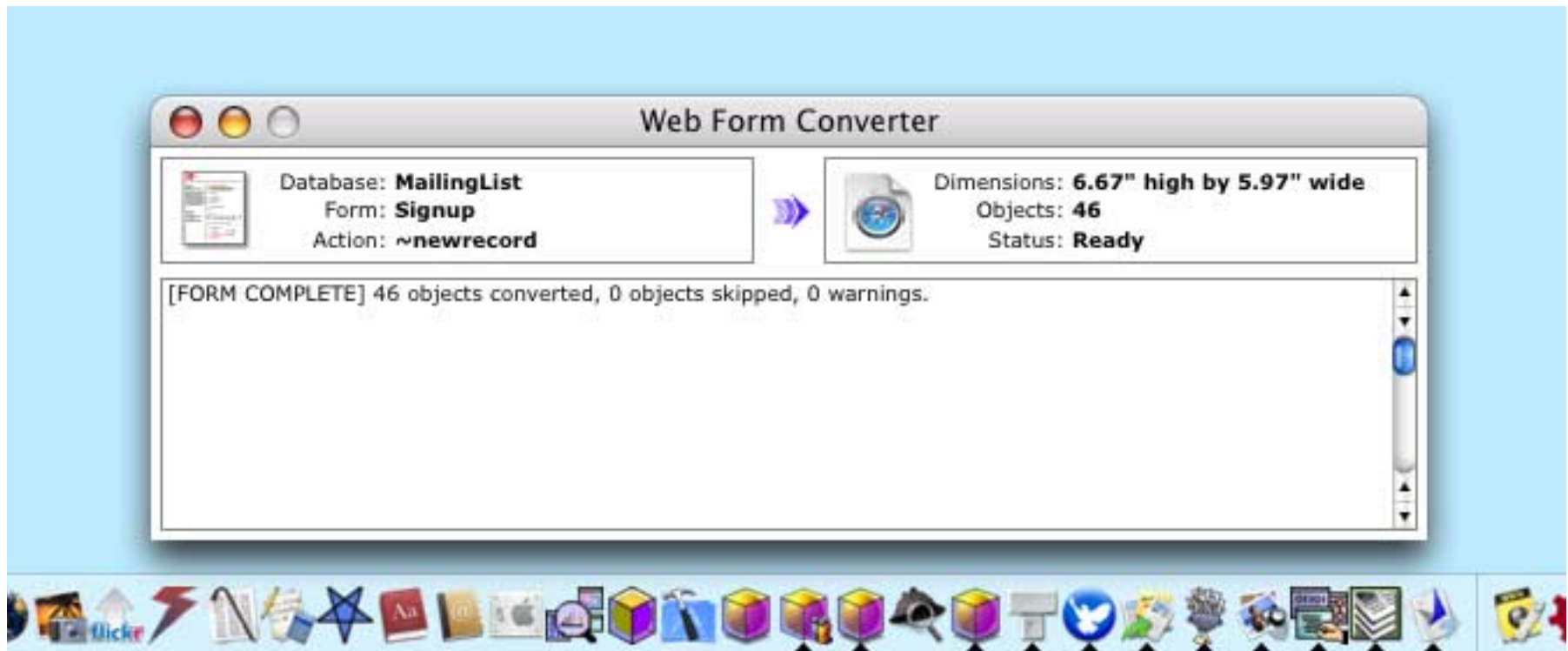
`Global`, `fileglobal` and `permanent` variables can be displayed and modified with the Variables wizard.



To learn more about this wizard see "[Displaying and Changing Variables](#)" on page 253 of *Formulas & Programming*.

Web Form Converter

Whenever you render a Panorama form to HTML Panorama will automatically open the Web Form Converter wizard. This wizard will appear centered at the bottom of the screen.



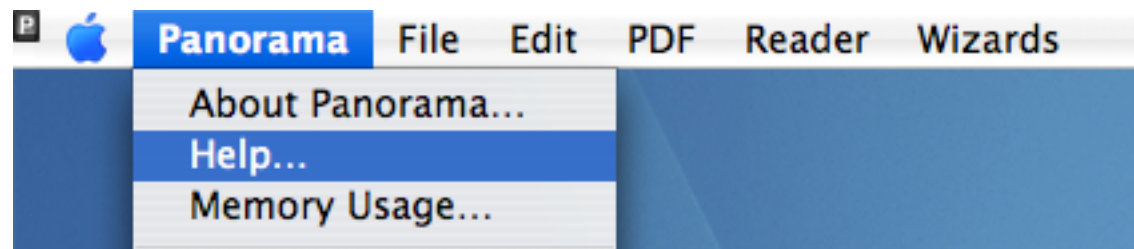
The wizard displays the status of last form that was rendered, including any errors or warnings. You can close this wizard any time you want — it will re-open the next time you render a form to HTML. You can also manually open this wizard using the **Web Form Options...** command in the **Web** submenu of the **Setup** menu (you must be in Graphics Mode in a form). To learn more about this wizard and about converting Panorama forms to HTML see Chapter 6 of the *Panorama Enterprise Handbook*.

Documentation Wizards

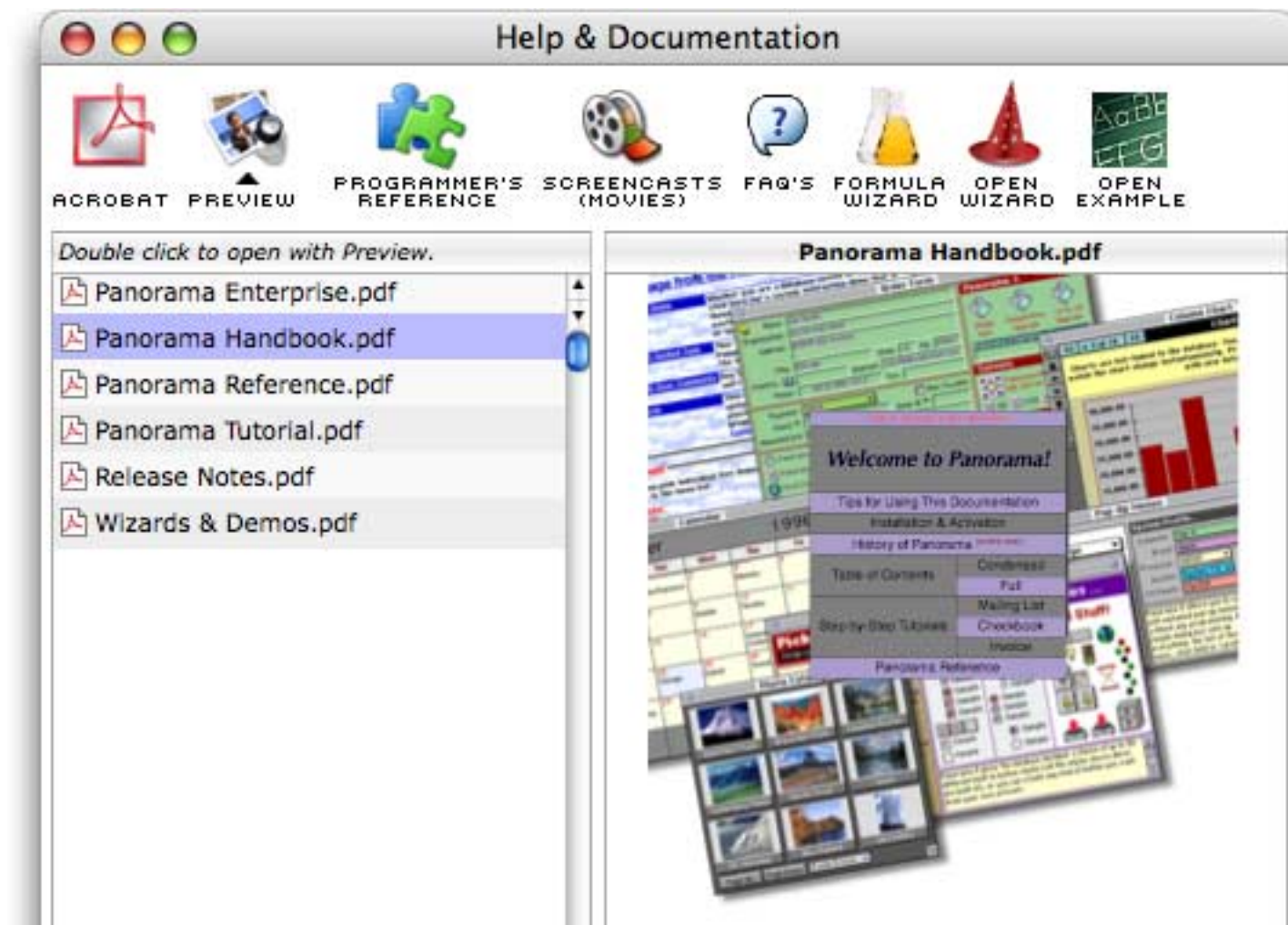
The wizards in this submenu provide access to documentation, help and tutorials. (These wizards are normally accessible only from the **Panorama** menu, but is also available in the **Wizard** menu if “built-in” wizards are enabled in General Preferences [see “[Include “Built-in” wizards in Wizard menu](#)” on page 9].)

Help & Documentation

This wizard makes it easy to access all of the documentation that comes with Panorama. You can open this from the **Documentation** submenu of the **Wizard** menu or simply by choosing **Help** from the **Panorama** menu.



The major portion of the wizard is devoted to the Panorama PDF documentation. You’ll see a list of available PDF files on the left. If the documentation is already installed on your system clicking on a PDF file will show the cover page of that document on the right.



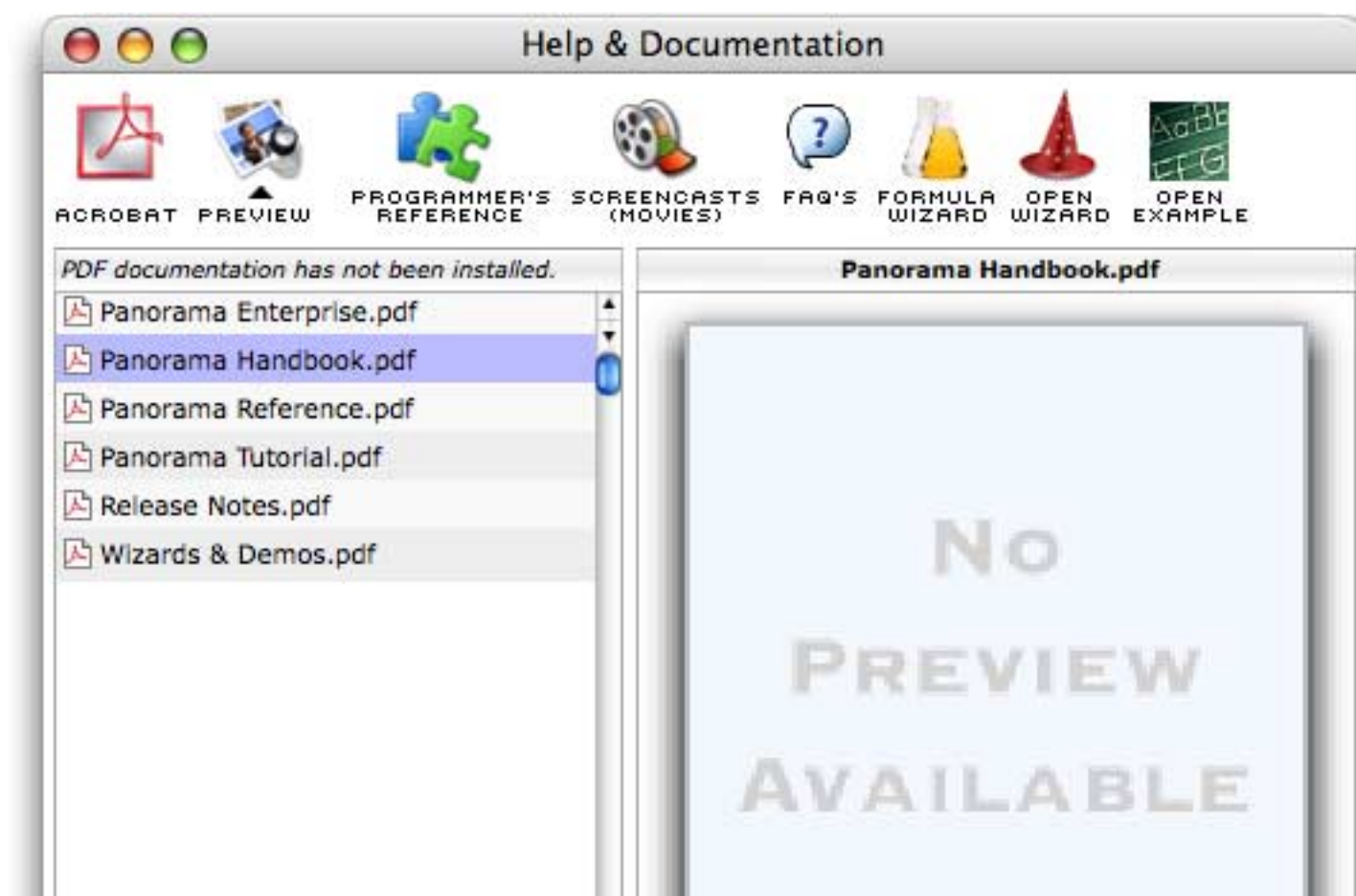
To open a PDF file simply double click on the name on the left or click once on the cover page on the right. The PDF files normally open with Apple's **Preview** program. If you'd like them to open with **Adobe Acrobat Reader** instead simply click on the Acrobat icon above the list. You can switch back and forth between Acrobat and Preview at any time.



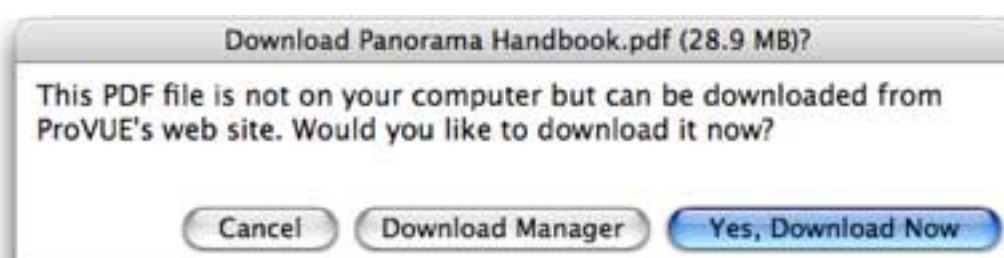
You can also choose Acrobat from the Reader menu to change this preference.



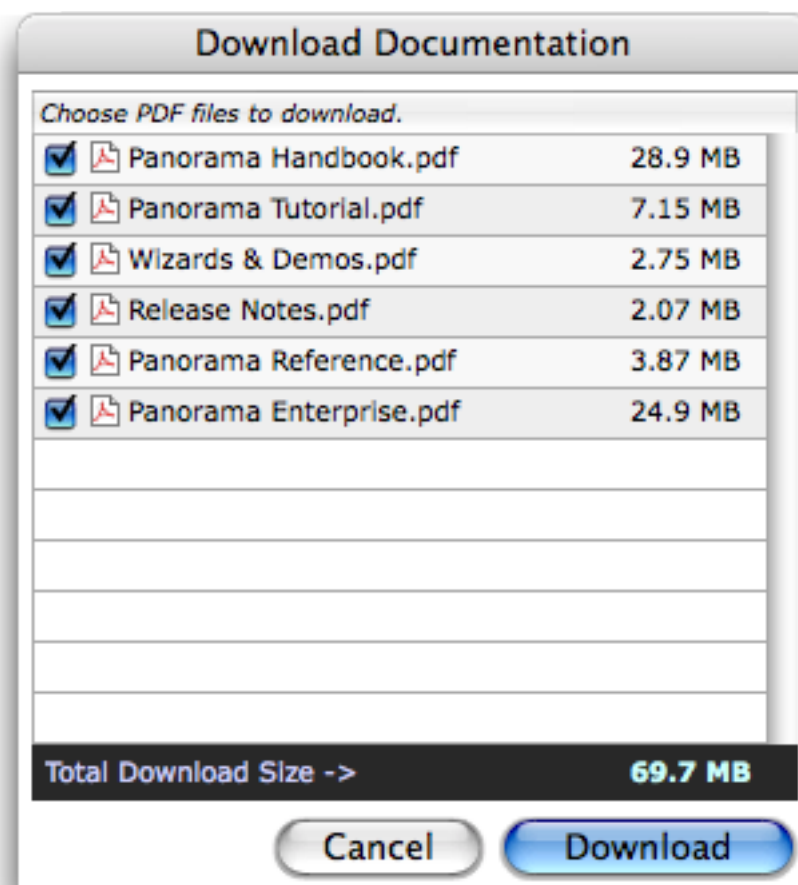
If you haven't already installed the documentation the wizard will list the available titles anyway. However the cover previews will not be available.



If you try to open the PDF file (by double clicking on the list or single clicking on the right) a dialog will appear asking if you want to download this PDF file.



You can choose to simply download the PDF file immediately or to open the PDF Download Manager, which looks like this.



This dialog allows you to choose multiple PDF files to download at once. (Files that have already been downloaded will be shown in gray.)



PROGRAMMER'S
REFERENCE

This icon opens the **Programmer's Reference** wizard (see [Page 48](#)).



SCREENCASTS
(MOVIES)

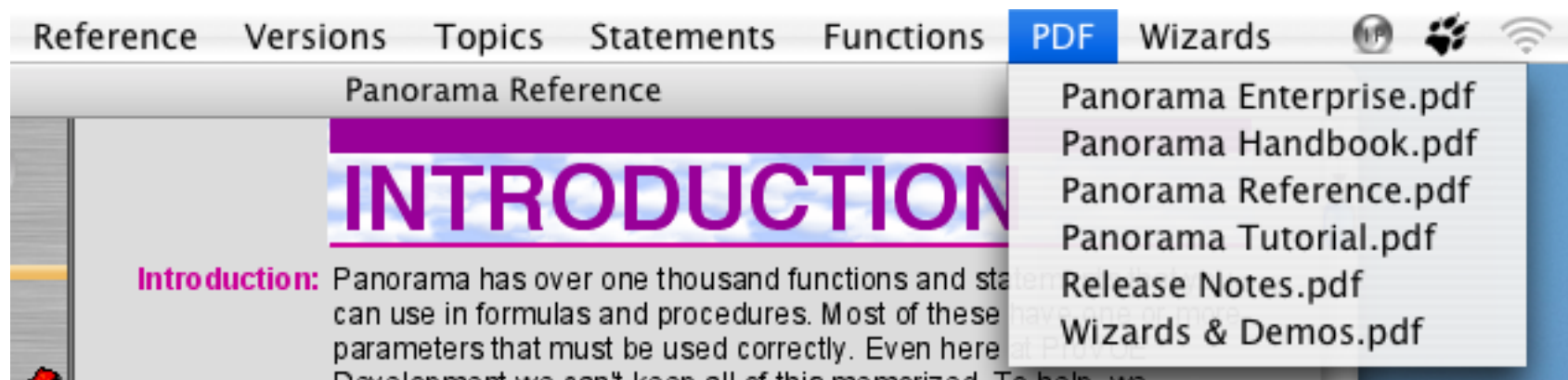
This icon the **Screencast** wizard (see also).



FAQ'S

This icon the **Frequently Asked Questions** page on the ProVUE web site.

Note: You can also open Panorama's PDF documentation directly from the **PDF** menu in the **Programming Reference** wizard. Only PDF files that have already been installed can be opened this way.



Programming Reference

The **Programming Reference** contains detailed reference information for every statement and function available in Panorama, as well as introductory information about related topics. Overall there are over 650 topics and over 900 pages of information. Each topic is cross-linked to other related topics for easy access, and the database is fully searchable.

FUNCTIONS

CALENDARDATE(...)

Syntax: `CALENDARDATE(date, boxnumber)`

Description: The `calendardate()` function is designed to help in creating monthly calendars. A standard monthly calendar has 6 rows and 7 columns (Sunday through Saturday) for a total of 42 boxes. For any given month from 28 to 31 of these boxes will be valid dates. The `calendarday()` function calculates what date corresponds to one of these 42 boxes.

Parameters: This function has two parameters: *date* and *boxnumber*.

date is any date in the month being displayed.

boxnumber is the box within the monthly calendar being displayed. The boxes are numbered from 1 to 42, starting with the upper left hand corner. The table below shows the position of all 42 monthly calendar boxes.

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	32	33	34	35
36	37	38	39	40	41	42

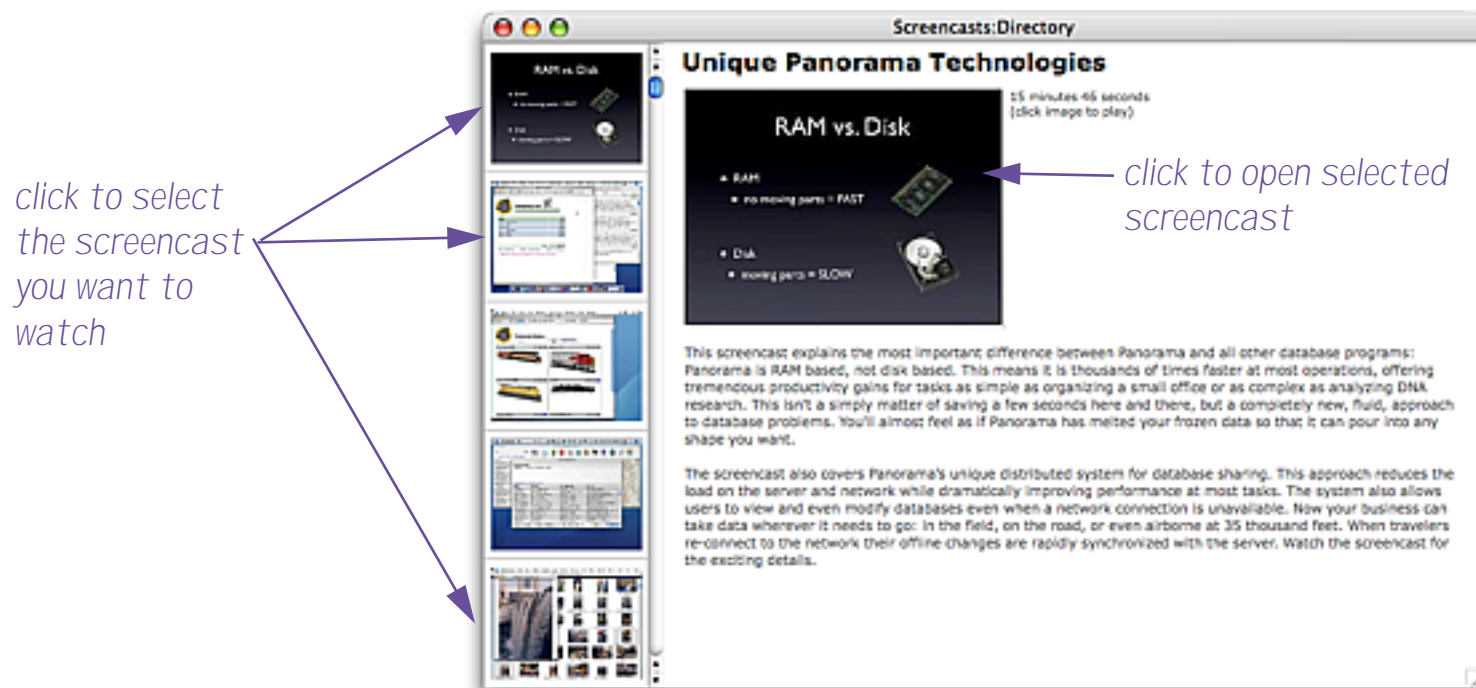
Result: This function returns a number corresponding to a date, or zero if the specified calendar box does not contain a day in this month.

Examples: The output of the `calendardate()` function is usually fed into a `lookupall()`, `lookupcalendar()`, or `lookupptime()` function. The last two functions can be used to lookup the events (appointments, to-do's, etc.) that occur on a particular day. You'll probably want to create your monthly calendar with a Matrix SuperObject™. The matrix should be 6 rows by 7 columns, with the cells numbered in horizontal order. To display the reminders that should appear in each of the calendar's 42 boxes use the formula below in an auto-wrap text object or a Text Display SuperObject™ inside the matrix frame. (This example assumes your reminders are stored in a database called `Reminders`. This database has at least two fields: `When` which contains the Reminder data type (see

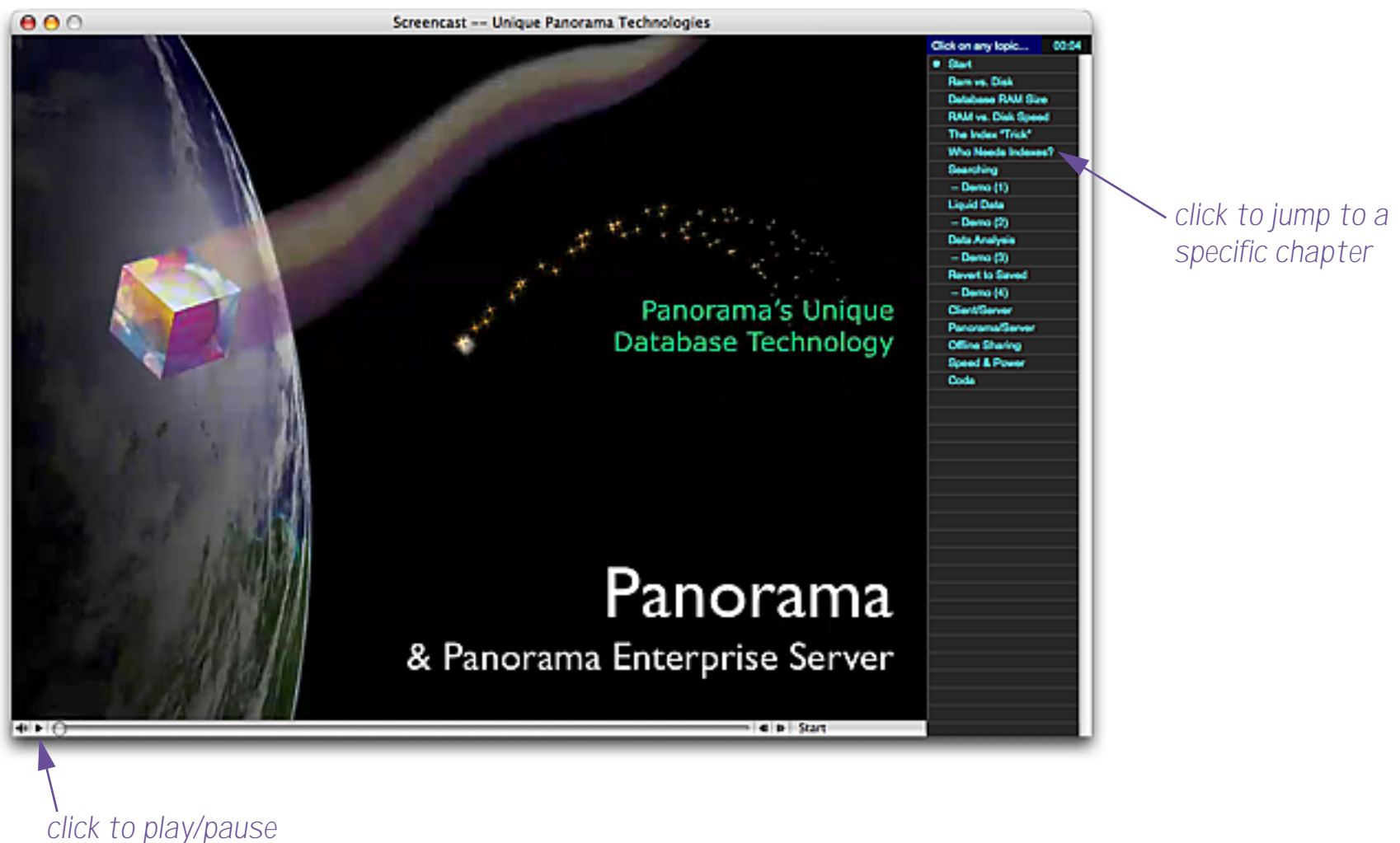
For more information on using the **Programming Reference** see “[Programming Reference Wizard](#)” on page 237 of *Formulas & Programming* or simply open the wizard (the first page contains instructions).

Screencasts

If you've installed Panorama from a CD you had the opportunity to install video screencasts when you install Panorama. (You can also watch these screencasts directly from the ProVUE web site.) If you have installed these screencasts you can use the Screencast wizard to view them.



Click on the left to select the screencast you want to watch, then click on the larger version of the screencast to open it.



You can use the chapter list on the right to jump directly to different topics in the movie.

Form Tools Wizards

The wizards in this submenu help with working with forms.

Font Usage

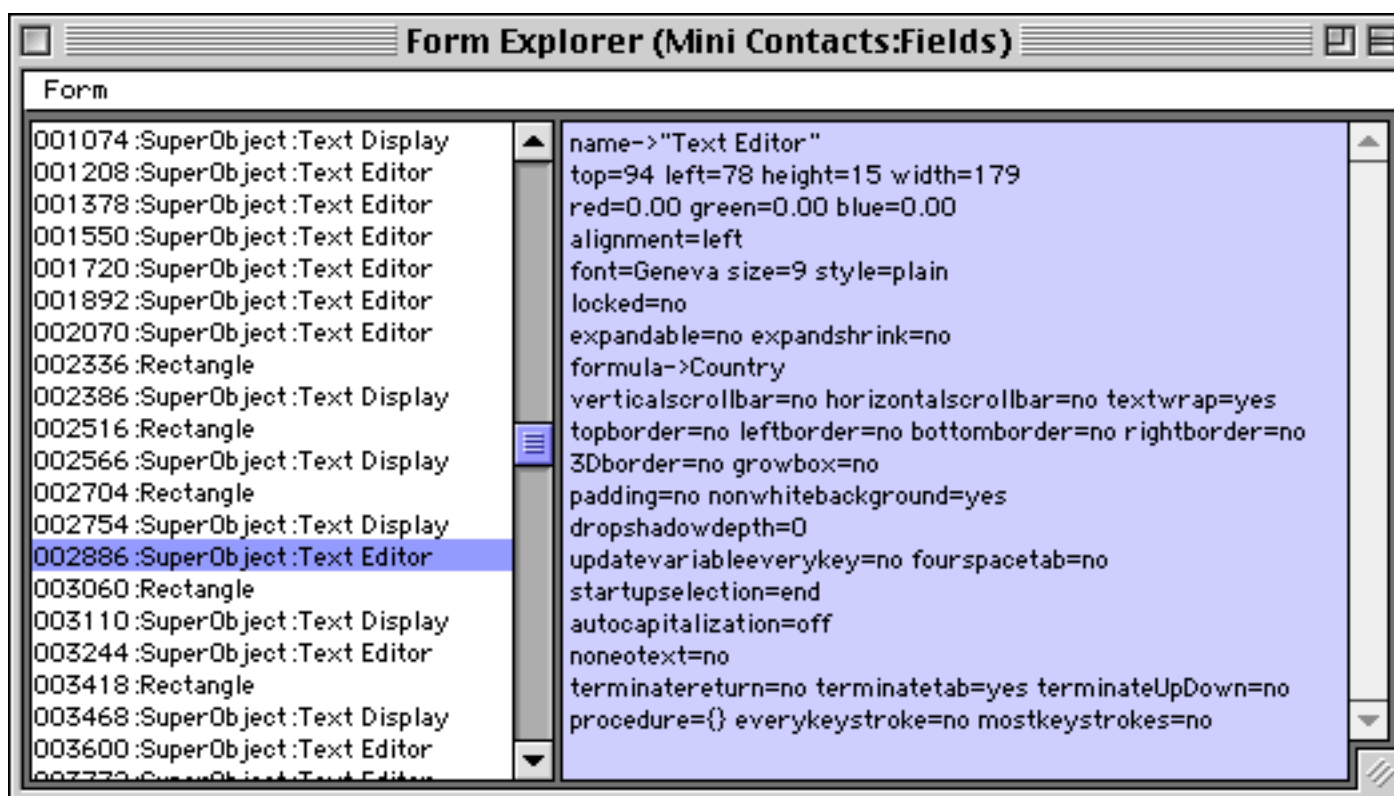
This wizard displays a list of all fonts used in a database's forms. All fonts will be listed except for Geneva, Chicago, New York and Monaco (Macintosh) or Alpine, City, Yankee and Block (Windows).



See [“Font”](#) on page 529 of the *Panorama Handbook* to learn how to select the fonts used in a form.

Form Explorer

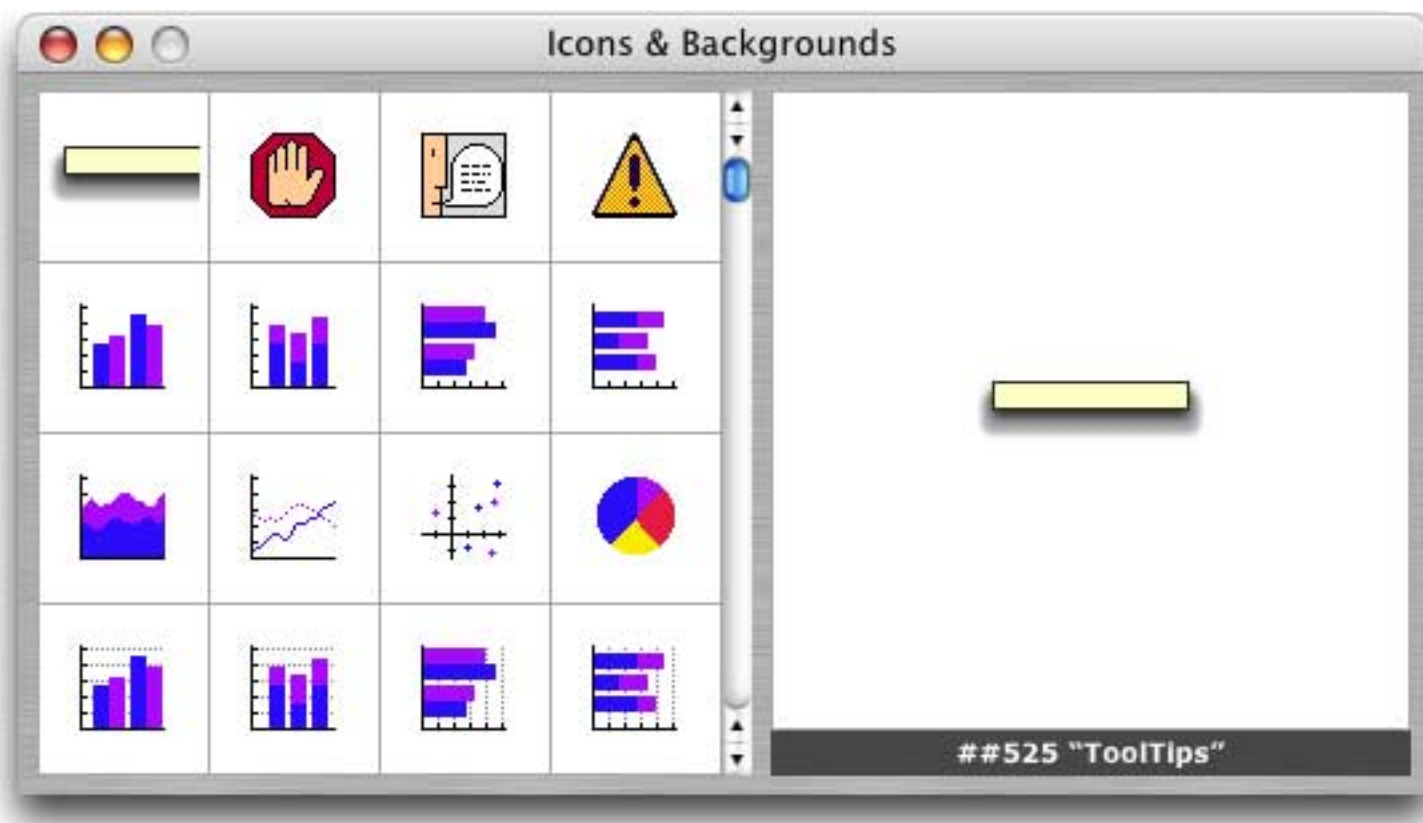
The **Form Explorer** wizard is an alternative tool for examining and (to some extent) modifying forms. The wizard displays a list of objects in a form, and displays the attributes for an object when you click on it. It's a great tool for exploring a form you are not familiar with to find out things like “what procedure is triggered by that button” or “what variable is being edited in that box”?



To learn more about this wizard see [“Using the Form Explorer Wizard”](#) on page 583 of the *Panorama Handbook* of the Panorama Handbook.

Icons & Backgrounds

Panorama includes a number of resource based images within the application itself. Most of these are used by Panorama in various windows and dialogs, but they are available for use in your databases also. To see a list of these images open the **Icons & Backgrounds** wizard in the **Form Tools** submenu of the **Wizard** menu.



To learn more about this wizard and using these images see “[Displaying Images from Resource Files](#)” on page 802 of the *Panorama Handbook*.

Window Size

The **Window Size** wizard measures the size of the currently open window.



To learn more about measuring window size see “[Measuring a Window \(Window Size Wizard\)](#)” on page 152 of the *Panorama Handbook*.

Window Tweak

Using the **Window Tweak** wizard you can enable and disable the tool palette and scroll bars in a form.



To learn all the details see “[Turning Window Components On and Off \(Window Tweak Wizard\)](#)” on page 150 of the *Panorama Handbook*.

Import-Export Wizards

The wizards in this submenu assist with importing data into existing Panorama databases as well as exporting data from Panorama to other applications.

Excel Wizard

This wizard can import data directly from an Excel worksheet into a Panorama database or export data from a Panorama database into an Excel worksheet. Starting with Panorama 6, however, you can also import or export between spreadsheets (Excel, Numbers) and Panorama simply by dragging the data (Mac) or using the clipboard (PC or Mac). See “[Importing a Text File](#)” on page 82 of the *Panorama Handbook* and “[Exporting a Text File](#)” on page 105 of the *Panorama Handbook* of the *Panorama Handbook*. We recommend you use these techniques instead of the Excel wizard.

However, if you do decide to use the Excel wizard it is described here. We’ll start with importing. The first step is to open the Excel worksheet and select the data you want to import. (In the example below this data also includes column names.)

PUBLICATION	CATEGORY	1ST NAME	LAST NAME	TITLE	ADDRESS	CITY	STATE	ZIP	PH	FAX
Albuquerque Journal	N	Rene	Kimball	Ent/Arts Ed.	Drawer J	Albuquerque	NM	87103-1131	505-823-3030	505-823-3994
Arizona Republic	N	Vinton	Supplee	Entertainment/Arts Editor	P.O. Box 1950	Phoenix	AZ	85001-1656	602-444-4823	602-444-8544
Denver Post	N	Ed	Smith	Entertainment Editor	1560 Broadway	Denver	CO	80202	303-823-1261	303-820-1679
Houston Chronicle	N	Pamela	Mitchell	Online Entertainment and	801 Texas Ave.	Houston	TX	77002	713-223-2100	
Houston Chronicle	N	Michael	Clark	Pop Music Critic	801 Texas Ave.	Houston	TX	77002	713-223-2100	
Indian Country News	N									
Las Vegas Review-Journal	N	Frank	Fertado	Ent/Arts Ed.						
Las Vegas Sun	N	John	Katsilometas	Ent/Arts Ed.						
Los Angeles Times	N	Oscar	Garza	Entertainment/Arts Editor	202 W. 1st Street	Los Angeles	CA	90012-4106	213-237-6590	213-237-4712
Orange County Register	N	Scott	Duncan	Show Editor	625 N. Grand Ave.	Santa Ana	CA	92701	714-796-7761	
Rocky Mountain News	N	Mark	Brown	Music Critic	100 Gene Amole Way	Denver	CO	80204	303-832-2674	
Rocky Mountain News	N	Joe	Rassenf	Entertainment Editor	100 Gene Amole Way	Denver	CO	80204	303-832-2610	
Salt Lake Tribune	N	Melinda	Miller	Entertainment/Arts Editor	P.O. Box 807	Salt Lake City	UT	84110-0807	801-257-8600	801-257-8525
San Diego Tribune	N	Michael	Crowell	Entertainment/Arts Editor	P.O. Box 120191	San Diego	CA	92112-0191	619-293-1018	619-293-1896
San Francisco Chronicle	N	Dave	Dayton	Dept. Arts/Entertainment	1901 Mission Street	San Francisco	CA	94133	415-777-1911	
San Francisco Chronicle - LA Bureau	N			Editor	11766 Wilshire Blvd., Suite 11	Los Angeles	CA	90025	310-478-3566	310-478-7257
Star Tribune	N	Jon	Bream	Reporter/Music Critic	425 Portland Ave.	Minneapolis	MN	55488	612-673-7719	612-673-4350
Star Tribune	N	Tim	Harlow	Calendar and Divisions	425 Portland Ave.	Minneapolis	MN	55488	612-673-7768	612-673-4350
The Star Ledger (Newark)	N	Linda	Fowler	Arts and Entertainment	1 Star Ledger Plaza	Newark	NJ	07102-120	973-322-4018	
Tucson Citizen	N	Rene	Kimball	Ent/Arts Ed.						
Tucson Daily Star	N	Cathy	Burch	County Music Reporter						
USA Today	N	Dennis	Moore	Weekend Editor	1000 Wilson Blvd.	Arlington	VA	22223-0001	703-276-3195	703-247-3135
USA Today - LA Bureau	N	John	Chelwynd	Entertainment/Arts Editor	10800 Wilshire Blvd., Suite 8	Los Angeles	CA	90024-4300	310-882-2404	310-882-1901

Once the cells are selected open Panorama and then open the Excel wizard. Press the **Preview Excel Selection** button to see a preview of the data to be imported.

A	B	C	D	E	F	G	H	I	J	K
PUBLIC	CATEG	1ST	LAST	TITLE	ADDRE	CITY	STATE	ZIP	PH	FAX
Albuqu	N	Rene	Kimball	Ent/	Drawer	Albuqu	NM	87103-	505-82	505-82
Arizona	N	Vinton	Supplee	Entertai	P.O.	Phoenix	AZ	85001-	602-44	602-44
Denver	N	Ed	Smith	Entertai	1560	Denver	CO	80202	303-82	303-82
Housto	N	Pamela	Mitchell	Online	801	Housto	TX	77002	713-22	
Housto	N	Michael	Clark	Pop	801	Housto	TX	77002	713-22	
Indian	N									
Las	N	Frank	Fertado	Ent/						
Las	N	John	Katsilo	Ent/						
Los	N	Oscar	Garza	Entertai	202 W.	Los	CA	90012-	213-23	213-23
Orange	N	Scott	Duncan	Show	625 N.	Santa	CA	92701	714-79	
Rocky	N	Mark	Brown	Music	100	Denver	CO	80204	303-89	
Rocky	N	Joe	Rassenf	Entertai	100	Denver	CO	80204	303-89	
Salt	N	Melinda	Miller	Entertai	P.O.	Salt	UT	84110-	801-25	801-25

Buttons: Preview Excel Selection, Import (Corpora...eckbook), Import (New Database), Use first line of Excel data for field names., Export Database to Excel

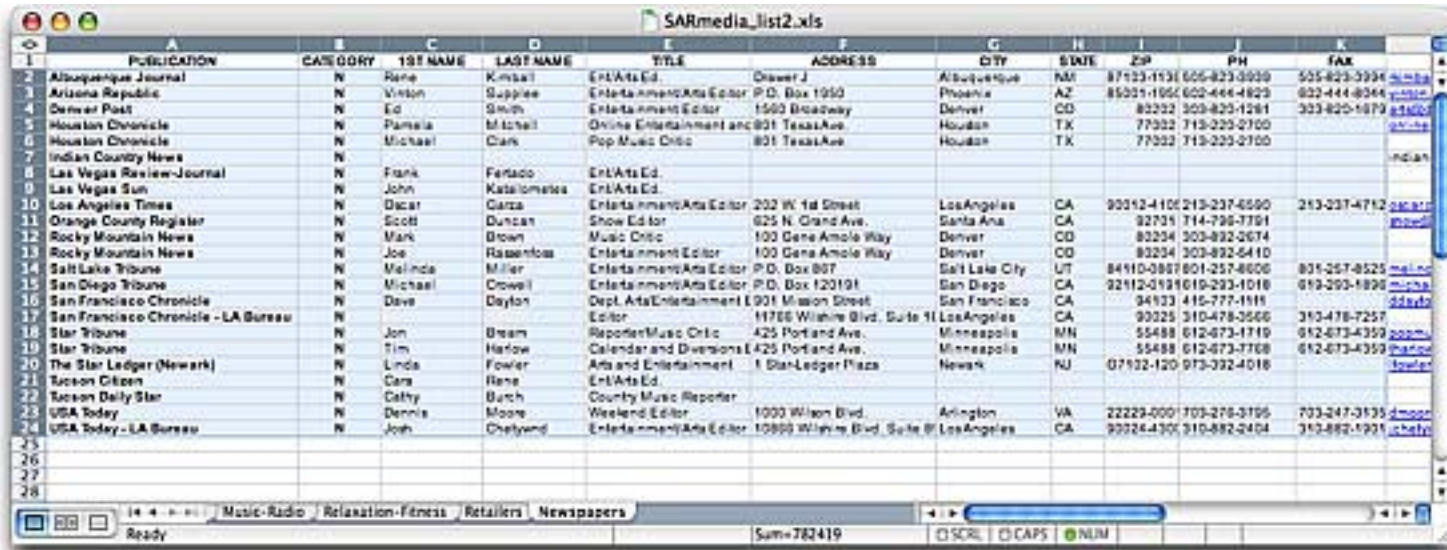
To create a new Panorama database with this data press the **Import (New Database)** button. If the first row of the Excel data has field names (like the data in this example) you will probably want to check the **Use first line of Excel data for field names** option.

After a delay the new database will appear:

PUBLICATION	CATEG	1ST NAME	LAST NAME	TITLE	ADDRESS	CITY	STAT	ZIP	PH	FAX
Albuquerque Journal	N	Rene	Kimball	Ent/Arts Ed.	Drawer J.	Albuquerque	NM	87103-1136	505-823-3939	505-823-3994
Arizona Republic	N	Vinton	Supplee	Entertainment/Arts	P.O. Box 1950	Phoenix	AZ	85001-1950	602-444-4823	602-444-8044
Denver Post	N	Ed	Smith	Entertainment Editor	1560 Broadway	Denver	CO	80202	303-820-1281	303-820-1679
Houston Chronicle	N	Pamela	Mitchell	Online Entertainment	801 Texas Ave.	Houston	TX	77002	713-220-2700	
Houston Chronicle	N	Michael	Clark	Pop Music Critic	801 Texas Ave.	Houston	TX	77002	713-220-2700	
Indian Country News	N									
Las Vegas Review-Journal	N	Frank	Fertado	Ent/Arts Ed.						
Las Vegas Sun	N	John	Katzilometer	Ent/Arts Ed.						
Los Angeles Times	N	Osoar	Garza	Entertainment/Arts	202 W. 1st Street	Los Angeles	CA	90012-4105	213-237-6590	213-237-4712
Orange County Register	N	Scott	Duncan	Show Editor	625 N. Grand Ave.	Santa Ana	CA	92701	714-796-7791	
Rocky Mountain News	N	Mark	Brown	Music Critic	100 Gene Amole Way	Denver	CO	80204	303-892-2674	
Rocky Mountain News	N	Joe	Rassenfoss	Entertainment Editor	100 Gene Amole Way	Denver	CO	80204	303-892-5410	
Salt Lake Tribune	N	Melinda	Miller	Entertainment/Arts	P.O. Box 867	Salt Lake City	UT	84110-0867	801-257-8606	801-257-8525
San Diego Tribune	N	Michael	Crowell	Entertainment/Arts	P.O. Box 120191	San Diego	CA	92112-0191	619-293-1018	619-293-1896
San Francisco Chronicle	N	Dave	Dayton	Dept. Arts/Entertain	901 Mission Street	San Francisco	CA	94103	415-777-1111	
San Francisco Chronicle - LA	N			Editor	11766 Wilshire Blvd. :	Los Angeles	CA	90025	310-478-3566	310-478-7257
Star Tribune	N	Jon	Bream	Reporter/Music Crit	425 Portland Ave.	Minneapolis	MN	55488	612-673-1719	612-673-4359
Star Tribune	N	Tim	Harlow	Calendar and Diversi	425 Portland Ave.	Minneapolis	MN	55488	612-673-7768	612-673-4359
The Star Ledger (Newark)	N	Linda	Fowler	Arts and Entertainm	1 Star-Ledger Plaza	Newark	NJ	07102-1200	973-392-4018	
Tucson Citizen	N	Cara	Rene	Ent/Arts Ed.						
Tucson Daily Star	N	Cathy	Burch	Country Music Repor						
USA Today	N	Dennis	Floore	Weekend Editor	1000 Wilson Blvd.	Arlington	VA	22229-0001	703-276-3795	703-247-3135
USA Today - LA Bureau	N	Josh	Chetyvnd	Entertainment/Arts	10866 Wilshire Blvd. :	Los Angeles	CA	90024-4300	310-882-2404	310-882-1901

Importing an Excel Worksheet into an Existing Database

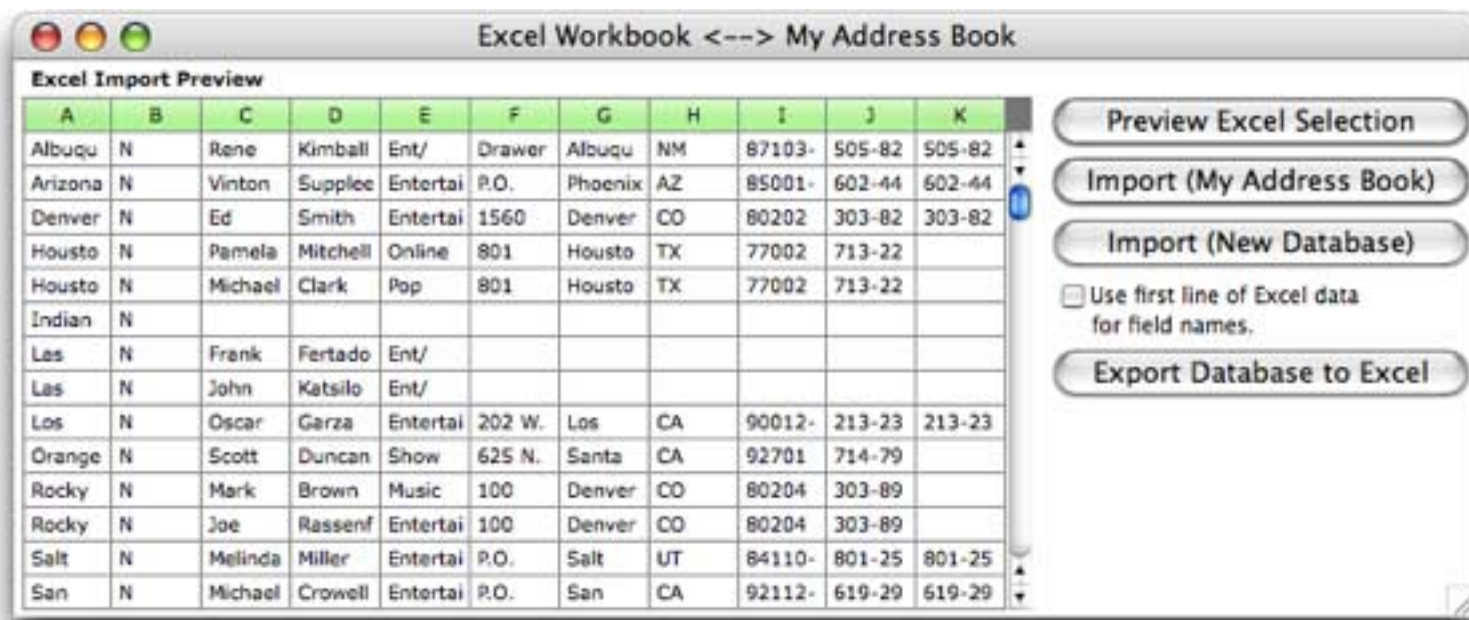
To import into an existing database start by selecting the cells in Excel. Since you'll be importing into an existing database you probably won't want to select any column headers.



Then switch to Panorama and make sure the database you want to import into is open.



Next open the Excel Wizard and press the **Preview Excel Selection** button.

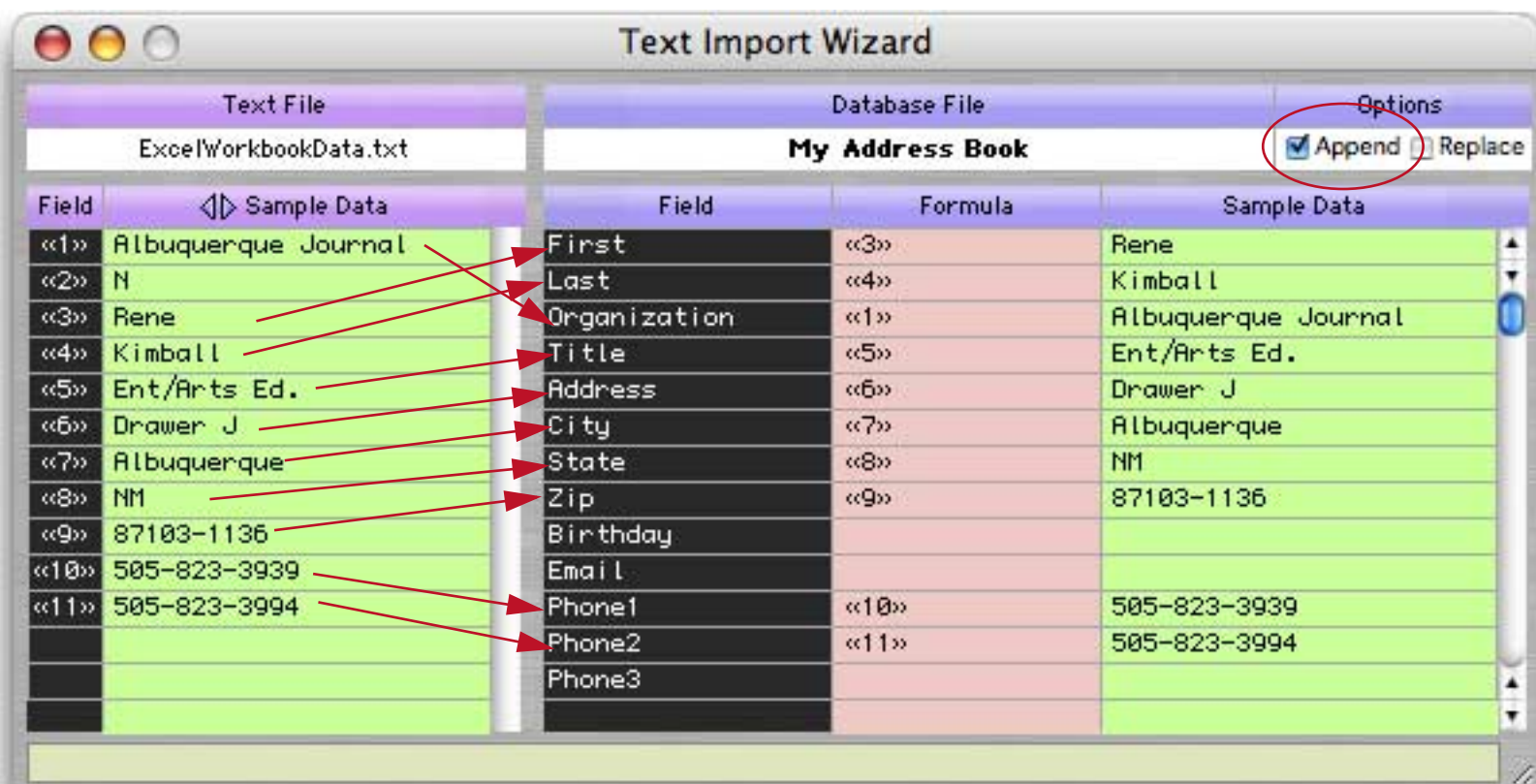


The second button from the top should show the name of the database you are going to import into. Press

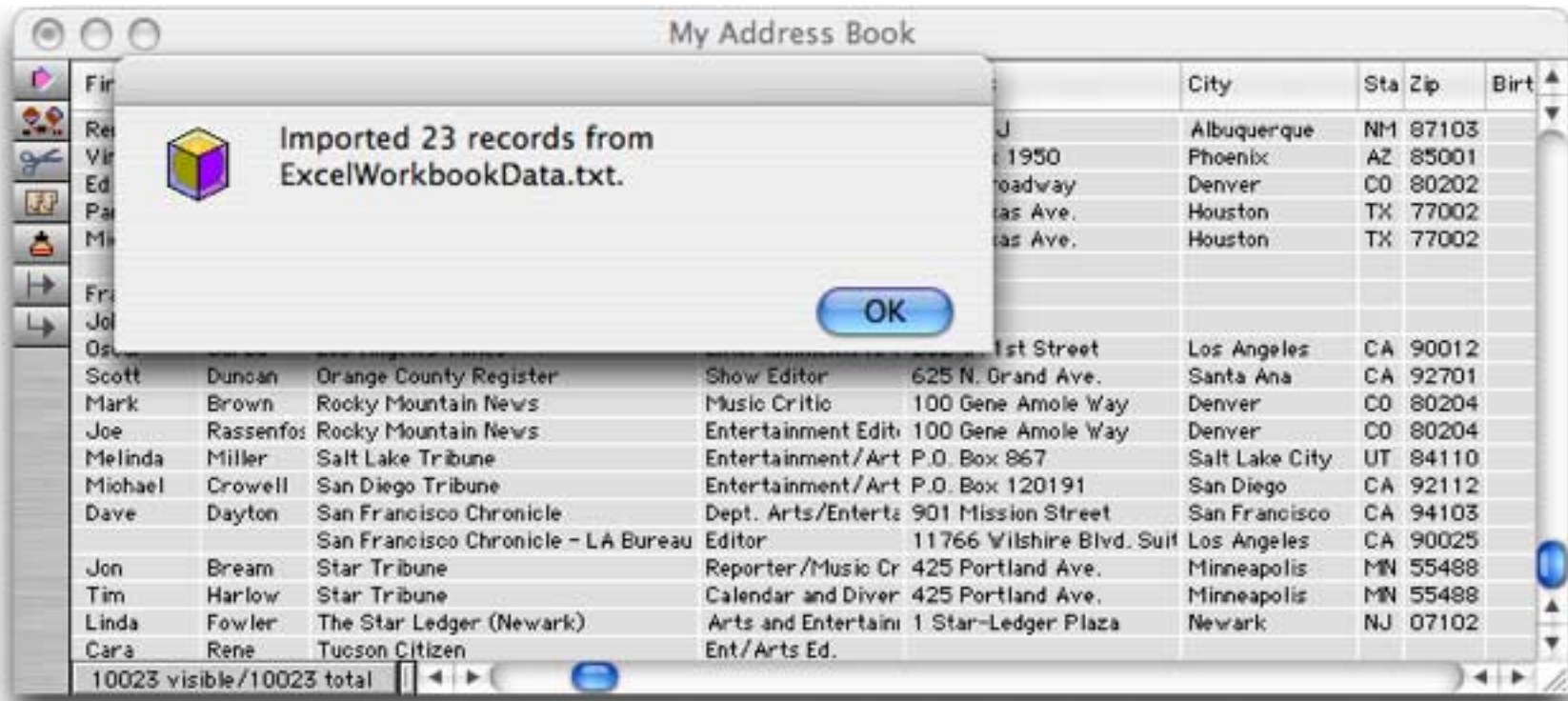
this button to launch the Text Import wizard.



The data to be imported appears on the left side of the wizard and the fields of the database being imported to appear on the right. Drag the data from the left onto the fields on the right and choose whether you want to append to or replace the existing data in the target database (for more information on this wizard see “[Text Import Wizard](#)” on page 63 of the *Panorama Handbook*).

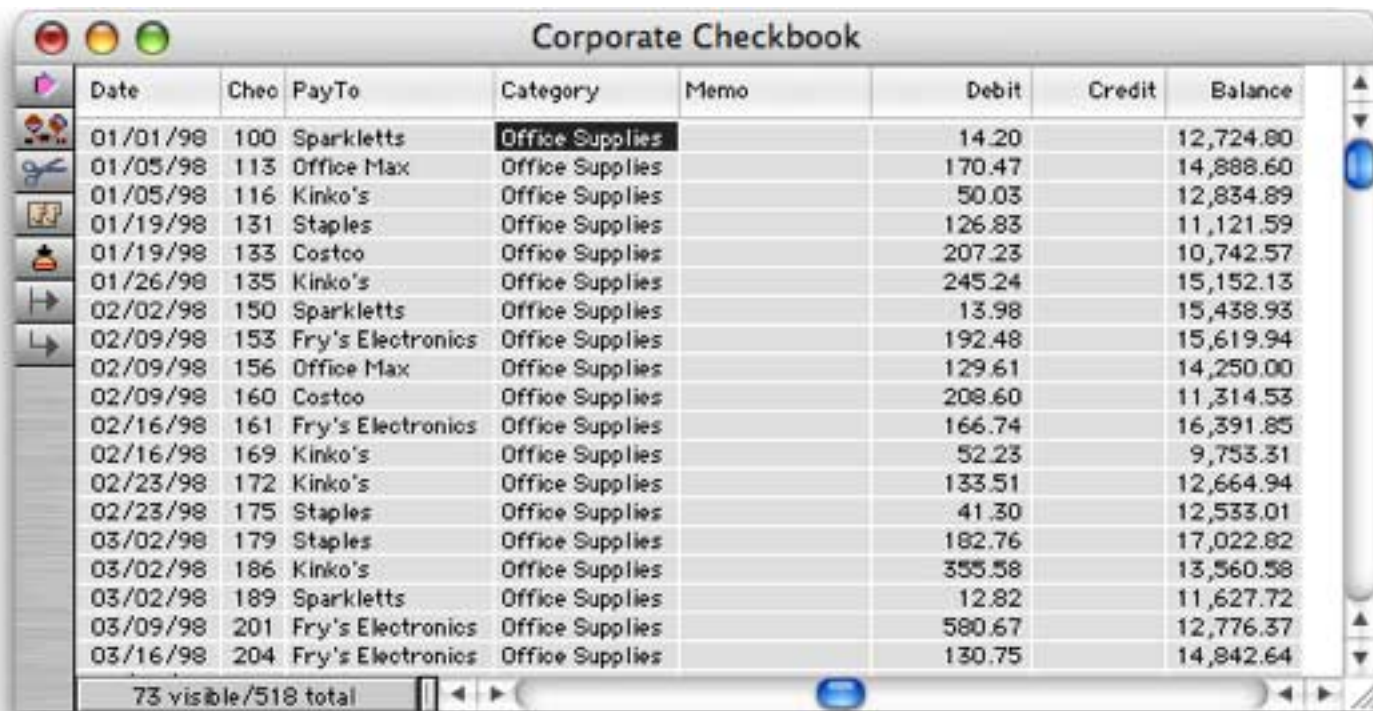


When everything is set up choose **Import Data** from the **Import** menu. The data will be imported into the database.

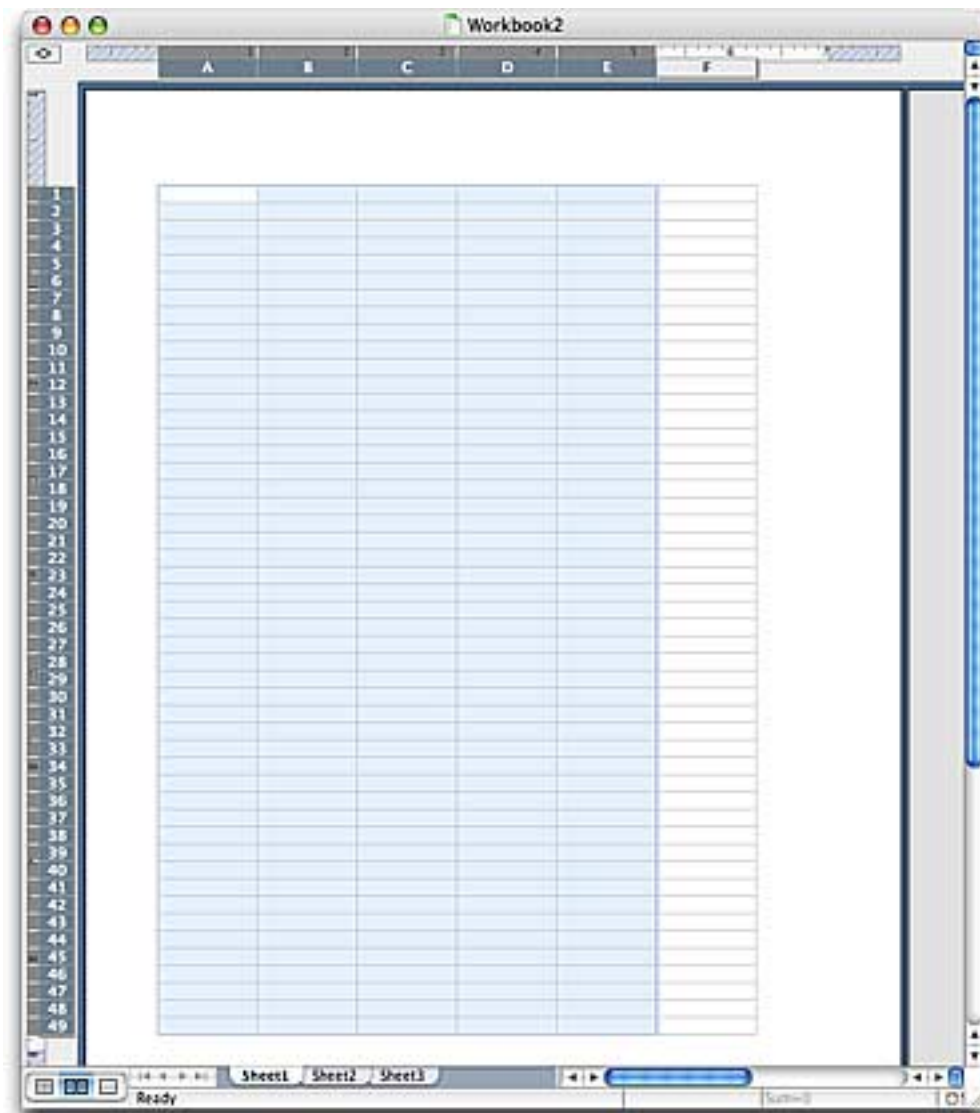


Exporting from Panorama into an Excel Worksheet

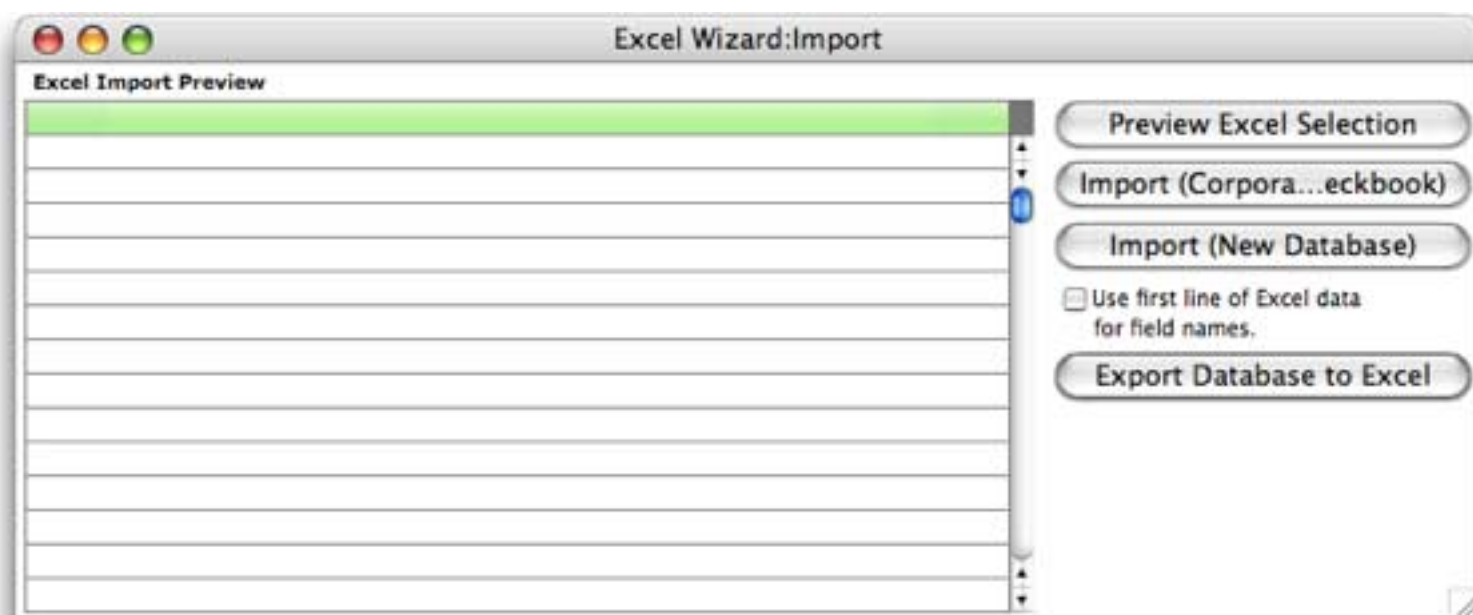
To export from Panorama to Excel start by opening the database that contains the data you want to export and selecting the data you want to export.



Next go to Excel and open (or create) the worksheet you want to export to. Select the area within the worksheet where you want to put the exported data. This area must be large enough for all of the data you want to export (if it is not large enough the data will be cut off).



Now go back to Panorama and open the Excel Wizard.



Press the **Export Database to Excel** button.

If you want to go ahead anyway press the **Export** button. Now the data will be transferred to Excel.

	A	B	C	D	E	F
1	1/1/98	100	Sparkletts	Office Supplie	14.2	
2	1/5/98	113	Office Max	Office Supplie	170.47	
3	1/5/98	116	Kinko's	Office Supplie	50.03	
4	1/19/98	131	Staples	Office Supplie	126.83	
5	1/19/98	133	Costco	Office Supplie	207.23	
6	1/26/98	135	Kinko's	Office Supplie	245.24	
7	2/2/98	150	Sparkletts	Office Supplie	13.98	
8	2/9/98	153	Fry's Electron	Office Supplie	192.48	
9	2/9/98	156	Office Max	Office Supplie	129.61	
10	2/9/98	160	Costco	Office Supplie	208.6	
11	2/16/98	161	Fry's Electron	Office Supplie	166.74	
12	2/16/98	169	Kinko's	Office Supplie	52.23	
13	2/23/98	172	Kinko's	Office Supplie	133.51	
14	2/23/98	175	Staples	Office Supplie	41.3	
15	3/2/98	179	Staples	Office Supplie	182.76	
16	3/2/98	186	Kinko's	Office Supplie	355.58	
17	3/2/98	189	Sparkletts	Office Supplie	12.82	
18	3/9/98	201	Fry's Electron	Office Supplie	580.67	
19	3/16/98	204	Fry's Electron	Office Supplie	130.75	
20	3/16/98	208	Staples	Office Supplie	192.63	
21	3/30/98	213	Office Max	Office Supplie	134.97	
22	3/30/98	216	Staples	Office Supplie	153.16	
23	4/1/98	223	Sparkletts	Office Supplie	13.81	
24	4/6/98	237	Staples	Office Supplie	122.2	
25	4/6/98	238	Kinko's	Office Supplie	87.68	
26	4/13/98	242	Kinko's	Office Supplie	189.49	
27	4/20/98	247	Fry's Electron	Office Supplie	98.8	
28	4/20/98	248	Kinko's	Office Supplie	70.34	
29	4/27/98	253	Costco	Office Supplie	170.5	
30	5/1/98	266	Sparkletts	Office Supplie	14.5	
31	5/4/98	276	Kinko's	Office Supplie	107.44	
32	5/11/98	279	Staples	Office Supplie	97.69	
33	5/18/98	288	Staples	Office Supplie	101.91	
34	6/1/98	304	Sparkletts	Office Supplie	14.95	
35	6/8/98	314	Staples	Office Supplie	247.4	
36	6/8/98	316	Office Max	Office Supplie	120.9	
37	6/22/98	326	Kinko's	Office Supplie	124.24	
38	6/29/98	334	Kinko's	Office Supplie	73.98	
39	7/1/98	342	Sparkletts	Office Supplie	14.61	
40	7/6/98	354	Fry's Electron	Office Supplie	50.51	
41	7/20/98	360	Kinko's	Office Supplie	176.83	
42	7/20/98	363	Staples	Office Supplie	165.09	
43	7/27/98	366	Staples	Office Supplie	177.8	
44	7/27/98	368	Kinko's	Office Supplie	105.2	
45	8/3/98	376	Office Depot	Office Supplie	77.23	
46	8/3/98	384	Sparkletts	Office Supplie	13.3	
47	8/3/98	386	Kinko's	Office Supplie	47.04	
48	8/10/98	391	Office Depot	Office Supplie	94.35	
49	8/10/98	392	Staples	Office Supplie	55.75	

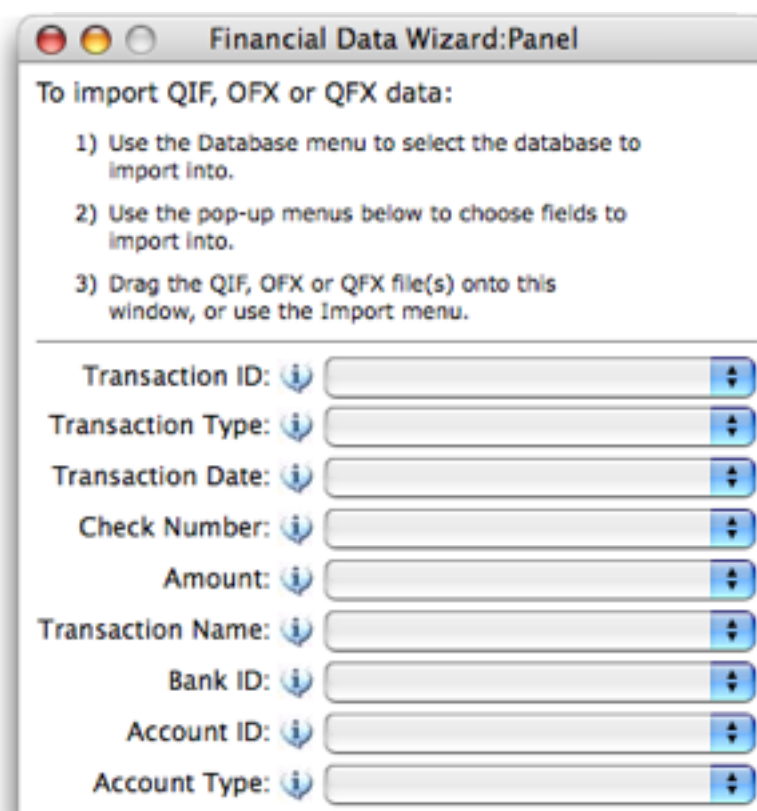
Financial Data Wizard

This wizard allows you to import data from QIF, OFX and QFX file formats. These file formats are used for financial data and can be generated by exporting from programs like Intuit Quicken and by downloading from the web sites from many financial institutions.

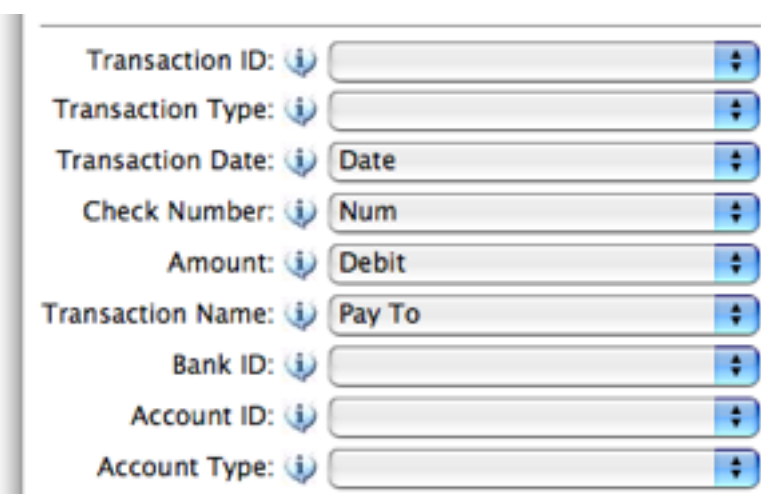
Before you import financial data you'll need to prepare a database to receive the data. An easy way to do this is to create a checkbook with the **New Database Wizard**.



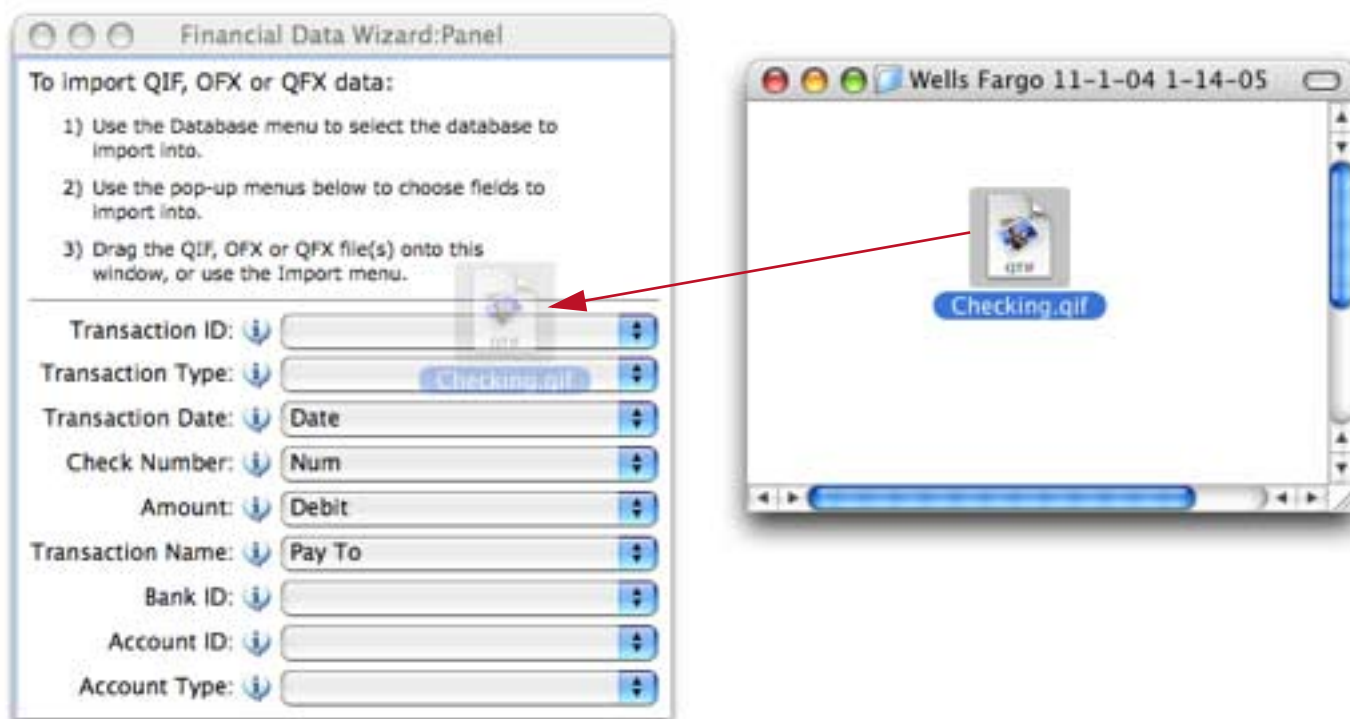
Next open the **Financial Data Wizard**.



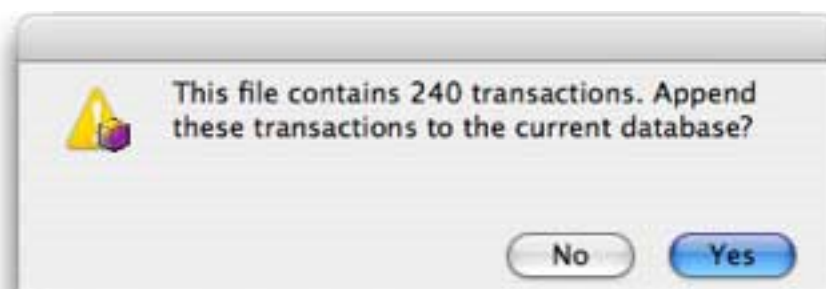
Using the pop-up menus, select which fields in the database will receive different types of financial data. In this case there are four fields in the target database that will receive financial data.



Once the fields are set up you can import the data. The simplest method is simply to drag the file containing the financial data onto the wizard.



The wizard will ask you to confirm that you want to append this new data to the database.



Press **Yes** to bring in the data.

The screenshot shows a spreadsheet window titled 'Untitled' with the following data:

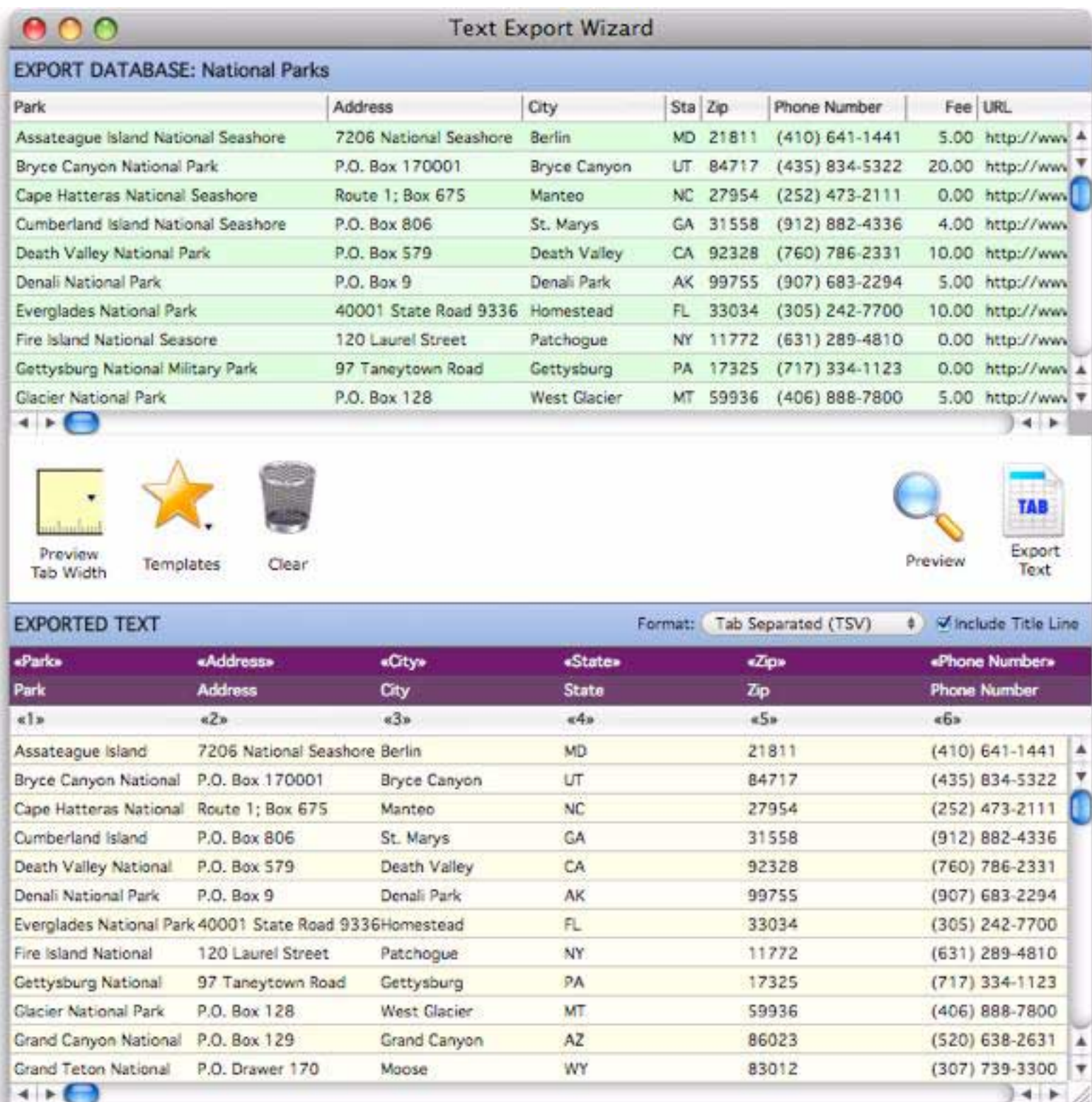
Num	Date	Pay To	Memo	Debit	Credit	Balance
	11/02/04	CPS MERCH SVCS CR CD FEES 041029		-49.69		
23114	11/02/04	CHECK		-82.90		
23104	11/02/04	CHECK		-158.46		
23101	11/02/04	CHECK		-184.69		
23113	11/02/04	CHECK		-200.00		
23102	11/02/04	CHECK		-1,000.00		
	11/02/04	DISCOVER NETWORK SETTLEMENT 0411		-3.73		
	11/02/04	DISCOVER NETWORK SETTLEMENT 0410		69.95		
	11/02/04	AMERICAN EXPRESS SETTLEMENT 0411		86.98		
	11/02/04	CPS MERCH SVCS CR CD DEP 041101		353.43		
23099	11/01/04	CHECK		-31.31		
23098	11/01/04	CHECK		-37.22		
23107	11/01/04	CHECK		-46.28		
23097	11/01/04	CHECK		-96.67		
23092	11/01/04	CHECK		-184.32		
23108	11/01/04	CHECK		-280.32		
	11/01/04	AMERICAN EXPRESS SETTLEMENT 0410		604.69		
	11/01/04	AMERICAN EXPRESS SETTLEMENT 0411		48.33		
	11/01/04	CPS MERCH SVCS CR CD DEP 041029		343.79		

At the bottom of the window, it says '241 visible/241 total'.

Instead of dragging the file onto the wizard you can also import the data by choosing the Import OFX/QFX/QIF command from the Import menu.

Text Export Wizard

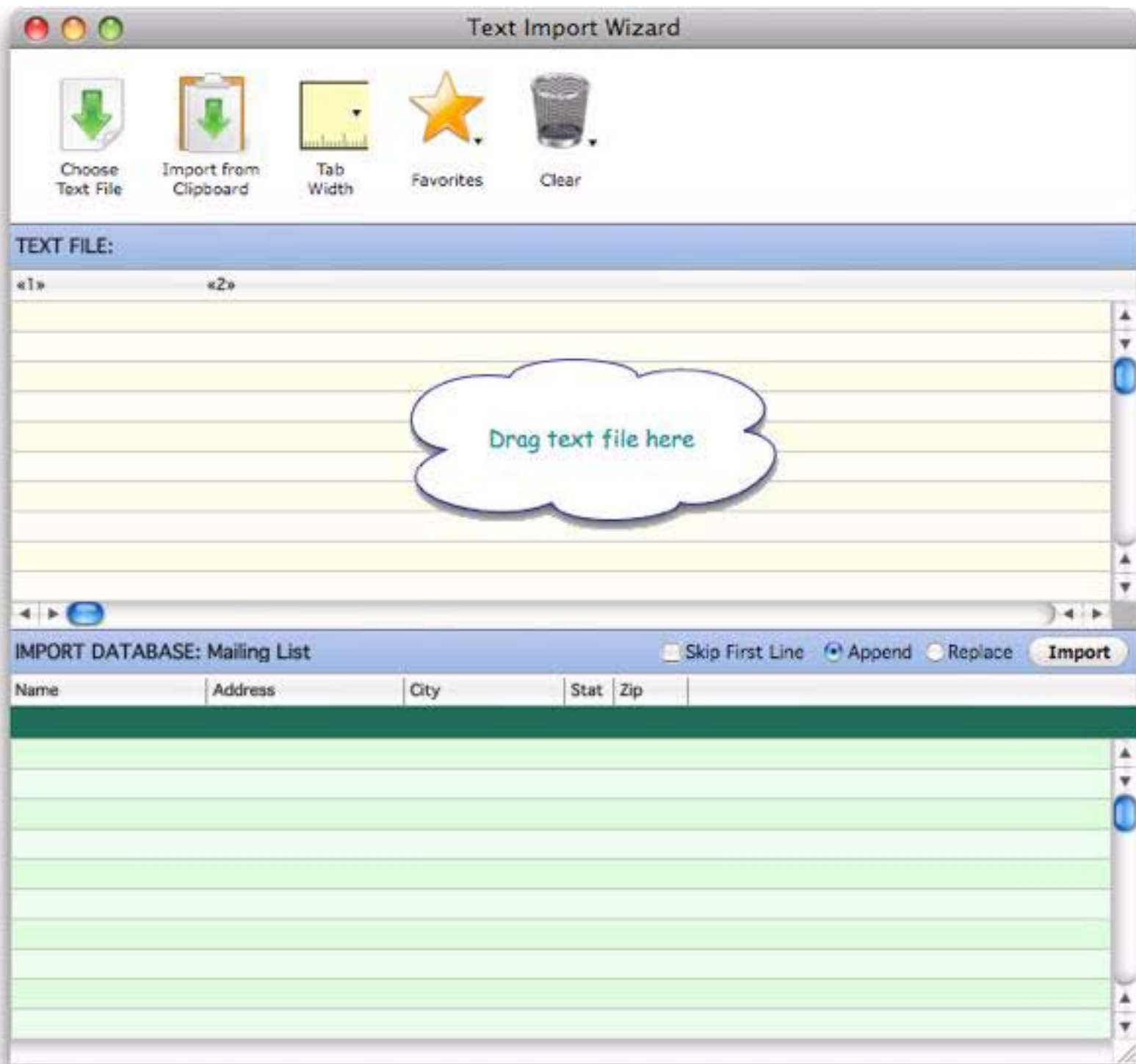
The **Text Export Wizard** allows you to export any database as a text file. Usually you'll do this when you want to transfer information to another application. The wizard allows you to specify the order of the fields being exported, and to manipulate the data as it is being exported (converting it to upper case, for example, or combining several database fields into one export field). The wizard can even be used to convert the database into an HTML table so that it can be published on the web (see "[Exporting HTML Tables](#)" on page 118 of the *Panorama Handbook*). (This wizard is normally accessible only from the **File** menu, but is also available in the **Wizard** menu if "built-in" wizards are enabled in General Preferences [see "[Include "Built-in" wizards in Wizard menu](#)" on page 9].)



To learn more about this wizard see "[Exporting with the Text Export Wizard](#)" on page 109 of the *Panorama Handbook*.

Text Import Wizard

The **Text Import Wizard** allows you to import almost any text file into a database. You'll use this wizard to help transfer data from other applications (Access, FileMaker, etc.) into Panorama. The data can be imported even if the arrangement of fields in the text file is completely different than the arrangement of fields in the database itself. (This wizard is normally accessible only from the **File** menu, but is also available in the **Wizard** menu if "built-in" wizards are enabled in General Preferences [see "[Include "Built-in" wizards in Wizard menu](#)" on page 9].)

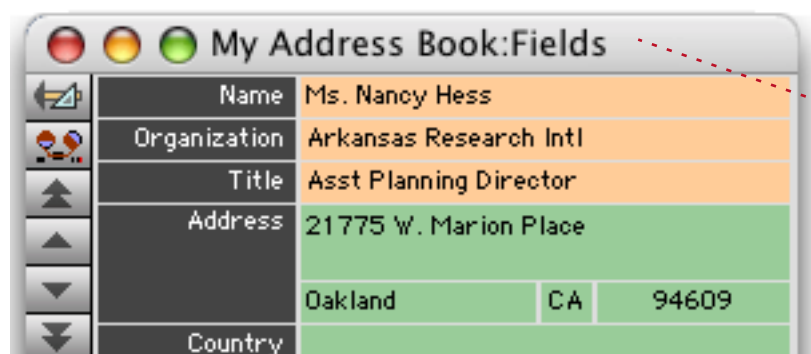


To learn more about importing data with this wizard see "[Using the Text Import Wizard](#)" on page 94 of the *Panorama Handbook*.

VCard Wizard

Generic fields allow you to transfer data between the database and other databases that also have generic fields, or between the database and applications that support vCards. For example an address could be copied to Apple's address book, or used to display a map. A phone number can be used to actually dial the phone, or an e-mail address to send an e-mail. The slickest way to use generic fields is to program them into your database itself (see "[VCard Drag and Drop](#)" on page 656 of *Formulas & Programming*). However, it's not necessary to do any programming to use generic fields. The **VCard Wizard** allows you to use generic fields without any programming at all. When you first open this wizard it will display the generic data from the current database, as shown below. (If the current database doesn't have any generic fields, it will display an error message.)

original database



Field	Value
Name	Ms. Nancy Hess
Organization	Arkansas Research Intl
Title	Asst Planning Director
Address	21775 W. Marion Place
	Oakland CA 94609
Country	

VCard wizard displays the same information



With the VCard Wizard you can:

- Drag contact information back and forth between this database and other databases or applications.
- Import or export groups of VCards.
- Display a map of the currently displayed address
- Send an e-mail to the currently displayed contact
- Automatically dial the phone

To learn more about this wizard see "[Using Generic Fields with the VCard Wizard](#)" on page 237 of the *Panorama Handbook*.

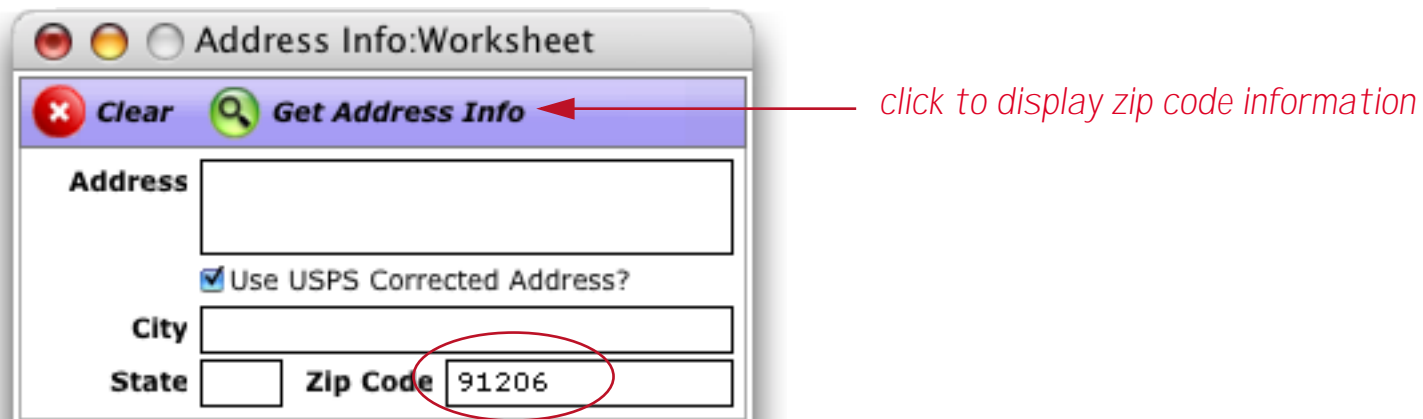
Internet Wizards

The wizards in this submenu bridge between Panorama and content on the Internet. Your computer must be connected to the Internet to use these wizards.

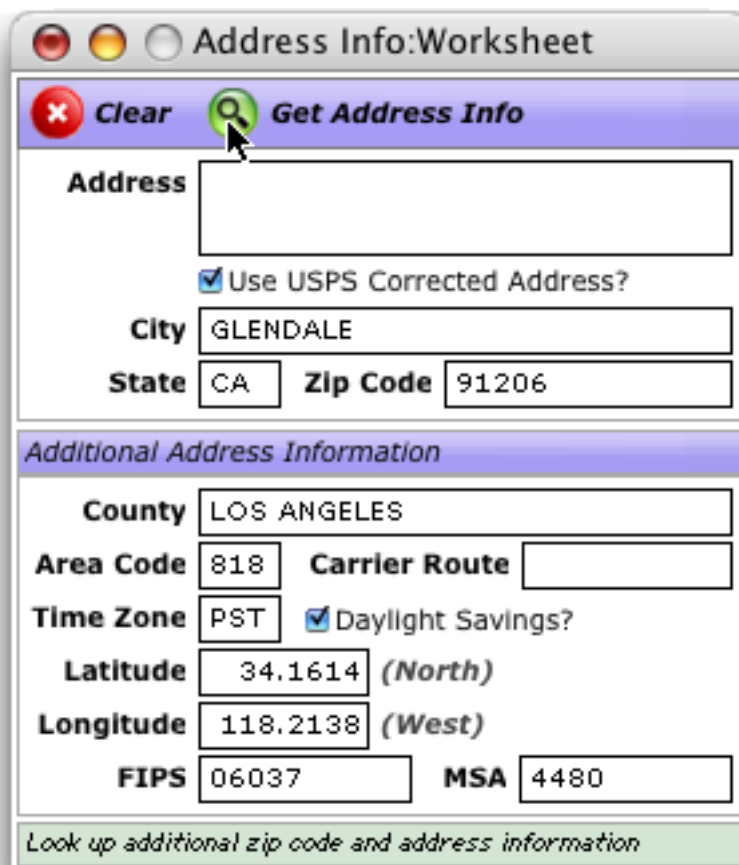
Address Info

This wizard gets information about US addresses and zip codes. If you enter a zip code it will display information about that zip code, including the city, state, county, area code, time zone, latitude and longitude, and the FIPS and MSA code. If you enter a full address it will display the zip+4 code and carrier route, and will check to make sure that this is a valid address according to the US Post Office.

To display information about a zip code, type in the zip code and press the **Get Address Info** checkbox.



The wizard will check on the Internet and display the information about this zip code.



To check and display information about an address, enter the address and press the **Get Address Info** button.

The screenshot shows a window titled "Address Info:Worksheet". At the top, there are two buttons: "Clear" (with a red 'x' icon) and "Get Address Info" (with a magnifying glass icon). Below the buttons, there are several input fields:

- Address:** A text box containing "1807 Abbott Street".
- Use USPS Corrected Address?**
- City:** A text box containing "san luis obispo".
- State:** A dropdown menu showing "CA".
- Zip Code:** An empty text box.

The wizard checks the Internet and displays the information (including looking up the nine digit zip code, since no zip code was supplied). Since the **Use USPS Corrected Address** option is checked, the wizard rewrites the address itself to conform to US Post Office standards (for example **1807 Abbott Street** is rewritten as **1807 ABBOT ST**).

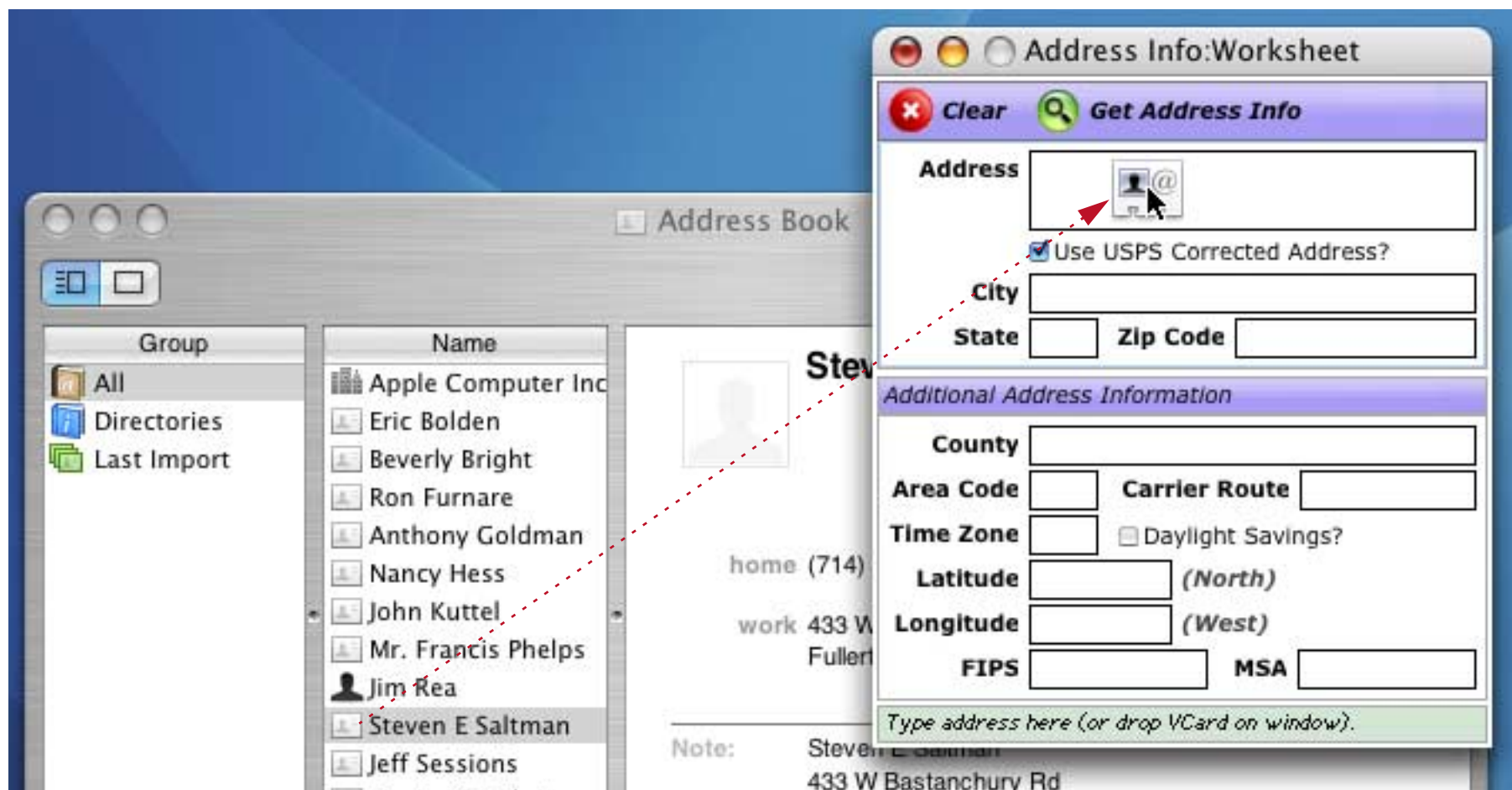
The screenshot shows the same window after clicking "Get Address Info". The address field now contains "1807 ABBOTT ST". The city field contains "SAN LUIS OBISPO". The zip code field now contains "93401-2660". Below these fields, there is a section titled "Additional Address Information" with the following details:

- County:** SAN LUIS OBISPO
- Area Code:** 805 **Carrier Route:** C033
- Time Zone:** PST **Daylight Savings?**
- Latitude:** 35.2383 (North)
- Longitude:** 120.6214 (West)
- FIPS:** 06079 **MSA:** 7460

If the address is not valid it will turn red when you press the **Get Address Info** button. In this case there is no such address as **18070 Abbot Street**.

The screenshot shows the window with an invalid address. The address field contains "18070 ABBOTT ST" and is highlighted with a red border. The city field contains "SAN LUIS OBISPO" and the zip code field contains "93401-2660". The "Use USPS Corrected Address?" checkbox is checked. The "Additional Address Information" section is not visible in this screenshot.

The **Address Info** wizard also understands VCards, so you can drag from any database or application that supports VCards. For example, you can drag from Apple's **Address Book** application, as shown here.



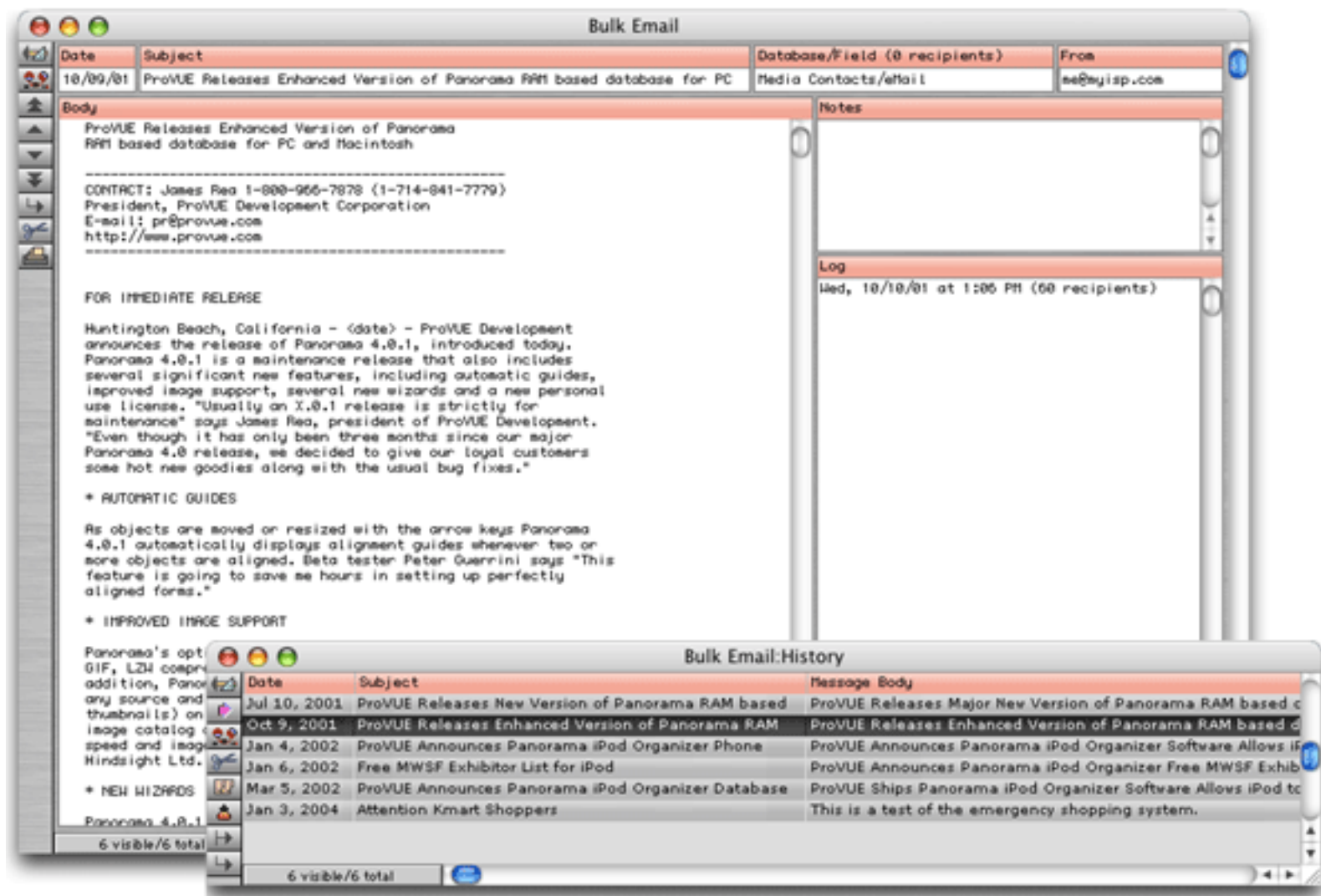
When the address is dropped on the wizard it will display the additional address information.



You can build the address checking functionality of this wizard directly into your own databases. See "[General Zip Code Information](#)" on page 622 and "[Street Address Information](#)" on page 623 of *Formulas & Programming* to learn the details.

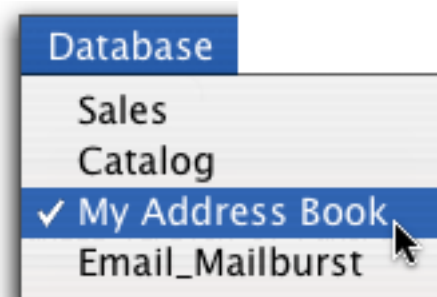
Bulk Email

The **Bulk Email** wizard makes it easy to send and keep track of bulk emails. It keeps all of the previous e-mails you've sent organized, and can automatically extract e-mail addresses from one or more other databases. The wizard has two primary windows. The Bulk Email window displays a single e-mail message, and allows you to configure and modify that message. The History window displays a list of the previous e-mails.

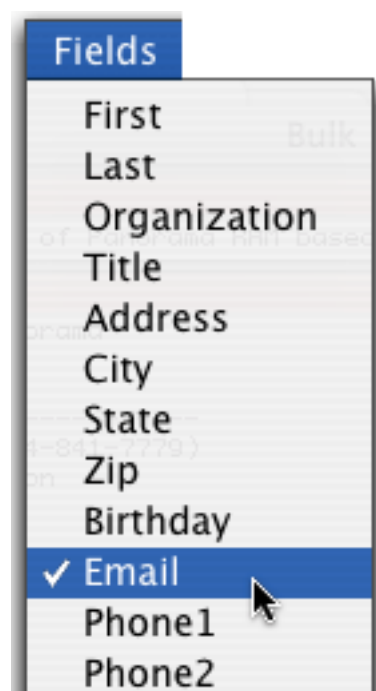


To create a new e-mail message use the **New Record** tool. Use the keyboard to fill in the date (defaults to today's date), subject, body of the message and any notes. You may also want to fill in the **From** e-mail address if it has changed.

The **Database** menu displays a list of all the other open databases. Select the database that contains the e-mail addresses you want to send to.



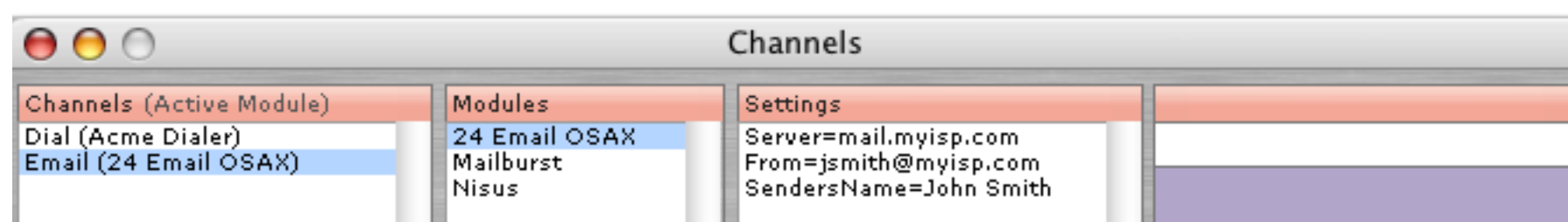
The **Fields** menu displays a list of the fields in the selected database. Select the field that contains the e-mail addresses you want to send to. (Note: If you have already used the *Generic Fields* wizard to define an e-mail field the wizard will select this field automatically. You can, however, choose a different field if you wish.)



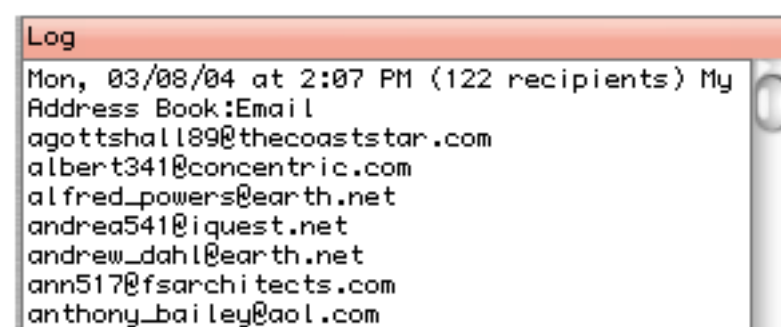
Note: If you are working with a database that has its generic fields set up (see “[“Generic” Fields](#)” on page 230 of the *Panorama Handbook*) Panorama will automatically ask if you want to create a new e-mail message when you open the **Bulk Email** wizard. If you click **Yes** the wizard will automatically add a new record and set up the **Date**, **Database** and **Fields** options for you.

Make sure that the correct data is selected in the database that contains the e-mail addresses. For example, if you only want to send e-mails to recipients in New Jersey with blue eyes, make sure that only those records are currently selected.

Before you actually send the e-mail you may want to open the **Channels Wizard** to double check to that the correct e-mail module is selected and configured (see “[Channels](#)” on page 93).



To actually send the bulk e-mail choose **Send Bulk Email** from the Mail menu. After the e-mail has been transmitted the wizard will update the log for this e-mail.



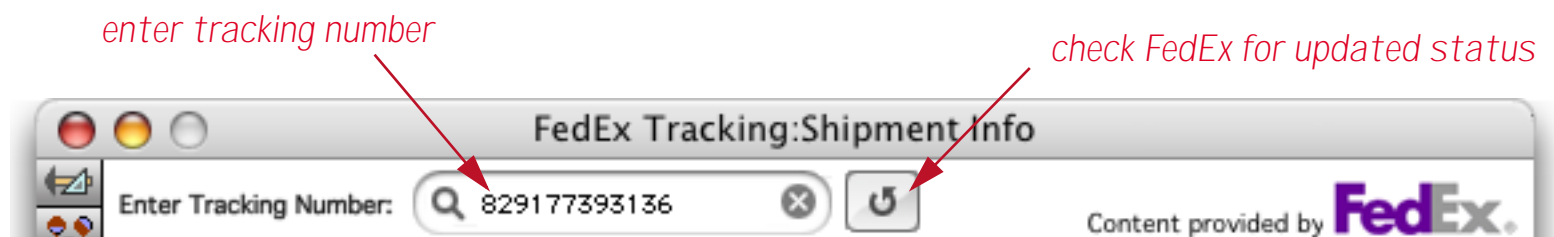
The first line of the log entry records the date, number of recipients, database, and field used for this mailing. The subsequent lines contain each e-mail address that received the mailing, so you have a permanent record (of course you can delete this information if you want to).

If you later decide to send this message to additional e-mail addresses (perhaps from a different selection or a different database) the wizard will check the log before sending the e-mails. Any e-mail addresses that have already received the mailing will not be sent a duplicate copy. This makes it easy to send a large mailing based on several lists.

You can build the e-mail sending functionality of this wizard directly into your own databases. See “[Sending E-Mail](#)” on page 629 of *Formulas & Programming* to learn the details.

Fedex Tracking

This wizard helps you track the progress of FedEx shipments. To use this wizard just enter the tracking number.



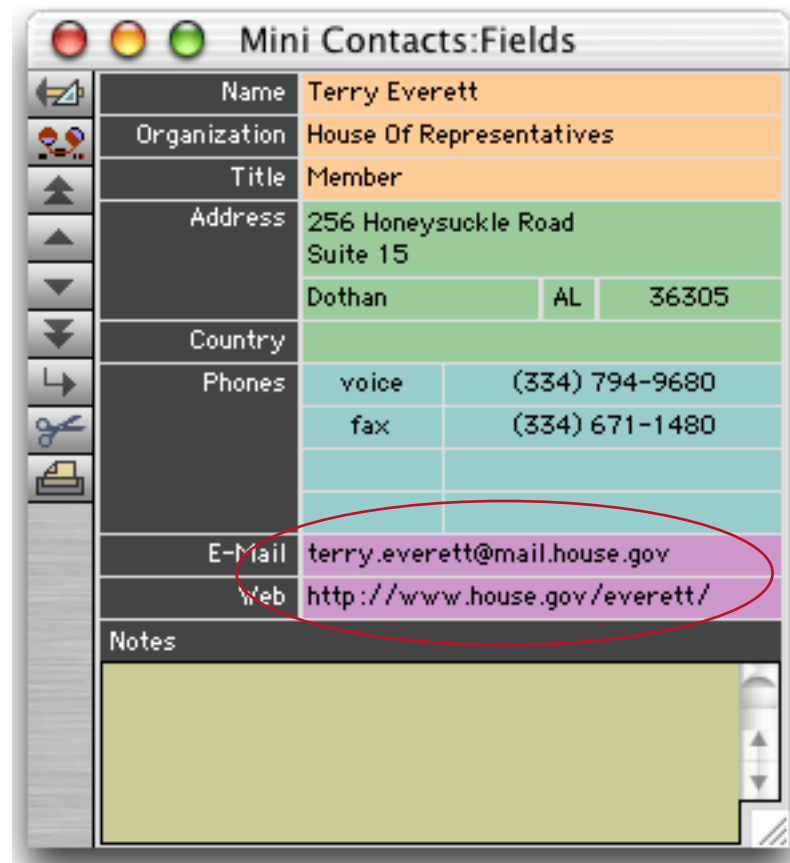
The wizard will display the status of this package. In this case the package has been delivered to the recipient.

Tracking Number	Status	Ship Date	Service Type	
829177393136	Delivery Complete	May 26, 2004	Priority Overnight	
Delivery Date	Location	Delivered To	Signed For By	
May 27, 2004 9:33 am	TOMBALL TX	Recipient	S.CALLAHAN	
Date	Time	Status	Location	Comments
May 27, 2004	9:33 am	Delivered	TOMBALL TX	
	9:32 am	On FedEx vehicle for delivery	HOUSTON TX	
	7:45 am	On FedEx vehicle for delivery	HOUSTON TX	
	7:41 am	Left FedEx Ramp	HOUSTON TX	
	6:47 am	Arrived at FedEx Destination Location	HOUSTON TX	
	4:08 am	Arrived at FedEx Ramp	HOUSTON TX	
	3:24 am	Left FedEx Sort Facility	FORT WORTH TX	
	1:34 am	Arrived at Sort Facility	FORT WORTH TX	
May 26, 2004	8:26 pm	Left FedEx Sort Facility	LOS ANGELES CA	
	7:25 pm	Arrived at Sort Facility	LOS ANGELES CA	
	7:25 pm	Left FedEx Origin Location	IRVINE CA	

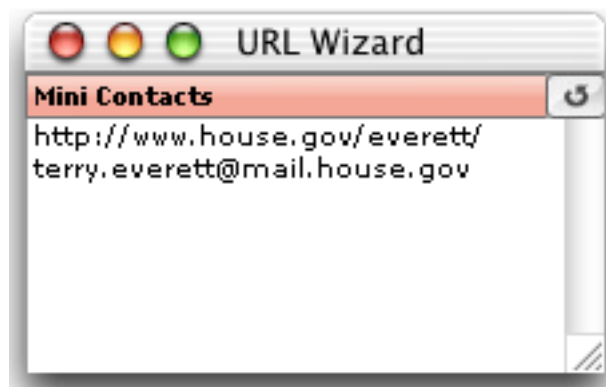
You can build the package tracking functionality of this wizard directly into your own databases. See “[FedEx Shipment Tracking](#)” on page 625 of *Formulas & Programming* to learn the details.

URL Wizard

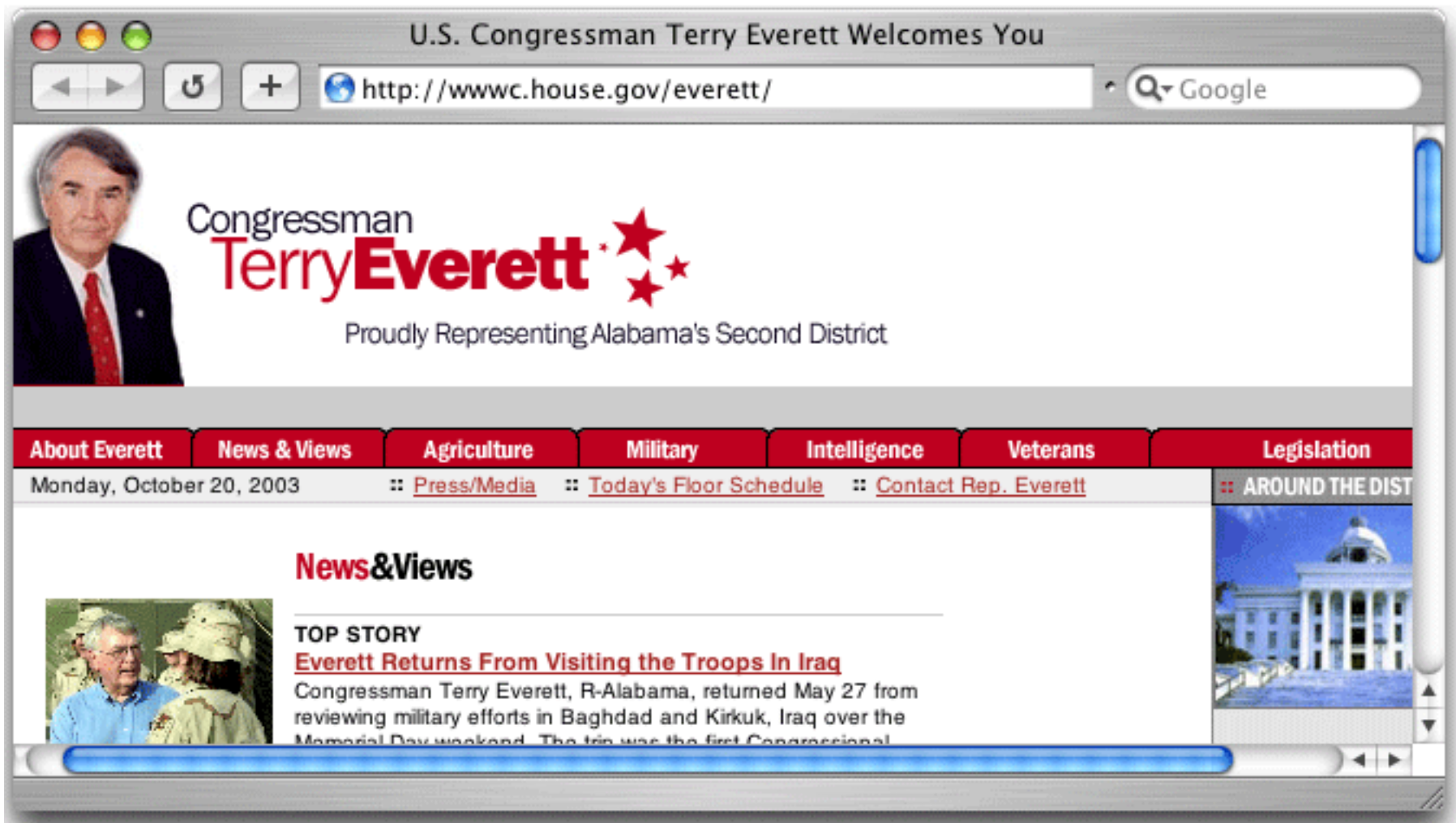
The **URL Wizard** scans all of the fields in the current record looking for URL's (web and e-mail addresses). If it finds any, you can double click on them to open the corresponding web page or create a new e-mail message. To illustrate the **URL Wizard** we'll use the **Mini Contacts** wizard, which comes with Panorama. The records in this database contain addresses, phone numbers, e-mail addresses and web site URLs.



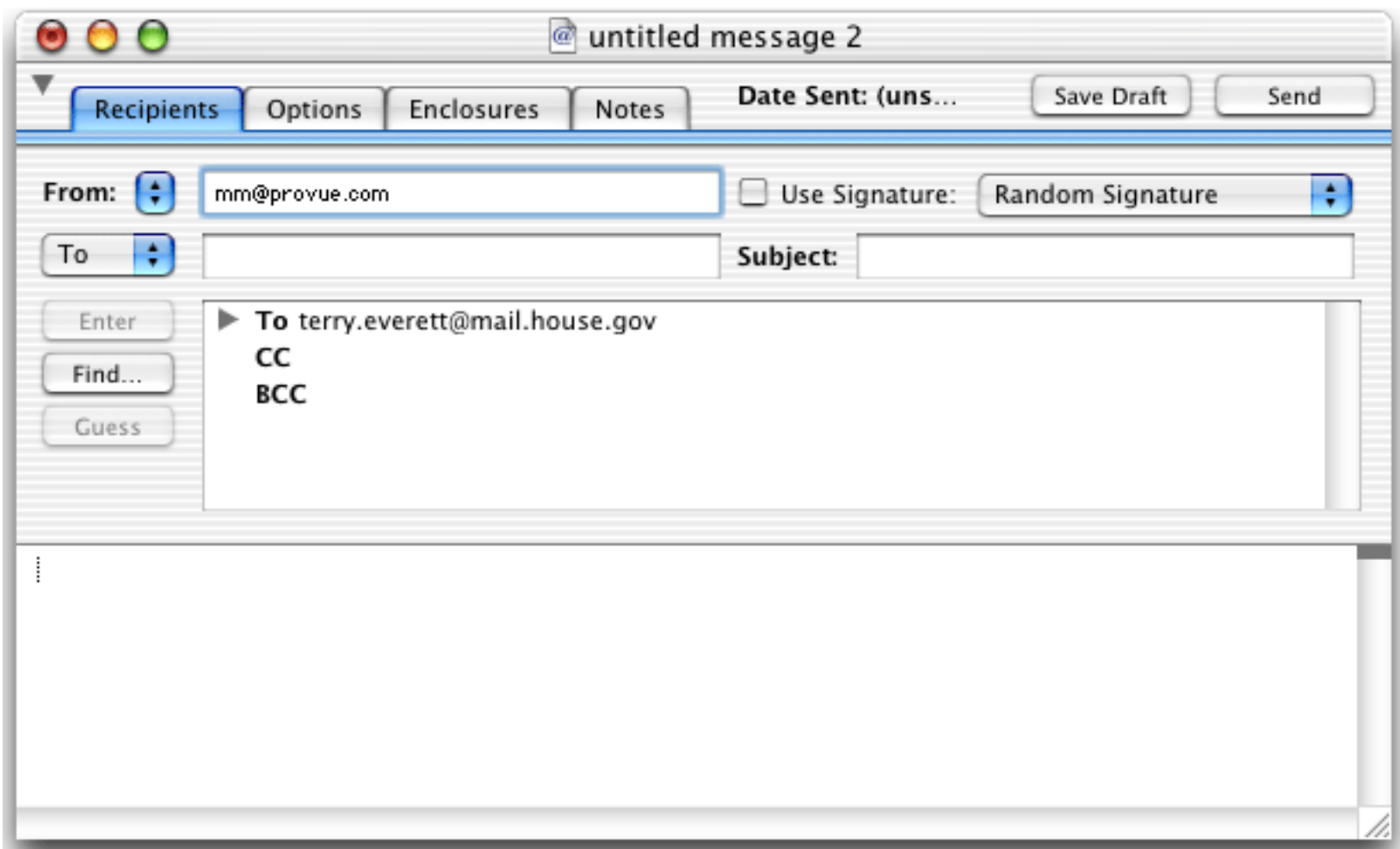
Open the **URL Wizard** to scan this record for internet addresses. As you can see, this record contains two: an e-mail address and a web site.



To open representative Everett's web site (using your default browser), double click on the first URL.



To send an e-mail to representative Everett double click on the e-mail address. The wizard will automatically open your default e-mail client and create a new pre-addressed message. (In case you are wondering, the default e-mail client on our system is *MailSmith* from Bare Bones Software, shown below.)



Each time you choose URL Wizard from the Wizard menu the wizard will re-scan the current record. Another way to re-scan is to press the re-scan button in the upper right hand corner of the window.



This is useful when you've moved to a different record or a different database and want to check for URLs in the new location.

You can build the functionality of this wizard directly into your own databases. See "[Displaying a Web Page](#)" on page 626 and "[Sending E-Mail](#)" on page 629 of *Formulas & Programming* to learn the details.

White Pages

The **White Pages** wizard allows you to look up addresses and phone numbers.



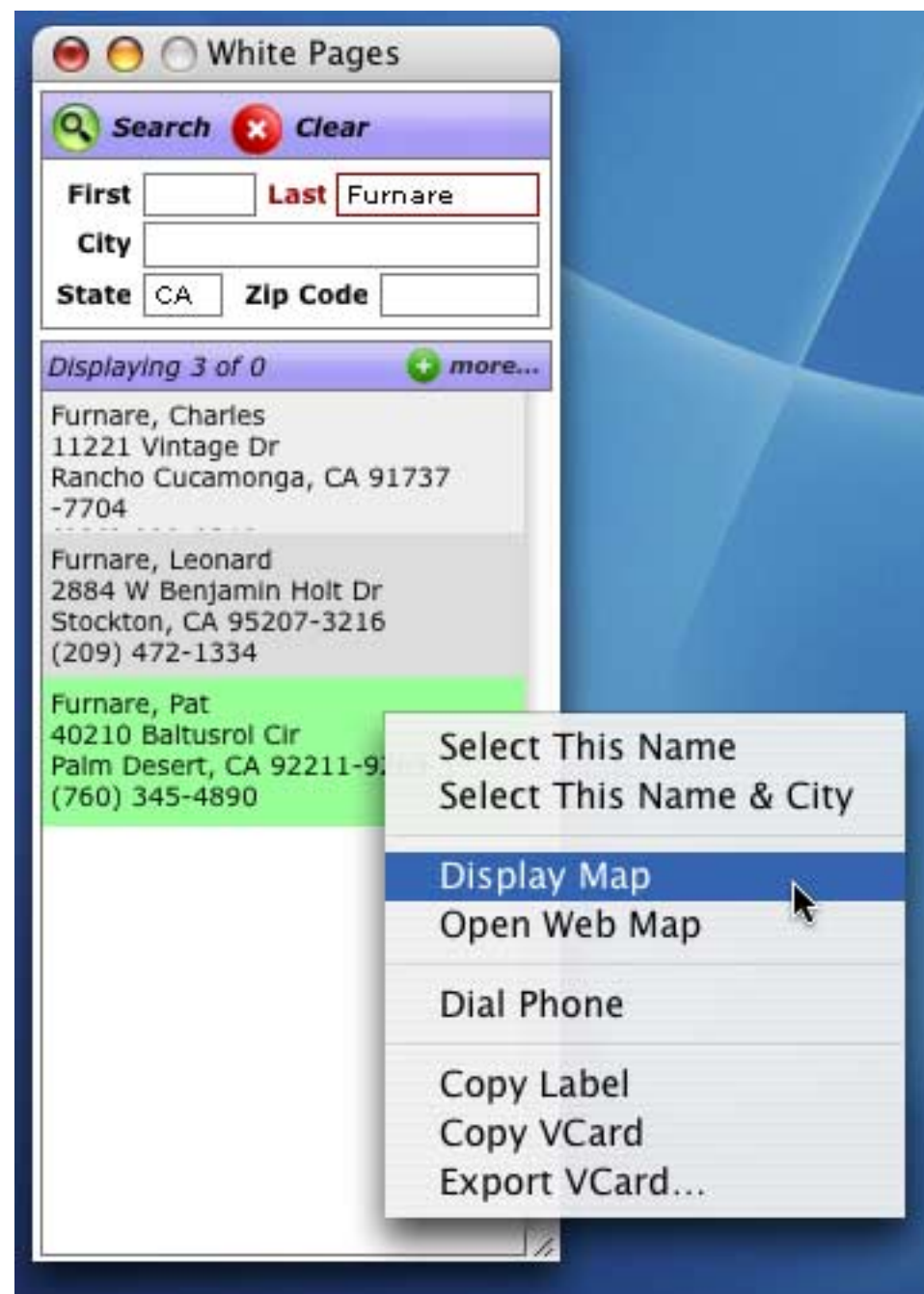
To search for a person, enter as much information as you know. At a minimum, you must enter at least a partial last name. The more information you enter, the better the chance that the wizard will be able to locate the person.





When you're ready to go, press the **Search** button. The wizard will display any people that match the criteria you have entered. In this case there are three people named **Furnare** in California.



If you hold down the **Control** key (Macintosh) or right click (Windows) on an entry a context menu will appear.

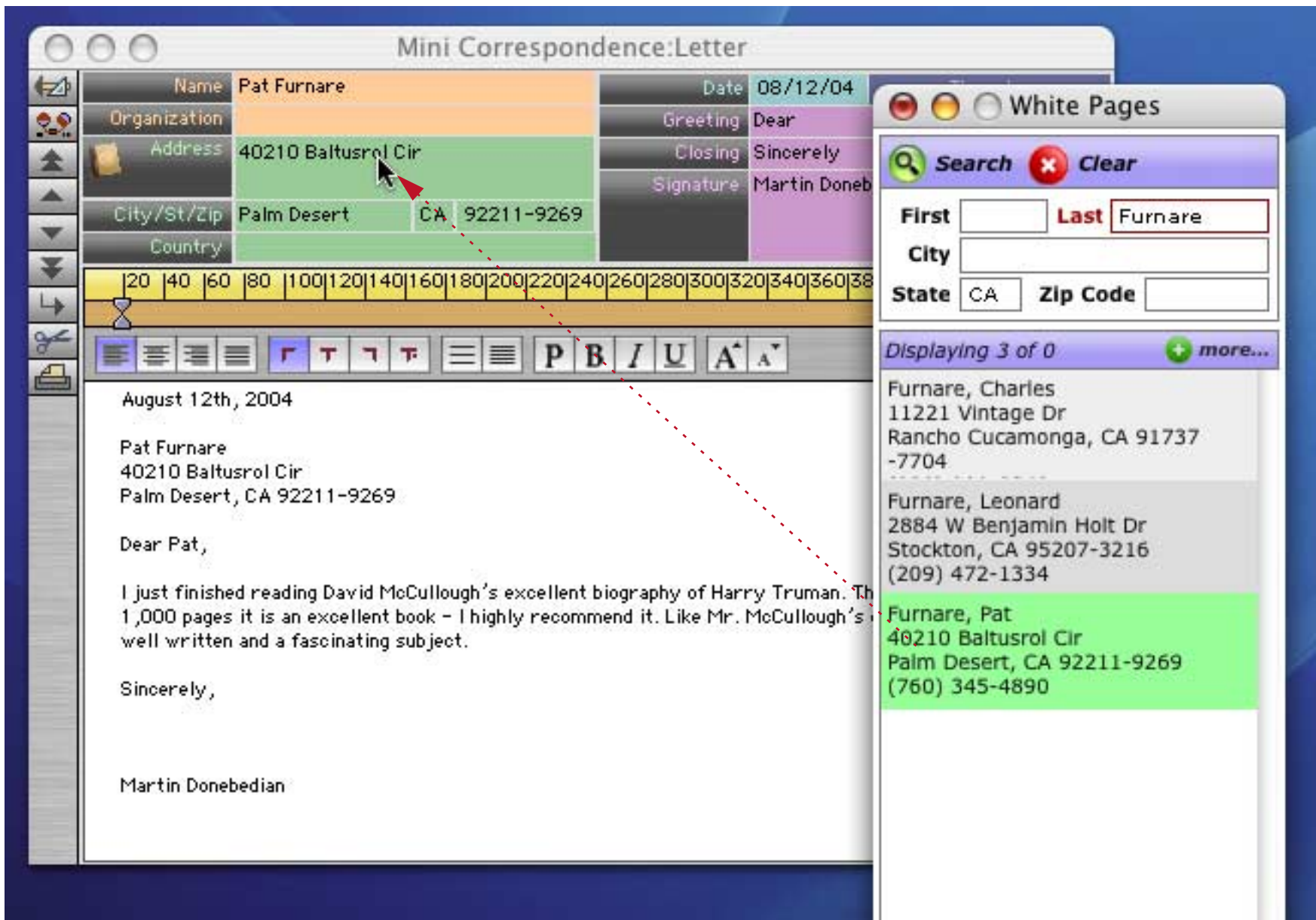


Choose an item from this menu to perform the operation on the selected address.

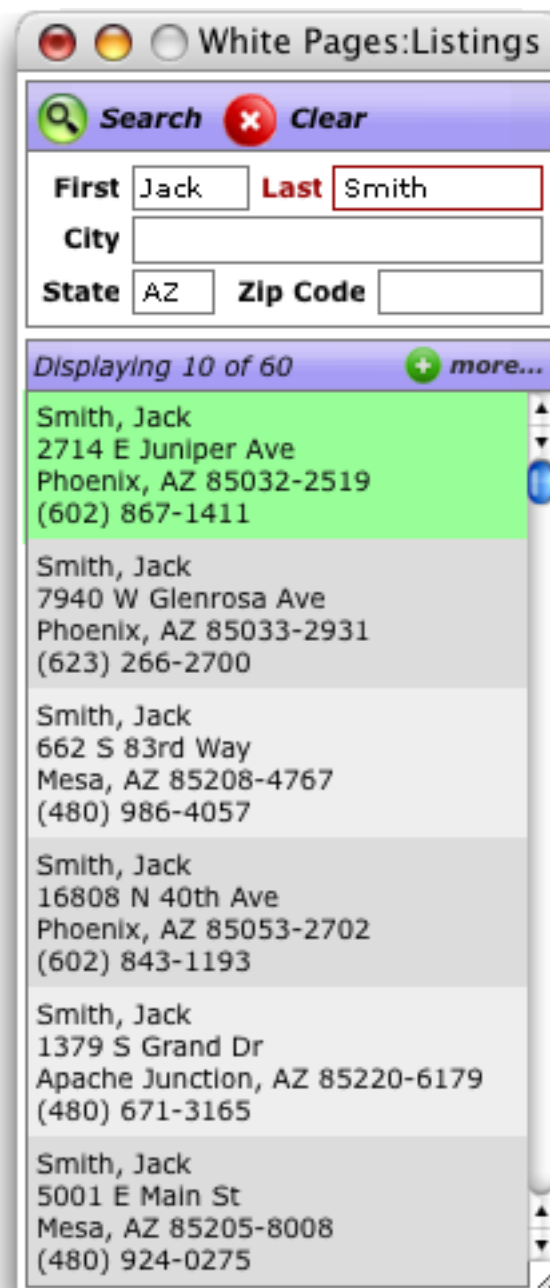
Menu Command	Description
Select This Name	This command is useful if you have entered a partial name. If you find a person with the name you are looking for in the list, choose this menu command to see if there is anyone else with this name in the list.
Select This Name & City	Like the Select This Name command, but only shows entries with the same name in the same city.
Display Map	<p data-bbox="681 562 1535 602">Displays a map showing this address in a separate window.</p>  <p data-bbox="681 1283 1847 1360">The map is interactive and can be zoomed (by clicking the numbers on the left) or resized by dragging on the lower right corner.</p>  <p data-bbox="681 2299 1869 2409">You can also dial the phone by clicking on the phone icon (on the right), or drag a VCard with the address by clicking and dragging on the directory book icon (on the left).</p>

Menu Command	Description
Open Web Map	<p>Opens your web browser and displays a map with this address.</p> 
Dial Phone	Dials this phone number using the currently selected dialing (see “ Channels ” on page 93).
Copy Label	Copies the address to the clipboard in standard label format, suitable for pasting into a text editor or word processor program.
Copy VCard	Copies the address to the clipboard in VCard format.
Export VCard...	Exports the address into a VCard file that can be imported by other VCard compatible programs.

You can also drag the person from the wizard to any VCard compatible database or application, for example Apple's **Address Book** program or the Mini Correspondence wizard, as shown here.



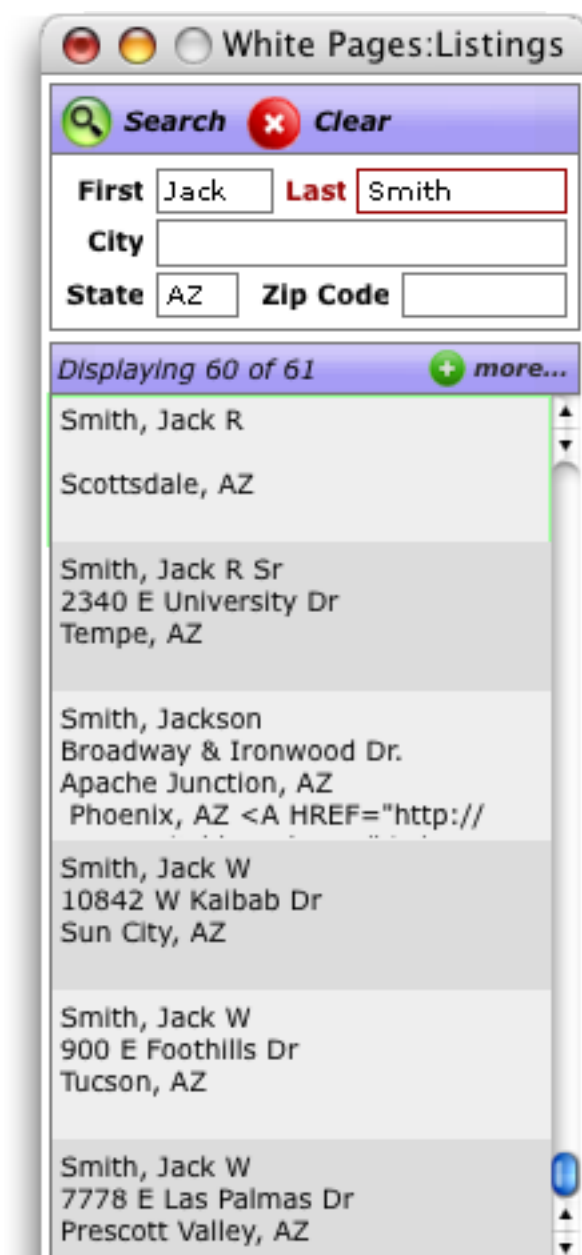
If your search turns up more than a few results, the wizard will only download the first ten. For example, there are sixty people named **Jack Smith** listed in **Arizona**, but the wizard initially displays only ten of them.



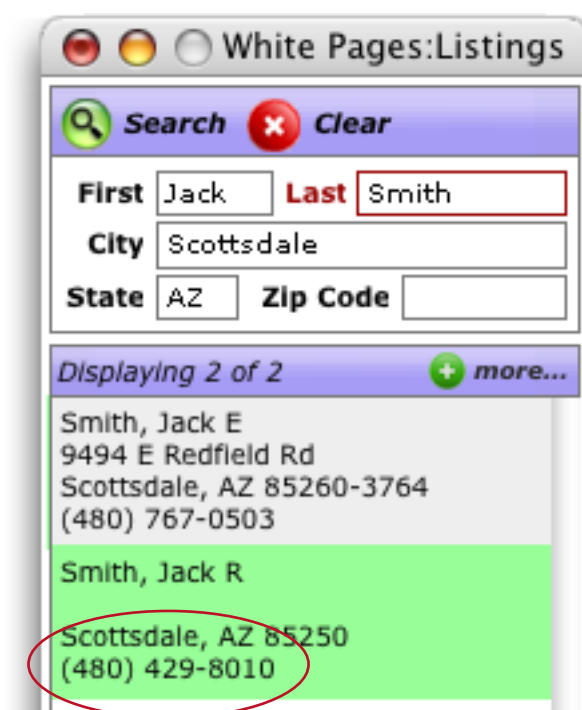
If the person you are looking for isn't listed in the first ten you can press the **more** button to display an additional ten.



If you hold down the **Option** key while you click the more button the wizard will load all of the remaining addresses from the Internet. This may take a few seconds.



As you display more and more people, you may find that there is less information displayed for each person. This is a function of the web site that Panorama is retrieving the information from. Sometimes you can display this additional information by narrowing your search. For example in the listing for all of Arizona there is no phone number listed for Jack Smith in Scottsdale. Narrowing the search to only include Scottsdale turns up the phone number and zip code.



If you try a really broad search that turns up hundreds or even thousands of matches the wizard will only indicate that there are 100 matches. For example, a search for every **Smith** in Arizona turns up 100 matches, even though there are thousands of Smith's living there. If your search turns up 100 matches, try using a narrower search.



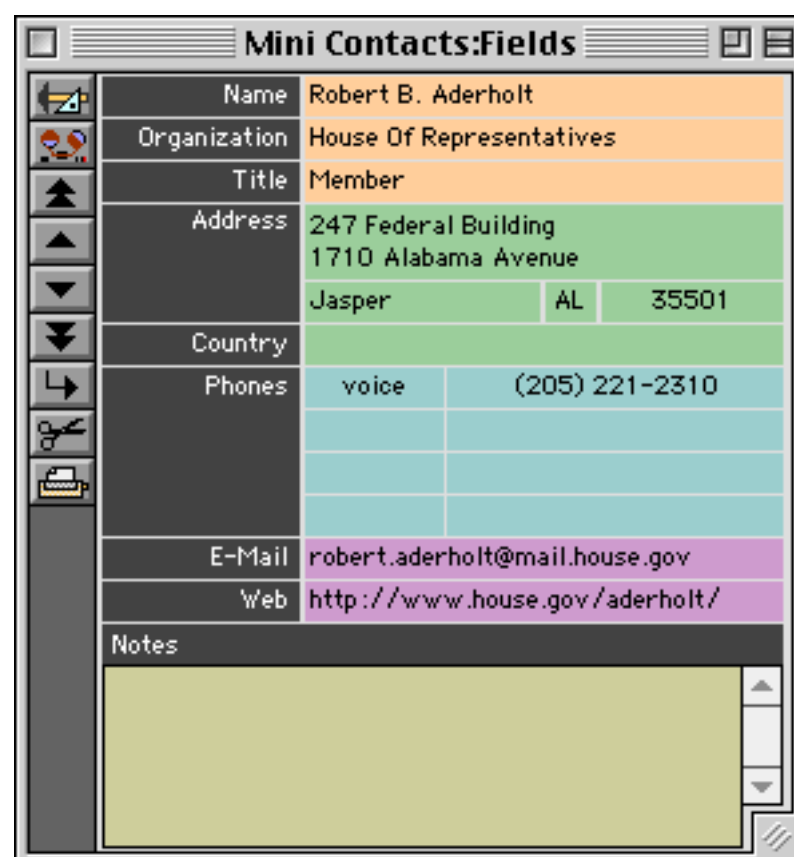
You can build the functionality of this wizard directly into your own databases. See “[White Pages](#)” on page 624 of *Formulas & Programming* to learn the details.

Mini Application Wizards

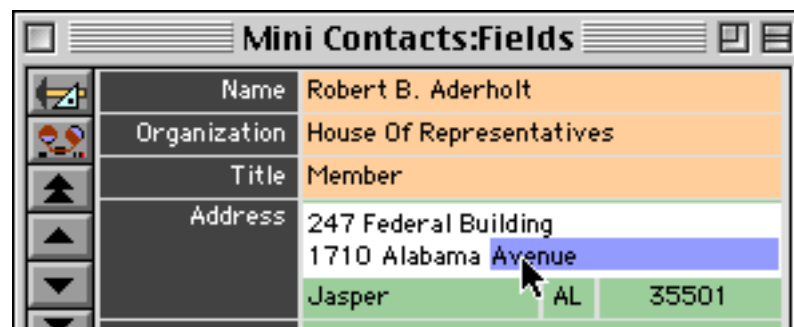
The databases in this category provide basic tools for organizing personal information. Compared to many personal information managers (PIMs) that are available these tools are very basic. However, these databases do illustrate how to create such tools in Panorama, and also have the advantage that you can adapt and customize them exactly to your own needs.

Mini Contacts Wizard

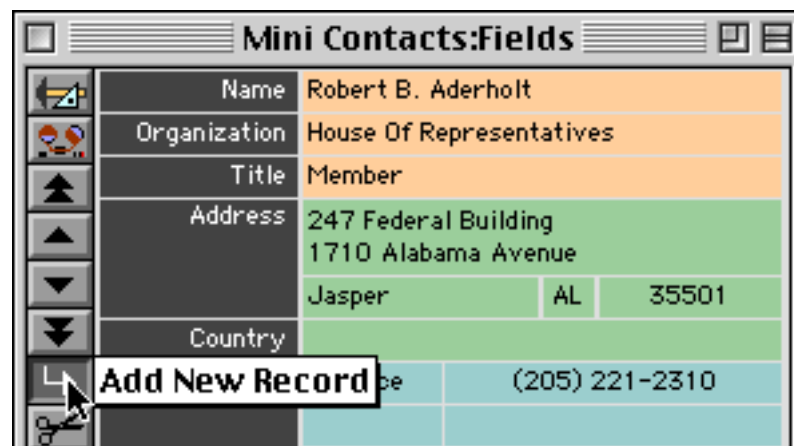
The **Mini Contacts** wizard is a very simple database for storing names, addresses and phone numbers.



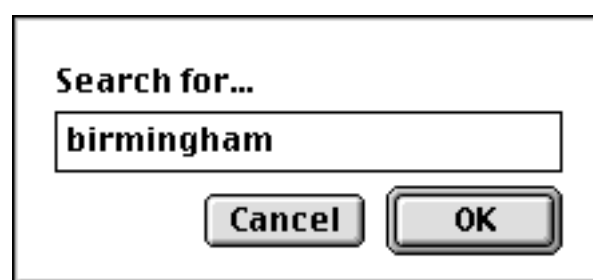
To edit any item simply click or drag on the item and begin editing. (The Mini Contacts database uses Text Editor SuperObjects for editing instead of data cells, so there is no expandable input window. See “[Types of Data Editing Objects](#)” on page 632 of the *Panorama Handbook* for more information). Press the **Enter** or **Tab** keys when you are finished editing an item.



To add a new record use the Add New Record tool or the Add New Record command in the Edit menu.



To search for text anywhere within in the database choose the Find command from the Search menu. The database will ask you what you want to search for.

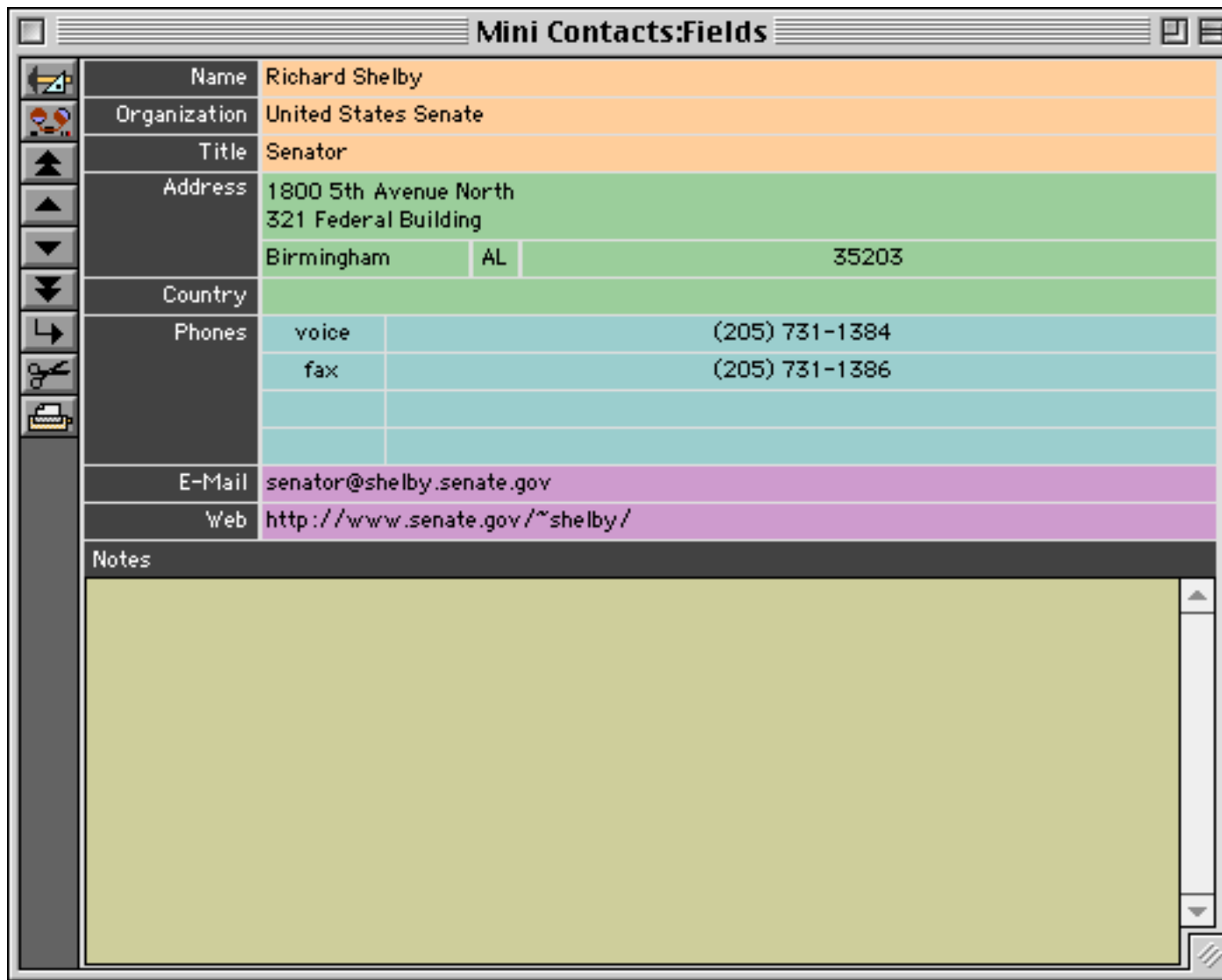


When you press the **OK** button Panorama will search all of the fields in the database for the word or phrase that has been typed in. (To learn how this search was set up see “[A Handy Universal Find Procedure](#)” on page 553 of *Formulas & Programming*). In this case a record has been found that contains **birmingham** in the City field.



To find additional occurrences of the word or phrase use the Find Next command. You may continue to use this command until you have located every occurrence of the word or phrase in the database.

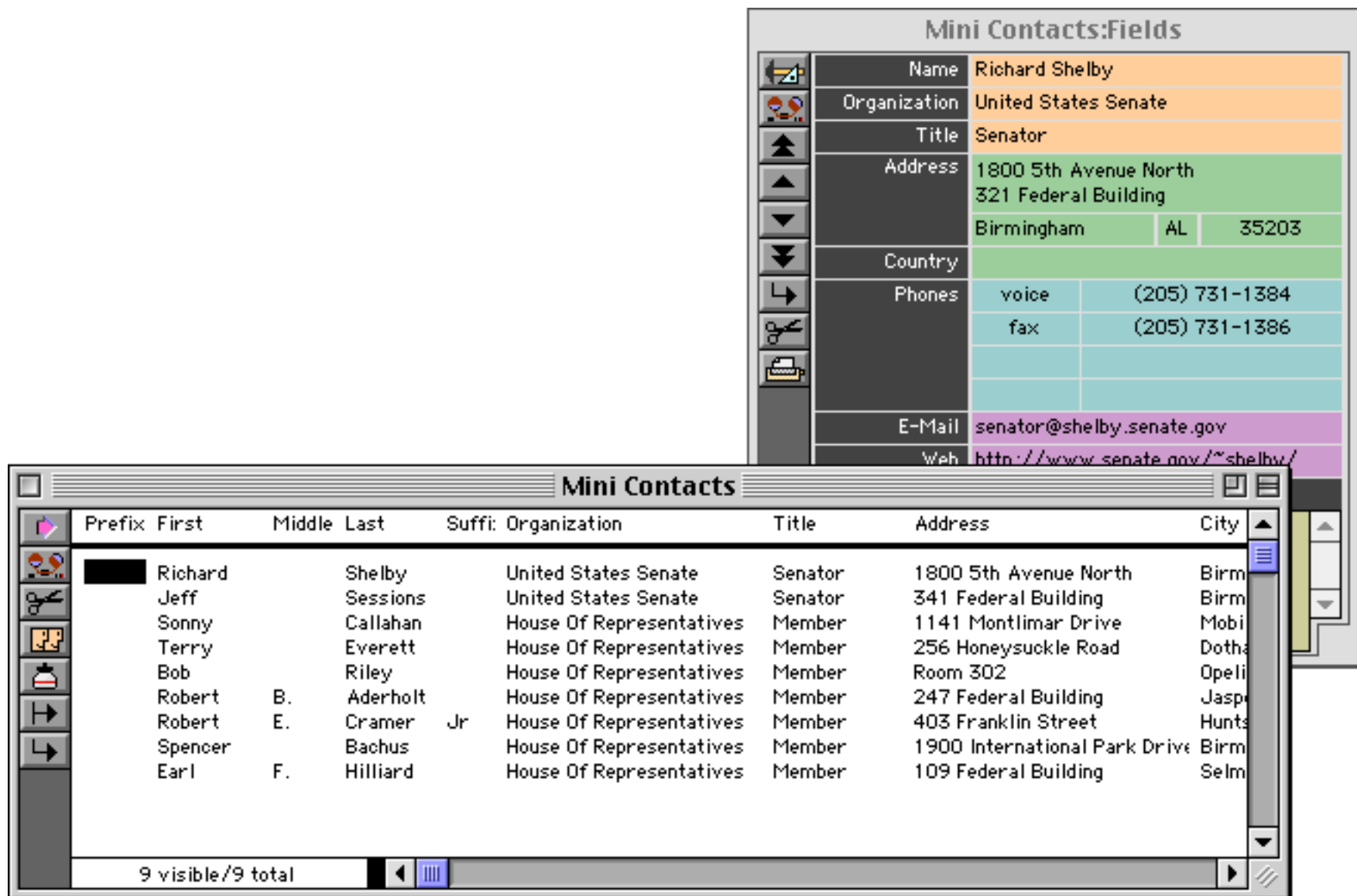
The Mini Contacts form is elastic and can be expanded up to the full screen size. See “[Elastic Forms](#)” on page 922 of the *Panorama Handbook* to learn how to create an elastic form.



The image shows a screenshot of a web browser window titled "Mini Contacts:Fields". The form is displayed in a compact, elastic view. On the left side, there is a vertical toolbar with icons for editing, deleting, and printing. The form fields are organized as follows:

Name	Richard Shelby		
Organization	United States Senate		
Title	Senator		
Address	1800 5th Avenue North		
	321 Federal Building		
Country	Birmingham	AL	35203
Phones	voice	(205) 731-1384	
	fax	(205) 731-1386	
E-Mail	senator@shelby.senate.gov		
Web	http://www.senate.gov/~shelby/		
Notes	<div style="background-color: #d3d3d3; height: 150px;"></div>		

To open the data sheet use the **View** menu (see “[Switching Between Views](#)” on page 168 of the *Panorama Handbook*). If you want the data sheet to open in its own separate window hold down the **Control** key (Macintosh) or **Alt** key (Windows) while you select from the menu (see “[Opening More Than One Window Per Database](#)” on page 169 of the *Panorama Handbook*).



You may notice that in the data sheet the name is split up into five separate fields, while in the form the name appears to be a single field. The database has been set up to make this conversion automatically. When you enter a name into the form Panorama automatically splits it up into five separate components (Prefix, First, Middle, Last and Suffix) and when a name is displayed in the form these components are automatically combined together. To learn how this was set up see “[Natural Data Entry](#)” on page 530 of *Formulas & Programming* and “[Natural Data Display](#)” on page 528 of *Formulas & Programming*.

Mini Calendar Wizard

The **Mini Calendar** wizard is a very simple database for keeping track of dates and events.



If a day has a black triangle in the upper left hand corner then there is a note attached to that day. Click on the day to see and/or edit the note.



To add a new note simply click on the day, then click in the note area and begin typing. Press the **Enter** key when you are done.



To search for a particular item press the **Find** button or choose **Find** from the Search menu.

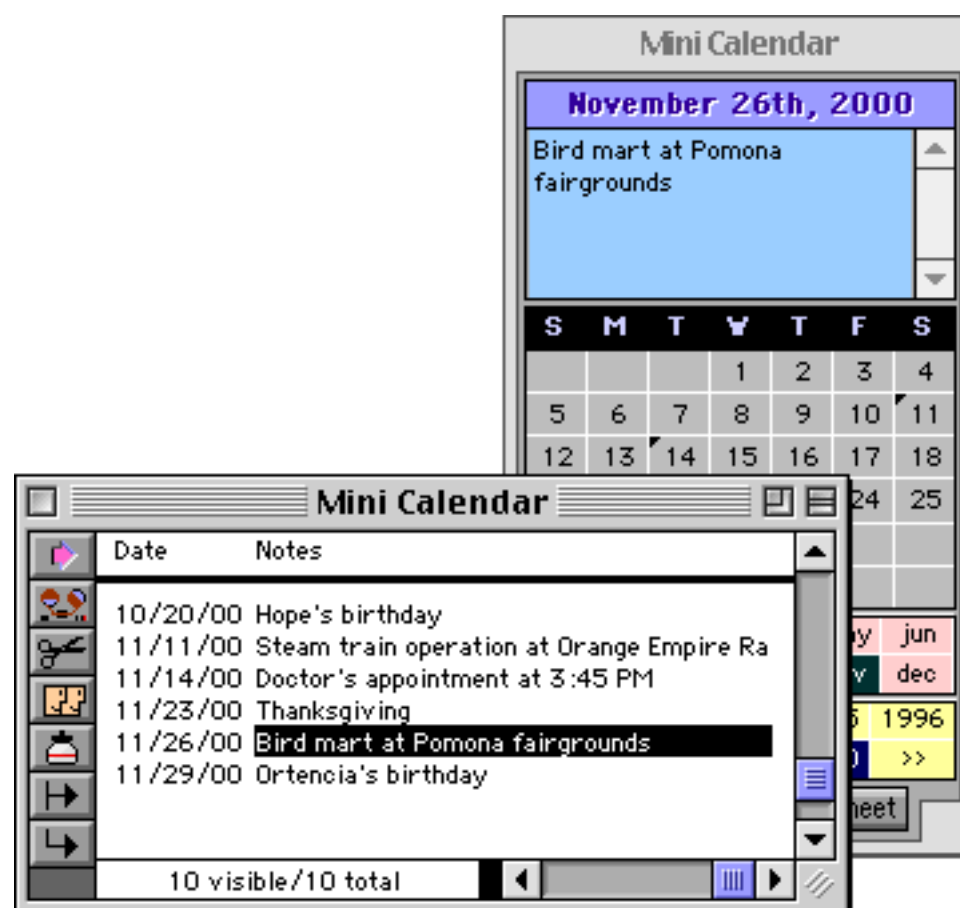


Press **OK** to locate the word or phrase. Panorama will search the database in date order.



If you think that there might be additional occurrences of this word or phrase you can press the **Next** button or choose **Find Next** from the Search menu.

If you'd like to see the data sheet for this database you can use the **View** menu or you can simply press the **Data Sheet** button.



You can use the data sheet to add, edit or delete calendar entries.

Mini Correspondence Wizard

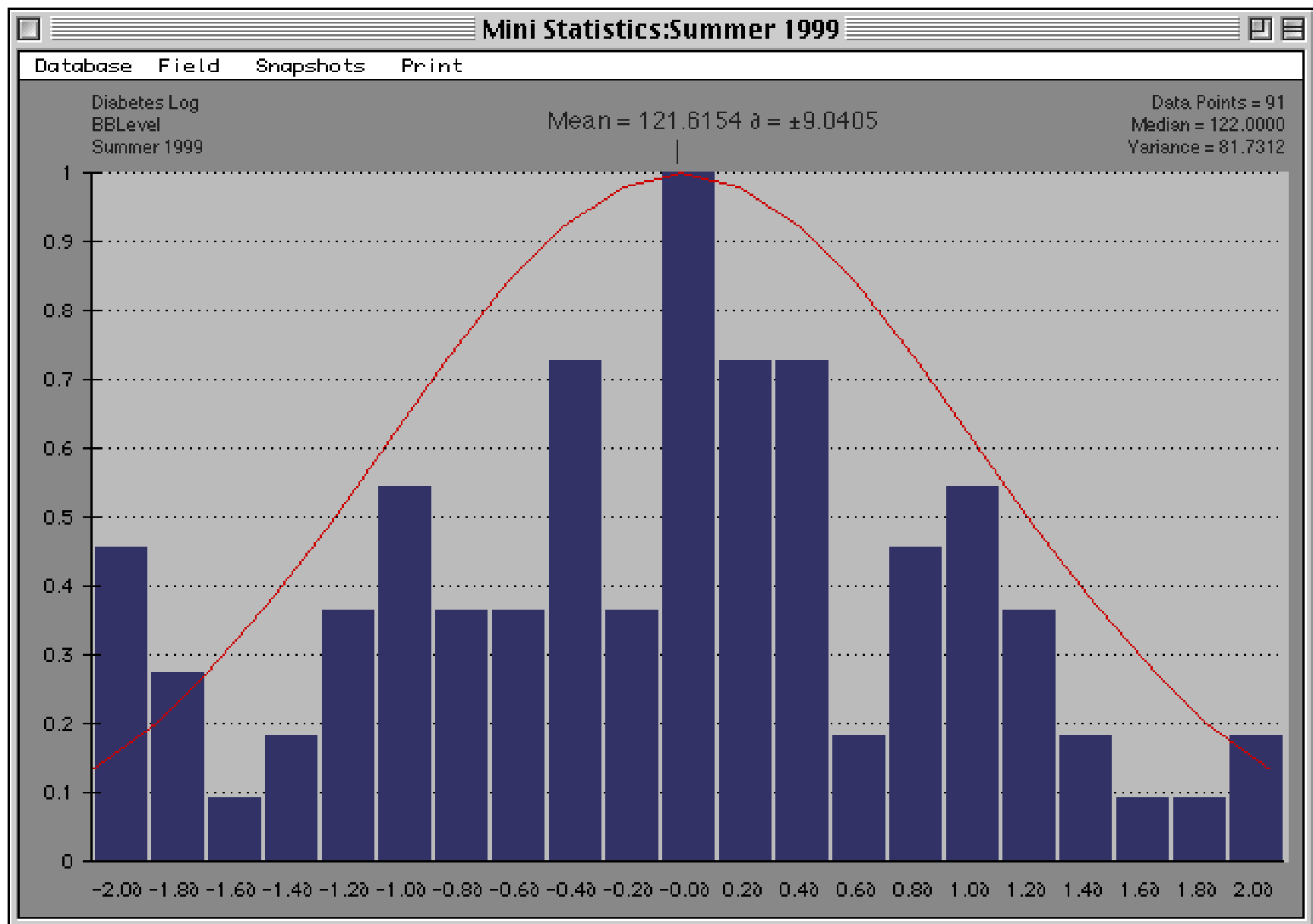
The **Mini Correspondence** database may be used for general correspondence (letters, memos, etc.) and to create mail merge letters that are customized and sent to a group of recipients. The wizard can be linked to any database that contains names and addresses to make it easy to create individual or mail-merge letters.



To learn more about this wizard see "[Using the Mini Correspondence Wizard](#)" on page 727 of the *Panorama Handbook*.

Mini Statistics Wizard

The **Mini Statistics** wizard can calculate the mean (average), median, and standard deviation of a data set. In addition the wizard can plot a normalized chart showing how the data is distributed around the mean. You can easily see how this distribution compares with the standard gaussian distribution (the famous bell shaped curve). Here is an example of an analysis performed by this wizard.



To learn more about this wizard see "[The Mini Statistics Wizard](#)" on page 410 of the *Panorama Handbook*.

Stopwatch Wizard

The **Stopwatch** wizard is a simple timer.



Press the **Start** button to start or re-start the timer. Press the **Stop** button to stop the timer. Press the Reset button to reset the timer to **0:00:00**.

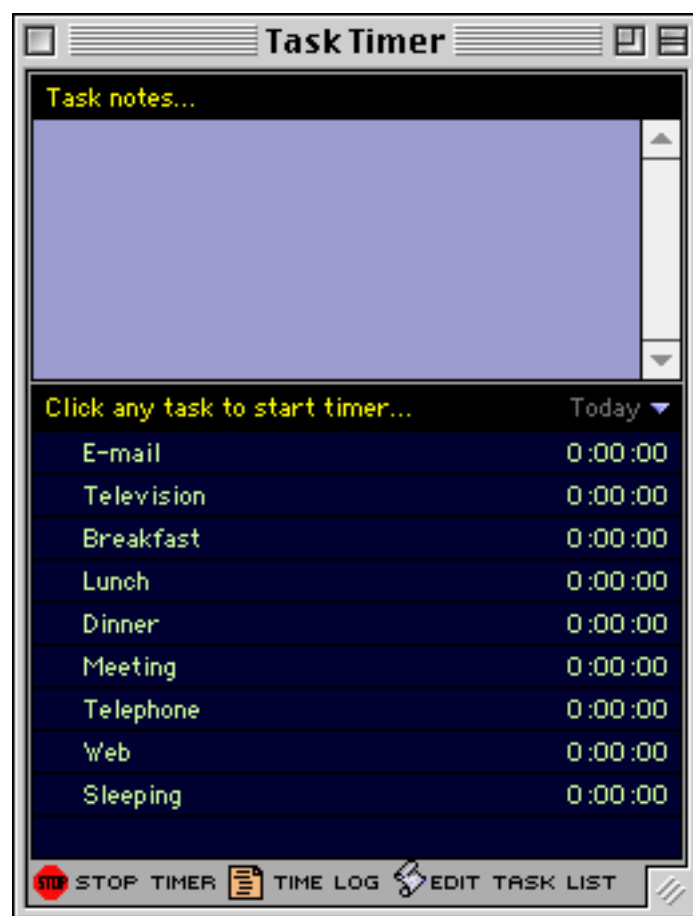
If you need more than one timer you can make a copy of the **Stopwatch** database file. To make the copy **Quit** from Panorama, open the Wizard folder and make one or more copies of the Stopwatch database. When you re-open Panorama you can start and stop each timer separately.



When a stopwatch is running the display will usually update once every second as long as Panorama is running and is the frontmost application. However, the display will not update when you are actually editing text. It also will not update when you are editing a form or a procedure.

Task Timer Wizard

The **Task Timer** wizard allows you to keep track of the time you spend at different tasks. You can set up a list of tasks to track.



When you start a task that you want to time click anywhere on the line for that time. An animated clock will appear to indicate that you are timing this task.



When you are done with the task you can click the line again or click the **Stop Timer** button at the bottom of the window. If you are starting a new task you can simply click on the new task to switch the timer. You can also type notes in the top section of the window. These notes will be included in the time log.



You can close the Task Timer or even quit from Panorama without affecting the timer. When you re-open the timer you will see that it has continued to keep track of the time of the last task started (if any). The task time updates when the Task Timer is in front, but not when any other window is in front. The time will update when you bring the Task Timer window forward.

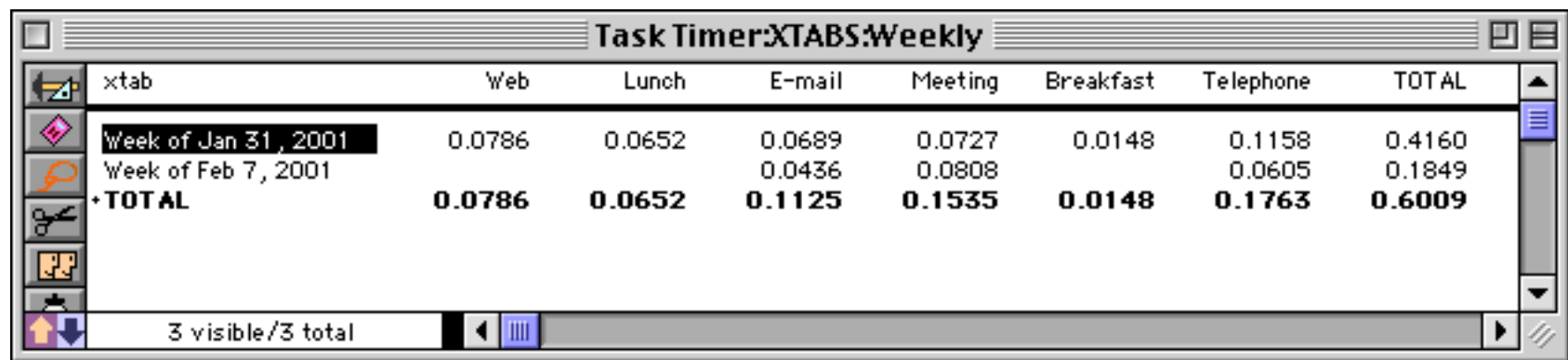
Click the **Time Log** button to view a log of the activities you have timed.

Task	Elapsed Time	Notes	Date	Start	Stop
Telephone	0.0365 hr		Wed, Feb 7, 2001	8:32:26 PM	8:34:38 PM
Telephone	0.0240 hr		Wed, Feb 7, 2001	8:34:40 PM	8:36:07 PM
Meeting	0.0808 hr	discussed xr23 status with	Wed, Feb 7, 2001	8:36:07 PM	8:40:58 PM
E-mail	0.0436 hr		Wed, Feb 7, 2001	8:42:05 PM	8:44:42 PM

Double click to edit the Notes for a time log entry. You can expand the Input Box to show as much text as you want (see "[Expanding the Input Box](#)" on page 273 of the *Panorama Handbook*).

Task	Elapsed Time	Notes	Date	Start	Stop
Telephone	0.0365 hr		Wed, Feb 7, 2001	8:32:26 PM	8:34:38 PM
Telephone	0.0240 hr	called Phil at Acme Widgets	Wed, Feb 7, 2001	8:34:40 PM	8:36:07 PM
Meeting	0.0808 hr	discussed xr23 status with	Wed, Feb 7, 2001	8:36:07 PM	8:40:58 PM
E-mail	0.0436 hr		Wed, Feb 7, 2001	8:42:05 PM	8:44:42 PM

Use the **Crosstabs** menu to open a crosstab that summarizes the time log data by day, week, or month.

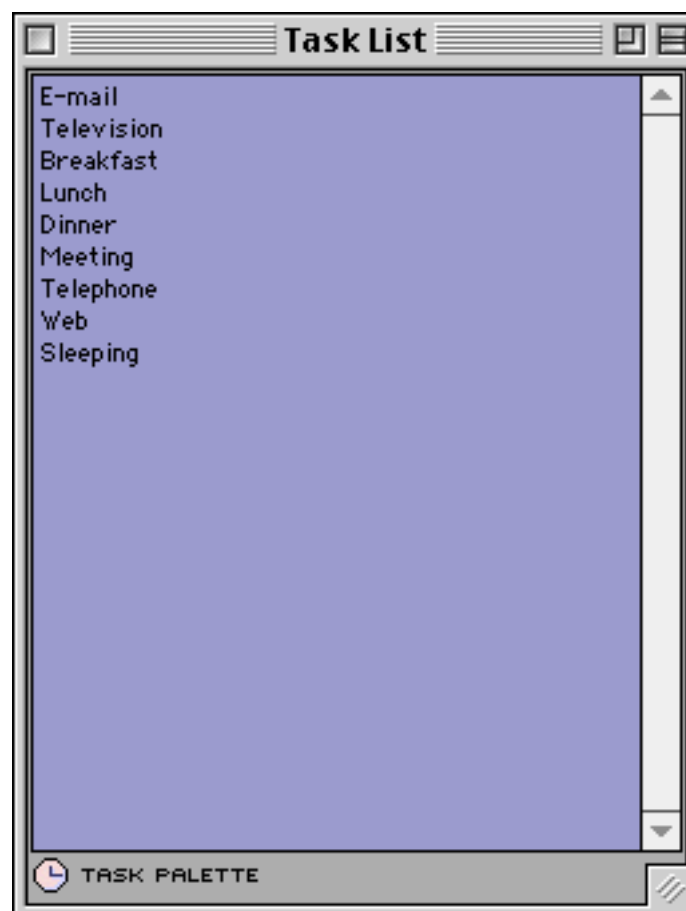


The screenshot shows a window titled "Task Timer:XTABS:Weekly" with a table of data. The table has columns for task categories and a total column. The rows represent different time periods.

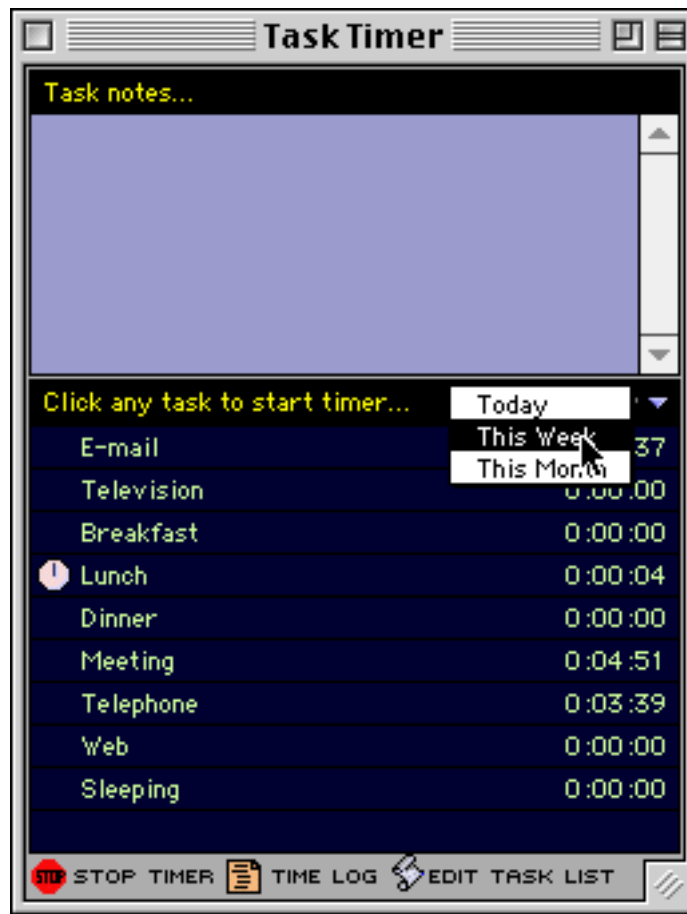
xtab	Web	Lunch	E-mail	Meeting	Breakfast	Telephone	TOTAL
Week of Jan 31, 2001	0.0786	0.0652	0.0689	0.0727	0.0148	0.1158	0.4160
Week of Feb 7, 2001			0.0436	0.0808		0.0605	0.1849
+TOTAL	0.0786	0.0652	0.1125	0.1535	0.0148	0.1763	0.6009

At the bottom of the window, it says "3 visible / 3 total".

To edit the list of tasks click on the **Edit Task List** button. You can type in any tasks you want, in any order. It's ok to remove a task that you have been timing — this does not affect any tasks you have already logged. When you've made all of the changes to the task list click the **Task Palette** button to switch back to the main timer window.



The Task Timer can display the cumulative time for each task for the current day, week, or month. Use the pop-up menu to select the period you want to use. The display will immediately update to reflect your choice.



Preferences Wizards

The wizards in this submenu set up preferences and options for Panorama and for individual databases. The normal way to open these wizards is to first open **Panorama->Preferences**, then click on the preference panel you want.



If “built-in” wizards are enabled in General Preferences (see “[Include “Built-in” wizards in Wizard menu](#)” on page 9) then you can also access each of these preference panes directly from the Preferences submenu in the Wizard menu.

Channels

Some Panorama applications require a connection between Panorama and an external program or resource. Panorama allows you to set up **channels** as a conduit between Panorama and the external resource. For example, suppose you have a Panorama application that needs to send an e-mail. To do that Panorama will need to make a connection with the Internet software installed on your computer. Panorama uses the Channel Wizard to configure that connection.

Panorma has special programming statements that take advantage of the connections set up by different channels. The table below lists each type of channel and the statements that use the connection set up by that channel.

Channel	Statement	Description
Dial	dialphone	Dial the phone, adding prefixes, country codes and area codes as needed.
	dialdigits	Dial one or more digits exactly as specified.

Channel	Statement	Description
Email	sendoneemail	Send a single e-mail message.
	sendbulkemail	Send multiple e-mail messages, one for each currently selected record in a database.
	sendarrayemail	Send multiple e-mail messages, one for each element of an array.
	sendemail	Send multiple e-mail messages with advanced options.
WhitePages	querywhitepages	Look up a person's address and/or phone number.
ZipInfo	zipinfo	Look up information about a zip code — city, state, county, area code, time zone, etc.

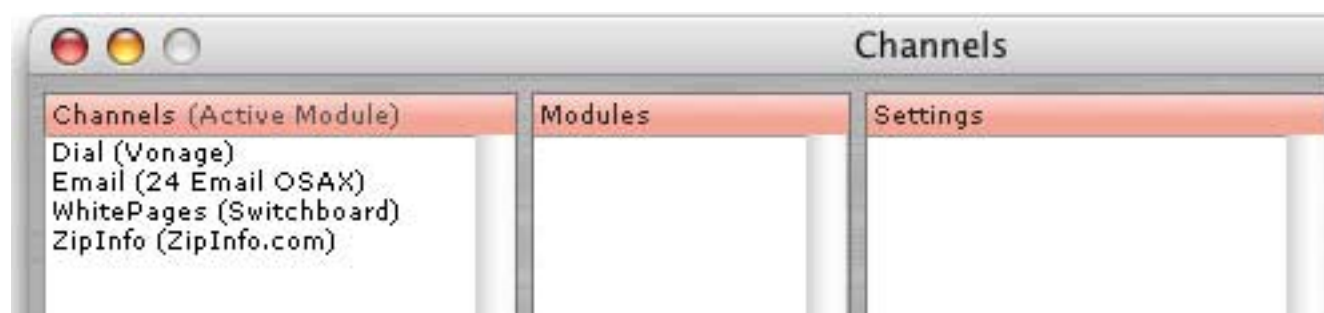
The exact operation of each of these statements will vary depending on how you have configured each channel. For example, the **dialphone** statement can dial the phone by creating tones on your computer speaker, by using a modem, with a bluetooth connection, or over the Internet if you have a Vonage phone. The programmer that writes the **dialphone** statement into his or her program doesn't know or care how the dialing is actually performed, he or she relies on the channel to do that job for them.

Even if you are not a programmer you may find that channels are useful for you. Many of the wizards and sample databases that are included with Panorama are already programmed to use channels. For example, the **White Pages** wizard can automatically dial the phone using the Dial channel, while the **Bulk Email** wizard will send mass e-mails using the Email channel. All you need to do is configure the channels for your needs and this wizards will be ready to go.

Note: The table above will grow as more channels become available. Check the **Channels** wizard for any additional channels that may have been added since this documentation was last updated. (You can also write your own channels, see "[Writing Your Own Channel Modules](#)" on page 739 of *Formulas & Programming*).

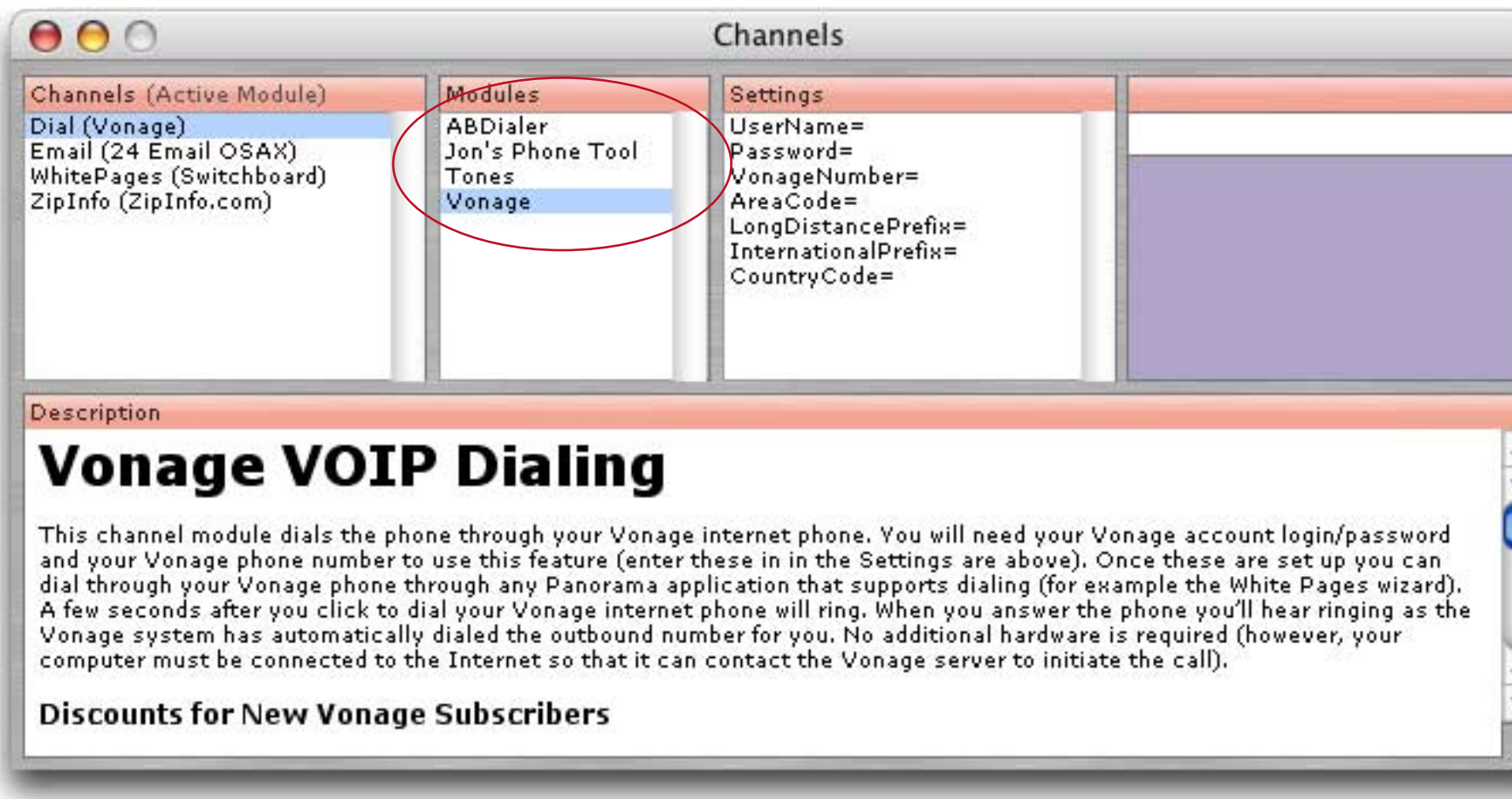
Selecting and Configuring a Channel

Each channel must be configured before it can be used. This configuration is done with the **Channels** wizard. When you first open this wizard it displays the types of channels available.

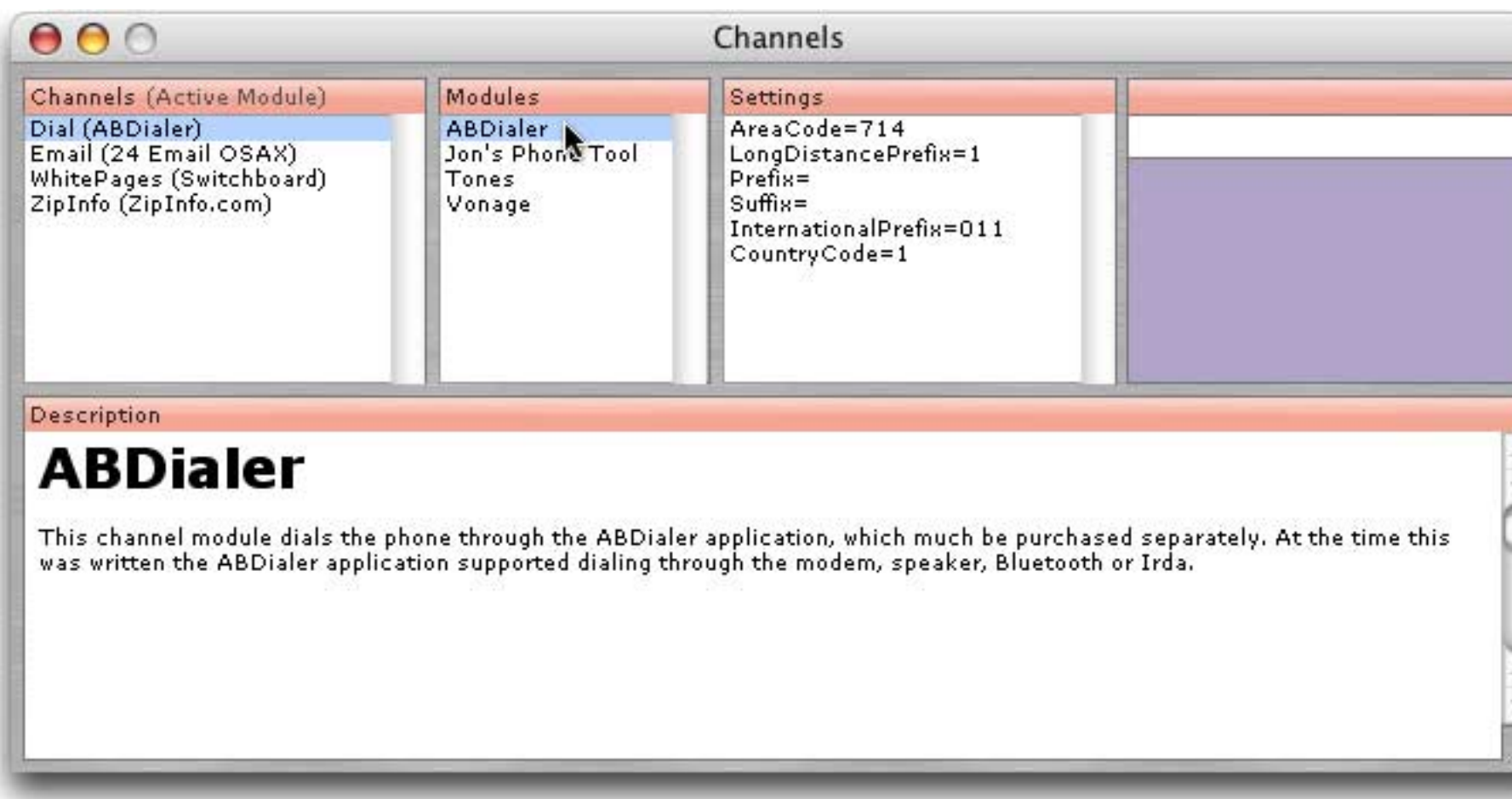


Each channel shows the channel name followed by the currently active module for that channel. For example, if I was to ask Panorama to dial the phone right now, it would do so through my *Vonage* internet phone connection. If I was to ask Panorama to send an e-mail, it would do so through *24 Email OSAX*, a shareware application I have purchased for sending e-mail.

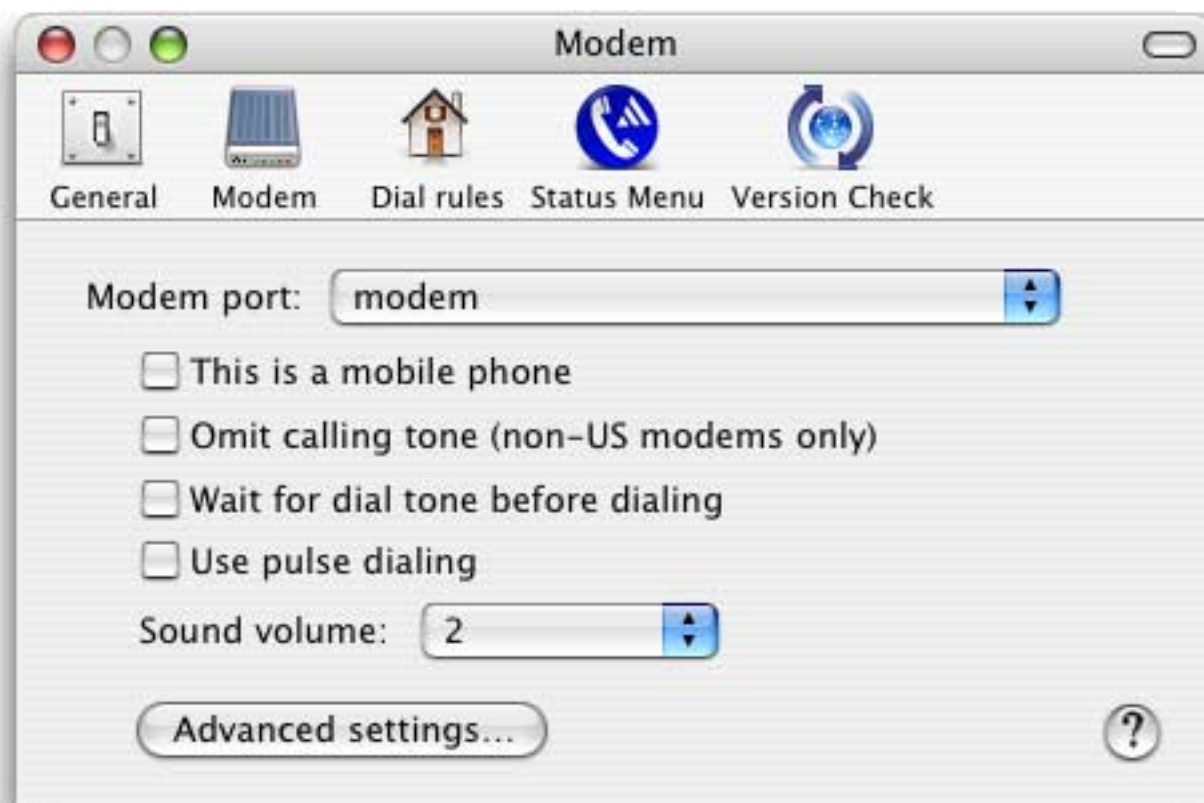
The Channels wizard allows you to change the active module. For example, I might want to dial the phone using my modem instead through the *Vonage* internet phone connection. To see the choices available I click on the **Dial** channel.



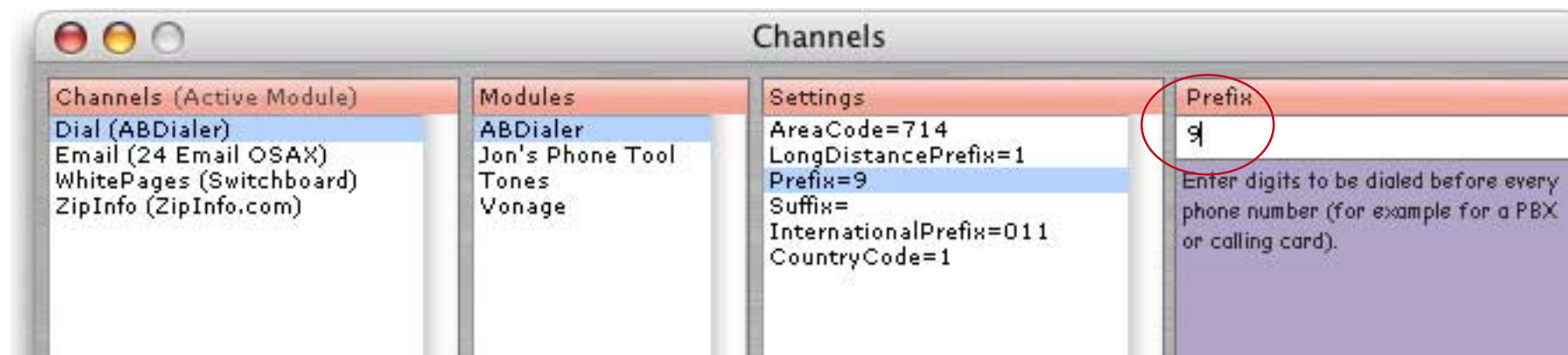
There are four different modules available for dialing. I know that I can use the *ABDialer* option to dial the phone with my modem, so I click on that.



When you select a module the wizard displays a description of the module in the bottom section of the wizard. In this case the description indicates that *ABDialer* is a program that must be purchased separately, and that it can dial through the modem, speaker, Bluetooth or Irda. Since this is a separate program it has its own configuration, which I can set up by launching the ABDialer application.



Getting back to Panorama, most modules have one or more settings that need to be configured before you can use the module. Click to select a particular setting, then type in the settings value in the box on the right. For example, suppose your phone is on a PBX and you need to dial 9 for an outside line. To set this up, click on the **Prefix=** option, then type 9 as shown below.



Repeat until you have typed in all of the necessary settings.

Finding More Information about a Module

Many channel modules rely on other software or hardware to perform their operations. The bookmarks menu lists links to web sites that contain additional information about additional items you'll need to use this module.

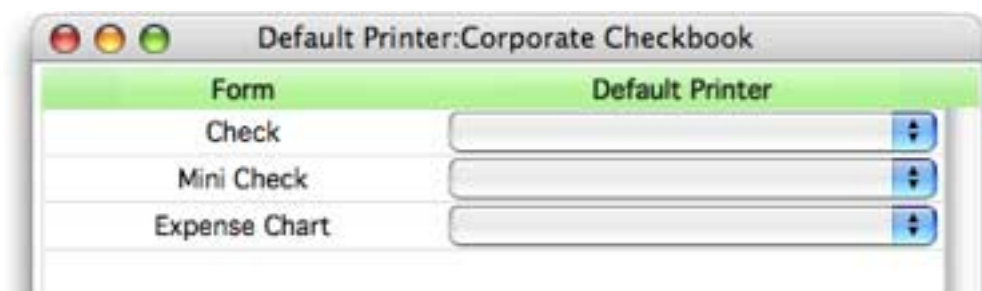


Selecting a link will automatically open your web browser to the specified page.

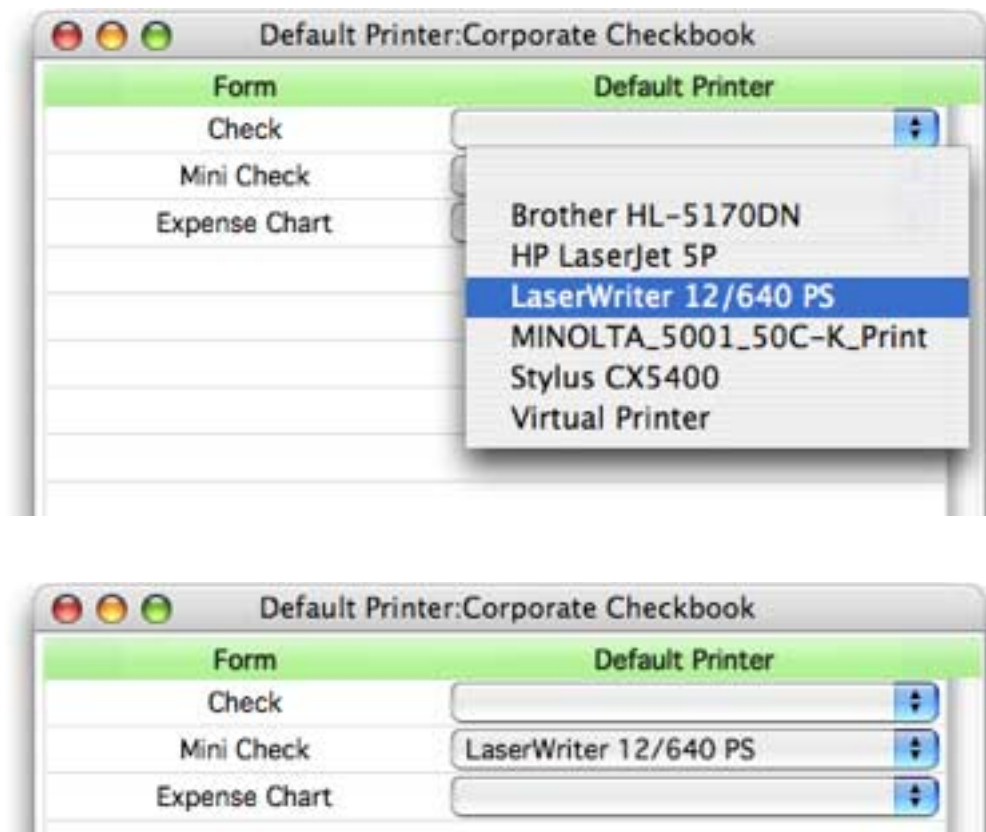


Default Printer

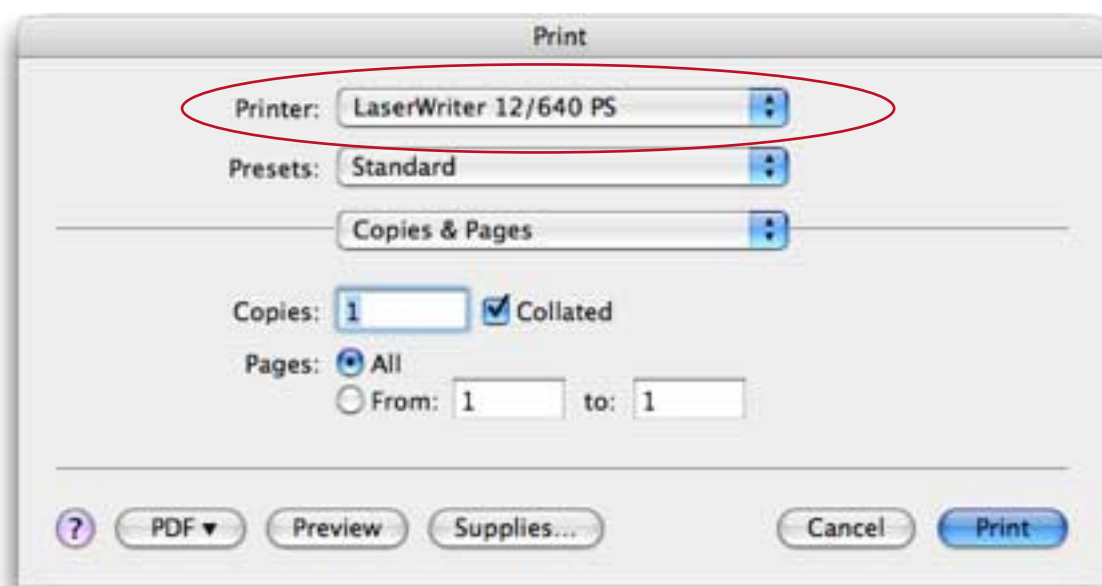
This wizard allows you to specify a default printer for various forms within a database. Start by opening the database you want to set up, then open the wizard. The wizard will list all of the forms in the database.



Suppose you want to set up the Mini Check form so that it always defaults to printing on a specific printer, no matter what printer is currently selected. Simply click on the appropriate pop-up menu and choose the printer.



Whenever you print this form the printer will automatically be set to the printer you have specified. (Of course you can always use the pop-up menu in the Print dialog to change the printer at the last minute.)

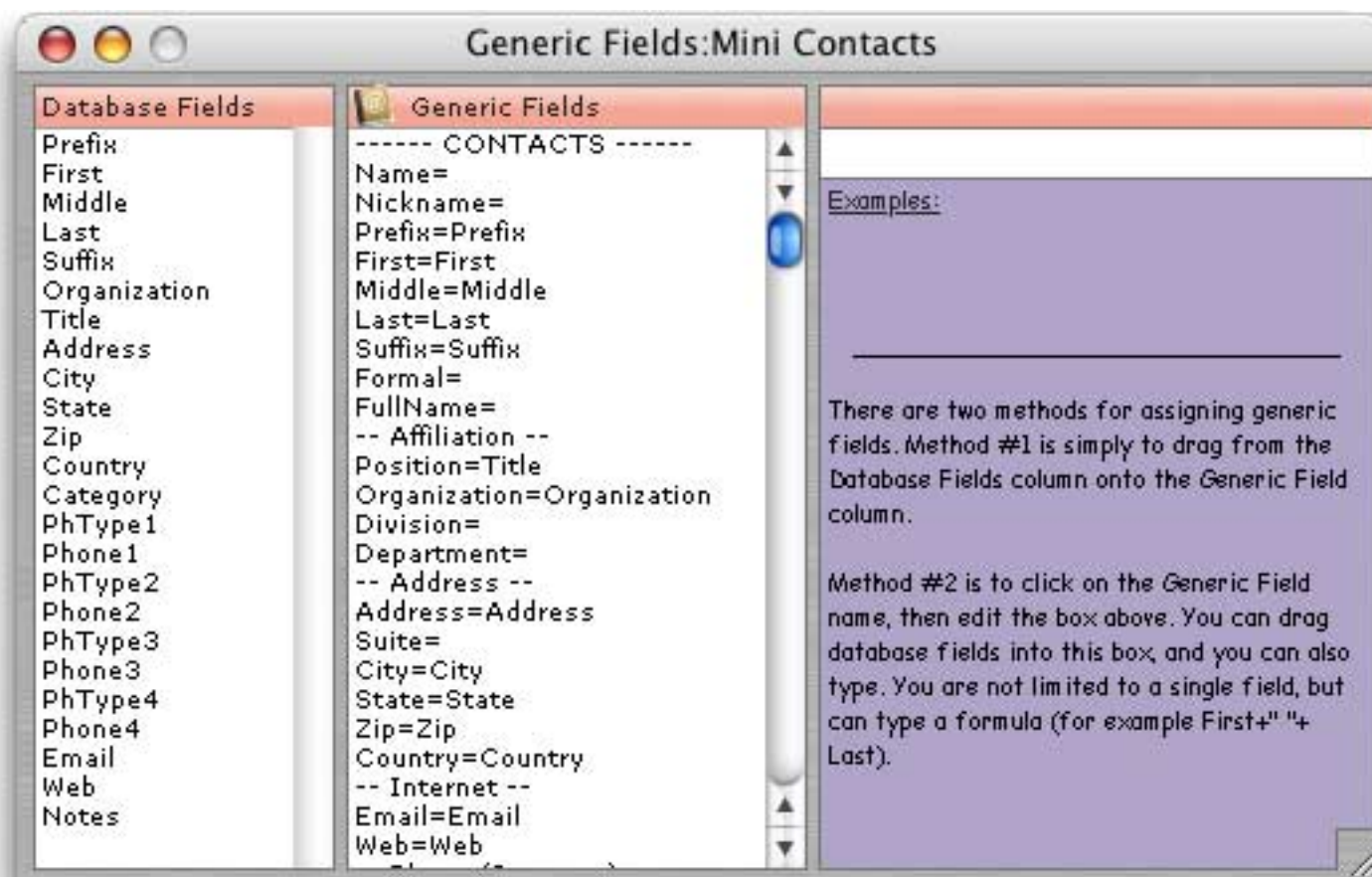


To turn off the default printer selection simply choose the empty option from the pop-up menu.

Generic Fields

Databases come in all sizes and shapes. Generic fields allow different databases to share information even if they have different field names or slightly different configurations. For example, one database may store company names in a field named **Company**, while another may have a similar field named **Organization**. By setting up generic fields for each database, you build a bridge so that Panorama knows that these two fields,

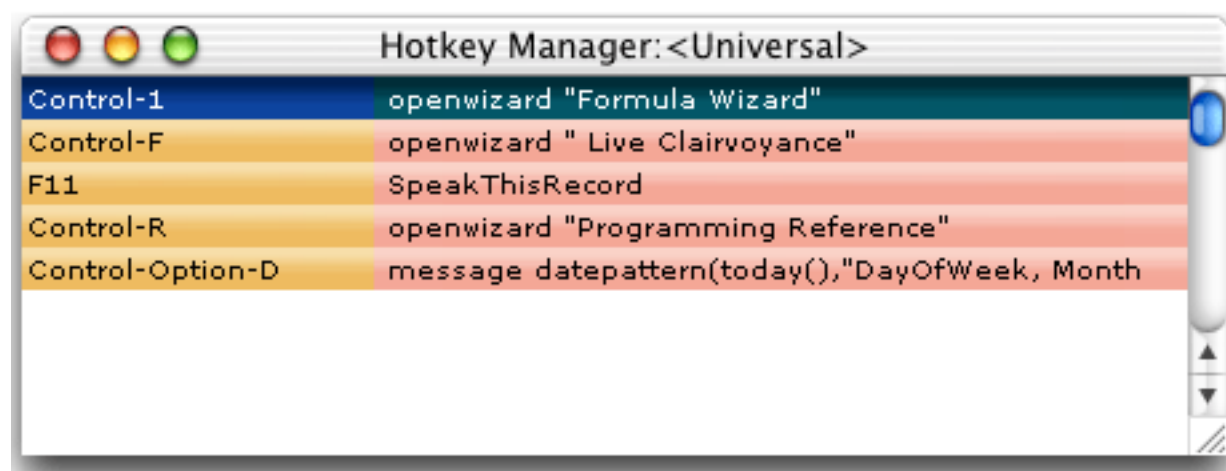
though named differently, contain the same type of information. Once this bridge is built Panorama can exchange data between these two databases (for example by drag and drop), and between Panorama and other applications that can share information (for example Apple's *Address Book*). Panorama includes a special wizard for setting up generic fields for any database that contains contact information.



To learn how to use this wizard see "[Generic Fields](#)" on page 230 of the *Panorama Handbook*.

Hotkey Manager

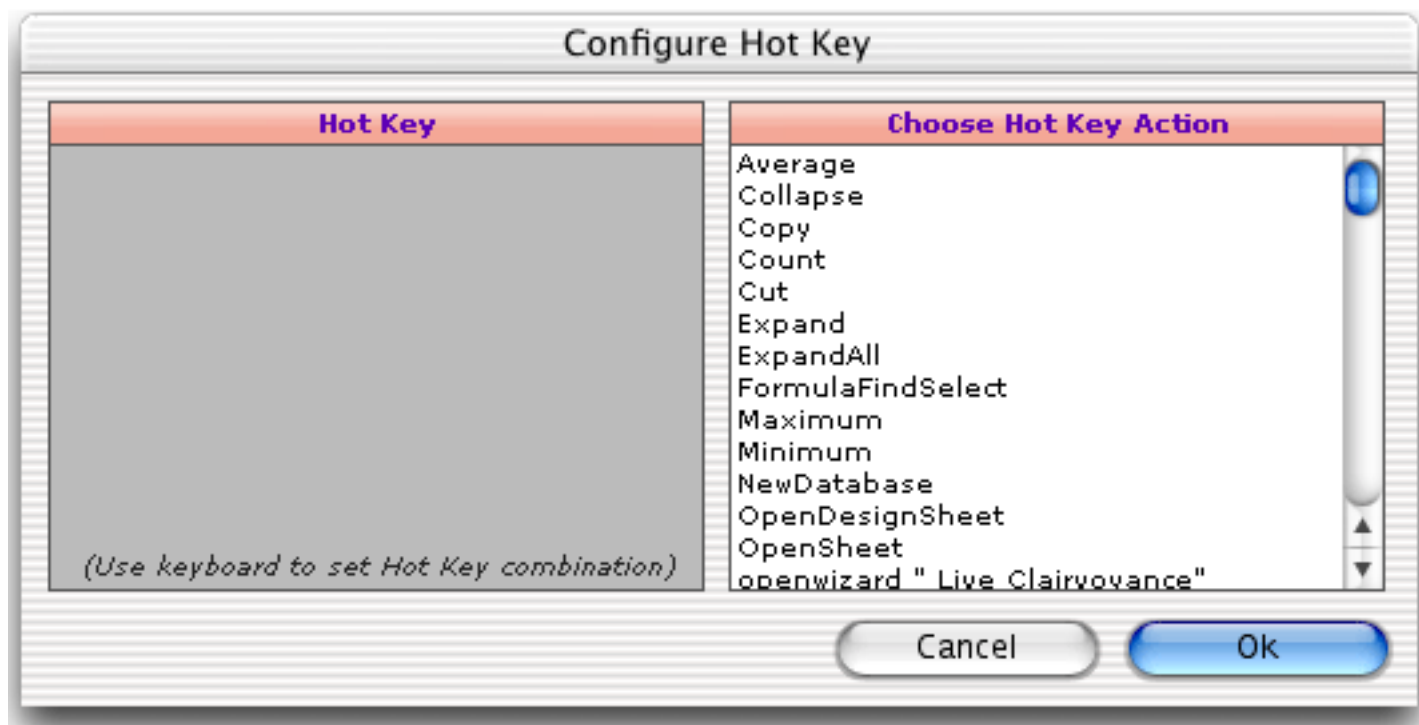
The **Hotkey Manager** Wizard allows you to set up database actions that will occur in response to different keystrokes and keystroke combinations. Each hotkey may be set up as a universal hotkey (active for all databases) or it may be made specific to a particular database. When the **Hotkey Manager** is first opened it displays the universal hotkeys that are already defined, if any.



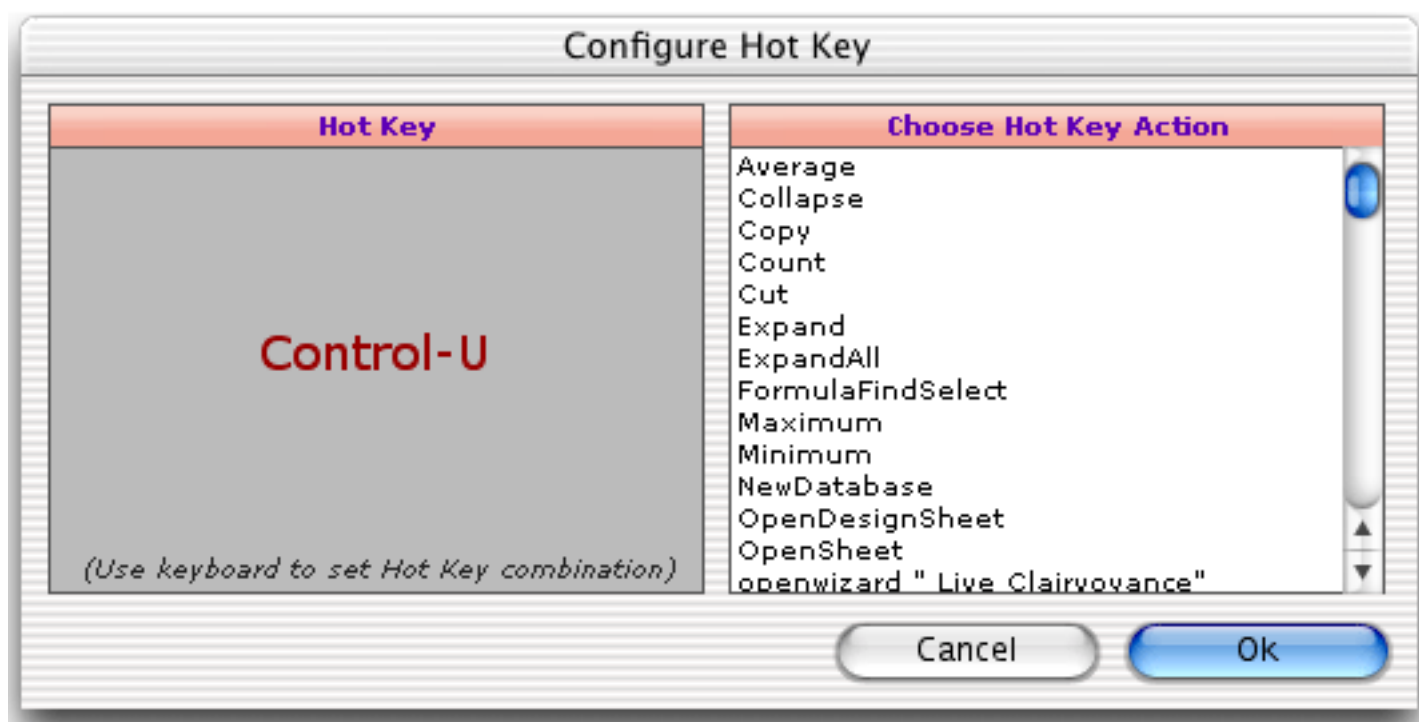
The window is divided into two columns. The first column displays each keystroke combination. The right side displays the action that will be performed when this keystroke combination is pressed.

Adding a New Universal Hotkey

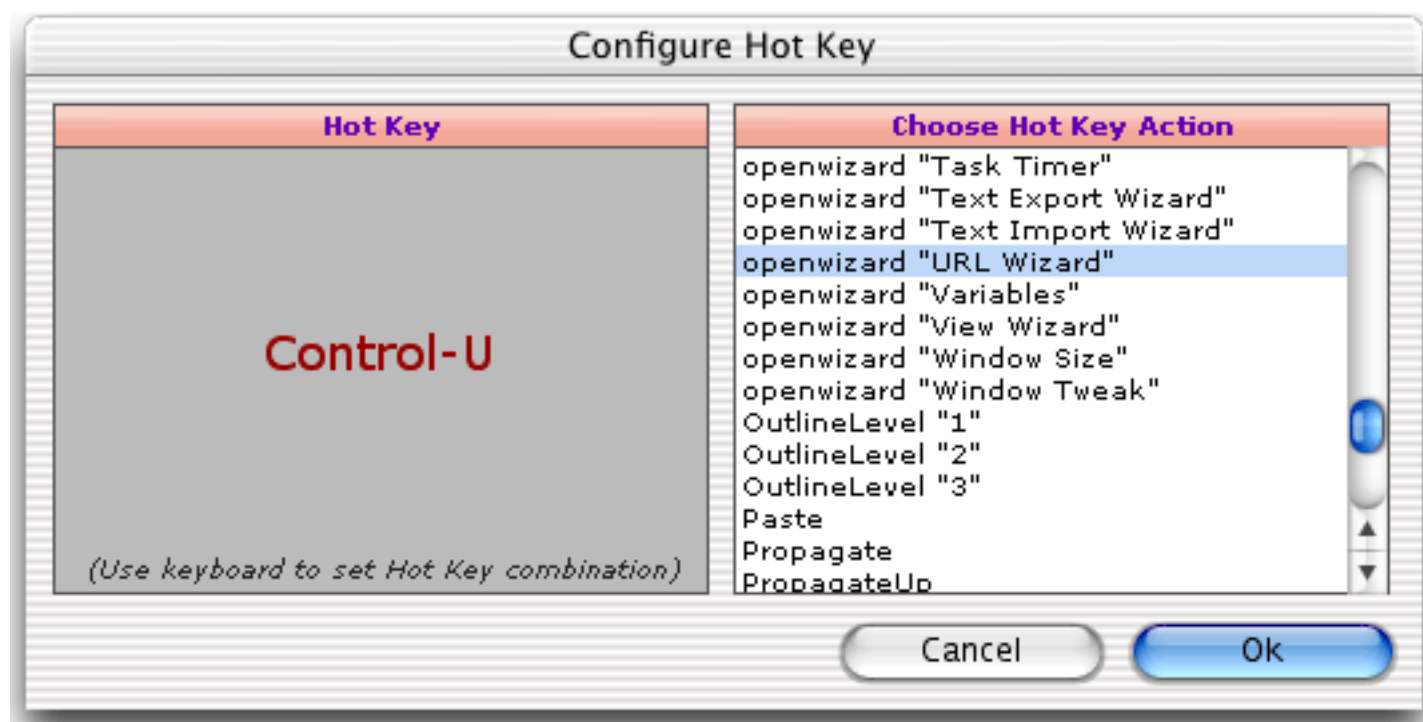
To create a new universal hotkey, choose **New Hotkey** from the Hotkey menu.



This dialog is divided into two sections. The section on the left displays the keystroke combination. To specify the combination simply press the key or key combination you want to use. You may use any character on the keyboard, optionally combined with the **Shift**, **Control**, **Option**, **Command** or **Alt** keys. (The **Option** and **Command** keys are available only on the Macintosh, the **Alt** key is available only on the PC.) If you decide you want to change the key combination, simply type another key or key combination. You can change the hot key as many times as you like. Each time you press a key or key combination the left side of the dialog will update to display your selection.



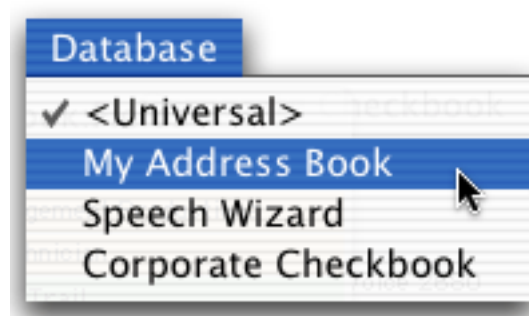
The right side of the dialog is a scrolling list. Select the action you want to perform from this list. (You can also set up a custom action -- more on that later). The actions in the list are all “universal” actions that could apply no matter what database is open (for example, opening a wizard).



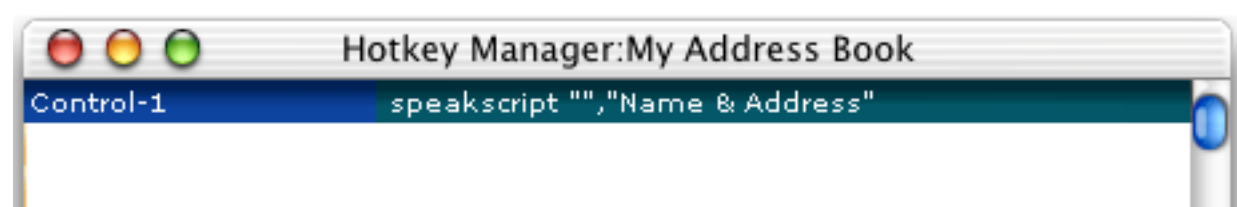
Once the action is selected, press the **Ok** button. The new Hotkey is ready to use immediately, and will be active no matter which Panorama database is currently active. In this case you can now press **Control-U** at any time to open the URL Wizard.

Creating a Database Specific Hotkey

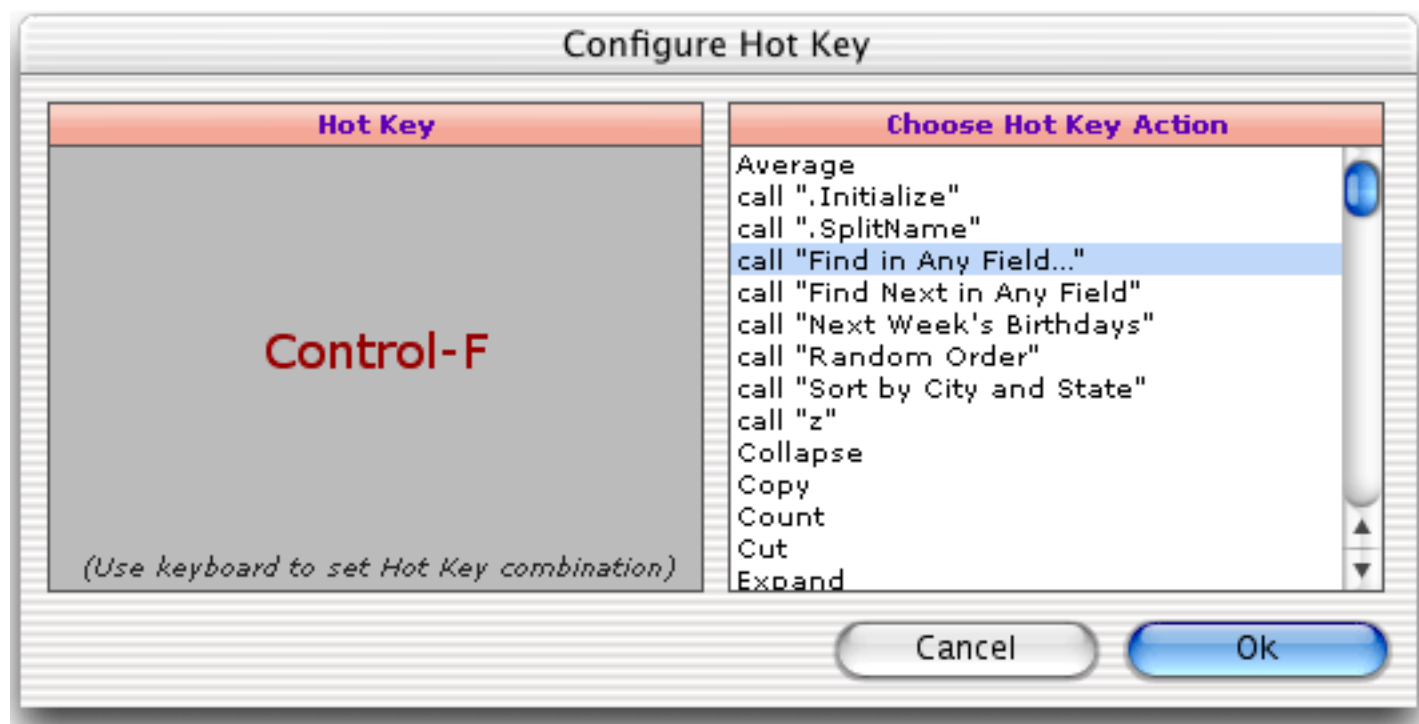
To create a database specific hotkey, first choose the database from the Database menu.



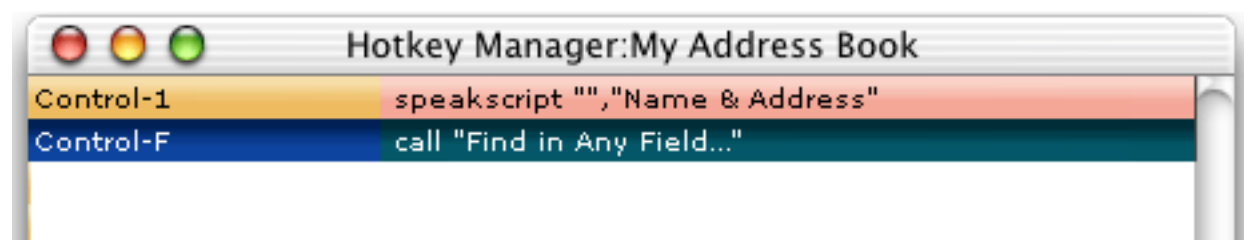
The wizard will display any hotkeys that have already been specifically defined for this database.



Now use the **New Hotkey** command in the Hotkey menu to define a new hotkey. The command works exactly the same as it did before, but the new hotkey it creates will be specific to the current database instead of universal. You'll also notice that there are more action choices on the right hand side of the dialog. In addition to the universal actions, the dialog also now lists actions that are specific to this database. For example, you can set up the hotkey to trigger any procedure in the database, as shown in this example.



When you press **Ok** the new hotkey is immediately defined and ready to use.



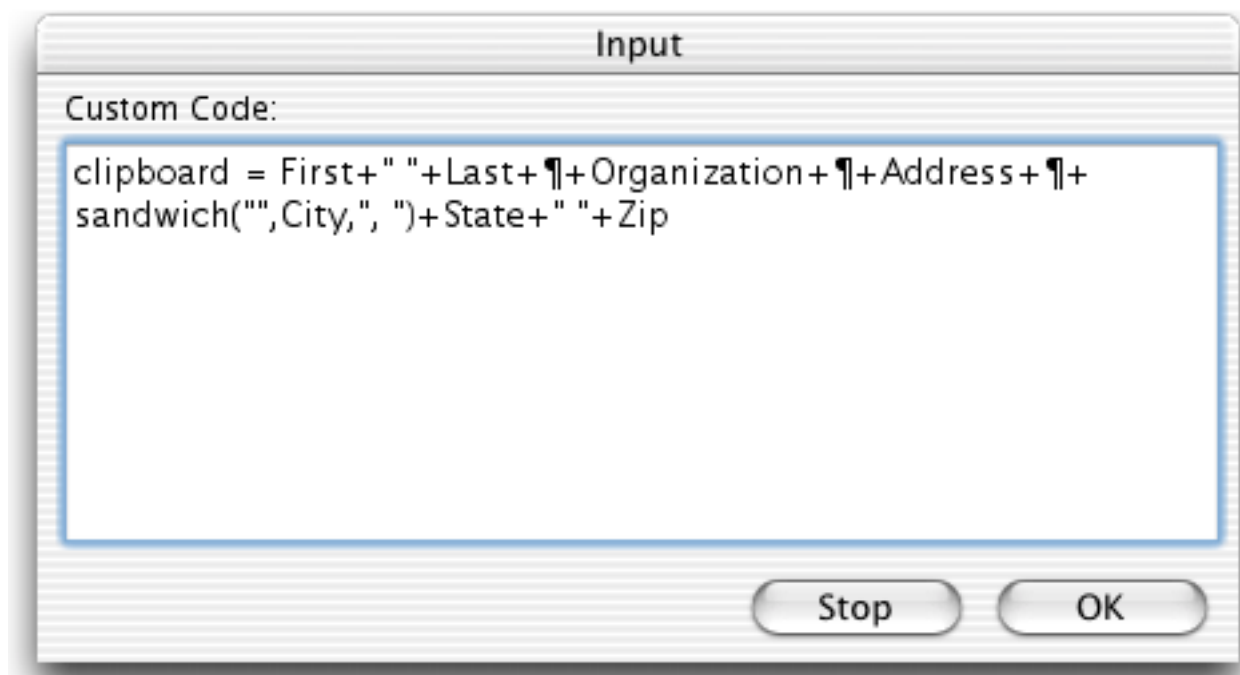
Notice that in this example the **Control-F** hotkey has been defined twice - once as a universal hotkey (to open the **Live Clairvoyance** wizard) and once as a database specific hotkey. In this case the database specific hotkey overrides the universal hotkey. As long as the **My Address Book** database is the active database (the top-most window) **Control-F** will activate the Find in Any Field procedure. When any other database is active **Control-F** will open the **Live Clairvoyance** wizard.

Database specific hotkeys are not stored in the wizard -- they are stored in the database itself. Your new hotkey will not be permanently saved until you save this database itself.

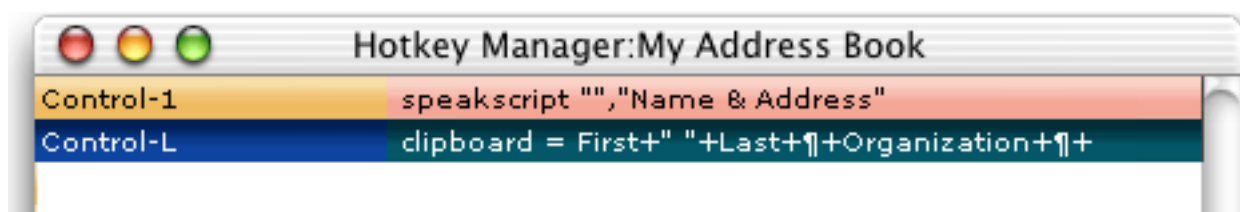
Custom Hotkey Actions

Normally hotkey actions are selected from the list in the hotkey configuration dialog. Sometimes, however, you may want to create a hotkey that performs a custom action that is not on the list. To do this, first create the hotkey the normal way. Since you are going to create a custom action, it doesn't matter which action you select.

Once the hotkey is created, select it and choose the **Custom Code** command from the Hotkey menu. This command opens a dialog that allows you to type in any procedure you like for the custom action. The example below shows how this dialog can be used to create a database specific hotkey that copies a mailing label into the clipboard, so that it can be pasted into another database or application. (Of course you could also create a procedure that did this, then select the procedure in the normal Hotkey Configuration dialog.)



When you press **OK** the hotkey list will show your new custom action.



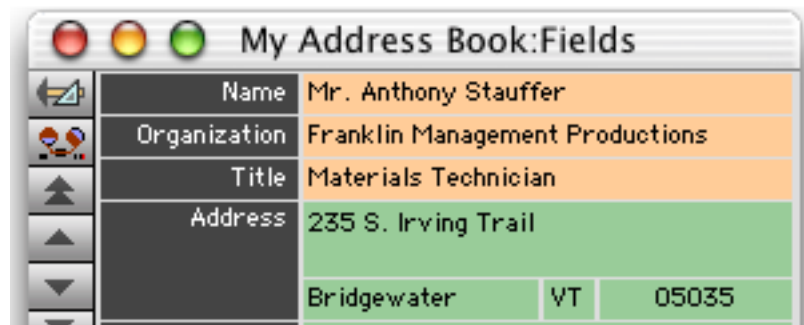
If you have created a universal hotkey, remember that this action may be performed with any database active. Be sure not to include any code that is specific to a particular database. Of course this isn't a problem if you are creating a database specific hotkey.

Speech Wizard

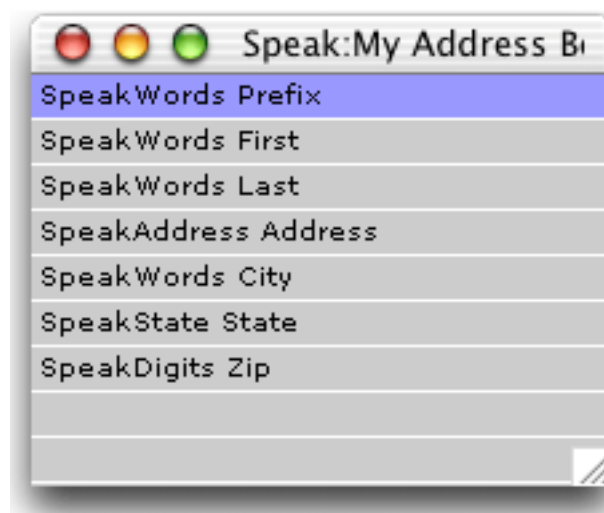
The **Speech Wizard** allows you to add speech synthesis to any Panorama database on a Macintosh computer. This allows Panorama to “read back” your data for voiced based data verification and auditing. Using a simple user interface you can create one or more scripts for reading back the information in a database.

Using Speech Scripts

The Address Book example database that comes with Panorama (in the Guided Tour folder) already has several speech scripts set up. To try these out, first open this database.



Now open the **Speech Wizard**. When you open the wizard, it displays the currently selected script (if any), as shown below.



To hear Panorama read back the name and address of the currently visible person, choose **Speak Script** from the Script menu. Notice that the script knows how to correctly pronounce abbreviations like **Mr.**, **S.** and **VT**.

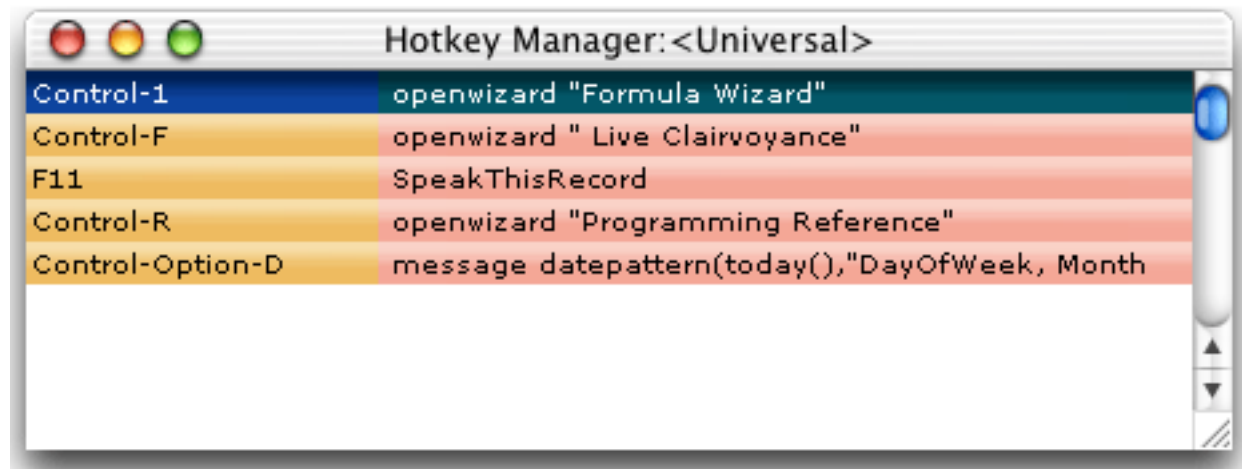
The **Script** menu allows you to select and manage scripts. Two scripts have been defined for this database **Name & Address** and **Phone Number**.



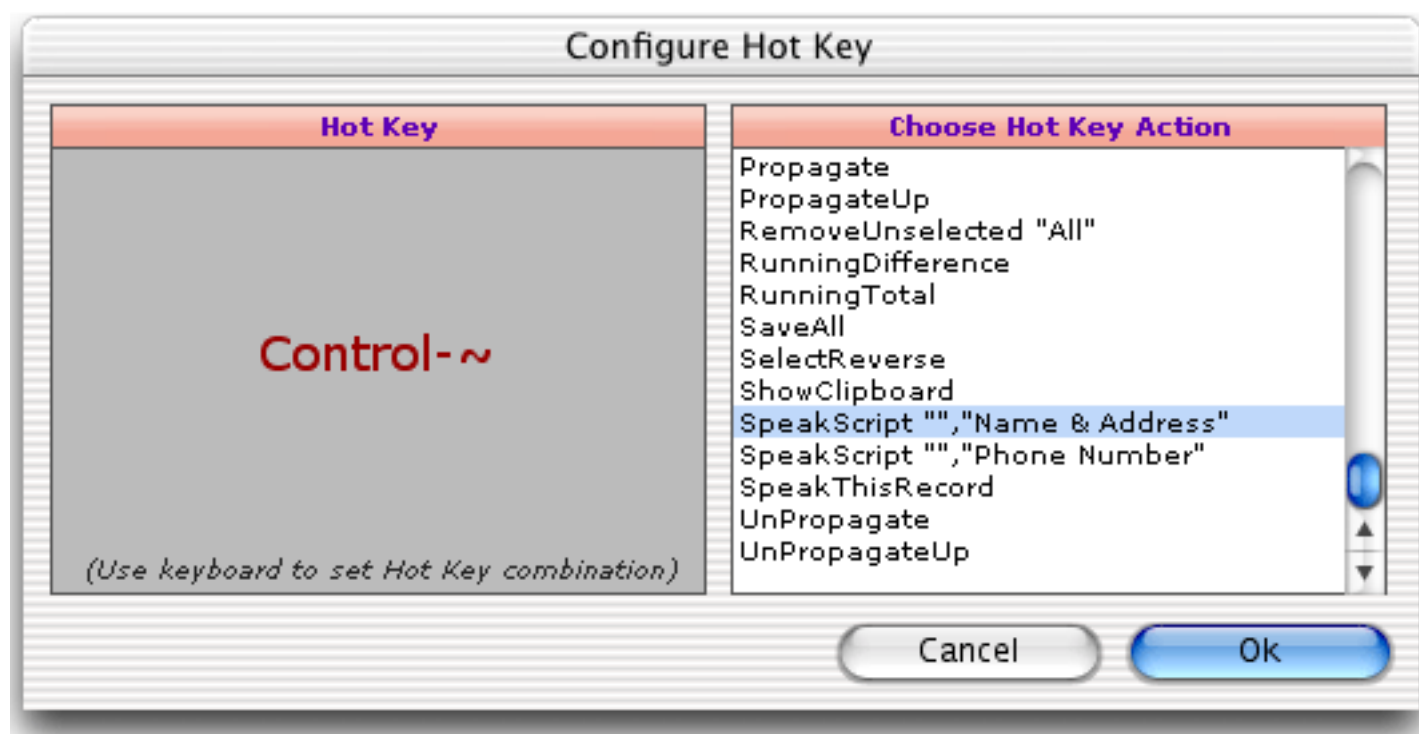
To switch to a different script simply select that script from the menu (for example **Phone Number**). You can then read back using that script or modify the script you have chosen.

Speaking Scripts with a Hotkey

The Hotkey manager comes pre-configured to speak the current script in any database when you press the **F11** key.



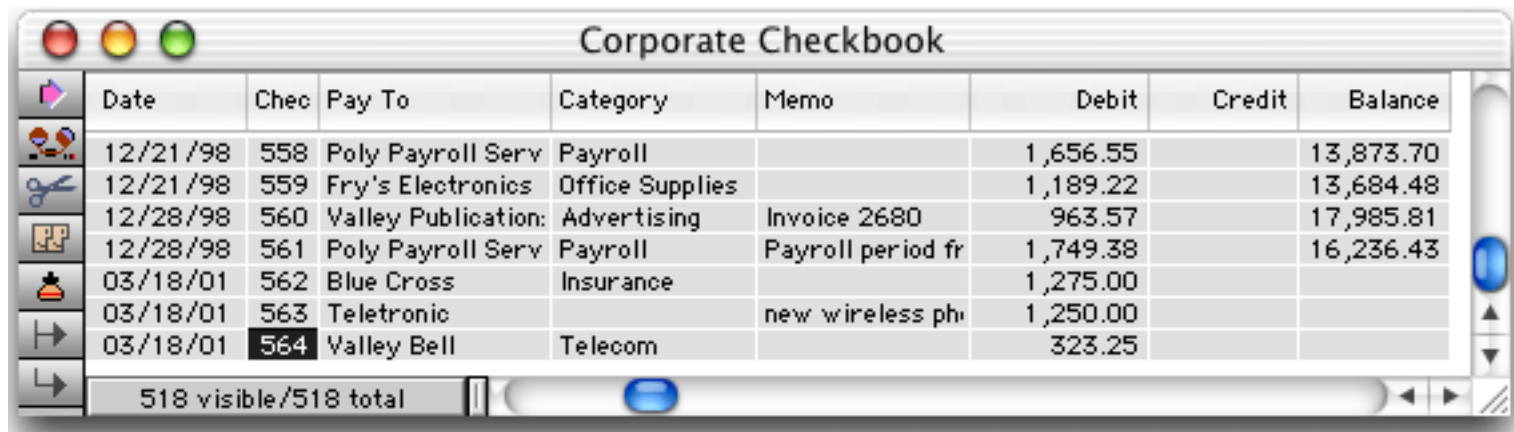
This means that in any database you can press the **F11** key to speak the current record (assuming a script has been set up). You can change the key assigned to this action using the Hotkey Manager wizard. You can change which script will be spoken using the **Script** menu (in the Speech Wizard). You can also set up a database specific hotkey to speak a specific script. Simply choose the script you want to use from the action list in the Hotkey Configuration dialog.



See "[Hotkey Manager](#)" on page 99 for more information on setting up hot keys.

Creating a New Script

To create a new script use the **New Script** command in the Script menu. We'll illustrate this with the **Corporate Checkbook** database, which is also in the Guided Tour folder.

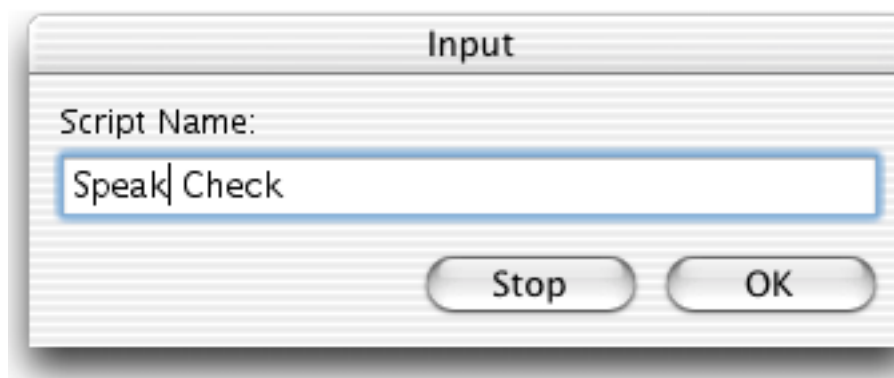


	Date	Chec	Pay To	Category	Memo	Debit	Credit	Balance
	12/21/98	558	Poly Payroll Serv	Payroll		1,656.55		13,873.70
	12/21/98	559	Fry's Electronics	Office Supplies		1,189.22		13,684.48
	12/28/98	560	Valley Publication:	Advertising	Invoice 2680	963.57		17,985.81
	12/28/98	561	Poly Payroll Serv	Payroll	Payroll period fr	1,749.38		16,236.43
	03/18/01	562	Blue Cross	Insurance		1,275.00		
	03/18/01	563	Teletronic		new wireless ph	1,250.00		
	03/18/01	564	Valley Bell	Telecom		323.25		

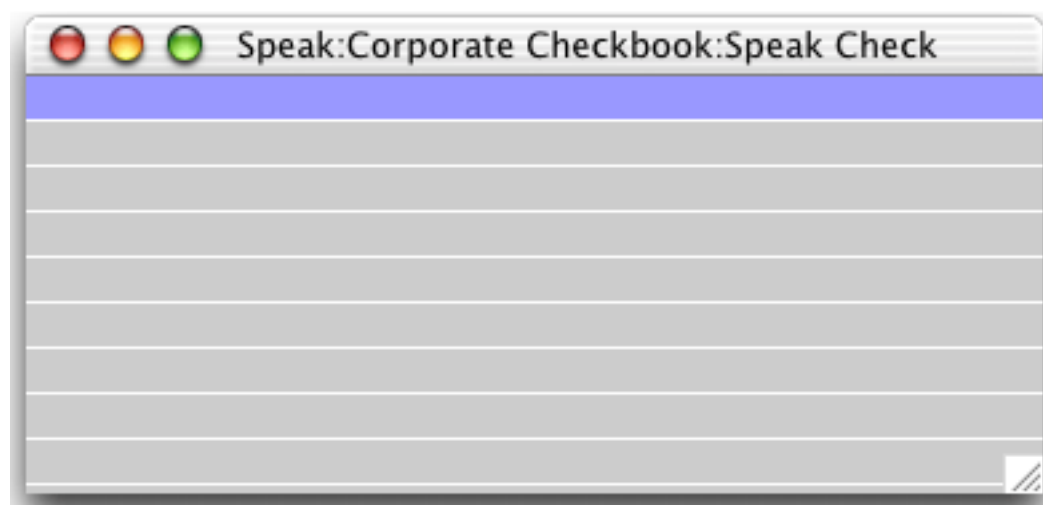
Our goal will be to create a script that reads the check data aloud like this:

Check number five-sixty-four to Valley Bell for three-hundred twenty- three dollars and twenty-five cents.

Start by choosing **New Script** from the Script menu, and assigning the new script a name.

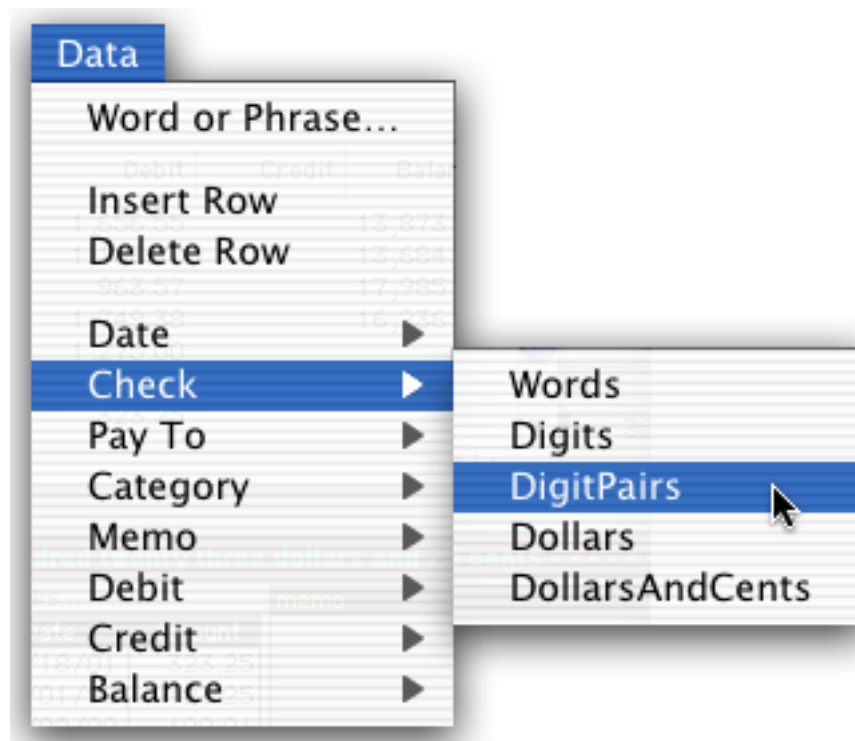


Press **OK** to create a new, empty script.

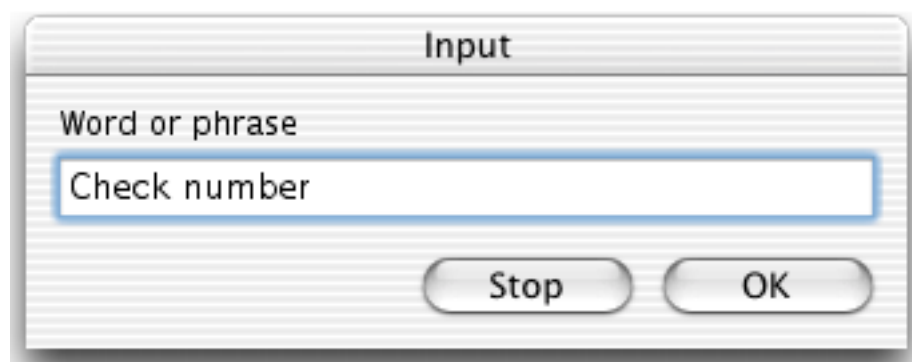


Using the Data Menu

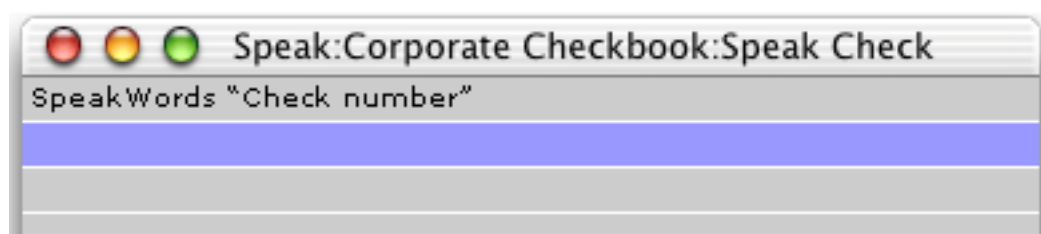
The **Data** menu is the primary method you'll use to create and modify scripts. This menu allows you to add a word or phrase, to insert or delete rows, and to add any field to the script. The bottom portion of this menu lists all of the fields in the current database. Each field has a submenu that lists the available formats for that field. For example, a numeric field like the Check number (shown below) can be spoken as **Words**, **Digits**, **Digit Pairs**, **Dollars** or **Dollars and Cents**.



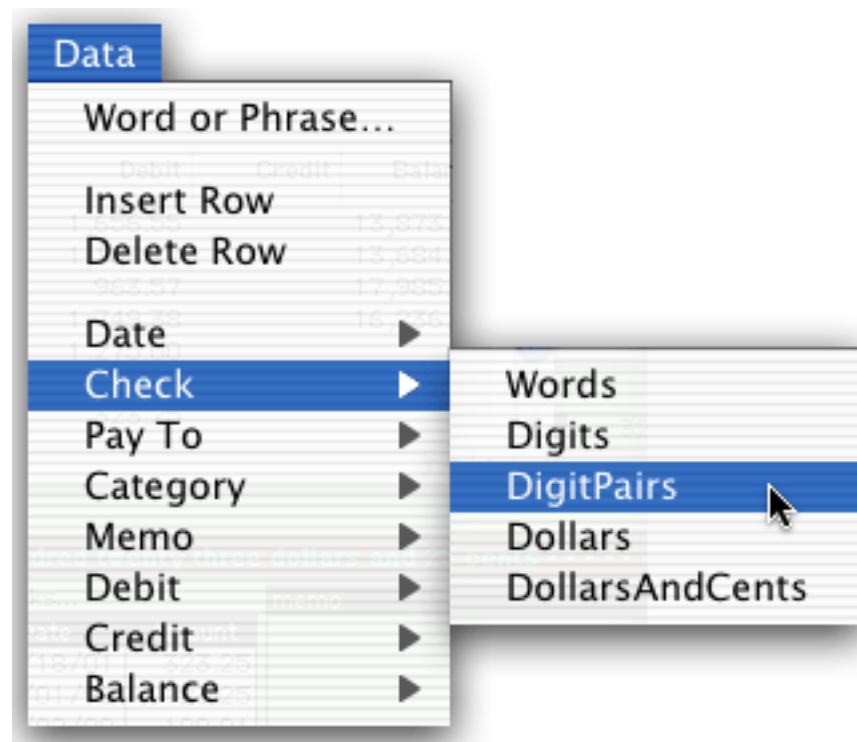
For this script we want to start by speaking the phrase check number, so you'll select the **Word or Phrase** menu item. A dialog appears for you to type in the word or phrase.



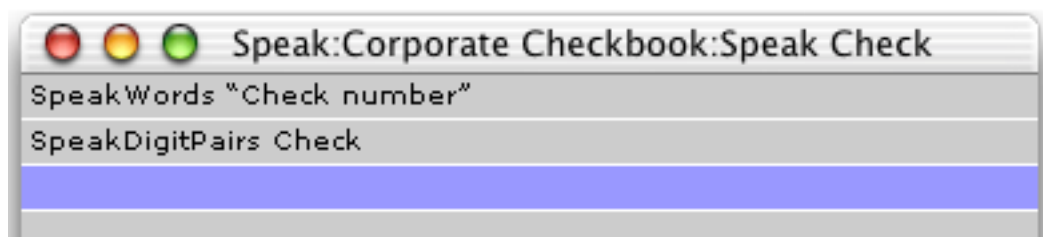
When you press the **OK** button this item is added to the script.



Next the script needs to speak the actual check number itself. Select **Check** from the **Data** menu, then select **DigitPairs** from the submenu.



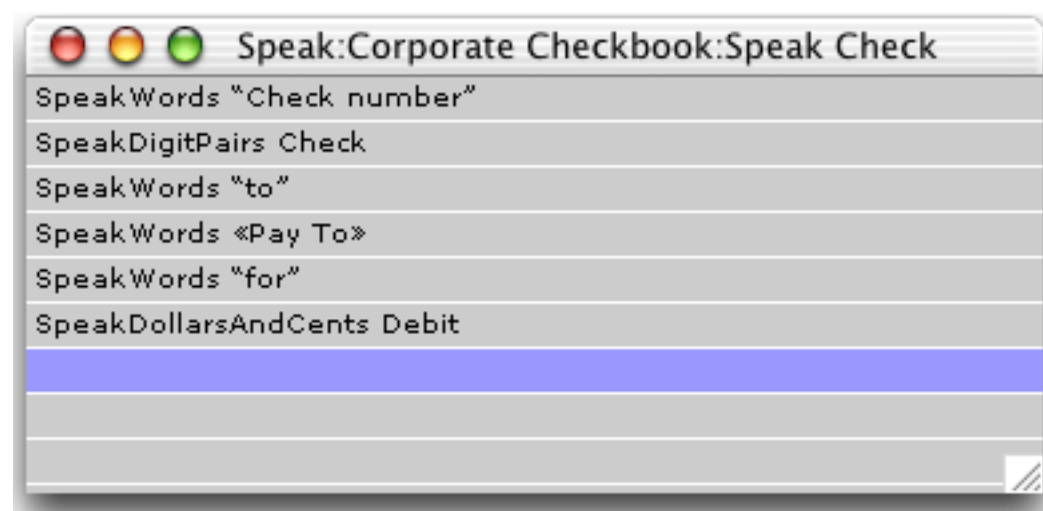
This item will be added to the script.



To complete the script perform the following steps.

- Select **Word or Phrase** and enter **to**.
- Select **Pay to > Words**.
- Select **Word or Phrase** and enter **for**.
- Select **Debit > DollarsAndCents**.

The finished script will look like this:



You can use the **Speak Script** command to try out your new script.

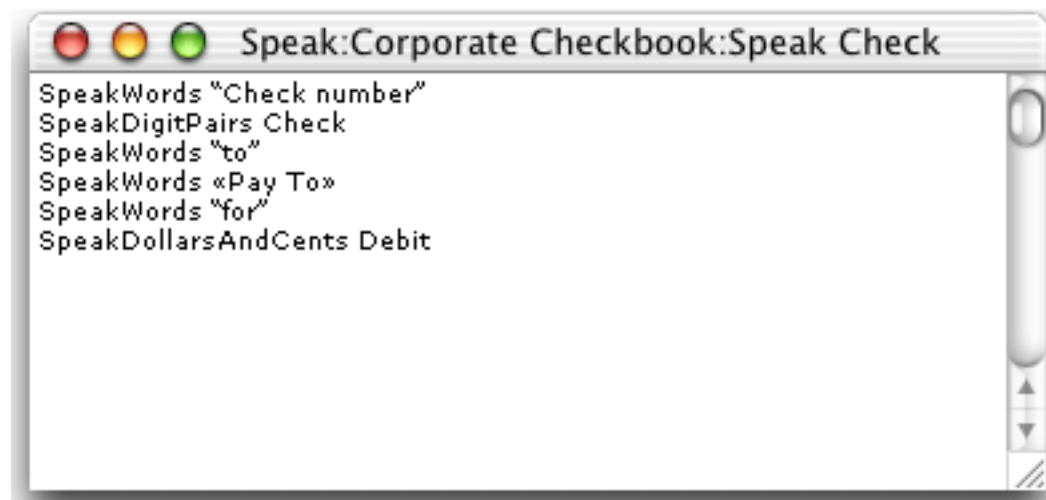
Speech Data Styles

Each type of data (text, numeric, date) has one or more styles that you can use to read the data. The table below lists and describes each of these styles.

Data Type	Statement	Description
TEXT	speakwords	The text is spoken using normal English.
	speakdigits	The data is spoken in English, but if the data contains any numbers they will be spoken as individual digits. For example, 4892 will be spoken as four eight nine two .
	speakdigitpairs	The data is spoken in English, but if there are any numbers they will be spoken as digit pairs. For example, 4892 will be spoken as forty-eight ninety-two .
	speakletters	The data is spoken letter by letter, including upper and lower case. For example Jim will be spoken as upper case J, lower case I, lower case M .
	speakcharacters	The data is spoken letter by letter. For example April will be spoken as A P R I L .
	speakcharactersslowly	The data is spoken letter by letter, with a delay between each letter. For example April will be spoken as A; P; R; I; L .
	speakaddress	The data is spoken in English, but any official USPS abbreviations are expanded as the text is spoken. For example S or S. is expanded to South , while Bl. is expanded to Boulevard . Any numbers in the text are spoken as digit pairs.
	speakstate	If the text is a two letter abbreviation of a U.S. state it will be spoken as the full name. For example CA will be spoken as California , while WV will be spoken as West Virginia .
	speakphonenumber	The first ten digits in the text are spoken as a phone number, along with any extension after that.
NUMBER	speakwords	The number is spelled out. For example, 4892 will be spoken as four-thousand eight-hundred and ninety-two .
	speakdigits	The number is spoken as individual digits. For example, 4892 will be spoken as four eight nine two .
	speakdigitpairs	The number is spoken as digit pairs. For example, 4892 will be spoken as forty-eight ninety-two .
	speakdollars	The integer portion of the number is spelled out, followed by the word Dollars. For example 378.93 will be spoken as Three-hundred seventy-eight dollars .
	speakdollarsandcents	The integer portion of the number is spelled out, followed by the word Dollars, followed by the two digits after the decimal point, followed by the word Cents. For example 378.93 will be spoken as Three-hundred seventy-eight dollars and ninety-three cents .
DATE	speakdate	The date is spelled out. For example 4/18/04 is spoken as April eighteenth, 2004 .

Advanced Mode vs. Simple Mode

The **Speech Wizard** actually has two modes: **Simple Mode** and **Advanced Mode**. So far we have only discussed the simple mode, which allows you to create and modify the script with the **Data** menu. Advanced mode allows you to modify the script directly, using a text editor.



To edit the script, simply click anywhere in the text and begin typing. You can also select text just as you would with any other text editing application.

In advanced mode, the script is actually a Panorama procedure. You can type any Panorama procedure code you like into the script, including if, loop, and call statements, as well as using variables.

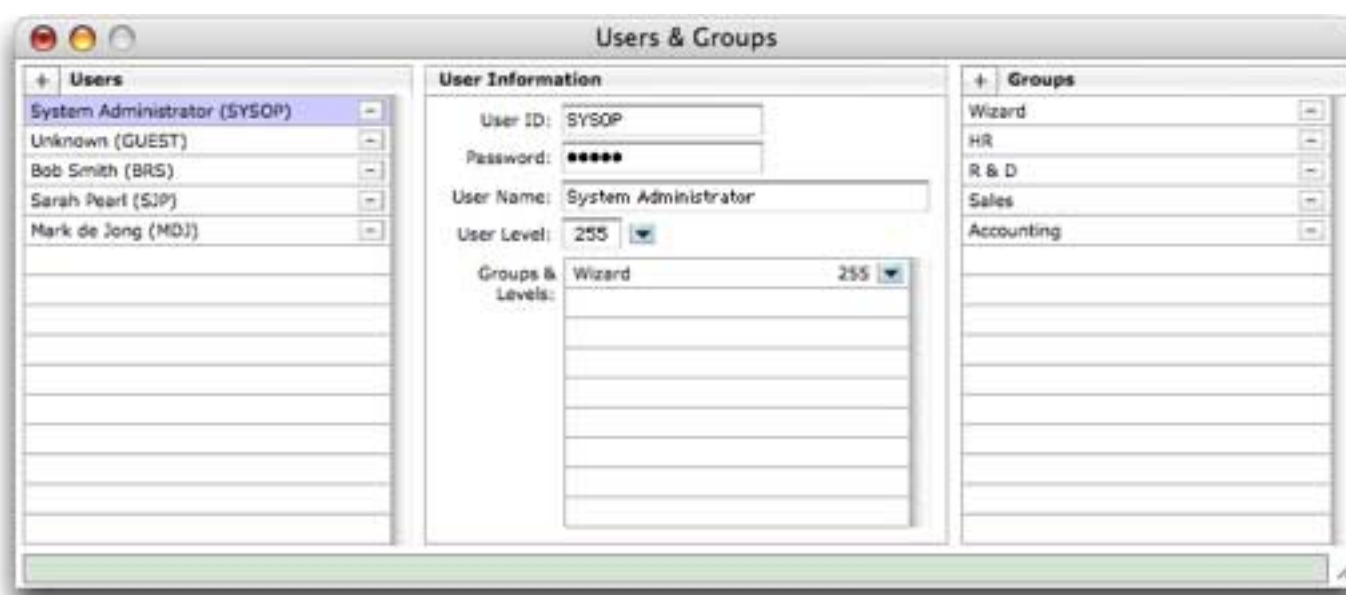
Saving a Script

The script wizard doesn't have any command for saving a script. That's because the script is not saved as part of the script wizard. Instead it is saved as part of the database itself. To save the script you need to save the original database that the script is attached to.

Because the script is saved along with the database, it doesn't matter if you move the database to a different folder or even a different computer. The script will remain as part of the database no matter where it goes. (Of course you can always use the **Delete Script** command to remove it.

Users & Groups

This wizard is used for set up users, groups, and access levels for accessing databases that have been locked with Panorama's security features.



For more on this wizard and setting up database security see the **Panorama Security Handbook** (which much be purchased separately).

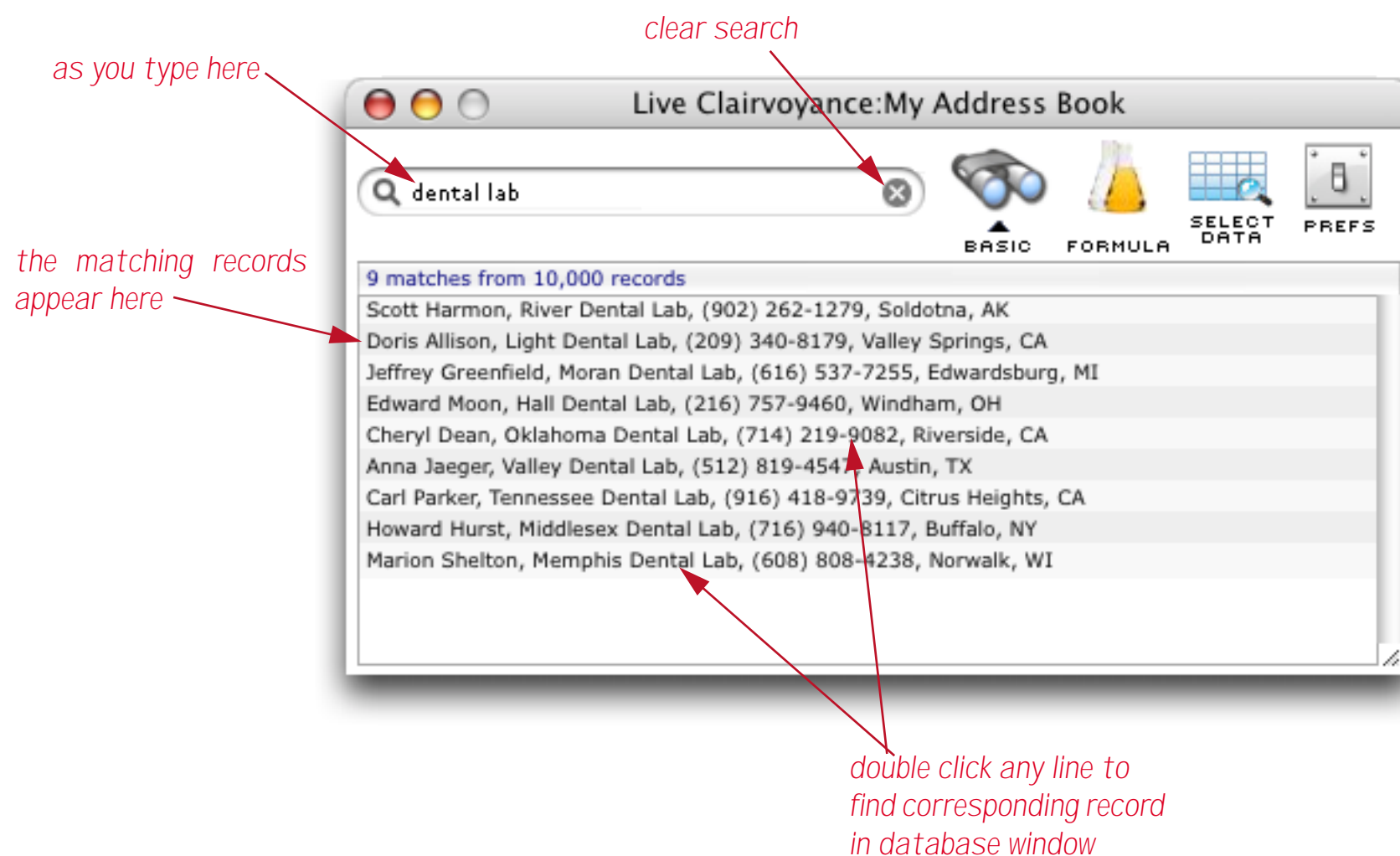
Search Wizards

These wizards provide alternate options for searching for data within a Panorama database.

Live Clairvoyance™

(Note: Starting with Panorama 6 this wizard has been superseded by the new Find/Select dialog, and this wizard is normally not accessible. However, it is available in the **Wizard** menu if “built-in” wizards are enabled in General Preferences [see “[Include “Built-in” wizards in Wizard menu](#)” on page 9].)

The **Live Clairvoyance™** wizard allows you to perform “live” searches on any Panorama database. The search results are updated dynamically as you type, allowing you to “hone in” on just the information you are looking for. The search may include multiple fields or even all fields in the database being searched. (If you've used the search box in iTunes you'll find the operation of this wizard familiar.) Using the Live Clairvoyance wizard doesn't require you to do any programming or make any modifications to your existing databases. Here's what this wizard looks like in action.

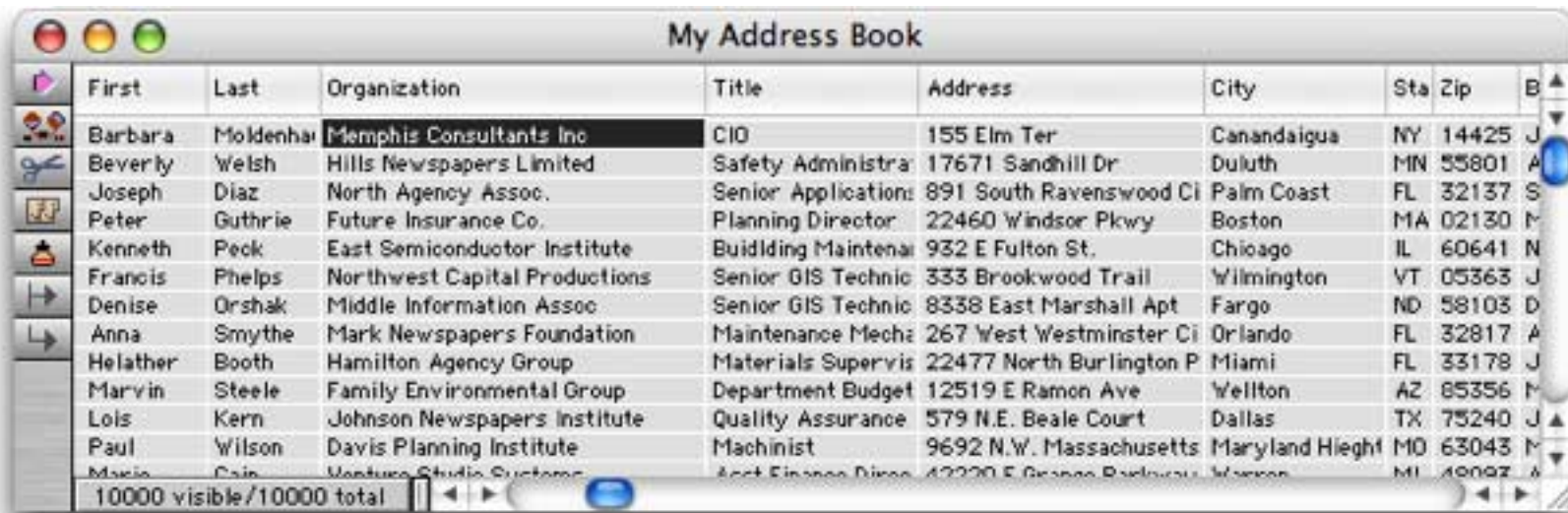


To learn more about this wizard see the Panorama 5.5 Handbook (this older book is available as a separate download from www.provue.com).

Quick Search Wizard

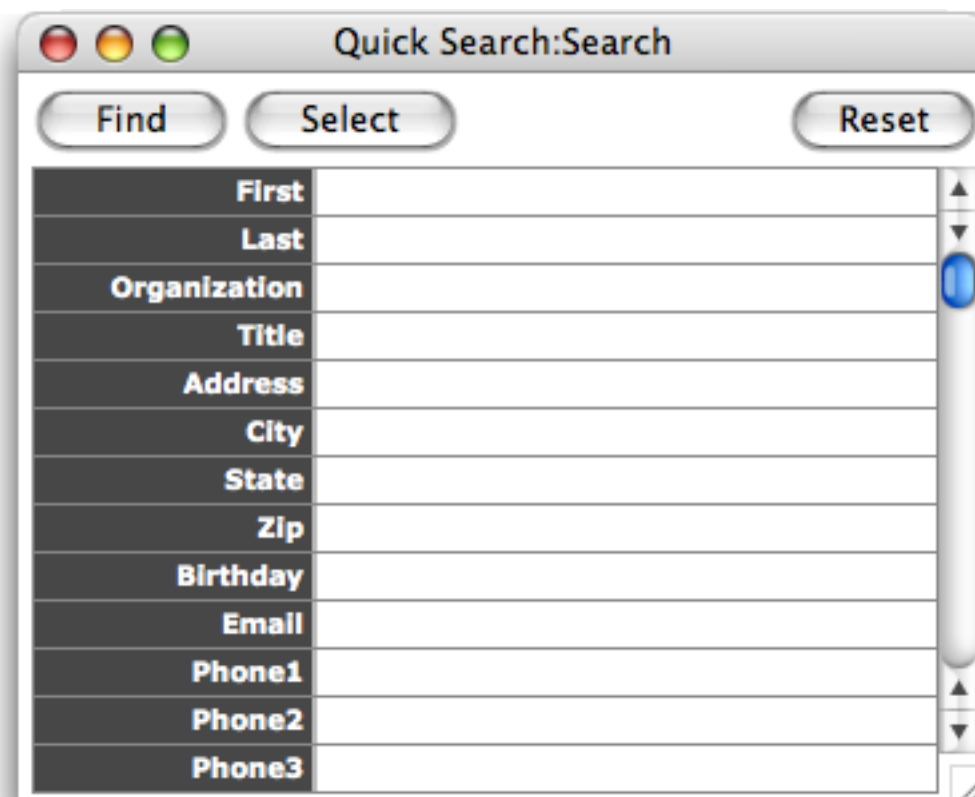
(Note: Starting with Panorama 6 this wizard has been superceded by the new Find/Select dialog, and this wizard is normally not accessible. However, it is available in the Wizard menu if “built-in” wizards are enabled in General Preferences [see [“Include “Built-in” wizards in Wizard menu”](#) on page 9].)

This wizard provides an alternate method to locate information within databases. It allows you to easily locate data based on selection criteria in multiple fields. To illustrate this wizard we’ll use this address list database.



	First	Last	Organization	Title	Address	City	Sta	Zip	B
	Barbara	Moldenhar	Memphis Consultants Inc	CIO	155 Elm Ter	Canandaigua	NY	14425	J
	Beverly	Welsh	Hills Newspapers Limited	Safety Administra	17671 Sandhill Dr	Duluth	MIN	55801	A
	Joseph	Diaz	North Agency Assoc.	Senior Applications	891 South Ravenswood Ci	Palm Coast	FL	32137	S
	Peter	Guthrie	Future Insurance Co.	Planning Director	22460 Windsor Pkwy	Boston	MA	02130	M
	Kenneth	Peck	East Semiconductor Institute	Building Maintena	932 E Fulton St.	Chicago	IL	60641	N
	Francis	Phelps	Northwest Capital Productions	Senior GIS Technic	333 Brookwood Trail	Wilmington	VT	05363	J
	Denise	Orshak	Middle Information Assoc	Senior GIS Technic	8338 East Marshall Apt	Fargo	ND	58103	D
	Anna	Smythe	Mark Newspapers Foundation	Maintenance Mecha	267 West Westminster Ci	Orlando	FL	32817	A
	Helather	Booth	Hamilton Agency Group	Materials Supervis	22477 North Burlington P	Miami	FL	33178	J
	Marvin	Steele	Family Environmental Group	Department Budget	12519 E Ramon Ave	Wellton	AZ	85356	M
	Lois	Kern	Johnson Newspapers Institute	Quality Assurance	579 N.E. Beale Court	Dallas	TX	75240	J
	Paul	Wilson	Davis Planning Institute	Machinist	9692 N.W. Massachusetts	Maryland Hieght	MO	63043	M
	Maxie	Cain	Venture Studio Systems	Asst Finance Direc	42220 E Grand Parkway	Meriden	MI	48092	A

Suppose you wanted to find all organizations in this database related to photography in the state of Oregon. Start by opening the Quick Search wizard.

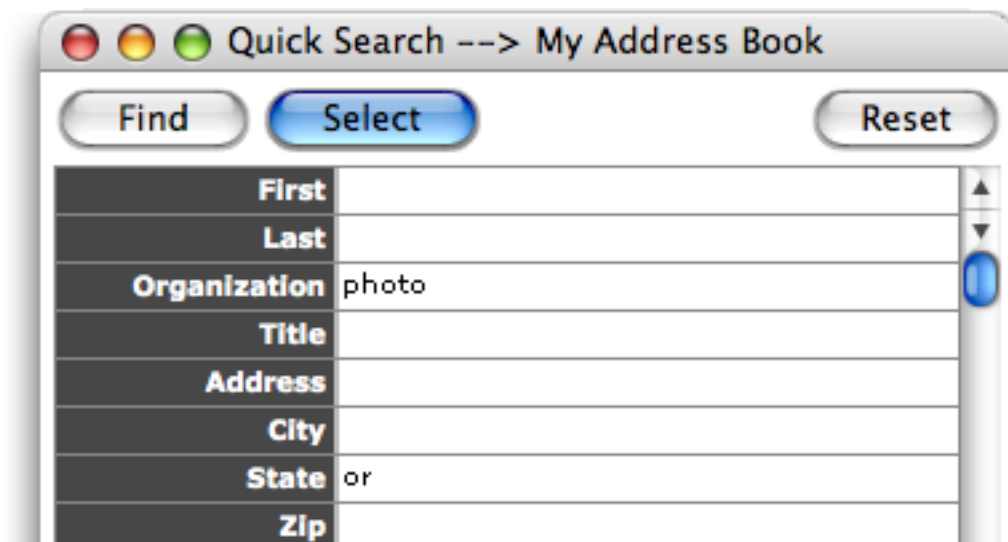


Quick Search:Search

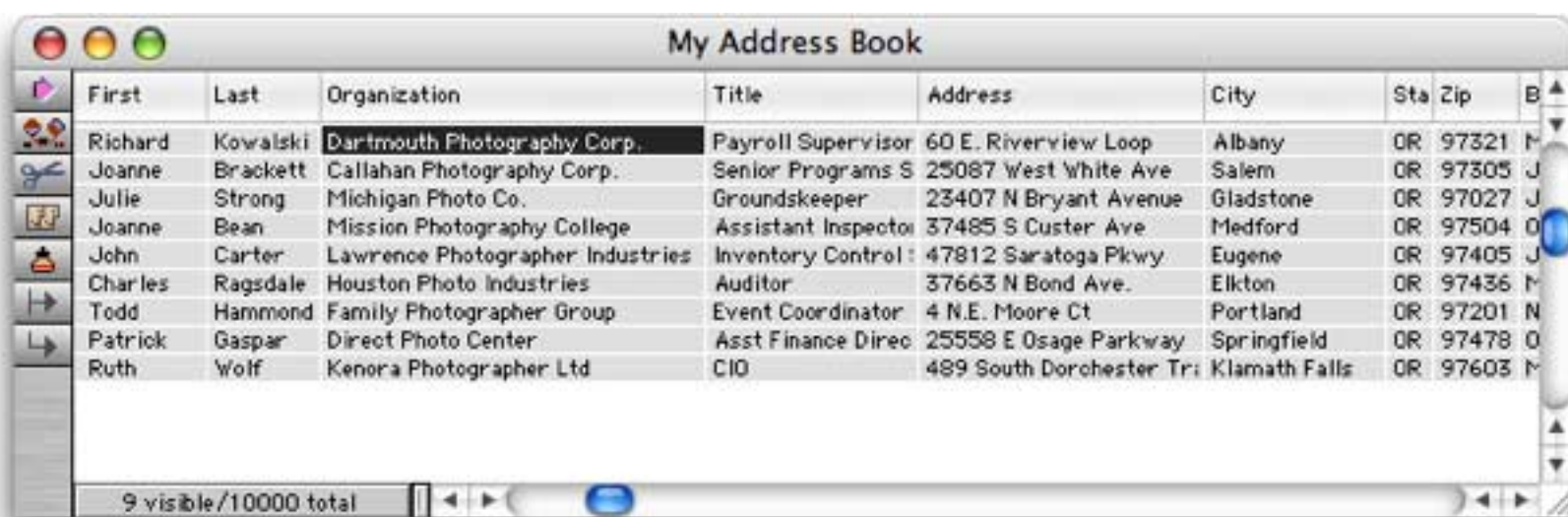
Find Select Reset

First	
Last	
Organization	
Title	
Address	
City	
State	
Zip	
Birthday	
Email	
Phone1	
Phone2	
Phone3	

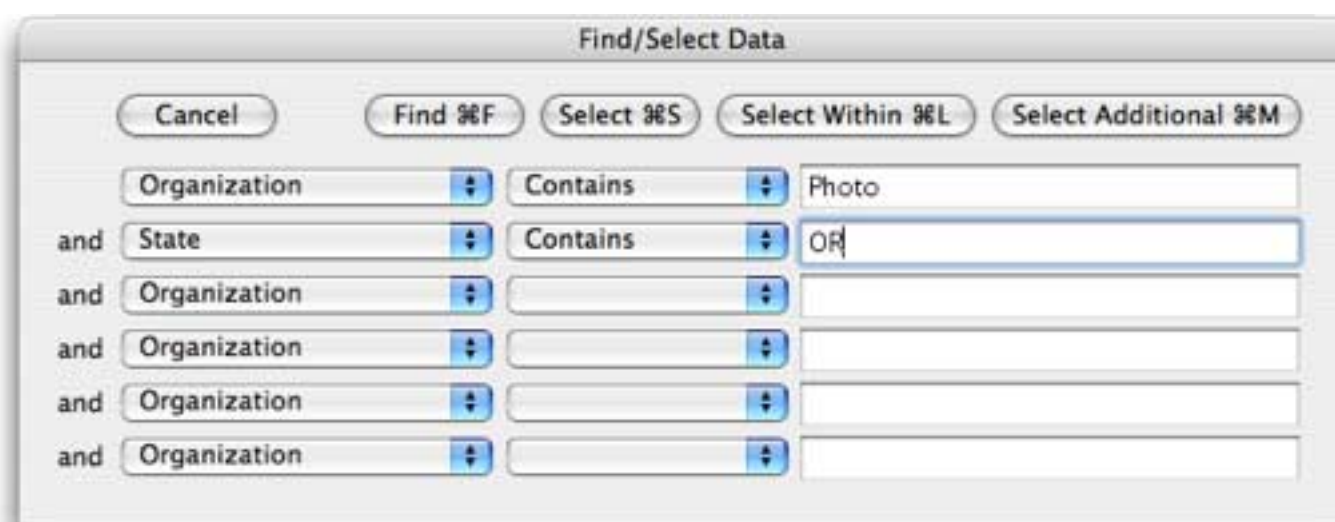
The wizard lists all of the fields in the database. Type **photo** into Organization and **or** into State.



Press the **Select** button to see all of the records that match all of the specified criteria.



Of course you could also locate this data with the regular Find/Select dialog (as shown below), but the Quick Search wizard makes it simpler.



If you don't want a field to be searchable simply uncheck it in this dialog.



After you press **Ok** the Quick Search wizard will show only the fields you have specified.

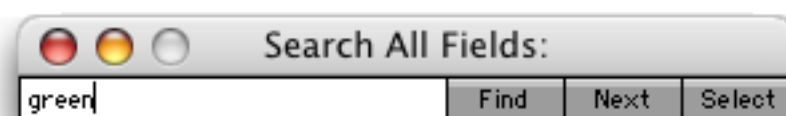


If you save the target database (in this case [My Address Book](#)) after configuring the fields Panorama will remember this field configuration permanently.

Search All Fields Wizard

(Note: Starting with Panorama 6 this wizard has been superseded by the new Find/Select dialog, and this wizard is normally not accessible. However, it is available in the **Wizard** menu if “built-in” wizards are enabled in General Preferences [see [“Include “Built-in” wizards in Wizard menu”](#) on page 9].)

The **Search All Fields** wizard makes it easy to search all of the fields in a database at once instead of one field at a time. Simply enter the word or phrase you want to locate and press either the **Find** or **Select** button.



The wizard will locate the word or phrase no matter what field it is located in. If you use the **Find** button you can jump through the database with the **Next** button to locate every occurrence of the word or phrase (in this case **Green**).

The following table represents the data shown in the screenshots, filtered by the search term 'Green'.

First	Last	Address	City	Stat	Zip	Phone
Darlene	Simpson	37054 South Greene Ap	Industry	CA	91746	(818) 247-5475
Melissa	Wheeler	47677 W Burnside Dr	La Mesa	CA	91942	(619) 464-9001
Raymond	Hendrickson	30953 S.W Poplar Blvd	Los Angeles	CA	90035	(213) 724-2175
Bernard	Gustafson	15417 E. Catalina Pkwy	Moffett Field	CA	94035	(415) 773-6256
Jason	Stevens	4779 N Fairview St.	Napa	CA	94558	(707) 278-1530
Judith	Simpson	544 S. Custer Lane	Orange	CA	92666	(714) 406-5575
Louise	Stauffer	40520 S.E. Cleveland P.	Piedmont	CA	94620	(510) 525-8600
Brian	Potter	15236 N. Porter Apt	Rialto	CA	92377	(909) 248-8477
Nancy	Greenberg	8526 West Dayton Rd.	San Anselmo	CA	94960	(415) 675-4256
Alan	Harrison	93 Morton Ter	San Diego	CA	92123	(619) 783-1965
Sandra	Cain	3975 S.W 1st Parkway	San Diego	CA	92154	(619) 297-5327
Edward	Hasson	429 W Harvey Cir	San Gabriel	CA	91776	(818) 990-1793

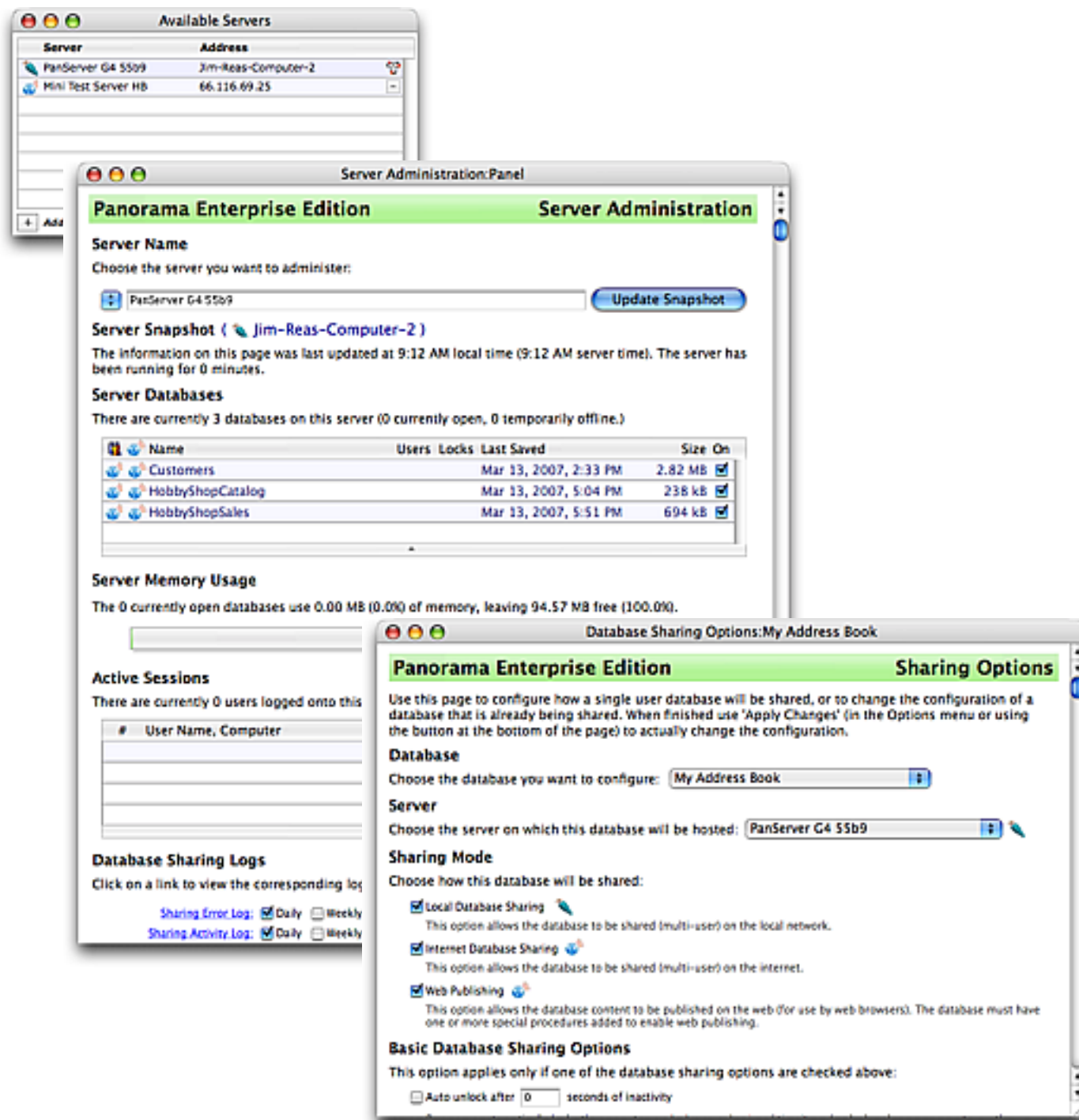
First	Last	Address	City	Stat	Zip	Phone
Raymond	Sanchez	59 W. Palmetto Cir.	Greenville	ME	04441	(207) 241-7088
Catherine	Wolff	2555 West University F	West Paris	ME	04289	(207) 718-0644
Joanne	Valdez	37935 S.E. Arbor Rt	Ann Arbor	MI	48105	(313) 592-4050
Sharon	Smith	915 E Willow Loop	Dearborn	MI	48126	(313) 420-8778
Tammy	Grant	468 S. Dorchester Ln	Ithaca	MI	48847	(517) 287-8374

First	Last	Address	City	Stat	Zip	Phone
Mary	Cooper	573 N. Somerset Loop	Greensboro	NC	27407	(919) 525-4522
Sally	Erickson	306 W Greene Dr.	Research Triang	NC	27709	(919) 680-8960
Stacey	Perkins	20143 Bishop Place	Elsie	NE	69134	(402) 526-8658
Charles	Wall	7306 W. Bethany St.	Papillion	NE	68128	(402) 374-5680
Kelly	Gage	677 S. Charlotte Lane	Bloomfield	NJ	07003	(201) 947-6456

First	Last	Address	City	Stat	Zip	Phone
Mary	Cooper	573 N. Somerset Loop	Greensboro	NC	27407	(919) 525-4522
Sally	Erickson	306 W Greene Dr.	Research Triang	NC	27709	(919) 680-8960
Stacey	Perkins	20143 Bishop Place	Elsie	NE	69134	(402) 526-8658
Charles	Wall	7306 W. Bethany St.	Papillion	NE	68128	(402) 374-5680
Kelly	Gage	677 S. Charlotte Lane	Bloomfield	NJ	07003	(201) 947-6456

Sharing Wizards

The wizards in this submenu are used to create and manage shared and web published databases with the Panorama Enterprise Server. If you have only a single user version of Panorama you can disregard these wizards.



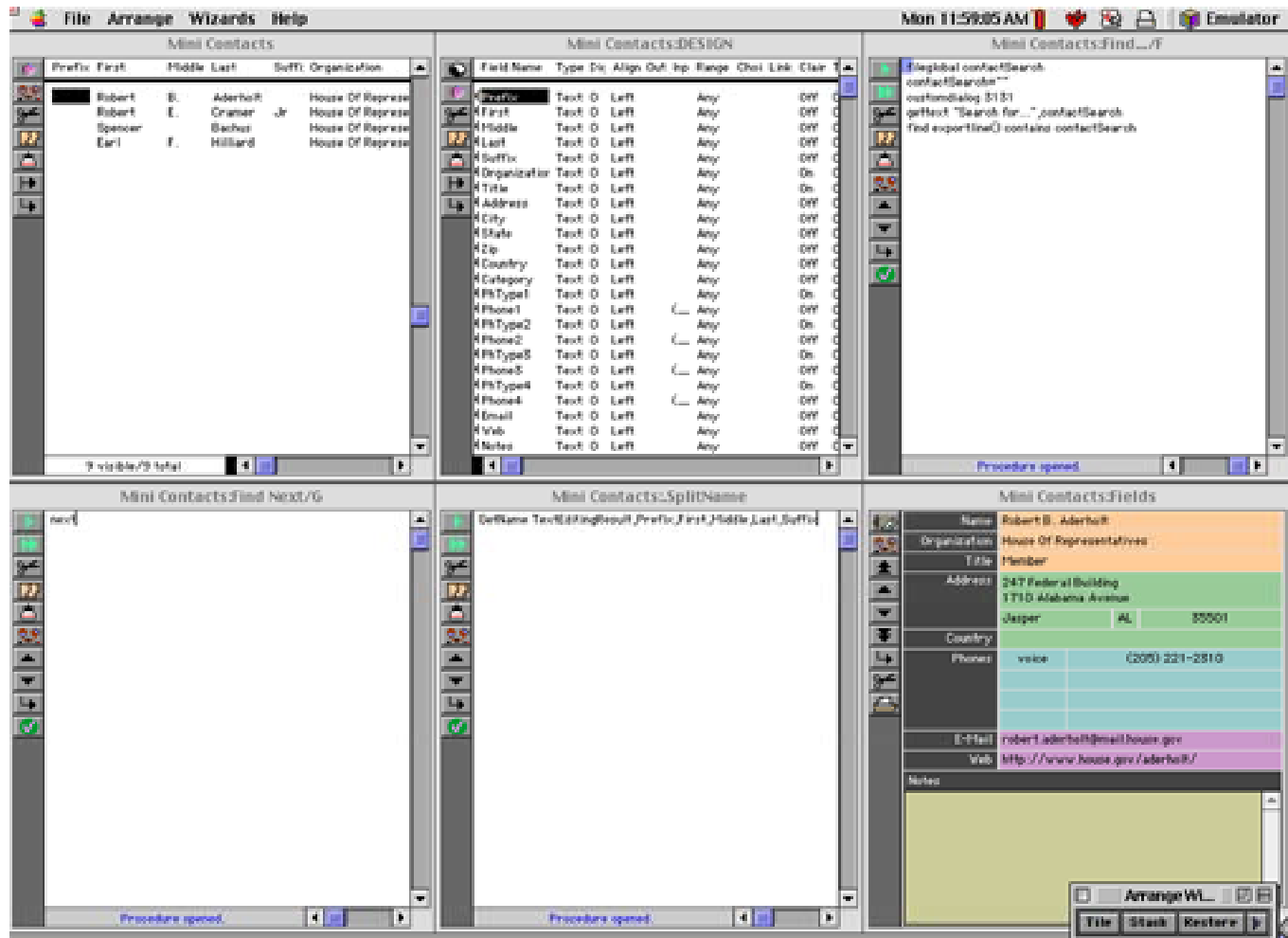
For more information on these wizards see the separate [Panorama Enterprise Handbook](#).

Utilities Wizards

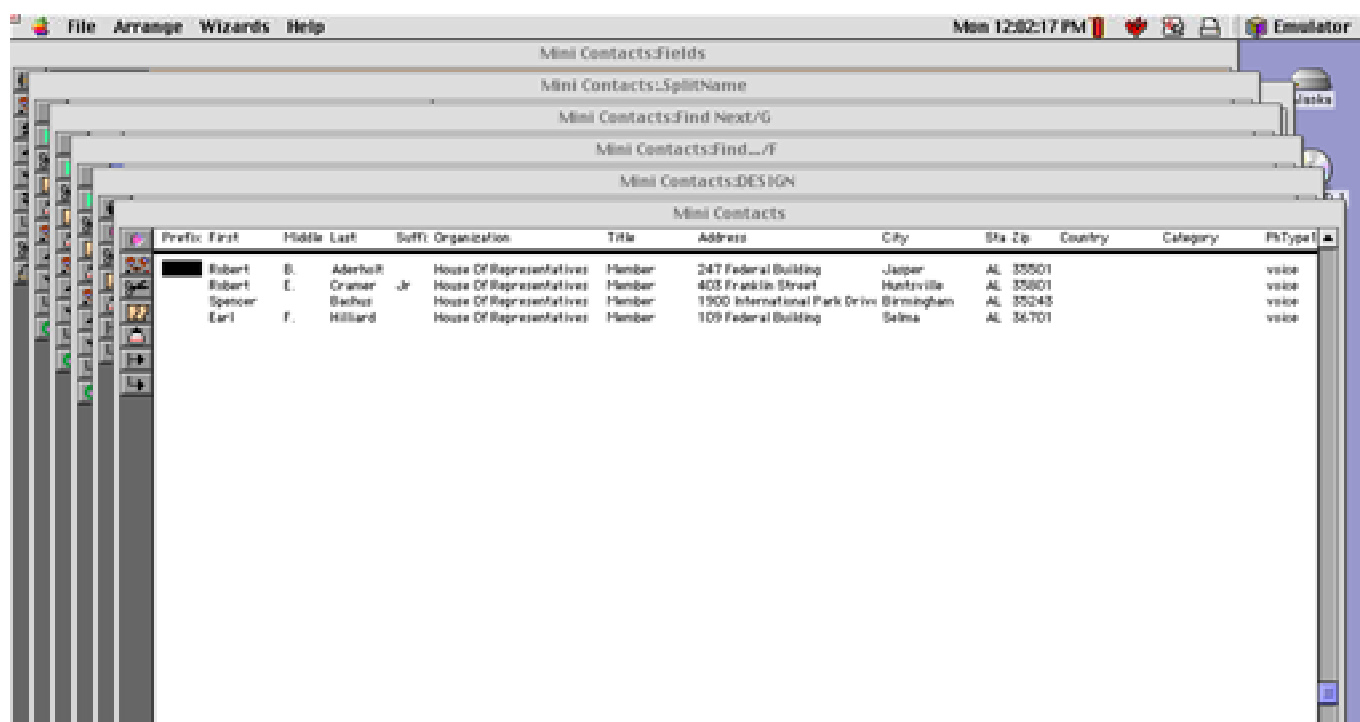
The wizards in this submenu provide tools to make working with Panorama databases easier. You don't need to use these wizards, but they can make some common database tasks easier.

Arrange Windows Wizard

The **Arrange Windows** wizard allows you to arrange all of the open Panorama windows into a regular pattern, either side by side (tiled) or piled on top of each other with a slight offset. This illustration shows an example of window tiling.



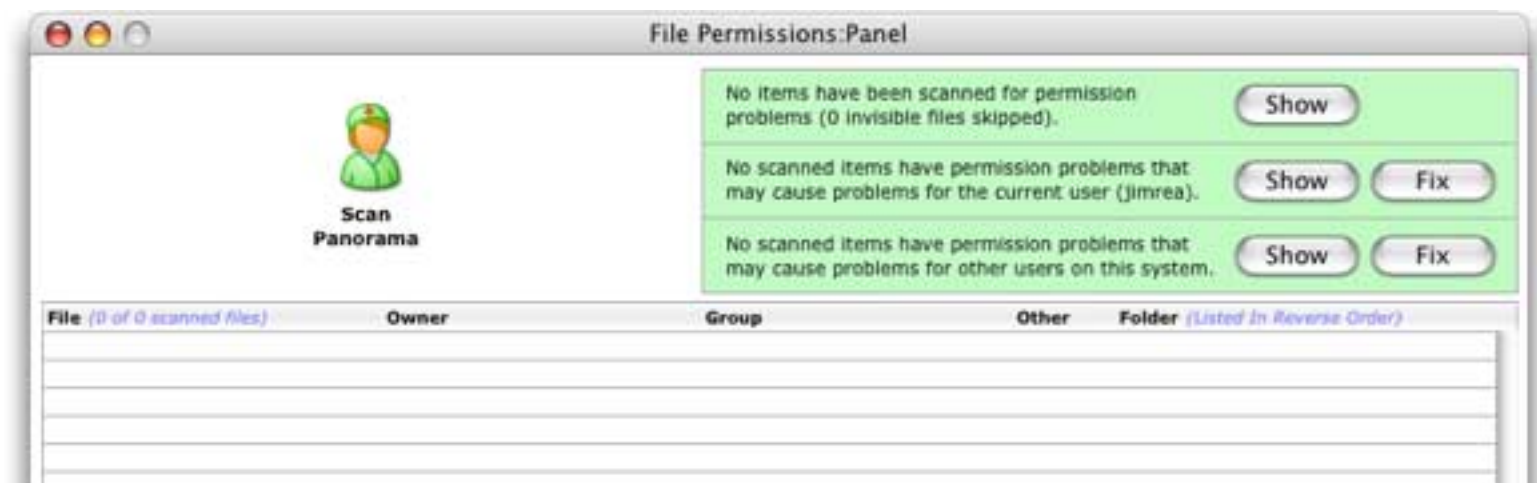
Here is an example of window stacking.



To learn more about this wizard see [“Arranging All Open Windows at Once \(Tiling and Stacking\)”](#) on page 156 of the *Panorama Handbook*.

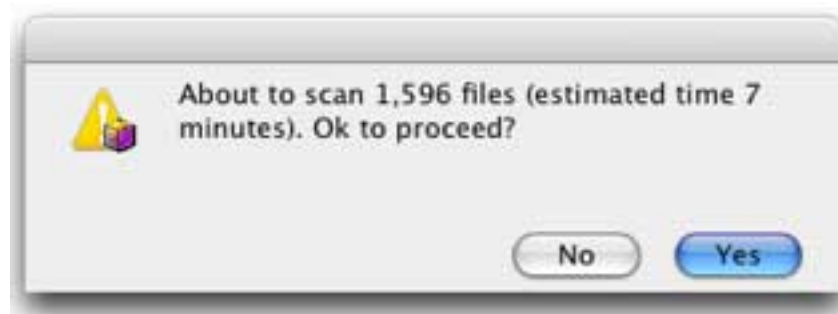
File Permissions

This wizard is for Mac OS X only. It is designed to scan files and folders looking for permission problems. Unlike Apple's **Disk Utility** program, which can only scan files that have been installed by a version of Apple's installer, Panorama's **File Permissions** wizard can scan any file or folder.

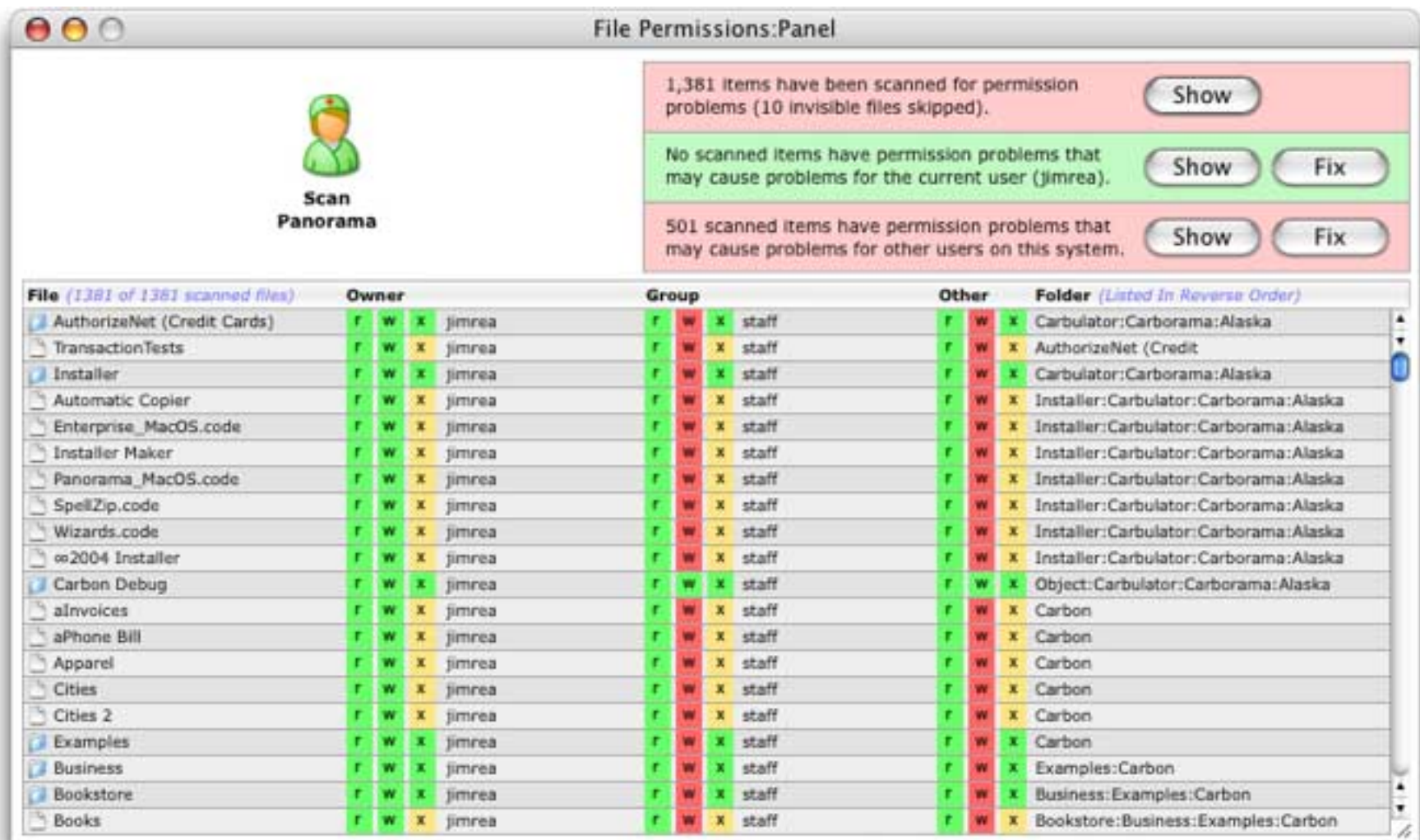


Scanning Panorama and Files Installed by Panorama

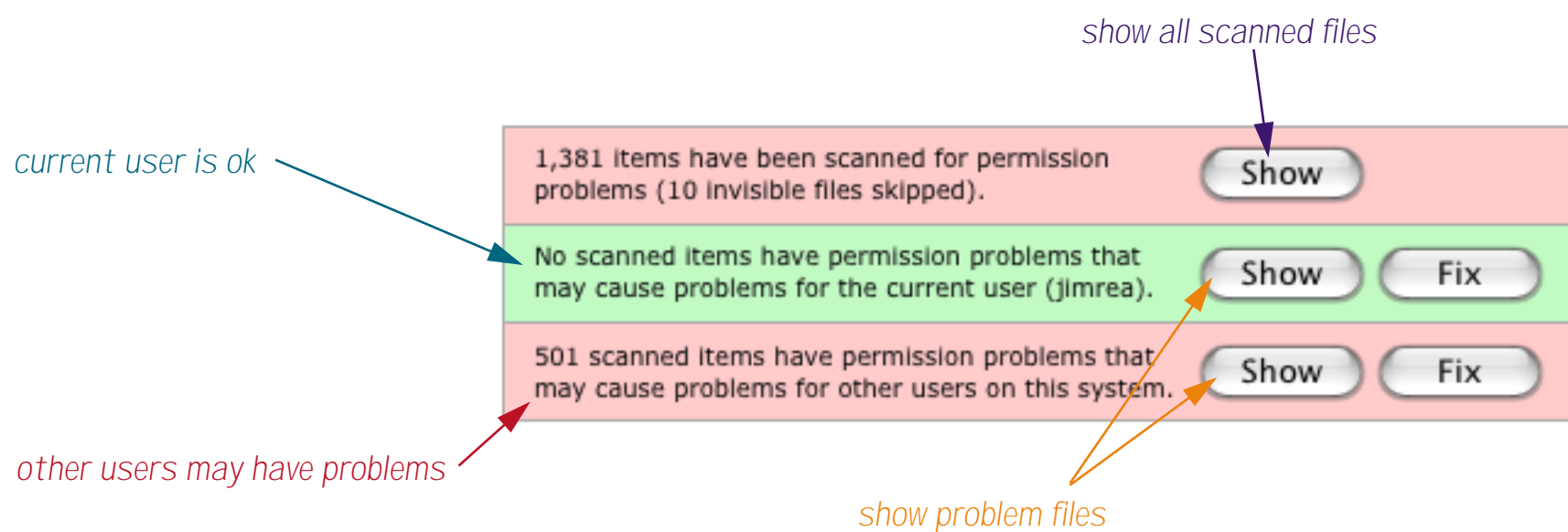
To scan the Panorama application and all of its support files simply press the **Scan Panorama** button. This also scans recently opened databases (databases that are listed in the **Recent Databases** wizard.) This process takes a while so the wizard starts by asking you if you really want to proceed.



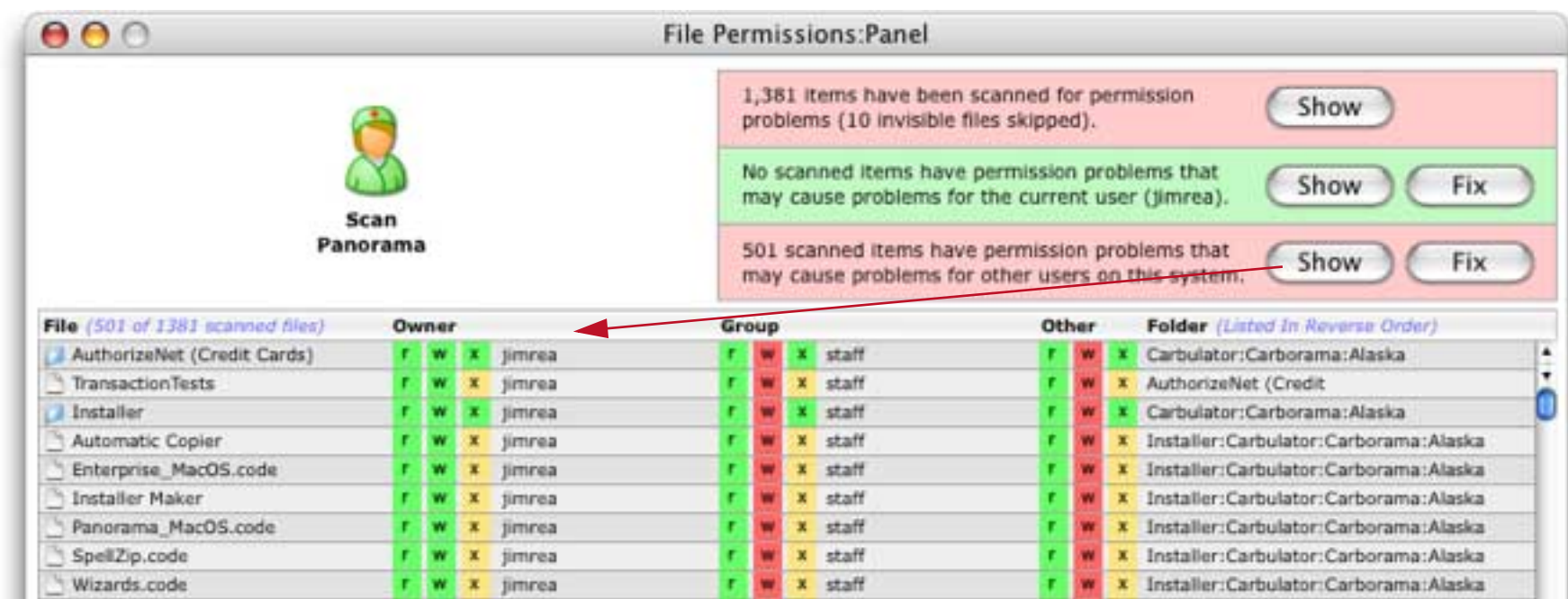
When the scan is complete the wizard displays the results. For each file and folder the wizard lists the owner, the group, and the operations that can be performed by each class of user. For each class there are three possible operations: R (read), W (write), and X (execute). If the box is green, the operation is allowed. If it is red, the operation is not allowed. If the box is yellow the operation is not allowed but does not ever need to be allowed.



The top section of the panel displays a summary of the results. In this case the current user (jimrea) is fine, but if there are other users on this computer they may encounter permission problems.



To see the files and folders that may have problems press one of the **Show** buttons. In this case for the files shown the files cannot be modified by anyone other than the primary user (in this case jimrea).



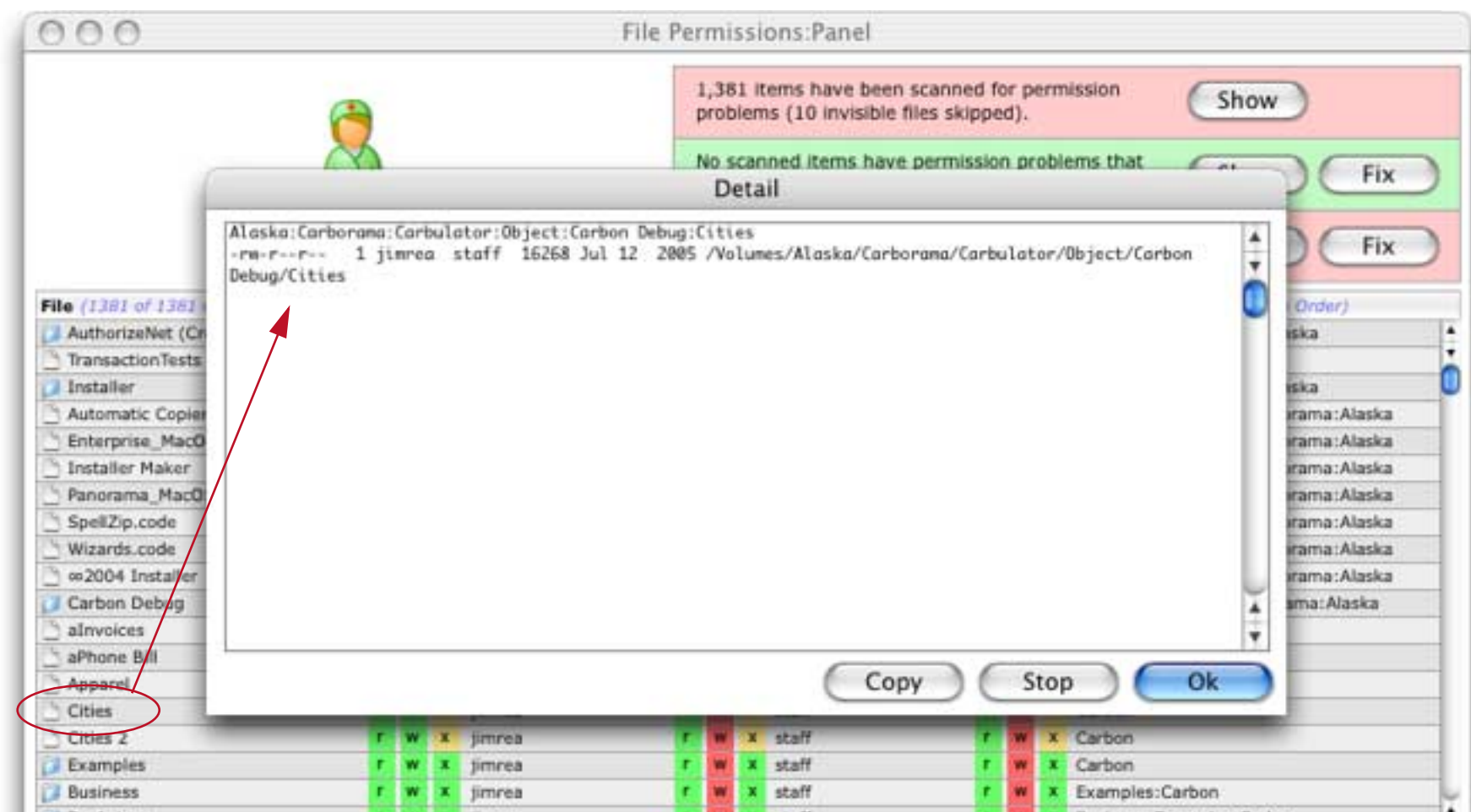
If you decide you want to correct this problem simply press the **Fix** button. If necessary the wizard will ask you for your system administration password, then it will repair the permissions of the specified files.

Checking Other Files and/or Folders

To check any other files and or folders simply drag them from the Finder onto the File Permissions wizard. You can scan and check any file or folder on your system this way.

Terminal Dump (for Geeks)

Double click on any item to see the `ls -l` terminal output for that file or folder.



Don't know what this is? Don't worry about it — it's for UNIX geeks only!

Repairing System Permissions

This wizard can also be used to repair system permissions. To do this choose **Repair System Permissions** from the **Fix** menu.



This command is provided as a convenience only. As the alert says, it is exactly the same as repairing permissions with Apple's **Disk Utility** program (in fact it simply invokes the UNIX command line version of this Apple program.)

Disk Permissions

This wizard is for Mac OS X only. The wizard displays information about each of the disk drives currently mounted on your computer. For each drive the wizard lists the owner, the group, and the operations that can be performed by each class of user. For each class there are three possible operations: R (read), W (write), and X (execute). If the box is green, the operation is allowed. If it is red, the operation is not allowed.

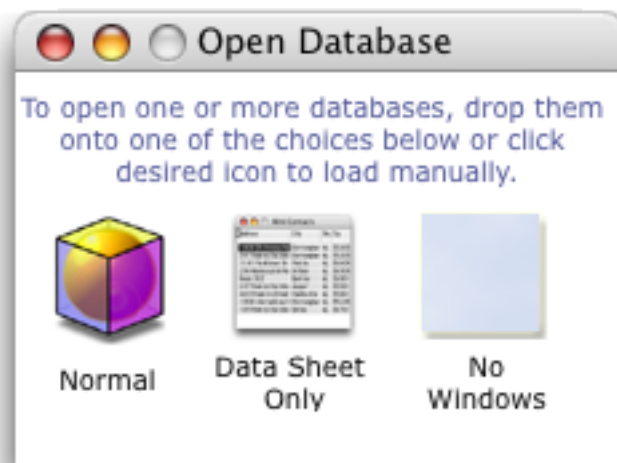
Disk Name	Owner	Group	Other
Panther	r w x jr	r w x unknown	r w x
Jaguar	r w x root	r w x admin	r w x
Classic	r w x jr	r w x staff	r w x

This wizard is included primarily to assist the ProVUE Development technical staff with debugging unusual installation problems. If you have difficulty installing Panorama, our technical support staff may ask you to use this wizard to help diagnose the problem. If the permissions are incorrect, you can change them using the Terminal (recommended for UNIX experts only) or with a freeware program named *BatChmod*. To find out more about *BatChmod* (and possibly download the program), go to the *BatChmod* web site:

<http://macchampion.com/arbysoft/>

Open Database

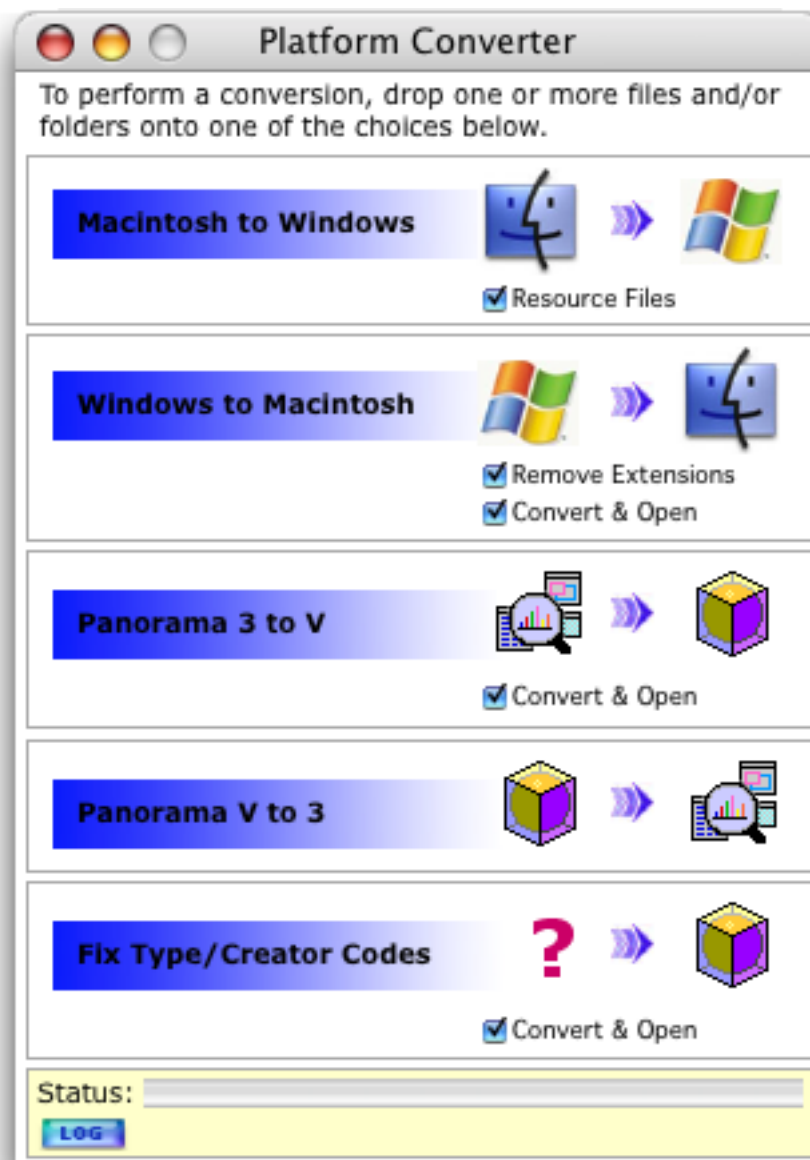
The standard techniques for opening a database (double clicking, **Open File** dialog, **Favorite Databases** wizard, etc.) will work fine in 99,999 of 100,000 cases. Sometimes, however, you may need to use a more specialized technique to open a database. For example, if a database has lost its MacOS type/creator information (perhaps by sending it through an e-mail client that doesn't properly support this information, a common problem) the standard techniques will not work. In other cases you may need to open a database but bypass the normal initialization of that database. The Open Database wizard is included for these special needs.



To learn more about these wizards see "[Advanced Database Opening Techniques](#)" on page 47 of the *Panorama Handbook*.

Platform Converter

The **Platform Converter** converts databases between platforms and versions. It doesn't actually modify the contents of files, but it does control how databases interact with the operating system. You can use the platform converter to convert Panorama 3.1 databases for use with Panorama V or later, and also to add the `.pan` extension required to use databases on Windows.

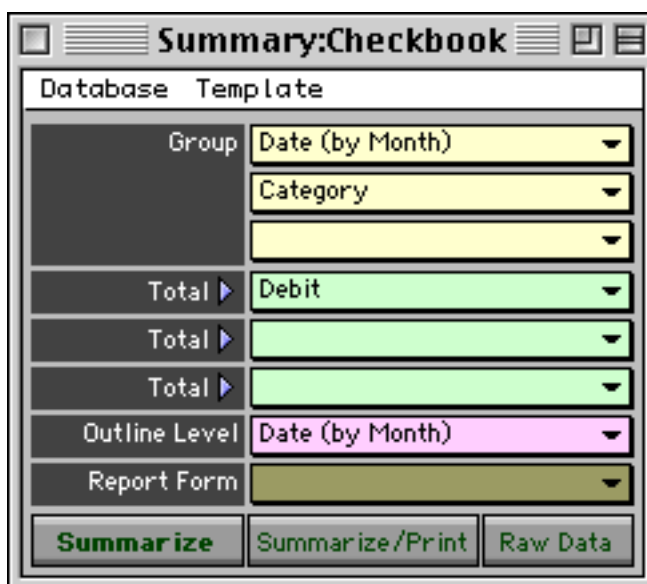


For more information about this wizard see "[Platform Converter Wizard](#)" on page 800 of *Formulas & Programming*.

Summaries & Outline Wizard

(Note: Starting with Panorama 6 this wizard has been superceded by the new **Analyze & Summarize** dialog, and this wizard is normally not accessible. However, it is available in the **Wizard** menu if “built-in” wizards are enabled in General Preferences [see “[Include “Built-in” wizards in Wizard menu](#)” on page 9].)

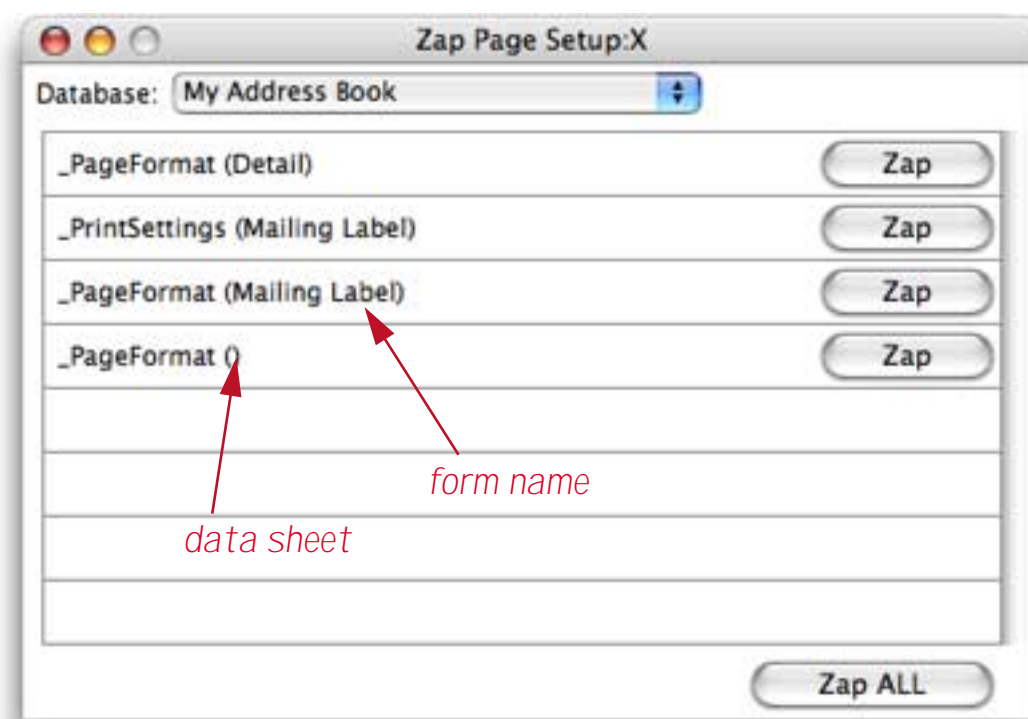
The **Summaries & Outline Wizard** automates the process of calculating summaries (see “[3-Step Summarizing](#)” on page 365 of the *Panorama Handbook*). You can use this wizard to rapidly take pages and pages of information and distill them down into concise, useful summaries.



Zap Page Setup Wizard

(Note: Starting with Panorama 6 this wizard has been superseded by the **Reset Page Setup** command in the **Setup** menu, and this wizard is normally not accessible. However, it is available in the **Wizard** menu if “built-in” wizards are enabled in General Preferences [see [“Include “Built-in” wizards in Wizard menu”](#) on page 9].)

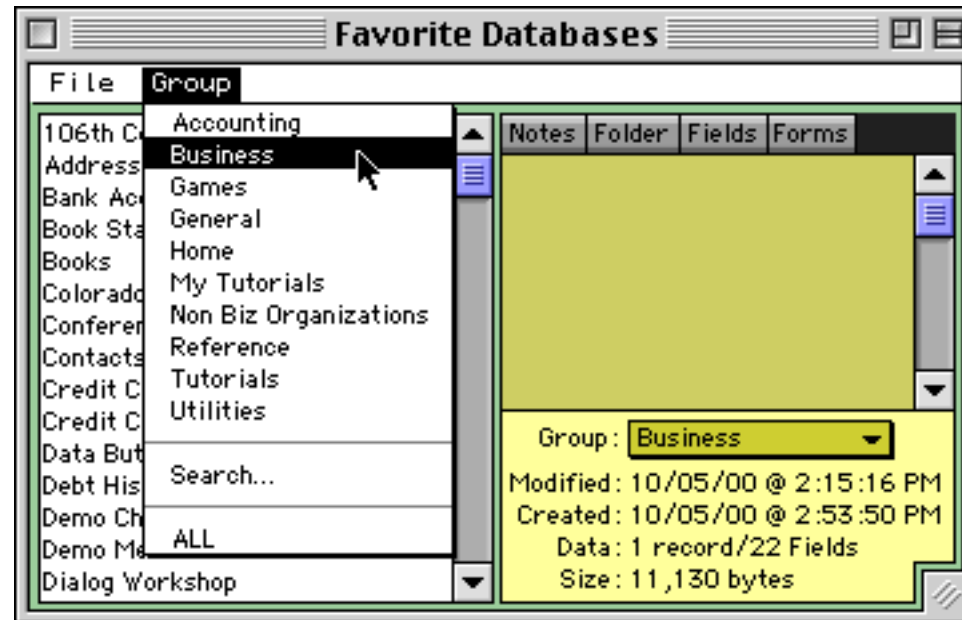
Panorama stores page setup and print configuration information for the data sheet and for each form in each database. Normally you don't have to worry about this, but occasionally this information will become corrupted (we believe this is caused by problems with printer drivers) and Panorama will fail to print. The corrupted information cannot be recovered but you can zap it and start over. To do this open the **Zap Page Setup** wizard.



The wizard lists each entity (data sheet or form) that has page setup information. You can zap the settings for individual forms separately, or simply zap all of the page setup information for the entire database. Once you zap you'll need to use the Page Setup dialog to re-configure the settings for each item.

Business Demo Files

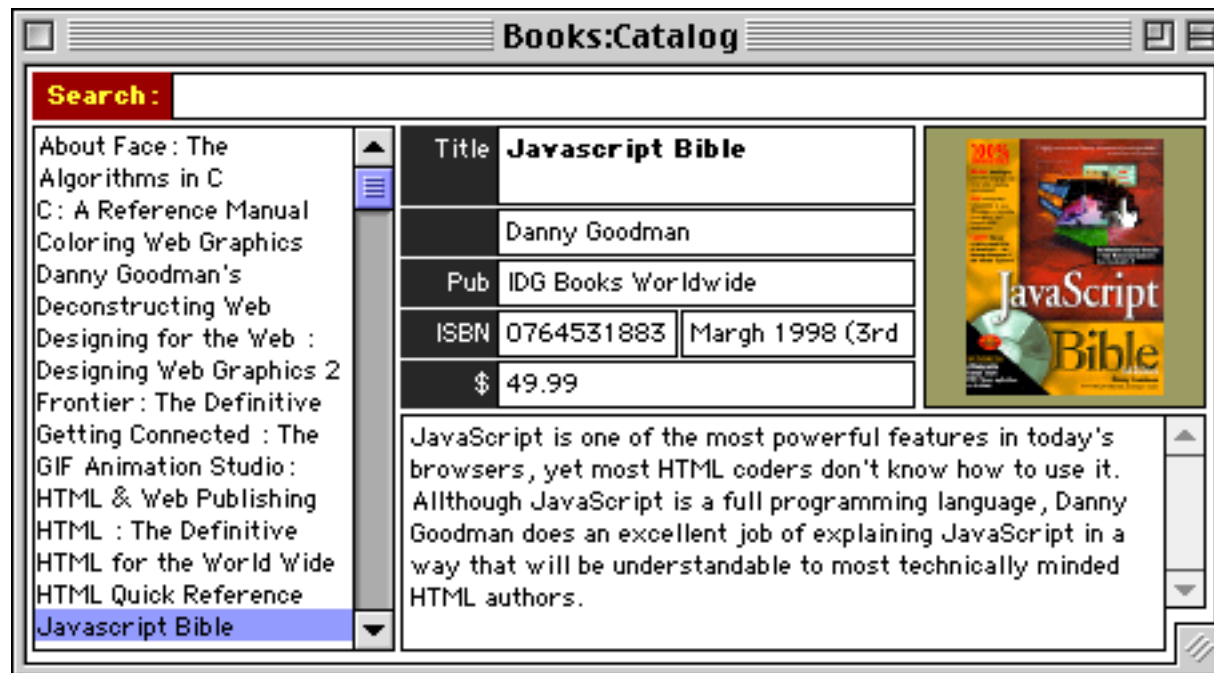
The demo databases in this category show examples of how Panorama can be used to build common business applications. To open these files open the **Favorite Databases** wizard and select the **Business** group.



The databases in this category use some fairly advanced Panorama techniques.

Books (Product Catalog)

This database demonstrates one way to build a product catalog using Panorama.



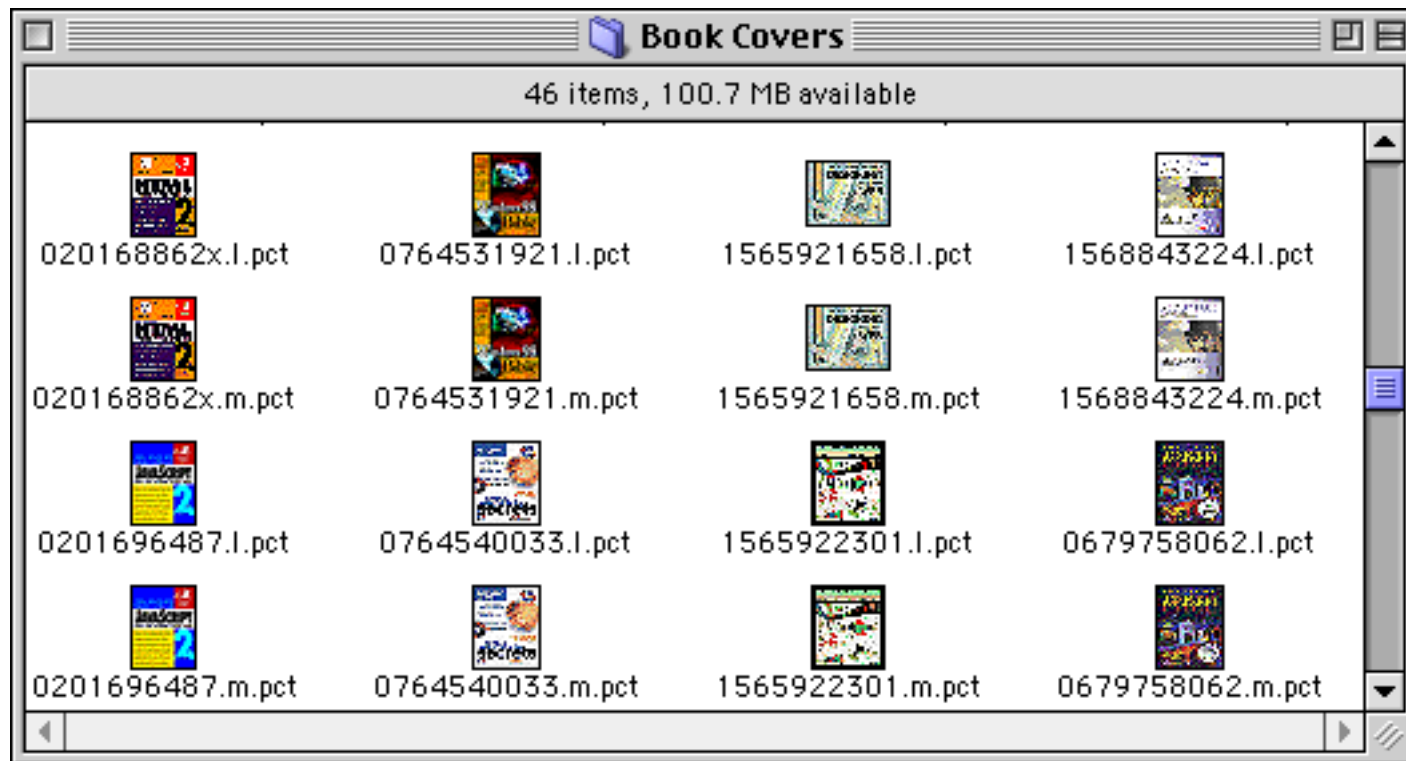
The database itself is fairly basic, as you can see if you use the **View** menu to open the data sheet (see [“Opening More Than One Window Per Database”](#) on page 169 of the *Panorama Handbook*).

Title	Authors	ISBN	Binding	Pages	Publisher	Edition
JavaScript: The Definitive Guide	David Flanagan, Dan Sh	1565923928	Paperback	776	O'Reilly & Associates	June 199
JavaScript Bible	Danny Goodman	0764531883	Paperback	607	IDG Books Worldwide	March 19
Danny Goodman's Applescript Handbook	Danny Goodman	0679758062	Paperback	554	Random House	1994
HTML & Web Publishing Secrets	Jim Heid	0764540033	Paperback	626	IDG Books Worldwide	May 199
Windows 98 Bible	Alan Simpson	0764531921	Paperback	1112	IDG Books Worldwide	June 199
JavaScript for the World Wide Web	Tom Negrino, Dori Smi	0201696487	Paperback	208	Peachpit Press	January

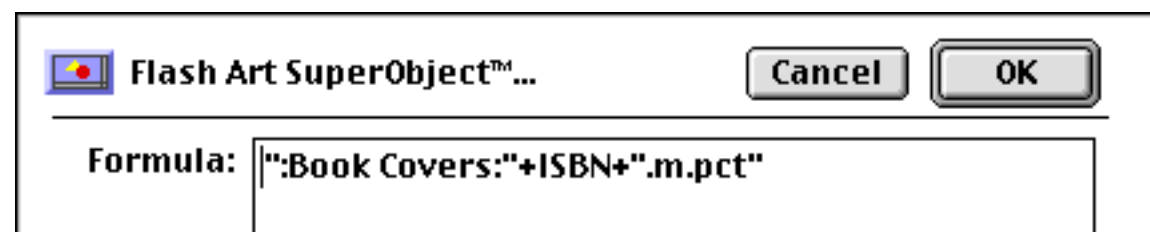
23 visible/23 total

Displaying the Book Covers

The database uses **Flash Art** to display the book covers (see “[Flash Art™](#)” on page 750 of the *Panorama Handbook*). The images are not stored in RAM as part of the database but are kept as separate files in a folder named **Book Covers** (see “[Displaying Images Directly From Disk Files](#)” on page 769 of the *Panorama Handbook*). Each image has been named according to the ISBN number of the corresponding book.

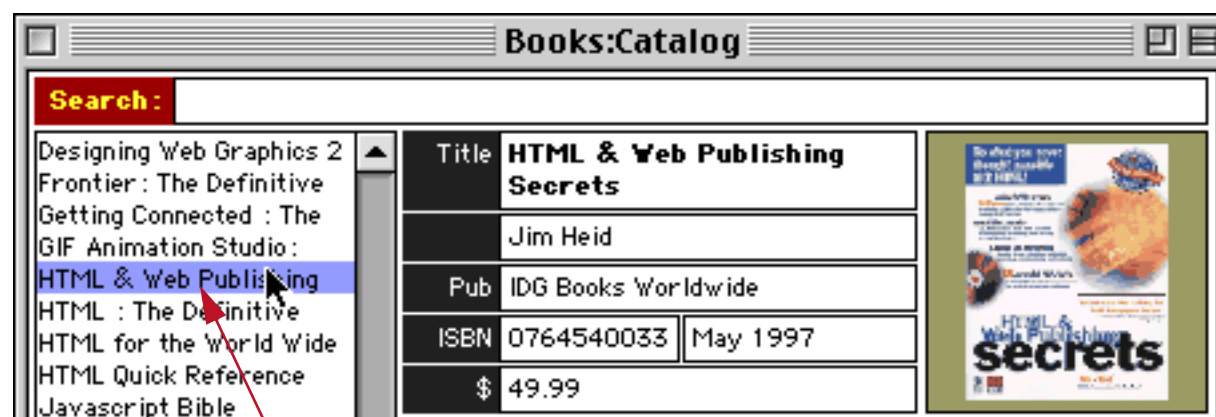


The Flash Art SuperObject uses a formula to convert the ISBN number stored in the database into the correct image name (see “[Displaying Images in a Different Folder \(Directory\)](#)” on page 771 of the *Panorama Handbook*).



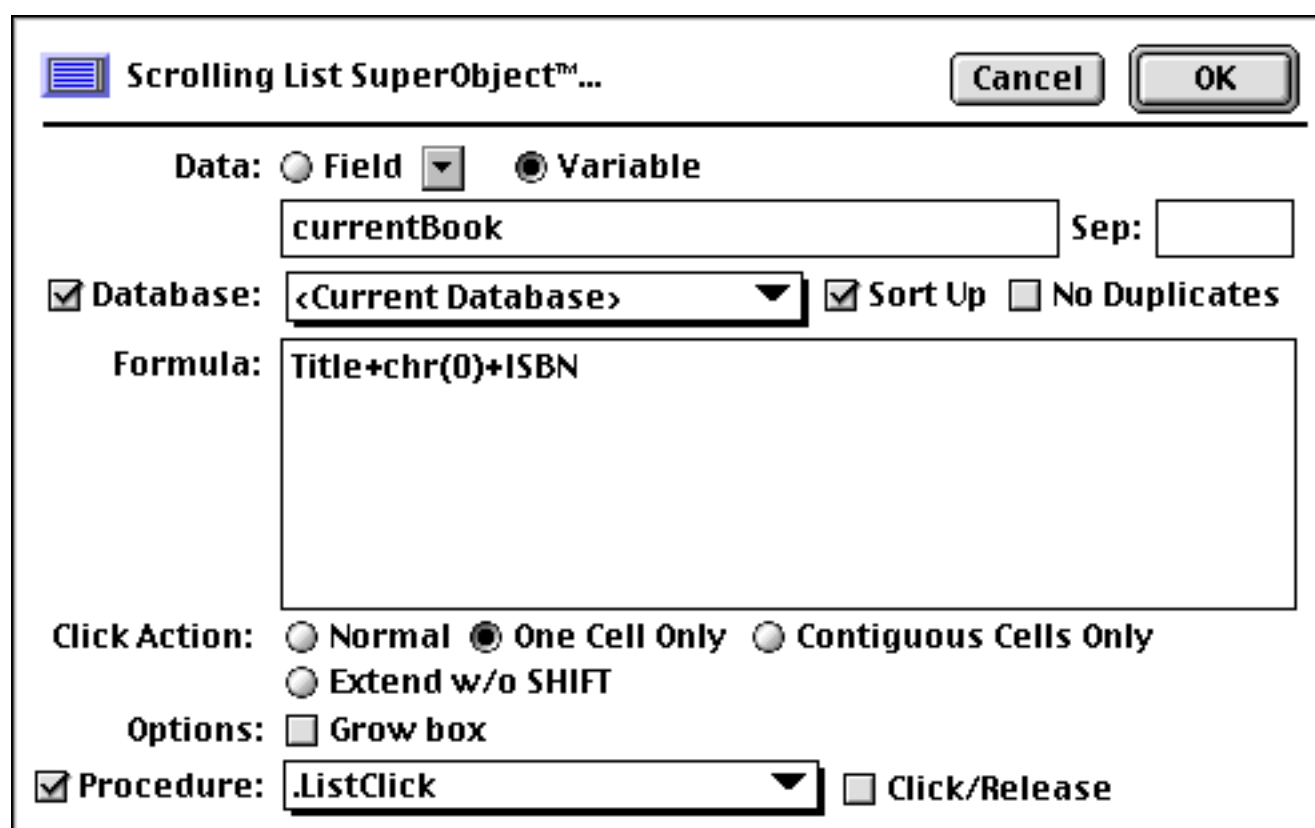
Navigation with a List SuperObject

One unusual aspect of this database is the use of a **List SuperObject** (see “[List SuperObjects](#)” on page 879 of the *Panorama Handbook*) for navigating within the database. This is a fairly advanced technique that is probably best attempted after you have some experience with creating Panorama procedures (see “[Procedures](#)” on page 203 of *Formulas & Programming*).

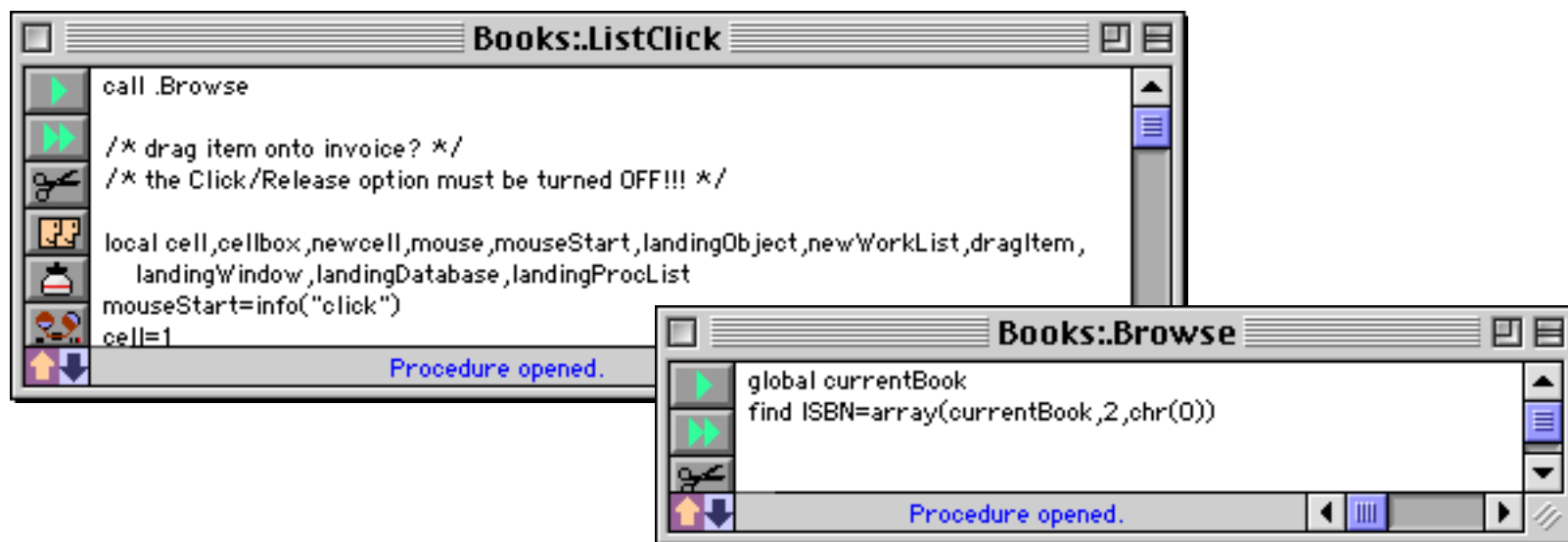


click in list to move to the corresponding record

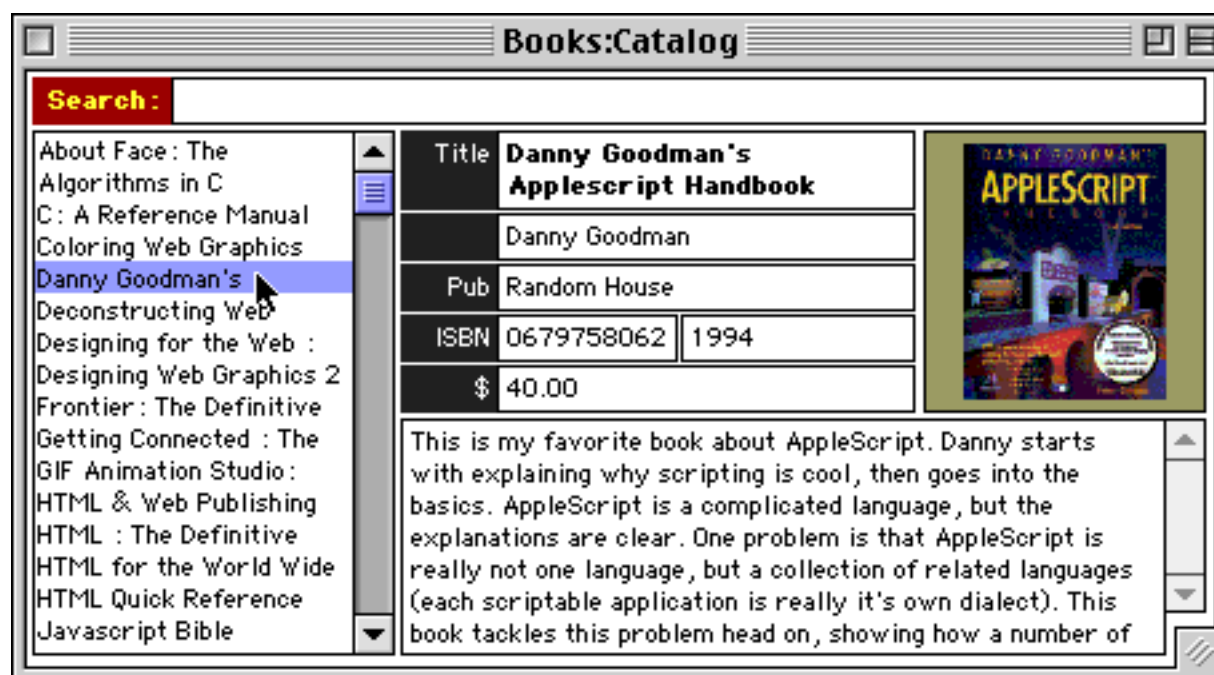
The default for this list is to display the name of every book in the database (see “[List Options](#)” on page 883 of the *Panorama Handbook* for more information about this dialog). The list also contains the ISBN number for each book, but the ISBN number is hidden because it is after the null character (created by the `chr(0)` function — see “[Hiding](#)” Part of a List Item” on page 897 of the *Panorama Handbook*).



When you click on one of the items in the list the `.ListClick` procedure is triggered. This procedure in turn calls a subroutine procedure named `.Browse` (see “[Subroutines](#)” on page 261 of *Formulas & Programming*).



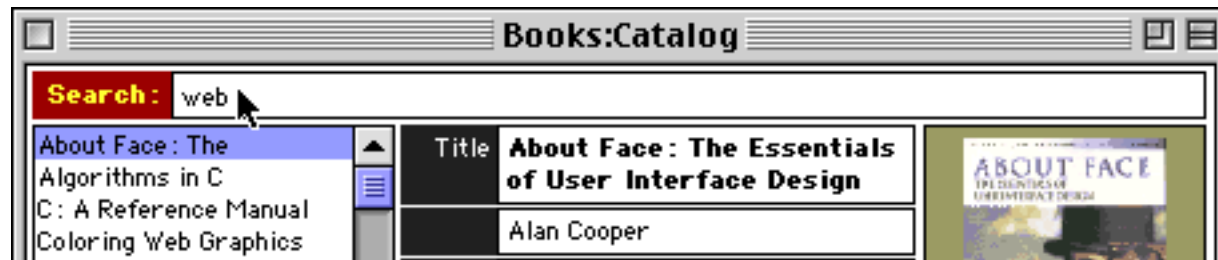
The `.Browse` procedure uses the `array()` function (see “[Text Arrays](#)” on page 93 of *Formulas & Programming*) to extract the hidden ISBN number in the `currentBook` variable (this variable was set up using the configuration dialog for the list shown above). It then uses the `find` statement to locate the record corresponding to the book that was clicked on (see “[Finding Information](#)” on page 552 of *Formulas & Programming*). The end result is that when you click on a book in the list, the information for that book appears.



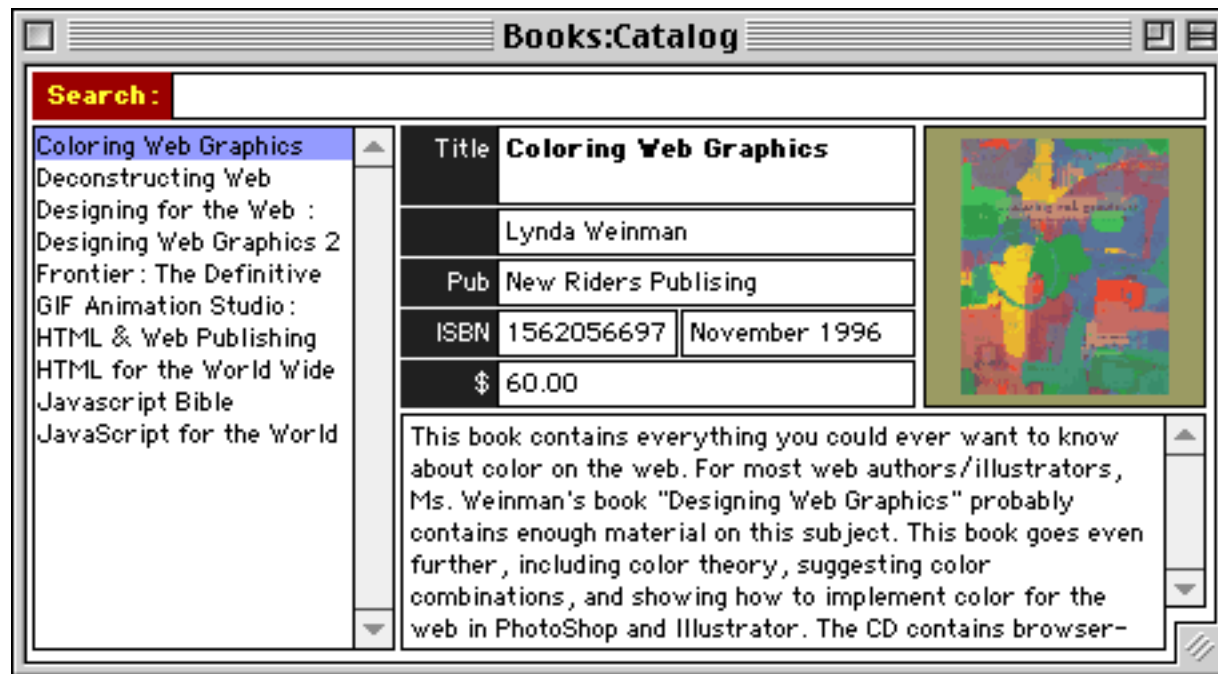
You may have noticed that the `.ListClick` procedure contains a bunch of additional code. This code allows you to drag an item from the catalog onto an invoice, and is discussed as part of the Invoice demo file.

Catalog “Search Engine”

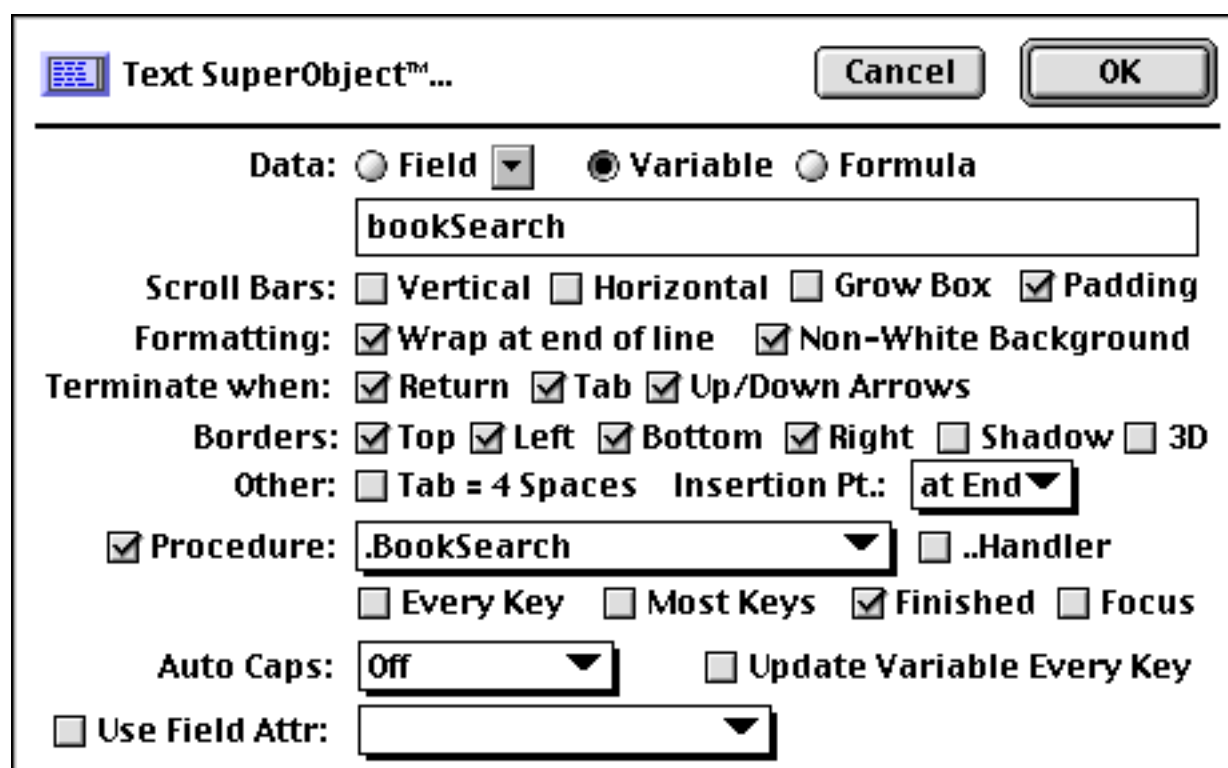
The catalog database has a “search engine” that makes it easy to locate items within the database. To search, click in the search area and type in a word or phrase, in this case [web](#).



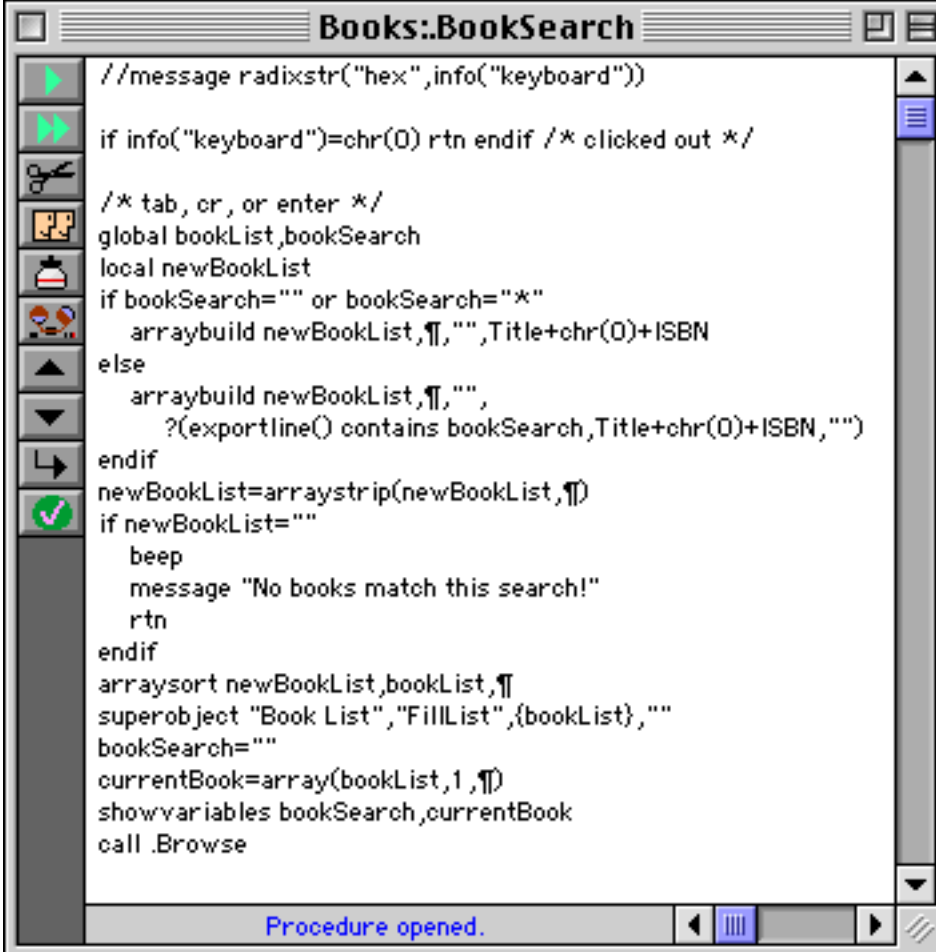
When you press the **Enter** key the database will search for books that contain the word or phrase and display them in the list. The word or phrase may be anywhere in the record - in the title, the description, the author or publisher’s name, anywhere.



How does this search engine work? The top of the form contains a **Text Editor SuperObject** (see “[Text Editor SuperObject](#)” on page 639 of *Formulas & Programming*) for you to type the word or phrase into. The word or phrase you type goes into the variable named [bookSearch](#).



When you press the **Enter** key a procedure named `.BookSearch` is automatically triggered. Here is the code for that procedure.



```

//message radixstr("hex",info("keyboard"))
if info("keyboard")=chr(0) rtn endif /* clicked out */

/* tab, cr, or enter */
global bookList,bookSearch
local newBookList
if bookSearch="" or bookSearch="*"
  arraybuild newBookList,{},"",Title+chr(0)+ISBN
else
  arraybuild newBookList,{},"",
    ?(exportline() contains bookSearch,Title+chr(0)+ISBN,"")
endif
newBookList=arraystrip(newBookList,{} )
if newBookList=""
  beep
  message "No books match this search!"
  rtn
endif
arraysort newBookList,bookList,{}
superobject "Book List","FillList",{bookList},""
bookSearch=""
currentBook=array(bookList,1,{} )
showvariables bookSearch,currentBook
call .Browse

```

The procedure uses the `arraybuild` statement to scan the database searching for records that match the word or phrase in the `bookSearch` variable (see “[Building an Array from a Database](#)” on page 594 of *Formulas & Programming*). It then uses the `superobject` statement to send a command to the list object telling it to re-display itself with the new list (see “[List SuperObject™ Commands](#)” on page 708 of *Formulas & Programming*). You’ll notice that for this to work the list object must be named `Book List` (see “[Object Type/Object Name](#)” on page 533 of the *Panorama Handbook*).

Invoices (Line Items)

This database demonstrates how to create an invoice with line item fields (see “[Repeating Fields \(Line Items\)](#)” on page 222 of the *Panorama Handbook*). You’ve already learned how to create such a file in the Step-by-Step tutorials (see Lesson 3 in *Panorama Tutorials*).

Invoices (Line Items):Invoice			
Name	Darlene Simpson		
Address	37054 South Green La Puente CA 91746		
Qty	Description	Price	Total
1	Windows Annoyances	29.95	29.95
1	Frontier: The Definitive Guide	34.95	34.95
1	Coloring Web Graphics	60.00	60.00
Date November 6, 2000		Subtotal	124.90
<input checked="" type="radio"/> Cash <input type="radio"/> Check <input type="radio"/> Visa/MC		Tax	6.23
		Total	131.13

Invoices (Arrays)

This database demonstrates an alternate technique for handling repeating detail lines in an invoice. Instead of using line item fields, this database stores repeating detail items in a single field using a text array. To understand how this database works you'll definitely need to study text arrays, so you may want to turn to "[Text Arrays](#)" on page 93 of *Formulas & Programming* if you are not already familiar with them.

Name:		Alan Harrison	
Organization:			
Address:		93 Morton Terrace	
City:	San Deigo	State:	CA
Zip:	92123		
Country:		Internet:	
Phone:	(619) 783-1965	Fax:	
Payment:	MasterCard	<input type="checkbox"/> Non-Taxable	
Card #:	5432-1092-0323-3434	Expiration:	11/03
NameOnCard:			
1	Algorithms in C	59.95	59.95
1	C: A Reference Manual	42.95	42.95
		Subtotal	102.90
		Tax	5.13
		Total	108.03

Setting up repeating items with a text array takes more programming than using line item fields. However, using a text array eliminates the need to determine the maximum number of items in advance. An invoice may contain one item or one hundred — it doesn't matter. No matter what the repeating data items are all stored in a single field.

This database works a bit differently than the previous database. Instead of typing in the detail items you drag them from the [Books](#) database.

The screenshot shows two overlapping windows. The background window is titled "Invoices (A)" and contains a form for customer information (Name: Alan Harrison, Address: 93 Morton Terrace, City: San Deigo, Country: [dropdown], Phone: (619) 7...) and a table of items. The table has columns for quantity, description, unit price, and total price. The current items are "1 Algorithms in C" (59.95) and "1 C: A Reference Manual" (42.95). A new row is being added, indicated by a red arrow from the catalog window. The subtotal is 102.90, tax is 5.13, and the total is 108.03.

The foreground window is titled "Books:Catalog" and has a search bar. Below the search bar is a list of books. "Javascript Bible" is selected. To the right of the list is a detailed view for "Javascript Bible" showing the author "Danny Goodman", publisher "IDG Books Worldwide", ISBN "0764531883", and price "\$ 49.99". There is also a small image of the book cover and a description: "JavaScript is one of the most powerful features in today's browsers, yet most HTML coders don't know how to use it. Although JavaScript is a full programming language, Danny Goodman does an excellent job of explaining JavaScript in a way that will be understandable to most technically minded HTML authors."

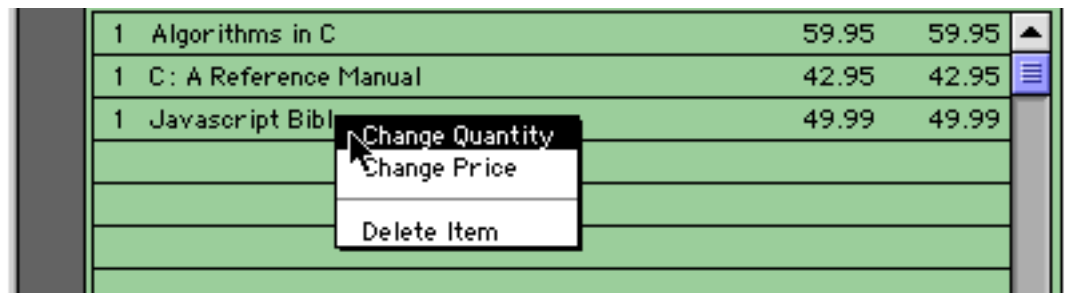
Quantity	Description	Unit Price	Total Price
1	Algorithms in C	59.95	59.95
1	C: A Reference Manual	42.95	42.95
		Subtotal	102.90
		Tax	5.13
		Total	108.03

When you release the mouse the item is added to the invoice.

The screenshot shows the same "Invoices (A)" window as before, but now with "1 Javascript Bible" added to the table. The new row is circled in red. The subtotal is now 152.89, tax is 7.64, and the total is 160.53.

Quantity	Description	Unit Price	Total Price
1	Algorithms in C	59.95	59.95
1	C: A Reference Manual	42.95	42.95
1	Javascript Bible	49.99	49.99
		Subtotal	152.89
		Tax	7.64
		Total	160.53

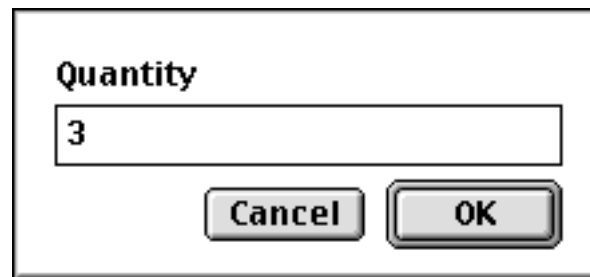
If you want to change the Quantity ordered of any line, click anywhere on the detail line to access this pop-up menu and select **Change Quantity**.



The screenshot shows a table with three rows of items. A context menu is open over the third row, 'Javascript Bible'. The menu options are 'Change Quantity', 'Change Price', and 'Delete Item'. The table columns are Item, Price, and Total.

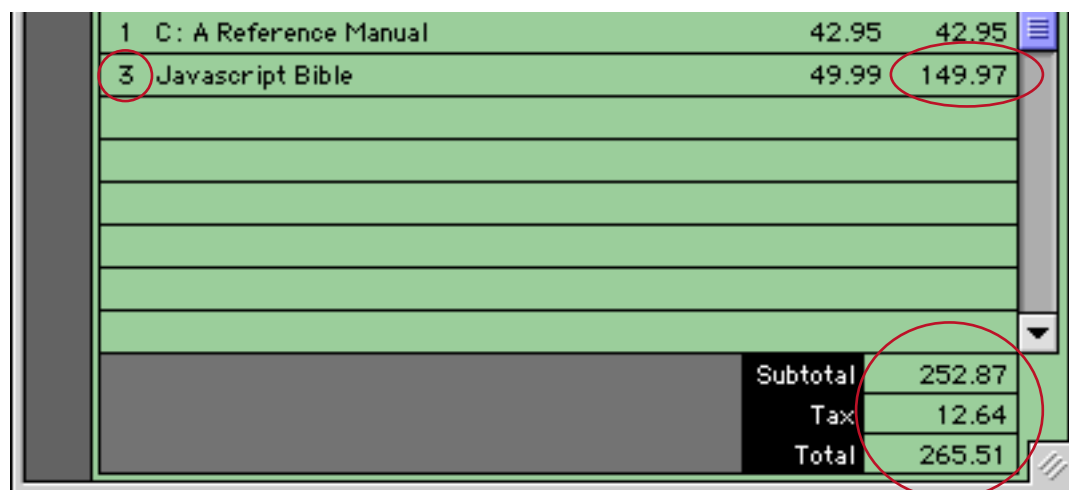
Item	Price	Total
1 Algorithms in C	59.95	59.95
1 C: A Reference Manual	42.95	42.95
1 Javascript Bible	49.99	49.99

Panorama will ask you for the new quantity.



A dialog box titled 'Quantity' with a text input field containing the number '3'. Below the input field are two buttons: 'Cancel' and 'OK'.

When you press the **OK** button the invoice will be updated.



The screenshot shows the updated invoice. The quantity for 'Javascript Bible' is now 3, and its total is 149.97. The subtotal is 252.87, tax is 12.64, and the total is 265.51. Red circles highlight the updated quantity, total, and the final totals.

Item	Price	Total
1 C: A Reference Manual	42.95	42.95
3 Javascript Bible	49.99	149.97
Subtotal		252.87
Tax		12.64
Total		265.51

As you can see, all of the totals are recalculated also. As mentioned before, the best feature of this database is that you can add as many detail lines as you like. As the number of lines grows you can scroll the items and/or expand the window.

How the Detail Lines are Stored

Let's take a look at the design sheet for this database (on the left) and compare it to the design sheet for the invoice database created using line item fields (on the right). Our new database stores all of the repeating data (invoice items) in a single field, **Items**. As you'll see, there is no limit to how many items can be stored in the invoice. The database on the right uses 60 fields to store the repeating data and has a limit of 15 items per invoice.

Field Name	Type	Dig	Align	Out	Inp	Range	Choi	Lin
Name	Text	0	Left			Any		
Organization	Text	0	Left			Any		
Address	Text	0	Left			Any		
City	Text	0	Left			Any		
State	Text	0	Left			Any		
Zip	Text	0	Left			Any		
Country	Text	0	Left			Any		
Internet	Text	0	Left			Any		
DayPhone	Text	0	Left			Any		
Fax	Text	0	Left			Any		
PaymentMe	Text	0	Left			Any		
NonTaxable	Text	0	Left			Any		
CardNumber	Text	0	Left			Any		
CardExpires	Text	0	Left			Any		
NameOnCard	Text	0	Left			Any		
Items	Text	0	Left			Any		
Subtotal	Num	2	Right			#.#		
Tax	Num	2	Right			#.#		
Total	Num	2	Right			#.#		
ItemScroll	Num	0	Right					
ItemWasScr	Num	0	Right					

Field Name	Type	Dig	Align	Out	Inp	Range	Choi	Lin
Name	Text	0	Left			Any		
Address	Text	0	Left			Any		
City	Text	0	Left			Any		
State	Text	0	Left			Alphat		
Zip	Text	0	Left			Numer		
Payment Meth	Text	0	Left			Any		
Credit Card	Text	0	Left			Any		
Payment Numb	Text	0	Left			Any		
Expiration	Text	0	Left			Any		
Authorization	Text	0	Left			Any		
Quantity1	Num	0	Right			Numer		
Description1	Text	0	Left			Any		
Price1	Num	2	Right			Any		
Total1	Num	2	Right			Any		
Quantity2	Num	0	Right			Numer		
Description2	Text	0	Left			Any		
Price2	Num	2	Right			Any		
Total2	Num	2	Right			Any		
Quantity3	Num	0	Right			Numer		
Description3	Text	0	Left			Any		
Price3	Num	2	Right			Any		
Total3	Num	2	Right			Any		
Quantity4	Num	0	Right			Numer		
Total12	Num	2	Right			Any		
Quantity13	Num	0	Right			Numer		
Description13	Text	0	Left			Any		
Price13	Num	2	Right			Any		
Total13	Num	2	Right			Any		
Quantity14	Num	0	Right			Numer		
Description14	Text	0	Left			Any		
Price14	Num	2	Right			Any		
Total14	Num	2	Right			Any		
Quantity15	Num	0	Right			Numer		
Description15	Text	0	Left			Any		
Price15	Num	2	Right			Any		
Total15	Num	2	Right			Any		
Subtotal	Num	2	Right			#.#		
Tax	Num	2	Right			Any		
GrandTotal	Num	2	Right			#.#		

How does all of this data get stuffed into a single field? Let's look at the data sheet to see.

Name	Organization	Address	City	S	Items	Subtotal
Mark Doolittle	First Bank and T	One First Plaza	New York	N	1~1565921658~24.95~24.95	791.12
Alan Harrison		93 Morton Terr	San Deigo	C	1~0201514257~59.95~59.95	90
					1~0133262243~42.95~42.95	99
						83

Each line in this cell corresponds to a detail line in the invoice (this is a carriage return delimited array, see “[Picking a Separator Character](#)” on page 93 of *Formulas & Programming*). This particular invoice has two lines, so there are two lines in the **Items** field. Since a data cell can contain an unlimited number of lines each invoice can contain an unlimited number of detail lines.

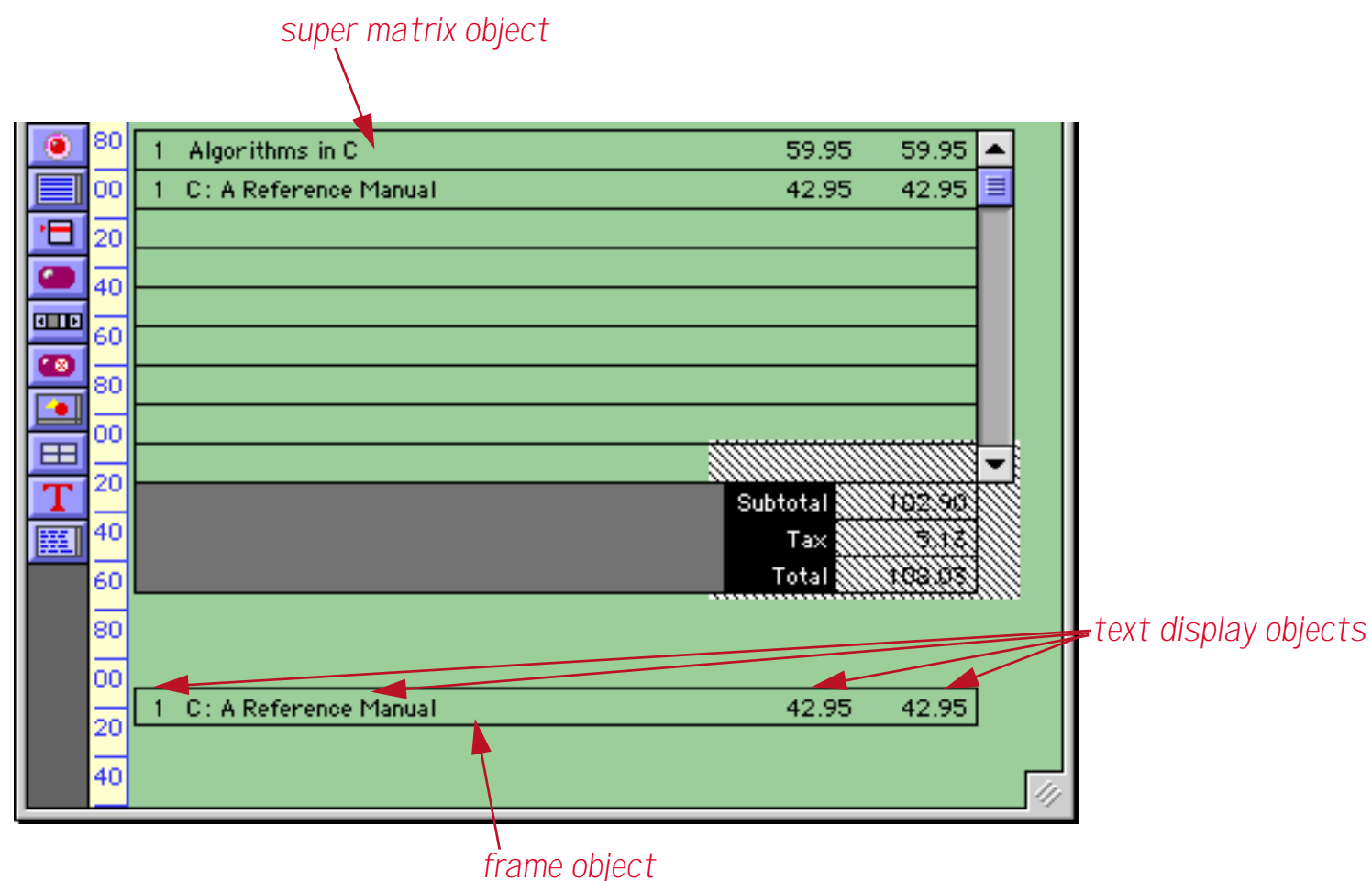
Within each line there are four “pseudo-cells”, each separated by the ~ character. The first pseudo-cell is the quantity. The second pseudo-cell identifies what is being sold, in this case the ISBN number for the book. Of course if your invoice isn't for books you'll need to use some other for of identification, perhaps a catalog number or simply a description of the item. The third pseudo-cell is the price of the item, and the last is the quantity times the price.

Displaying the Detail Lines

Obviously no one would want to edit the **Items** cell in the data sheet manually. Instead, this database uses a **Super Matrix Object** to display the detail lines. The result looks like this.

1	Algorithms in C	59.95	59.95	▲
1	C: A Reference Manual	42.95	42.95	☰

Let's switch into Graphics Design Mode to see how this works. (You may want to review Super Matrix Objects before continuing, see "[Super Matrix Objects](#)" on page 939 of the *Panorama Handbook*). This illustration shows Super Matrix Object itself and the **Frame Object** (see "[The Matrix Template \(and Frame Object\)](#)" on page 940 of the *Panorama Handbook*). The frame object contains the template for the data displayed in the matrix. When the database is actually in use the window is shrunk so that the frame object and the template are invisible.



The actual data is displayed with four text display objects (see "[Text Display SuperObjects™](#)" on page 608 of the *Panorama Handbook*). The table below shows the four formulas used by these objects.

Column	Formula
Qty	<code>array(array(Items,(ItemScroll-1)+info("matrixrow"),¶),1,"~")</code>
Item	<code>lookup("Books",ISBN, array(array(Items,(ItemScroll-1)+info("matrixrow"),¶),2,"~") ,Title,"",0)</code>
Price	<code>array(array(Items,(ItemScroll-1)+info("matrixrow"),¶),3,"~")</code>
Total	<code>array(array(Items,(ItemScroll-1)+info("matrixrow"),¶),4,"~")</code>

You'll notice that all four of these contain this core in common. This section of the formula calculates the line number being displayed. In this case `ItemScroll` is a global variable that is linked to the scroll bar (more on that later).

```
(ItemScroll-1)+info("matrixrow")
```

Actually, all four of these actually contain a larger core in common. This larger core takes the line number and uses it to extract the appropriate line of data from the `Items` array.

```
array(Items,(ItemScroll-1)+info("matrixrow"),¶)
```

If you look closely, you'll see that there is even a larger commonality between each of these four formulas. A second `array()` function (displayed in orange below) extracts the actual cell from within the line of data. The four formulas aren't exactly the same because they extract different cells — 1, 2, 3, and 4.

```
array(array(Items,(ItemScroll-1)+info("matrixrow"),1),1,"~")
```

For the `Quantity`, `Price` and `Total` cells that's it - this is the complete formula. But for the `Item` we don't actually have the description, but just the ISBN number. To get the description we must use this ISBN number and look up from the `Books` database using the `lookup()` function (see "[Linking With Another Database](#)" on page 131 of *Formulas & Programming*).

```
lookup("Books",ISBN,array(array(Items,(ItemScroll-1)+info("matrixrow"),1),2,"~"),
Title,"",0)
```

The end result is that the formulas are displayed over and over again by the Super Matrix Object, with the formula adjusting to display the information for each line.

1	Designing for the Web : Getting Started in a New	24.95	24.95	▲
1	GIF Animation Studio: Animating Your Web Site	39.95	39.95	☰
2	Javascript Bible	49.99	99.98	
1	Algorithms in C	59.95	59.95	
1	Danny Goodman's Applescript Handbook	40.00	40.00	
1	C: A Reference Manual	42.95	42.95	
1	About Face: The Essentials of User Interface	29.99	29.99	
1	Frontier: The Definitive Guide	34.95	34.95	
1	Getting Connected : The Internet at 56K and Up	23.96	23.96	▼

Scrolling the Detail Lines

An invoice may have more lines of data than will fit on the form. To handle this the database has a Scroll Bar SuperObject (see "[Scroll Bars](#)" on page 979 of the *Panorama Handbook*). In this case the scroll bar is linked to a numeric field named `ItemScroll` and to a procedure named `.ItemScroll`. The scroll bar could be linked to a variable, but by linking it to a field Panorama will remember how each invoice is scrolled.

Scroll Bar SuperObject™...
Cancel
OK

Data: Field Variable

ItemScroll

Min: (1-65535)

Max: (1-65535)

Page Up/Down: (< Max)

Format: 16 Pixel Width

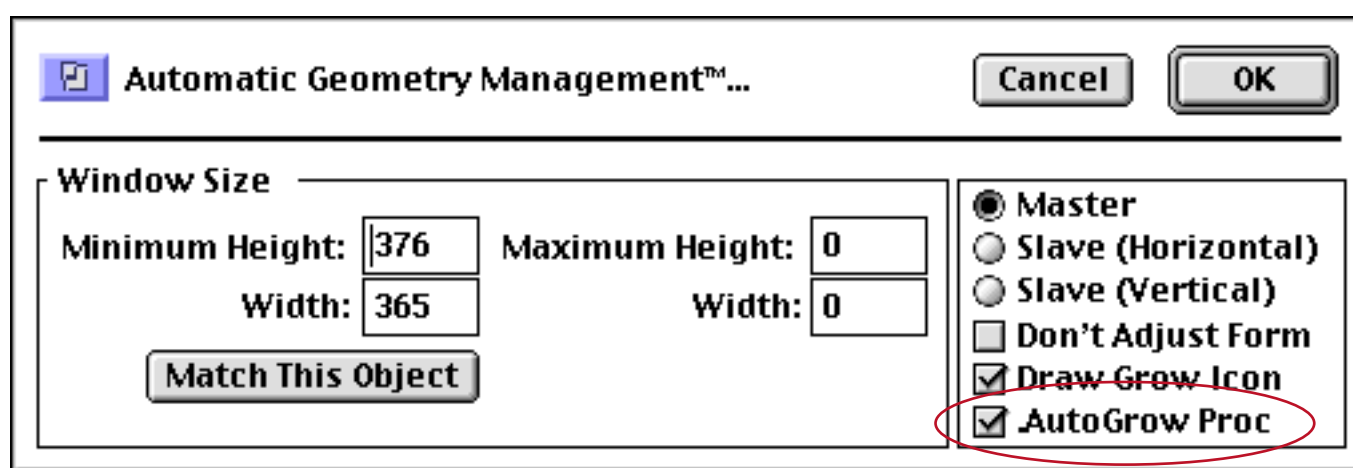
Procedure:

The procedure is very short and relies on the Matrix SuperObject to do most of the work (see “[Super Matrix SuperObject™ Commands](#)” on page 715 of *Formulas & Programming*).

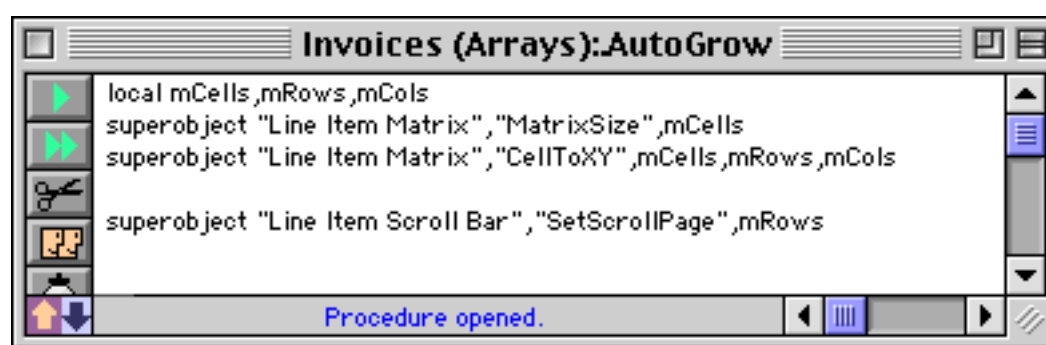


Adjusting for Window Size Variations

In addition to the normal elastic form adjustments the scroll bar must be adjusted for the number of visible invoice lines. To do this the **.AutoGrow Proc** option is turned on when creating the elastic form.



With this option enabled Panorama will automatically trigger this procedure every time the window dimensions are changed.

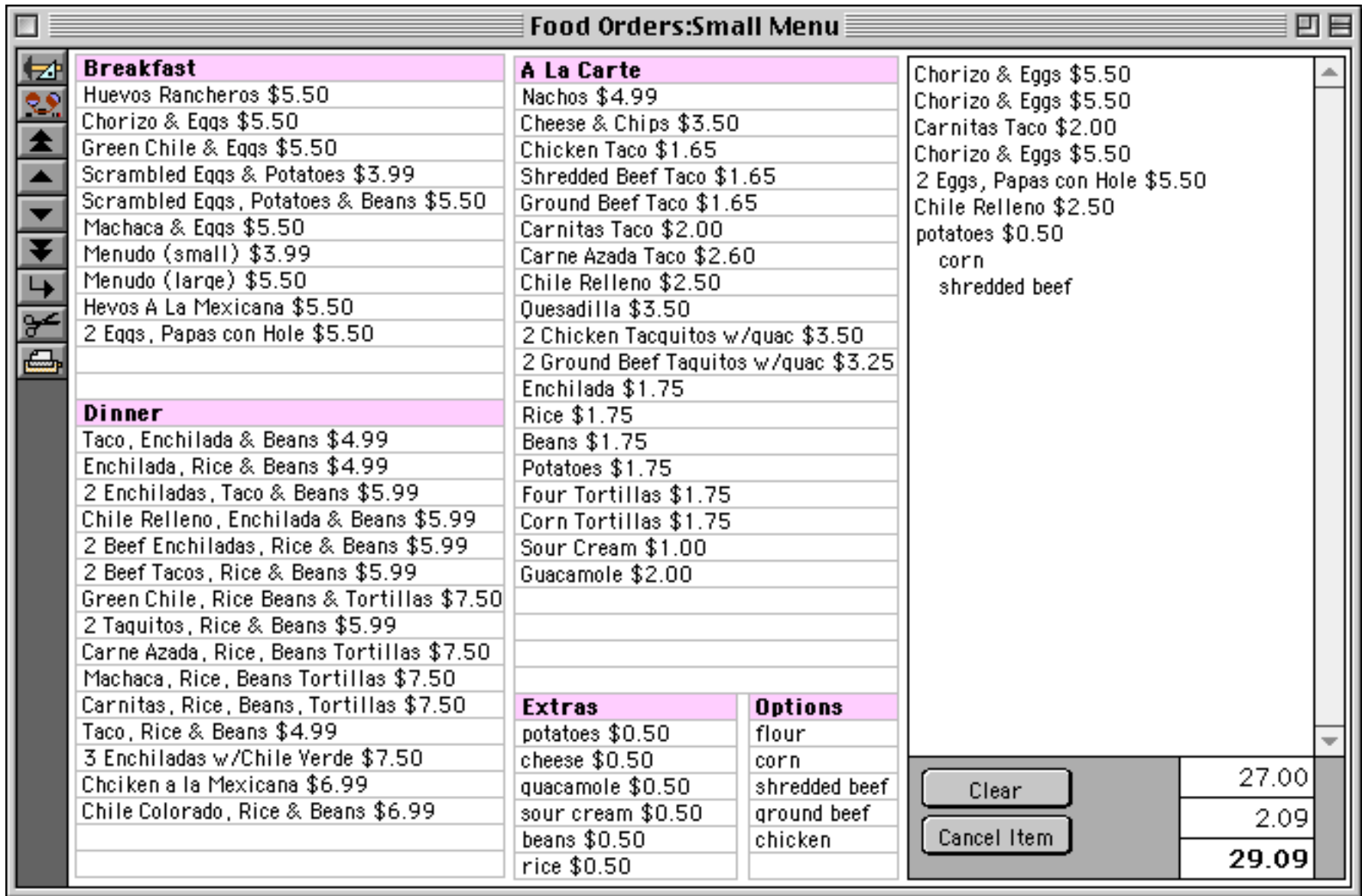


The second and third lines determine the number of lines that are currently being displayed (see “[Super Matrix SuperObject™ Commands](#)” on page 715 of *Formulas & Programming*). The final line sets the scroll bar page height to this number (see “[Scroll Bar SuperObject™ Commands](#)” on page 718 of *Formulas & Programming*). This adjusts the scroll bar so that clicking in the page up/down area will cause the invoice items to move up or down one page.

1	Algorithms in C	59.95	59.95	▲
1	Danny Goodman's Applescript Handbook	40.00	40.00	← page up
1	C: A Reference Manual	42.95	42.95	
1	About Face: The Essentials of User Interface	29.99	29.99	
1	Frontier: The Definitive Guide	34.95	34.95	
1	Getting Connected: The Internet at 56K and Up	23.96	23.96	← page down
10	HTML: The Definitive Guide (Nutsell Handbook)	32.95	329.50	
1	Teach Yourself C in 21 Days	29.99	29.99	
1	Teach Yourself Advanced C in 21 Days	34.95	34.95	▼

Mexican Restaurant

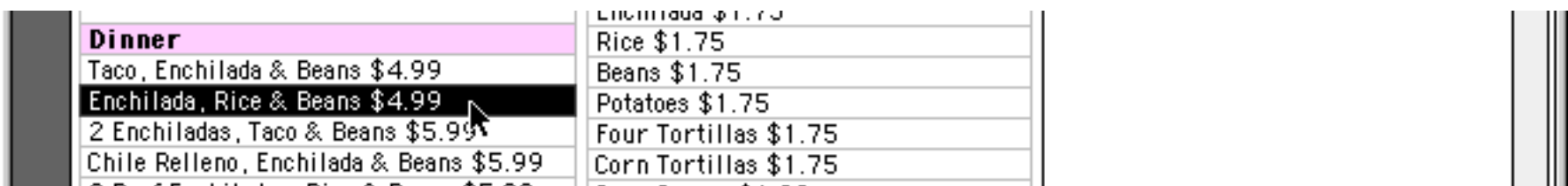
This database demonstrates another way to create an invoice. The menu items are listed on the left, with the current order on the right.



Use the Add New Record tool to start a new order.



To add an item to the order, click on the item in the menu.



The item will appear in the box on the right.

Food Orders:Small Menu		
Breakfast	A La Carte	Enchilada, Rice & Beans \$4.99
Huevos Rancheros \$5.50	Nachos \$4.99	
Chorizo & Eggs \$5.50	Cheese & Chips \$3.50	

As items are added to the order the total is updated automatically.

Food Orders:Small Menu		
Breakfast	A La Carte	Enchilada, Rice & Beans \$4.99
Huevos Rancheros \$5.50	Nachos \$4.99	sour cream \$0.50
Chorizo & Eggs \$5.50	Cheese & Chips \$3.50	3 Enchiladas w/Chile Verde \$7.50
Green Chile & Eggs \$5.50	Chicken Taco \$1.65	
Scrambled Eggs & Potatoes \$3.99	Shredded Beef Taco \$1.65	

Carnitas, Rice, Beans, Tortillas \$7.50	Extras	Options	
Taco, Rice & Beans \$4.99	potatoes \$0.50	flour	
3 Enchiladas w/Chile Verde \$7.50	cheese \$0.50	corn	
Chicken a la Mexicana \$6.99	quacamole \$0.50	shredded beef	12.99
Chile Colorado, Rice & Beans \$6.99	sour cream \$0.50	ground beef	0.99
	beans \$0.50	chicken	13.98
	rice \$0.50		

An unusual feature of this database is that you can type in items “off the menu.” Simply click in the box on the right and type in the item. The cost of the item must be preceded with a dollar sign (\$) as shown below.

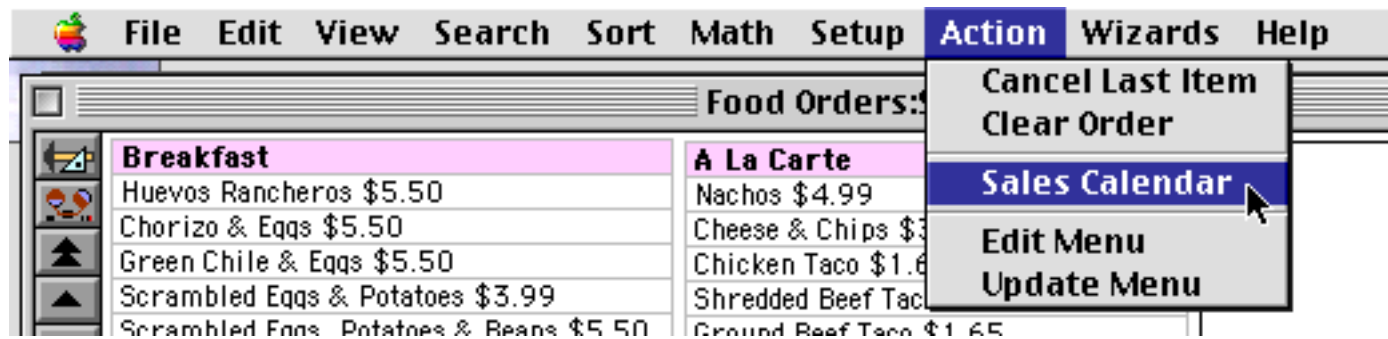
Food Orders:Small Menu		
Breakfast	A La Carte	Enchilada, Rice & Beans \$4.99
Huevos Rancheros \$5.50	Nachos \$4.99	sour cream \$0.50
Chorizo & Eggs \$5.50	Cheese & Chips \$3.50	3 Enchiladas w/Chile Verde \$7.50
Green Chile & Eggs \$5.50	Chicken Taco \$1.65	Hamburger \$4.00
Scrambled Eggs & Potatoes \$3.99	Shredded Beef Taco \$1.65	
Scrambled Eggs, Potatoes & Beans \$5.50	Ground Beef Taco \$1.65	

When you press the **Enter** key the database will calculate the new total, including the hand-entered “off the menu” item.

Carnitas, Rice, Beans, Tortillas \$7.50	Extras	Options	
Taco, Rice & Beans \$4.99	potatoes \$0.50	flour	
3 Enchiladas w/Chile Verde \$7.50	cheese \$0.50	corn	
Chicken a la Mexicana \$6.99	quacamole \$0.50	shredded beef	16.99
Chile Colorado, Rice & Beans \$6.99	sour cream \$0.50	ground beef	1.30
	beans \$0.50	chicken	18.29
	rice \$0.50		

Sales Calendar

An unusual feature of this database is the Sales Calendar, which can be opened from the Action menu.



The Sales Calendar shows a summary of sales on each day. You can easily flip back and forth to compare revenues with prior months or years.

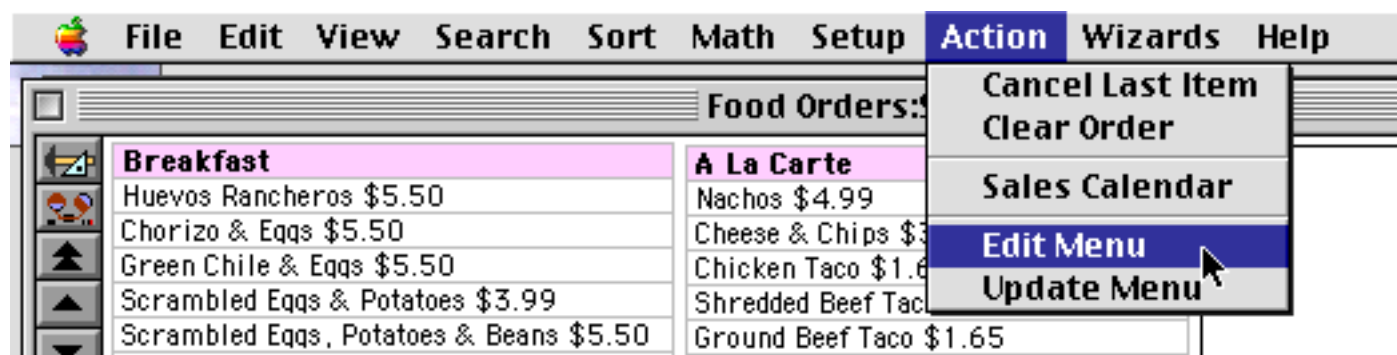
The screenshot shows the 'Food Orders:Calendar' window for November 1999. The calendar displays daily sales figures for each day of the month. The days are color-coded: yellow for days with sales data and grey for days without.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2 \$118.12	3 \$152.10	4 \$187.19	5 \$288.20	6 \$379.80
7 \$423.21	8	9 \$136.20	10 \$157.39	11 \$163.12	12 \$248.83	13 \$359.12
14 \$491.01	15	16 \$138.12	17 \$133.80	18 \$148.48	19 \$316.32	20 \$403.27
21 \$486.25	22	23 \$98.23	24 \$107.19	25	26 \$220.11	27 \$447.73
28 \$535.61	29	30 \$187.23				

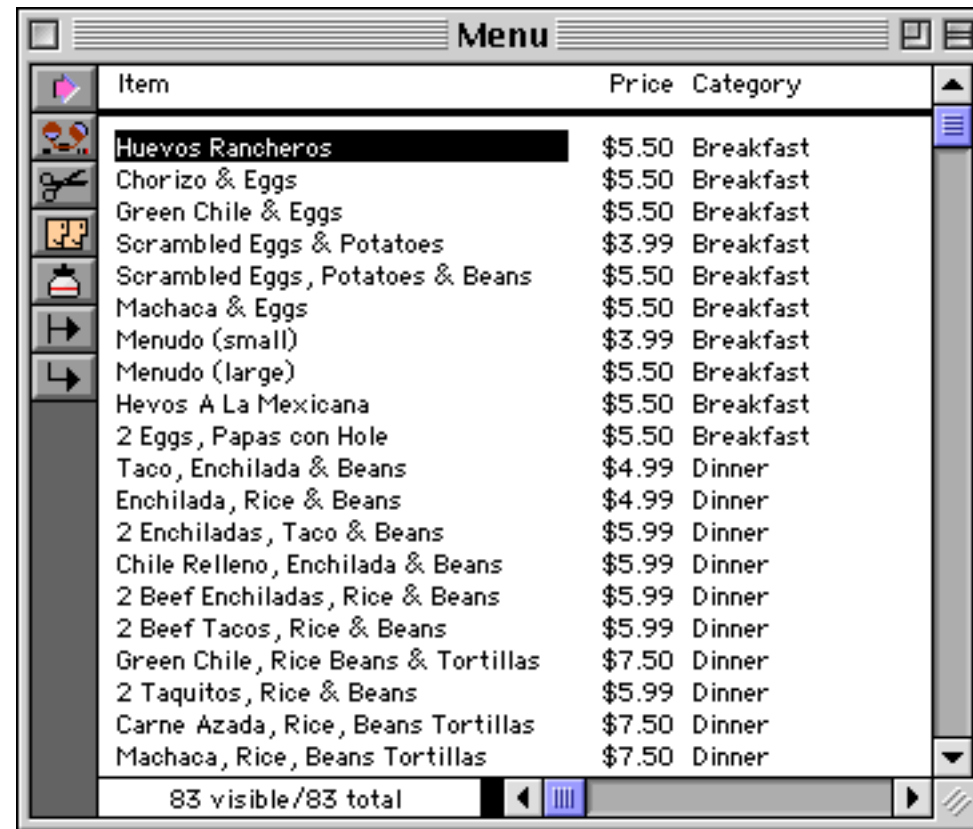
To learn more about creating a calendar see "[Building a Calendar](#)" on page 971 of the *Panorama Handbook*.

Editing the Menu

To change a price or item description choose Edit Menu from the Action menu.



This opens a second database that contains all the items on the database.



Item	Price	Category
Huevos Rancheros	\$5.50	Breakfast
Chorizo & Eggs	\$5.50	Breakfast
Green Chile & Eggs	\$5.50	Breakfast
Scrambled Eggs & Potatoes	\$3.99	Breakfast
Scrambled Eggs, Potatoes & Beans	\$5.50	Breakfast
Machaca & Eggs	\$5.50	Breakfast
Menudo (small)	\$3.99	Breakfast
Menudo (large)	\$5.50	Breakfast
Hevos A La Mexicana	\$5.50	Breakfast
2 Eggs, Papas con Hole	\$5.50	Breakfast
Taco, Enchilada & Beans	\$4.99	Dinner
Enchilada, Rice & Beans	\$4.99	Dinner
2 Enchiladas, Taco & Beans	\$5.99	Dinner
Chile Relleno, Enchilada & Beans	\$5.99	Dinner
2 Beef Enchiladas, Rice & Beans	\$5.99	Dinner
2 Beef Tacos, Rice & Beans	\$5.99	Dinner
Green Chile, Rice Beans & Tortillas	\$7.50	Dinner
2 Taquitos, Rice & Beans	\$5.99	Dinner
Carne Azada, Rice, Beans Tortillas	\$7.50	Dinner
Machaca, Rice, Beans Tortillas	\$7.50	Dinner

83 visible/83 total

Once you have edited one or more items click back on the original database and choose **Update Menu** from the Action menu. In this case we have increased the price of **Hevos A La Mexicana** by \$1.00.

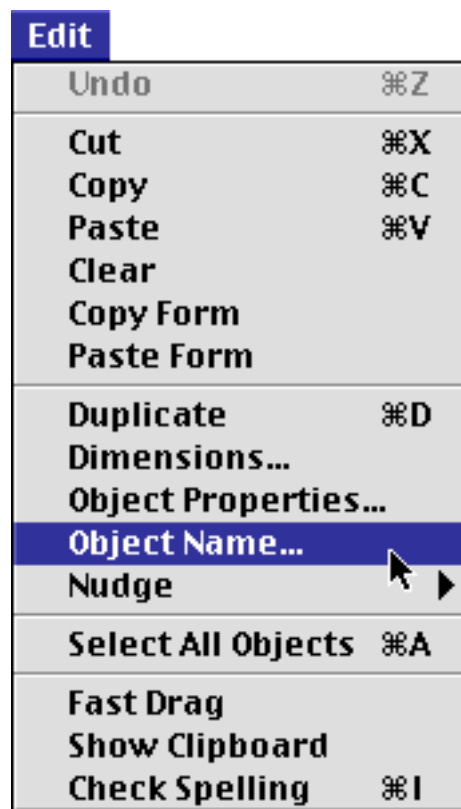


Breakfast	
Huevos Rancheros	\$5.50
Chorizo & Eggs	\$5.50
Green Chile & Eggs	\$5.50
Scrambled Eggs & Potatoes	\$3.99
Scrambled Eggs, Potatoes & Beans	\$5.50
Machaca & Eggs	\$5.50
Menudo (small)	\$3.99
Menudo (large)	\$5.50
Hevos A La Mexicana	\$6.50
2 Eggs, Papas con Hole	\$5.50

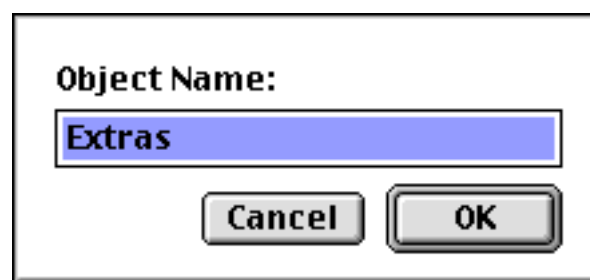
More drastic changes will require editing the menu form. You'll notice that the menu is divided into several different categories. Each category has a Super Matrix object to display the category (see "[Super Matrix Objects](#)" on page 939 of the *Panorama Handbook*). The easiest way to create a new category is to make a copy of one of the existing categories, as shown here (see "[Duplicating Objects](#)" on page 560 of the *Panorama Handbook*).



The menu category displayed by this object is controlled by the object's name. To change the category choose the **Object Name** command from the Edit menu (see "[Object Type/Object Name](#)" on page 533 of the *Panorama Handbook*).



The current name of this category is **Extras**.



Type in the new category name, for example **Drinks**, then press **OK**.

Object Name:

Drinks

Cancel OK

To make this category appear you must switch to Data Access Mode and then add one or more items in this category to the menu database (see above).

Item	Price	Category
Guacamole	\$2.00	A La Carte
potatoes	\$0.50	Extras
cheese	\$0.50	Extras
guacamole	\$0.50	Extras
sour cream	\$0.50	Extras
beans	\$0.50	Extras
rice	\$0.50	Extras
flour		Options
corn		Options
shredded beef		Options
ground beef		Options
chicken		Options
Coke	\$1.00	Drinks
Diet Coke	\$1.00	Drinks
Sprite	\$1.00	Drinks
Milk	\$1.25	Drinks

87 visible/87 total

Now switch back to the **Food Orders** database and use the **Update Menu** command in the Action menu to make the new **Drinks** category appear.

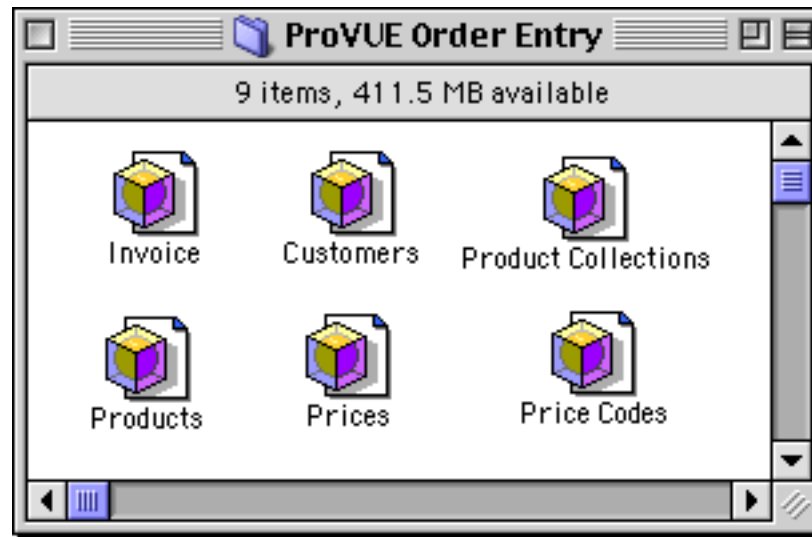
Breakfast	A La Carte	Drinks
Huevos Rancheros \$5.50	Nachos \$4.99	Coke \$1.00
Chorizo & Eggs \$5.50	Cheese & Chips \$3.50	Diet Coke \$1.00
Green Chile & Eggs \$5.50	Chicken Taco \$1.65	Sprite \$1.00
Scrambled Eggs & Potatoes \$3.99	Shredded Beef Taco \$1.65	Milk \$1.25
Scrambled Eggs, Potatoes & Beans \$5.50	Ground Beef Taco \$1.65	
Machaca & Eggs \$5.50	Carnitas Taco \$2.00	
Menudo (small) \$3.99	Carne Azada Taco \$2.60	
Menudo (large) \$5.50	Chile Relleno \$2.50	
Hevos A La Mexicana \$6.50	Quesadilla \$3.50	
2 Eggs, Papas con Hole \$5.50	2 Chicken Taquitos w/quac \$3.50	
	2 Ground Beef Taquitos w/quac \$3.25	

The final step, re-arranging the graphics to make room for the new category, is left up to you!

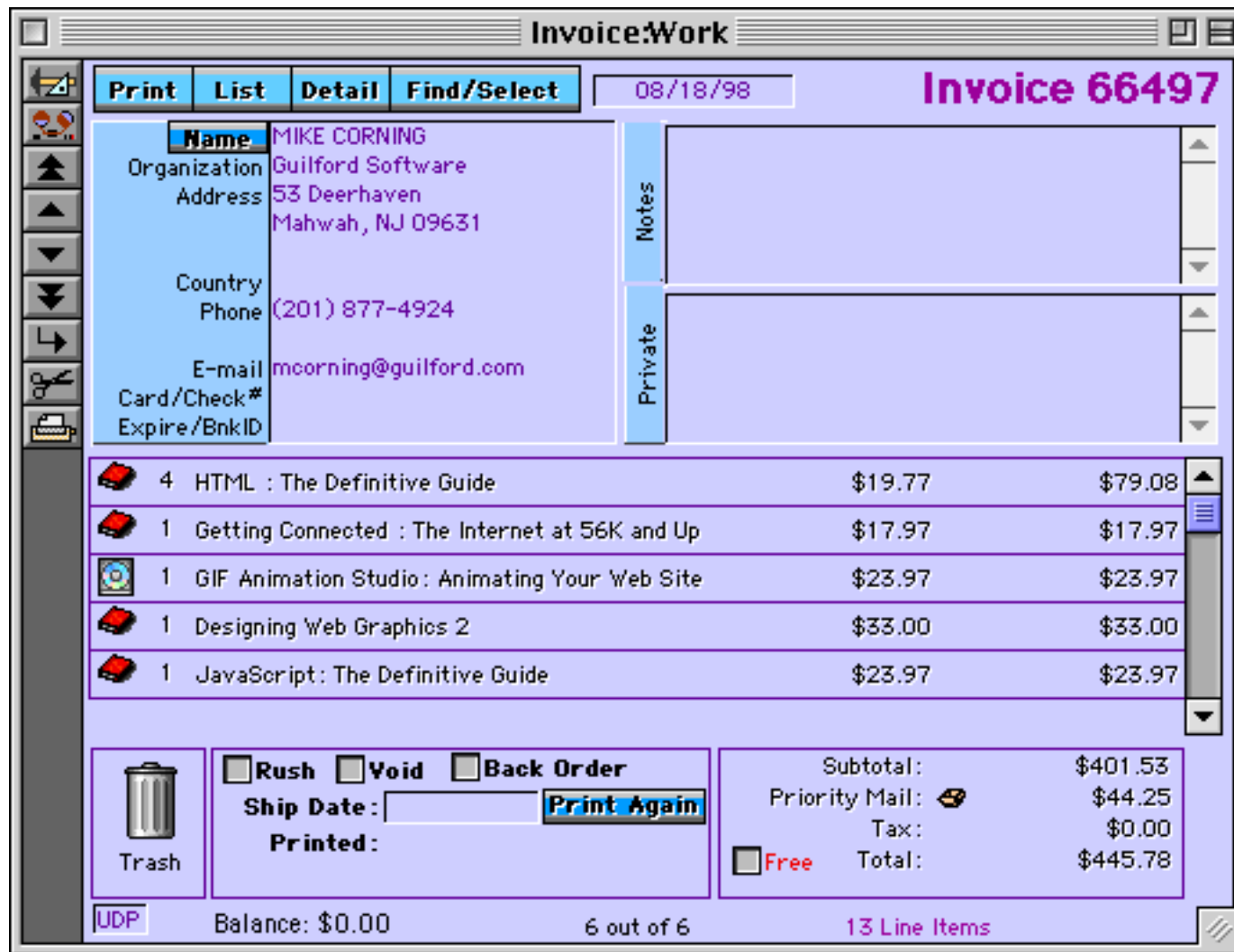
ProVUE Order Entry

This is not a single database but actually six databases that work together as a complete order entry system. This is actually a modified version of the order entry system we use here at ProVUE, so the design assumptions in this system are focused on a software or manufacturing company. However, the design can easily be adapted for many different types of businesses.

The six database files are shown here.



The **Invoice** file is the primary file for this system. It contains all of the information for each order.



The **Customers** database contains information and preferences for regular customers. This database is designed for customers that order regularly (for example dealers or distributors), not one-time or occasional customers. The system can use the information in this database to automatically give the correct discount to each order placed by a regular customer.

The screenshot displays two windows from a software application. The top window, titled "Customers:List", shows a list of customer records. The bottom window, titled "Customers:Detail", provides a detailed view for the selected customer, "Alpha Building Supply".

Customers:List

Find/Select	Customer Name	Type
	PACIFIC TECHNICAL BOOKS	Dealer
	Anaheim, CA 92628	
	Alpha Building Supply	Public
	Brea, CA 92624	
	Web Visions	Dealer
	Costa Mesa, CA 92608	
	Cyberlex Programming Intensive	Educational
	Costa Mesa, CA 92642	
	Horizon Dental	Public
	Diamond Bar, CA 92618	
	Candle Works	Public
	Fullerton, CA 92625	

Customers:Detail

Customer ID: 1001 Inactive Type: Public

Organization: **Alpha Building Supply** Contact: Kirk Shelby

Address: 731 Melody Lane Ship To:

City: Brea State: CA Zip: 92624

Country: [v] Phons: (714) 894-2489

E-Mail: Price: Retail (List) Intl Distributor

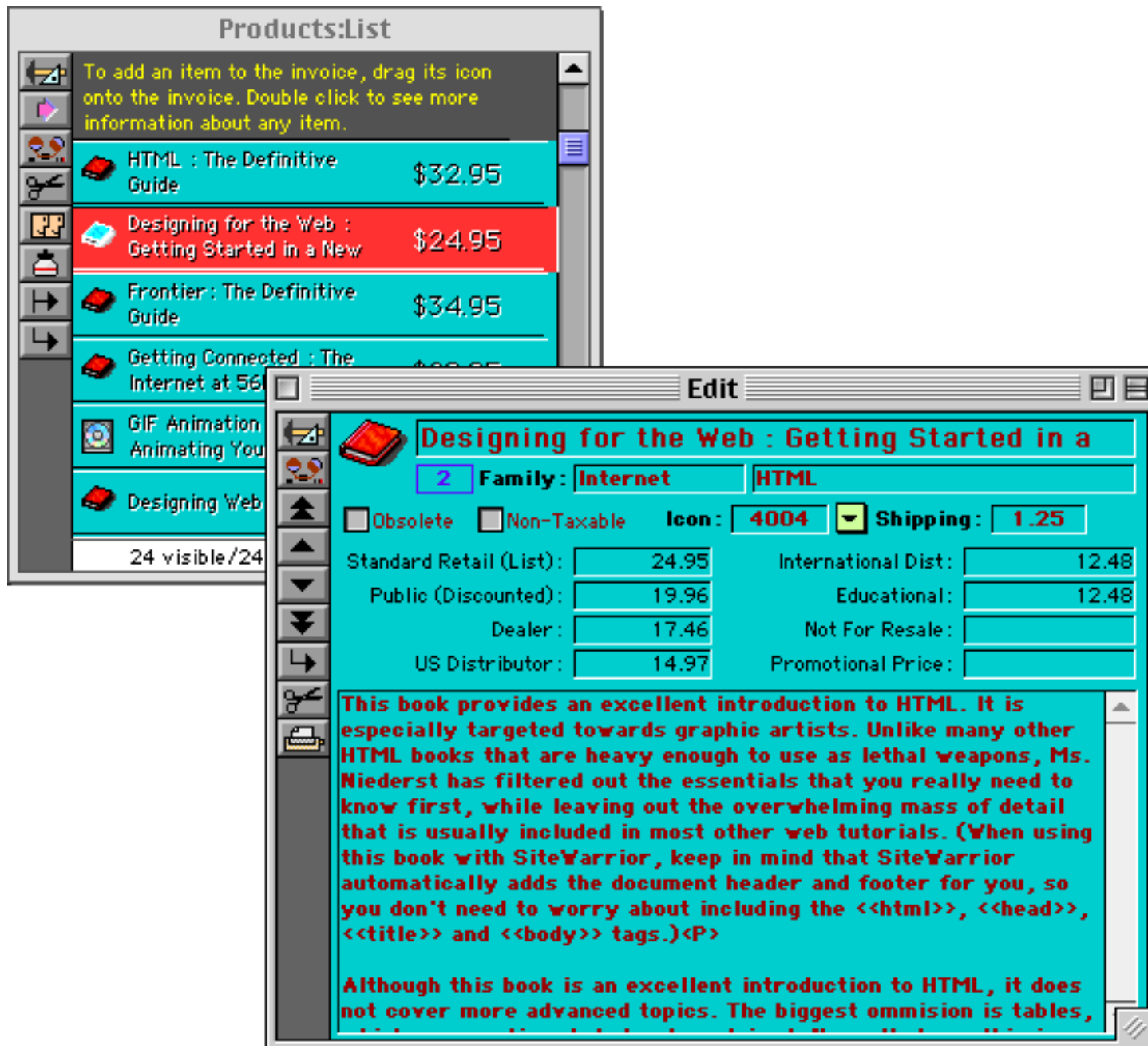
Web: Public (Discount) Educational

Reseller ID: Dealer Not For Resale

Fed Tax ID: Distributor

Notes: Preferred Collection: BEST SELLERS

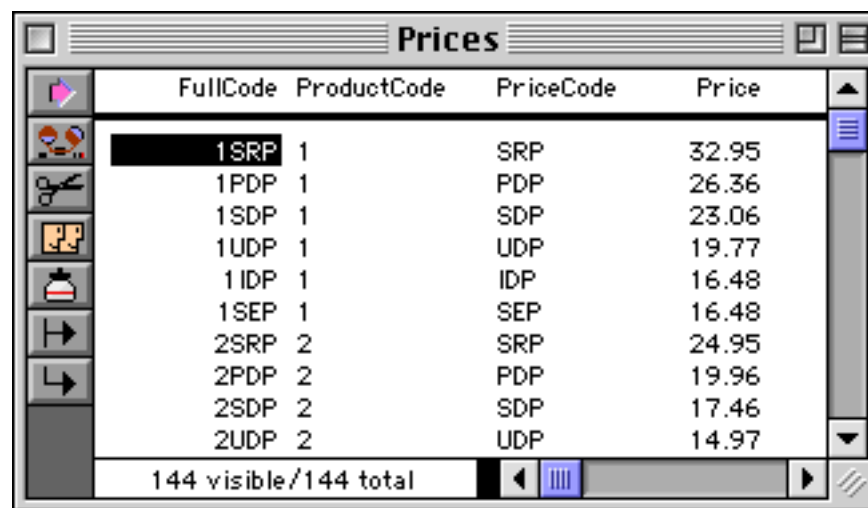
Product descriptions and pricing information are actually split up into three separate databases. The **Products** database contains the description of each product (the pricing information shown in the windows below is actually being looked up from the **Price List** database). Each product must be assigned a product number that is used to link this database with the **Prices** database (described below).



This system assumes that each product has a standard list price but also has other prices that are paid by different types of customers — dealers, distributors, educational institutions, etc. The system uses a three letter code for each price category. These codes are kept in the **Price Codes** database, along with the standard discounts for each of these categories (as you'll see later, you can customize these discounts for each individual product, or even for an individual invoice).



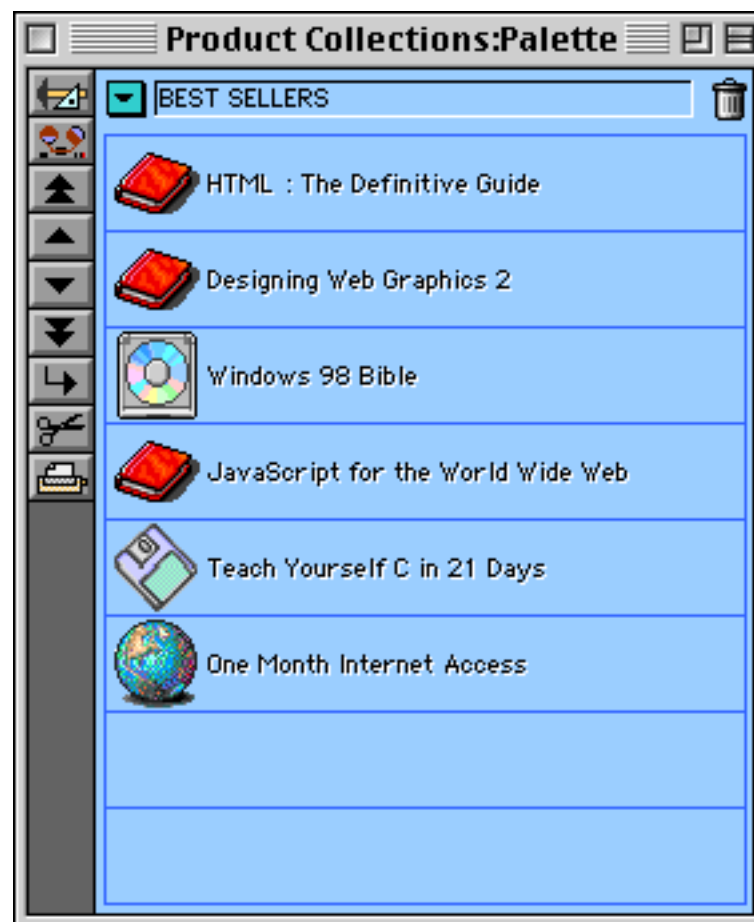
The **Prices** database contains the actual prices for each product in each category. You usually won't have to use this database directly because the system has special forms for editing this data.



FullCode	ProductCode	PriceCode	Price
1SRP	1	SRP	32.95
1PDP	1	PDP	26.36
1SDP	1	SDP	23.06
1UDP	1	UDP	19.77
1IDP	1	IDP	16.48
1SEP	1	SEP	16.48
2SRP	2	SRP	24.95
2PDP	2	PDP	19.96
2SDP	2	SDP	17.46
2UDP	2	UDP	14.97

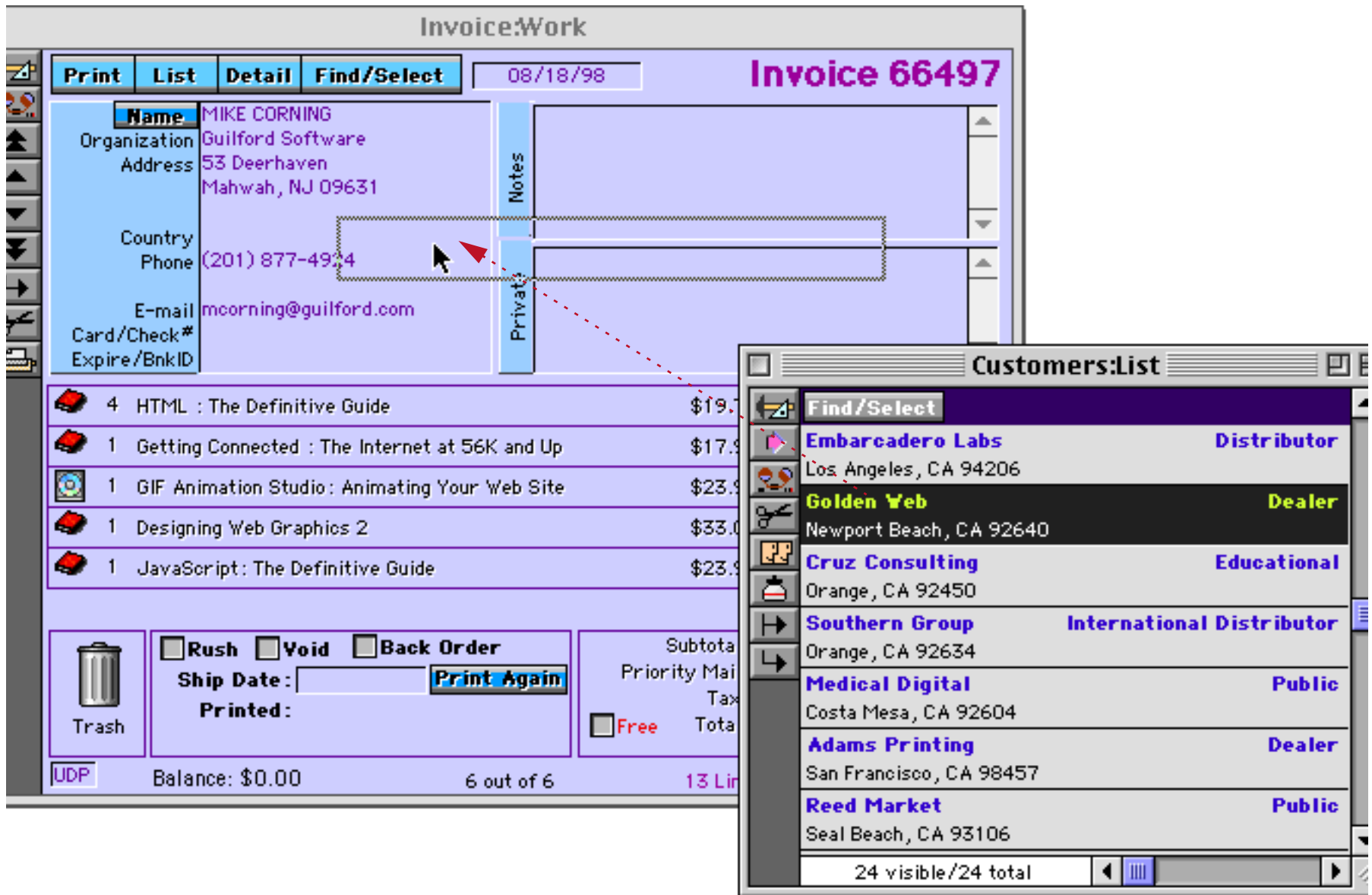
144 visible/144 total

Your product database may contain hundreds or even thousands of products. The **Product Collections** database helps organize these products into logical groups. You'll usually use this to keep the most frequently ordered products at your fingertips. You can even set up the profile for each regular customer so that when a regular customer places an order the items they order most frequently automatically appear.

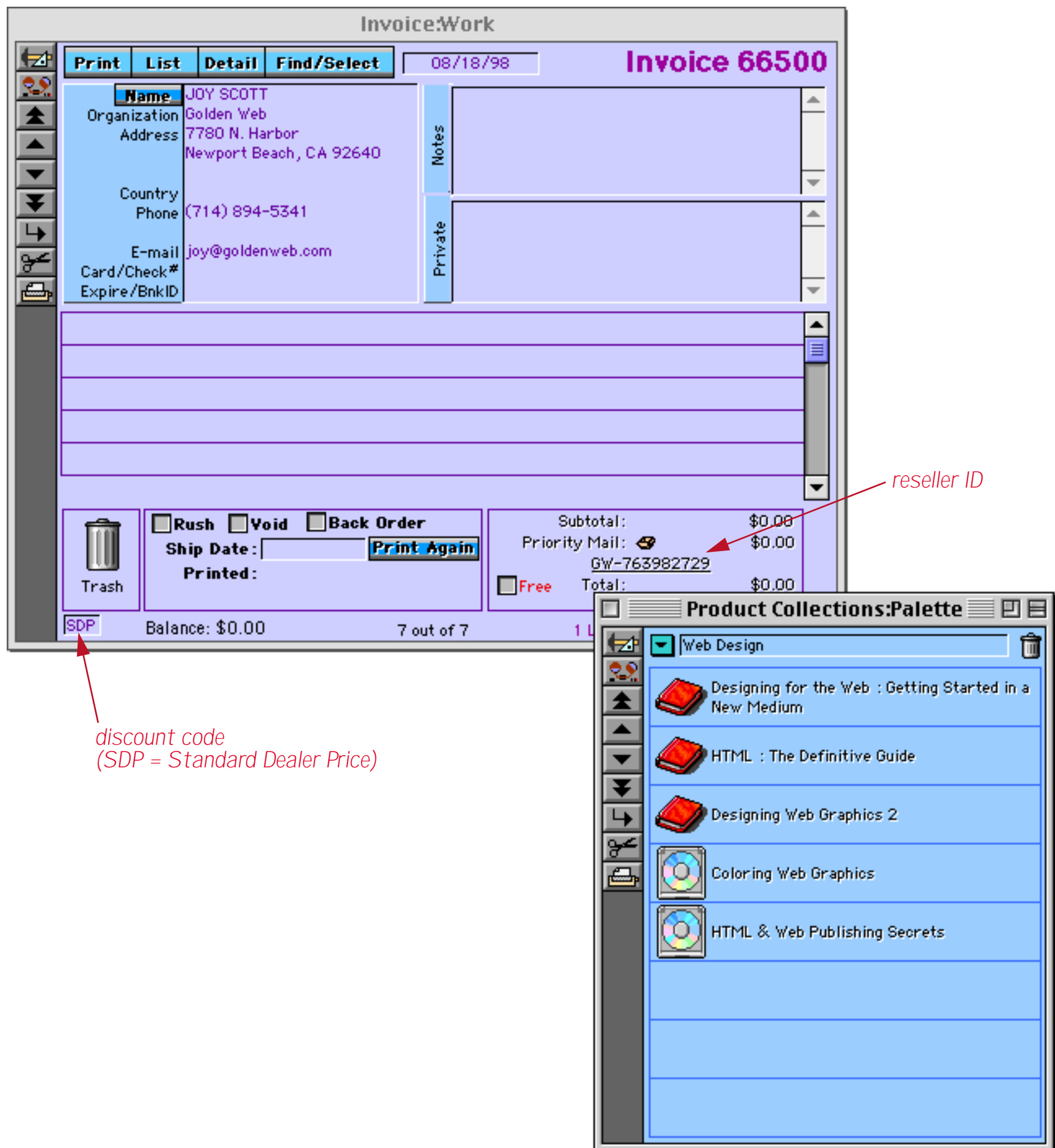


Placing an Order from a Regular Customer

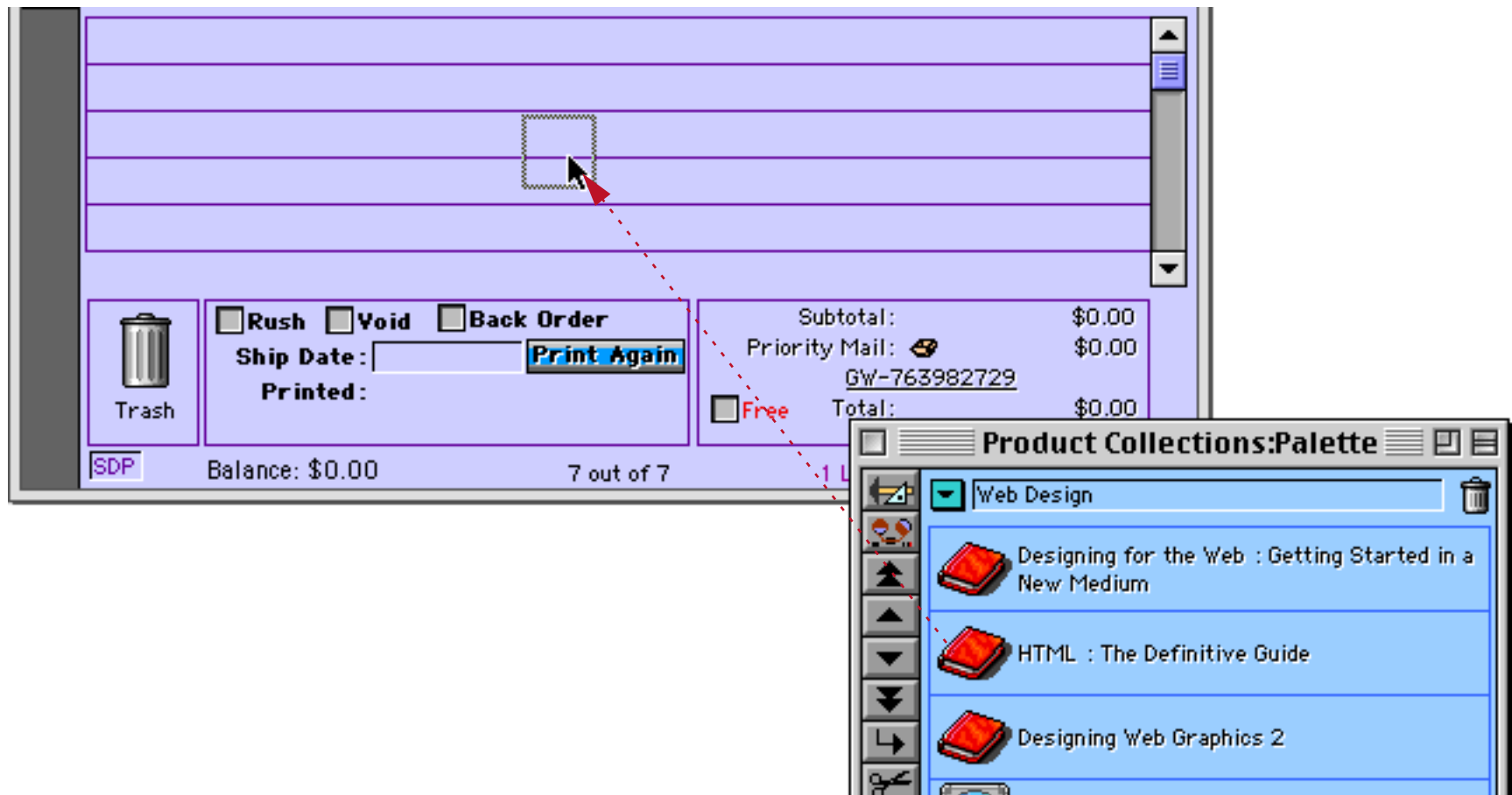
When a regular customer places an order, locate that customer in the **Customers** database and drag their entry over the **Invoice** form. In this case we've received an order from a dealer named **Golden Web**.



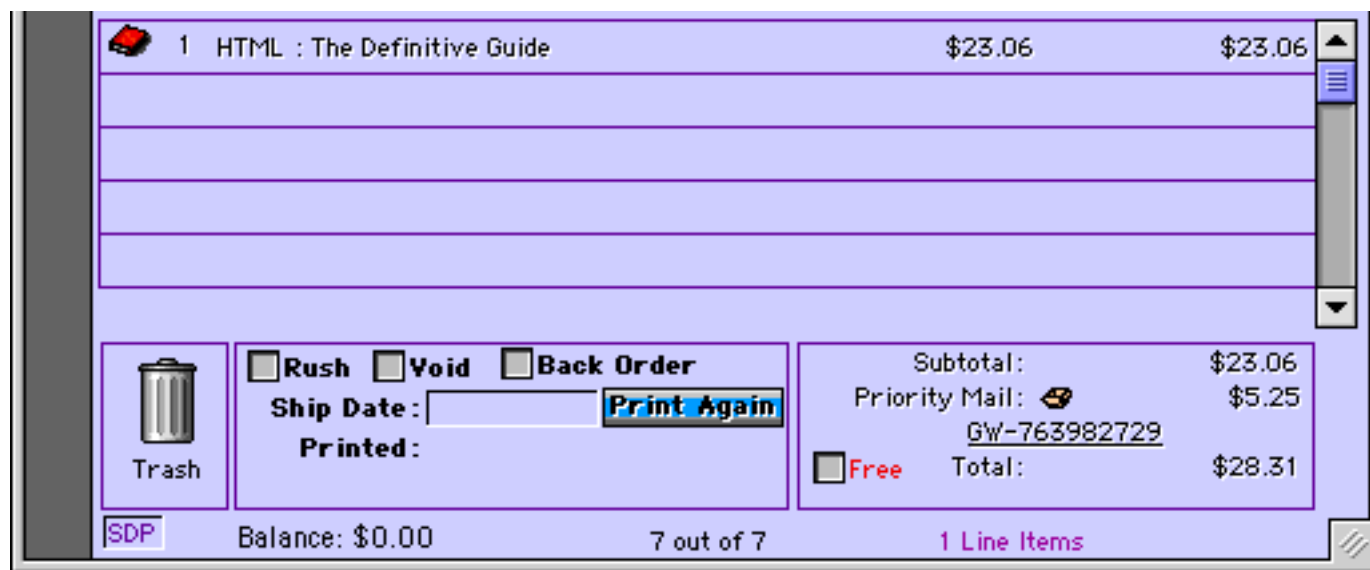
When you release the mouse the system will automatically create a new invoice. Using the information in the **Customers** database the system fills in the contact information, discount code, and in this case, the reseller ID (for sales tax exemption) as well). The system also brings forward the **Product Collections** window and selects the collection that is appropriate for this customer (as specify in the **Customers** database).



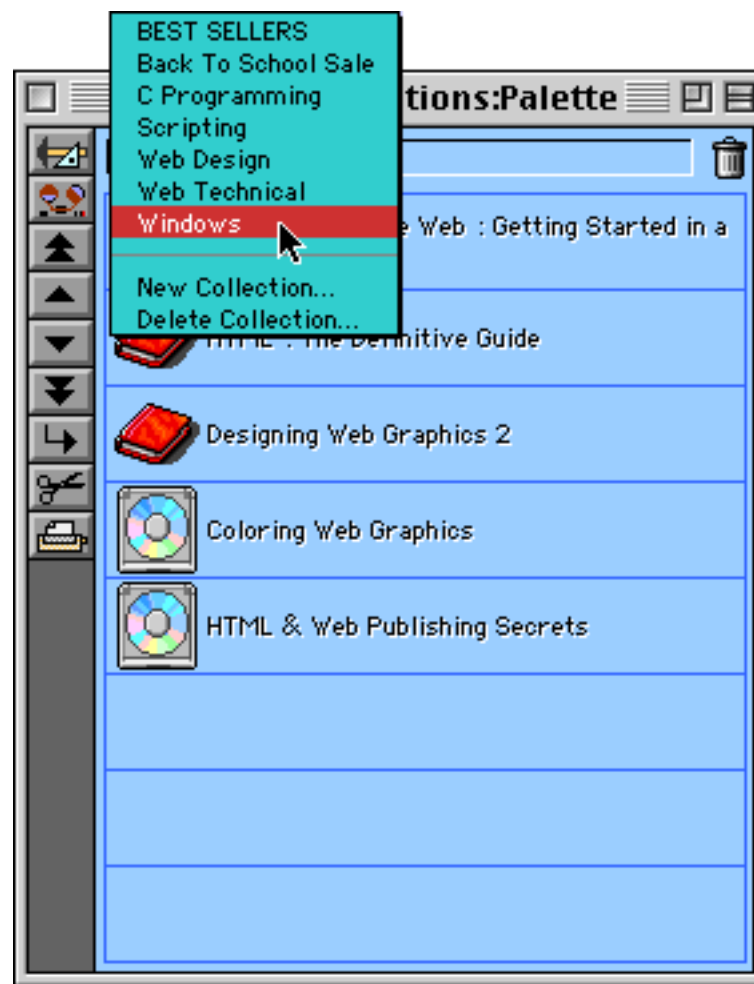
To add a product from this collection to this invoice, simply drag the product onto the invoice form. It doesn't matter exactly where you drag the product to on the form, anywhere will do. No matter where you release the mouse the new product will be added on the next available line.



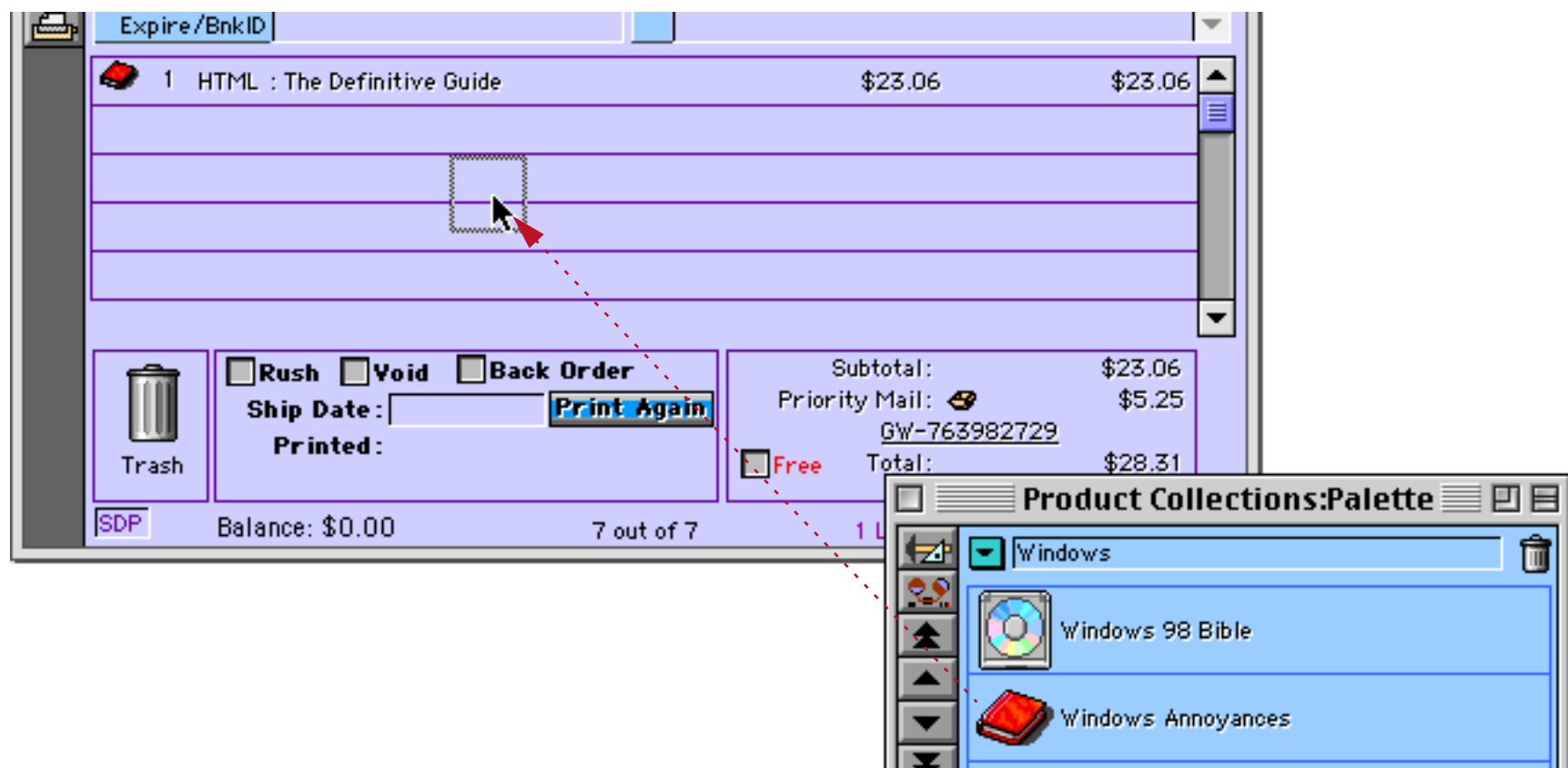
When the mouse is released the item is added to the invoice (the standard retail price of this book is \$32.95, but the system has automatically filled in the correct dealer price of \$23.06).



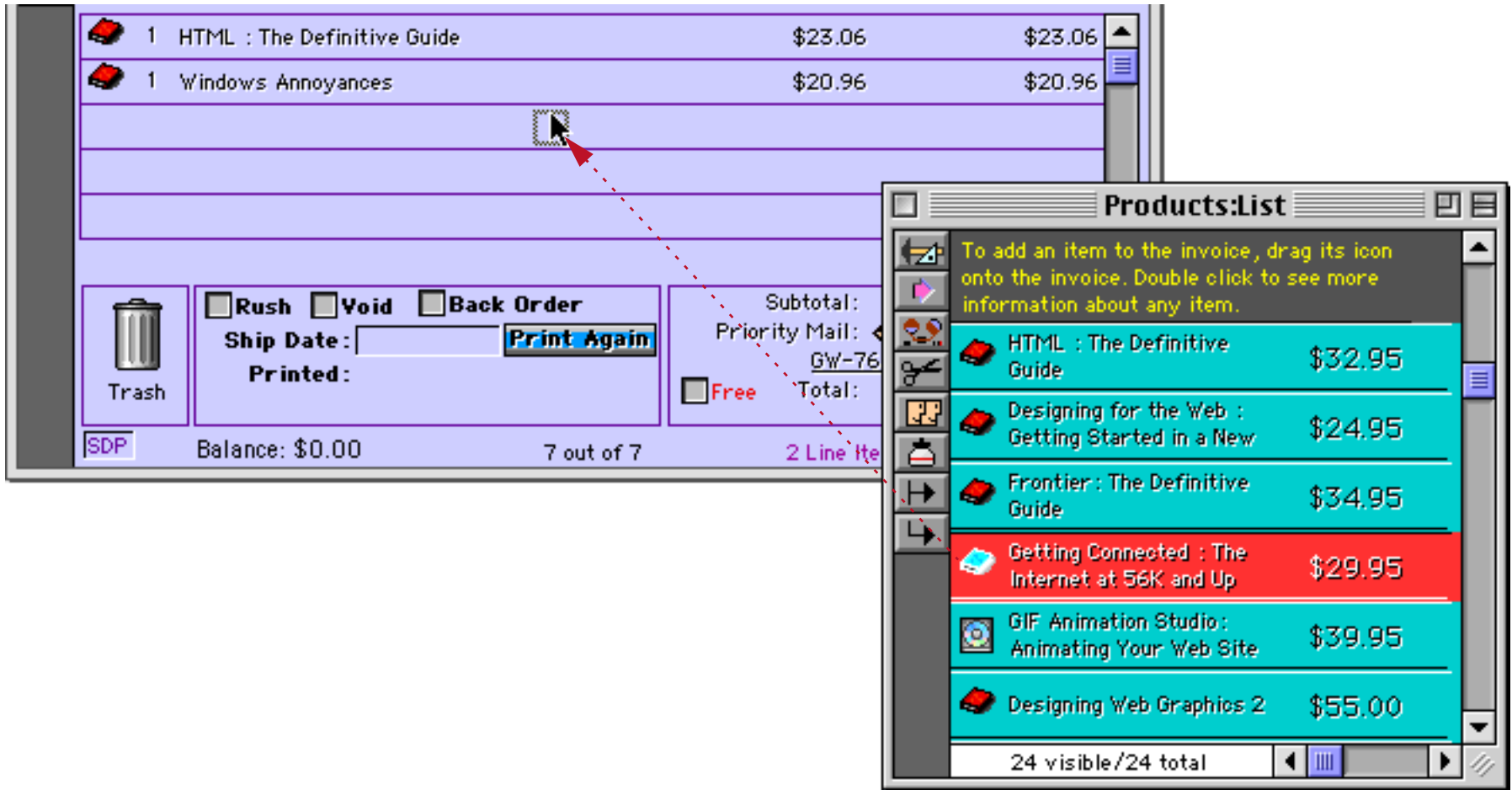
If you want to add a product from another collection, select the collection from the pop-up menu at the top of the **Product Collections** window.



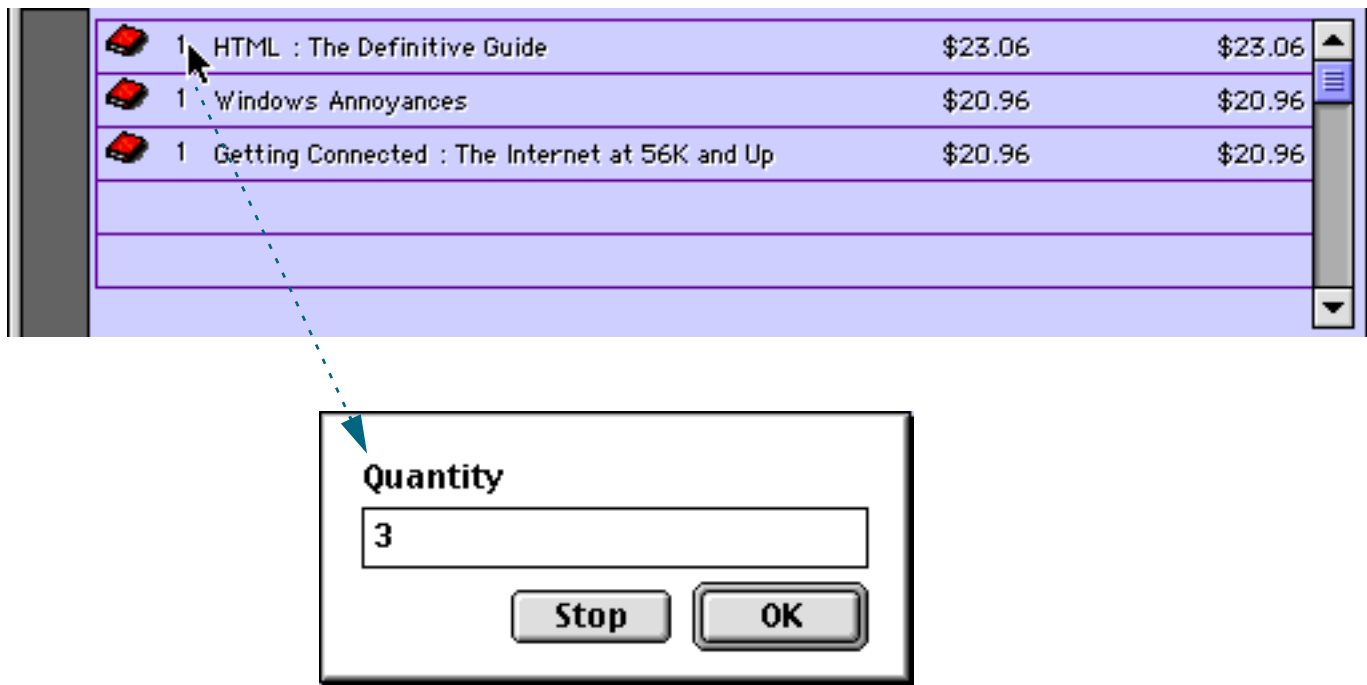
Once the new collection is selected you can drag items from it onto the invoice.



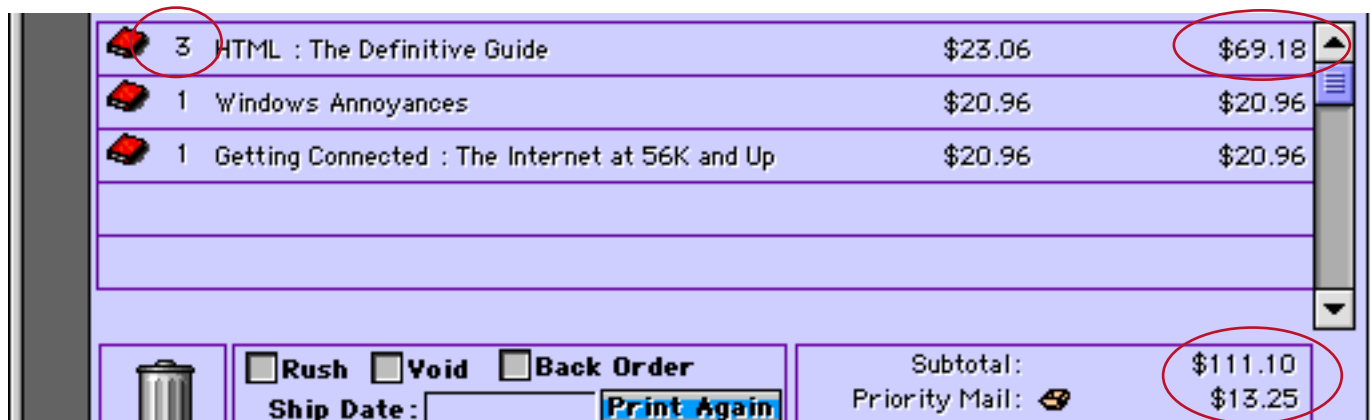
You can also drag items directly from the **Product List** onto the invoice.



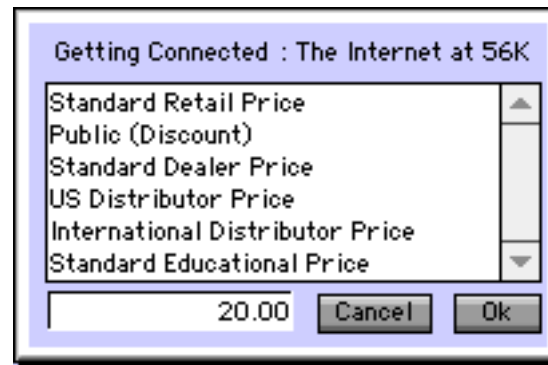
If you want to change the quantity, click on the number. This makes a dialog appear.



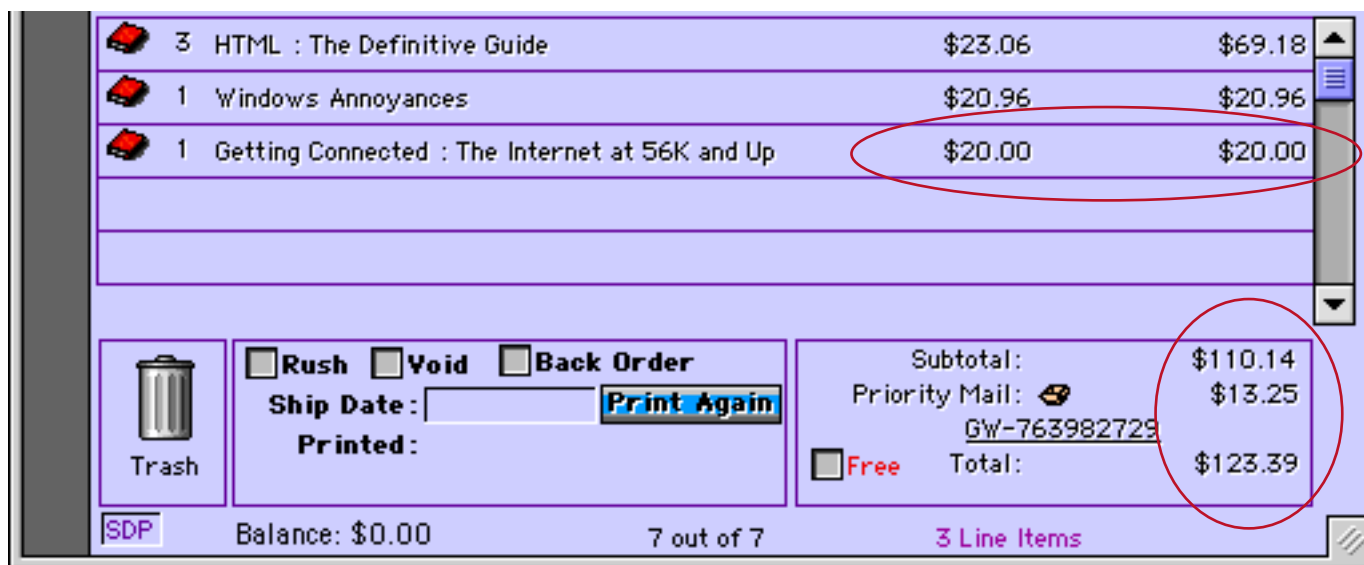
Enter the new quantity and press the **OK** button to update the invoice.



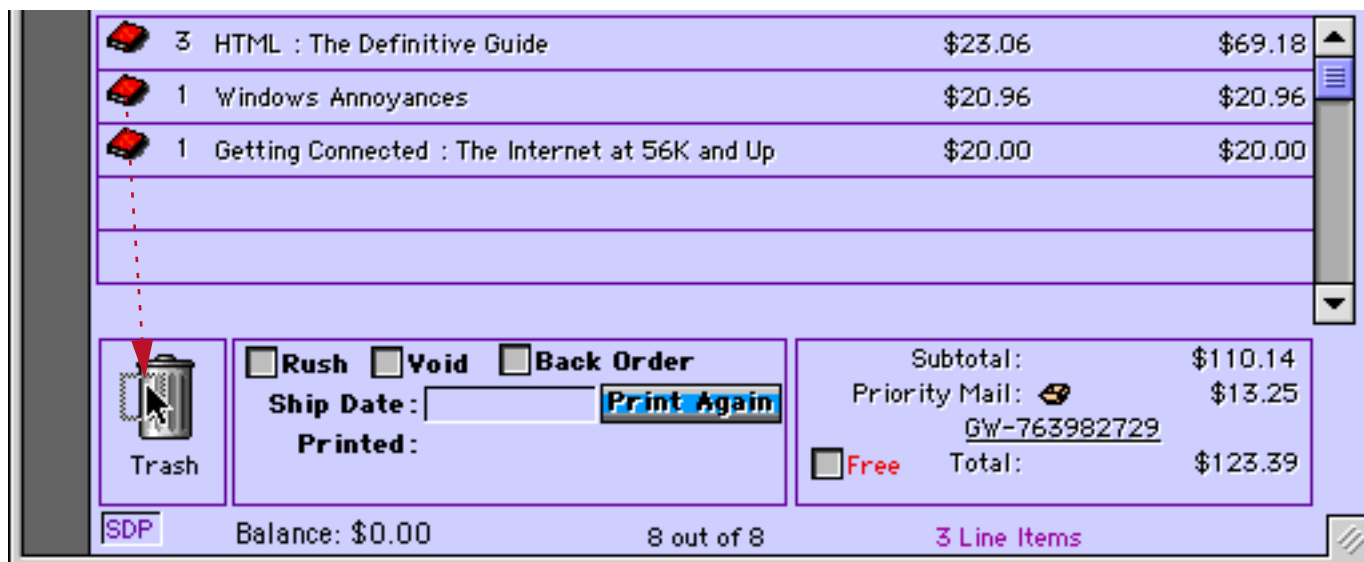
To change the price of an item click on the number. This opens a dialog that allows you to adjust the price.



You can either select from a list of standard prices for this item or type in the exact price you want to use, in this case \$20.00. Press **OK** or the **Enter** key to update the invoice.

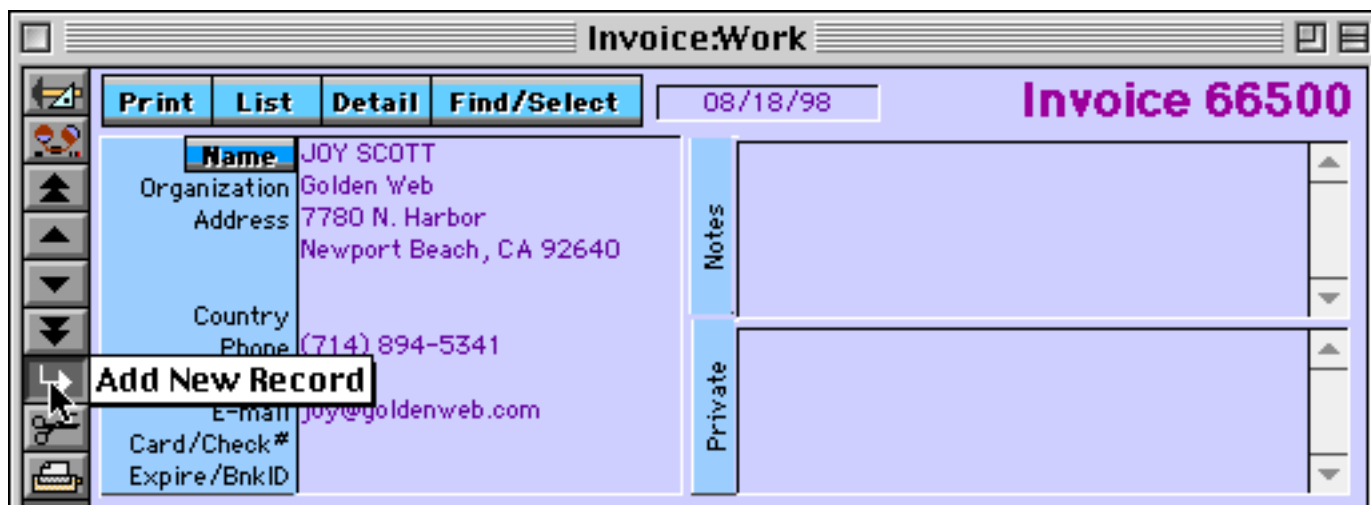


To completely remove an item from the order drag the item into the trash can.

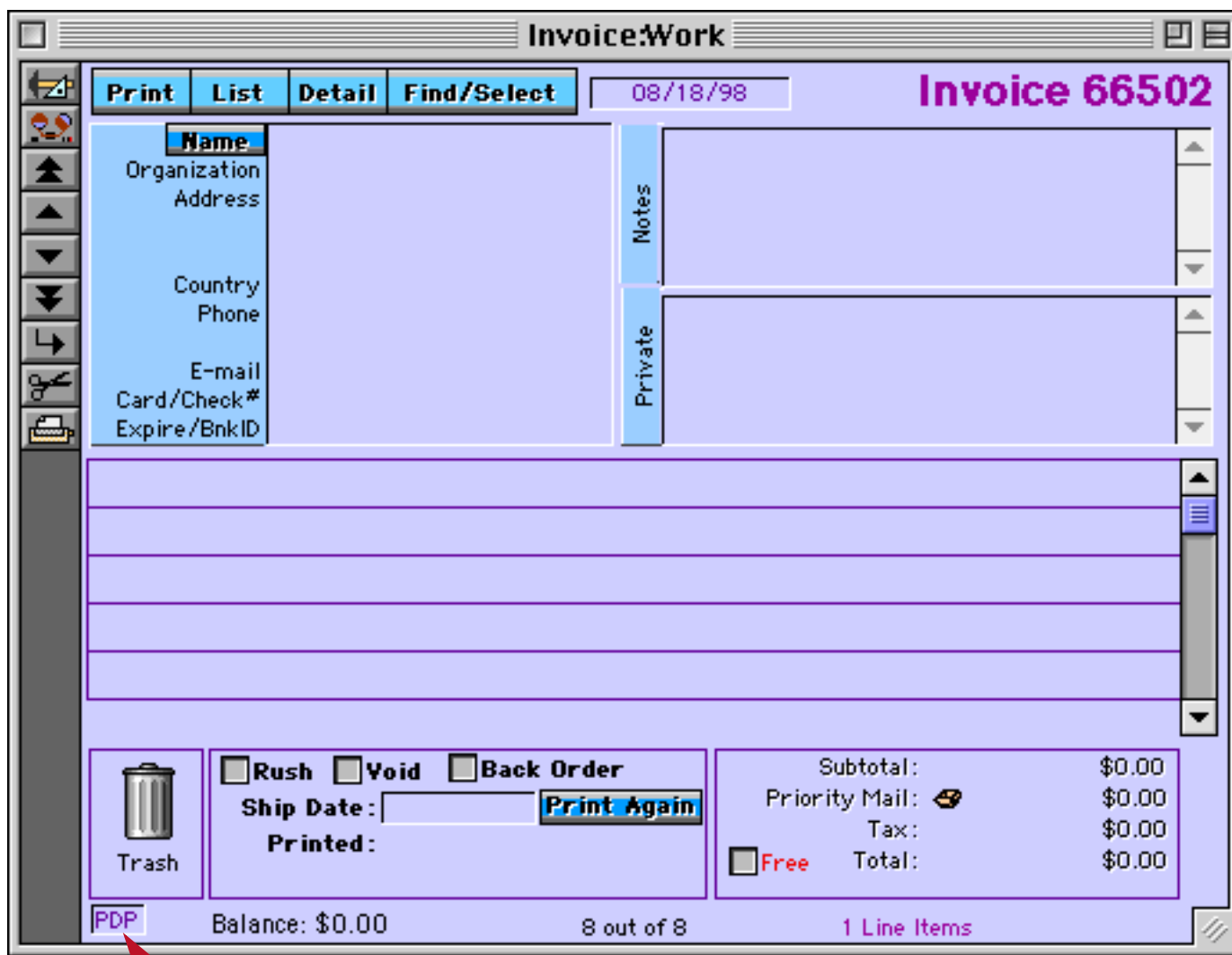


Placing an Order from an Occasional Customer

When a regular customer places an order use the **Add New Record** tool to create a new invoice.



This creates a new, blank order.



*Discount code
(PDP = Public Direct Price)*

The system assumes that this occasional customer will receive PDP pricing (Public Direct Price). If this is not the case you should edit this field now.

The next step is to fill in the contact and payment information for this order. Click in the box and then type in the information.

The screenshot shows the 'Invoice:Work' window with the 'Detail' view selected. The contact information for Joan Wolter is displayed in a list format. The fields are as follows:

Name	Joan Wolter
Organization	Marin Communications
Address	208 W. Buckingham Circle Springfield, OR 97478
Country	
Phone	(503) 377-6208
E-mail	jwolter95@creative.net
Card/Check#	4908-2900-3892-1987
Expire/BnkID	12/04

Buttons for 'Print', 'List', 'Detail', and 'Find/Select' are visible at the top. The date '08/18/98' and 'Invoice 66502' are also displayed.

Press the **Enter** key to add this information to the database.

The screenshot shows the 'Invoice:Work' window with the 'Detail' view selected. The contact information for Joan Wolter is now displayed in all caps, indicating it has been added to the database. The fields are as follows:

Name	JOAN WOLTER
Organization	MARIN COMMUNICATIONS
Address	208 W. BUCKINGHAM CIRCLE SPRINGFIELD, OR 97478
Country	
Phone	(503) 377-6208
E-mail	jwolter95@creative.net
Card/Check#	4908-2900-3892-1987
Expire/BnkID	12/04

The buttons and date/invoice information remain the same as in the previous screenshot.

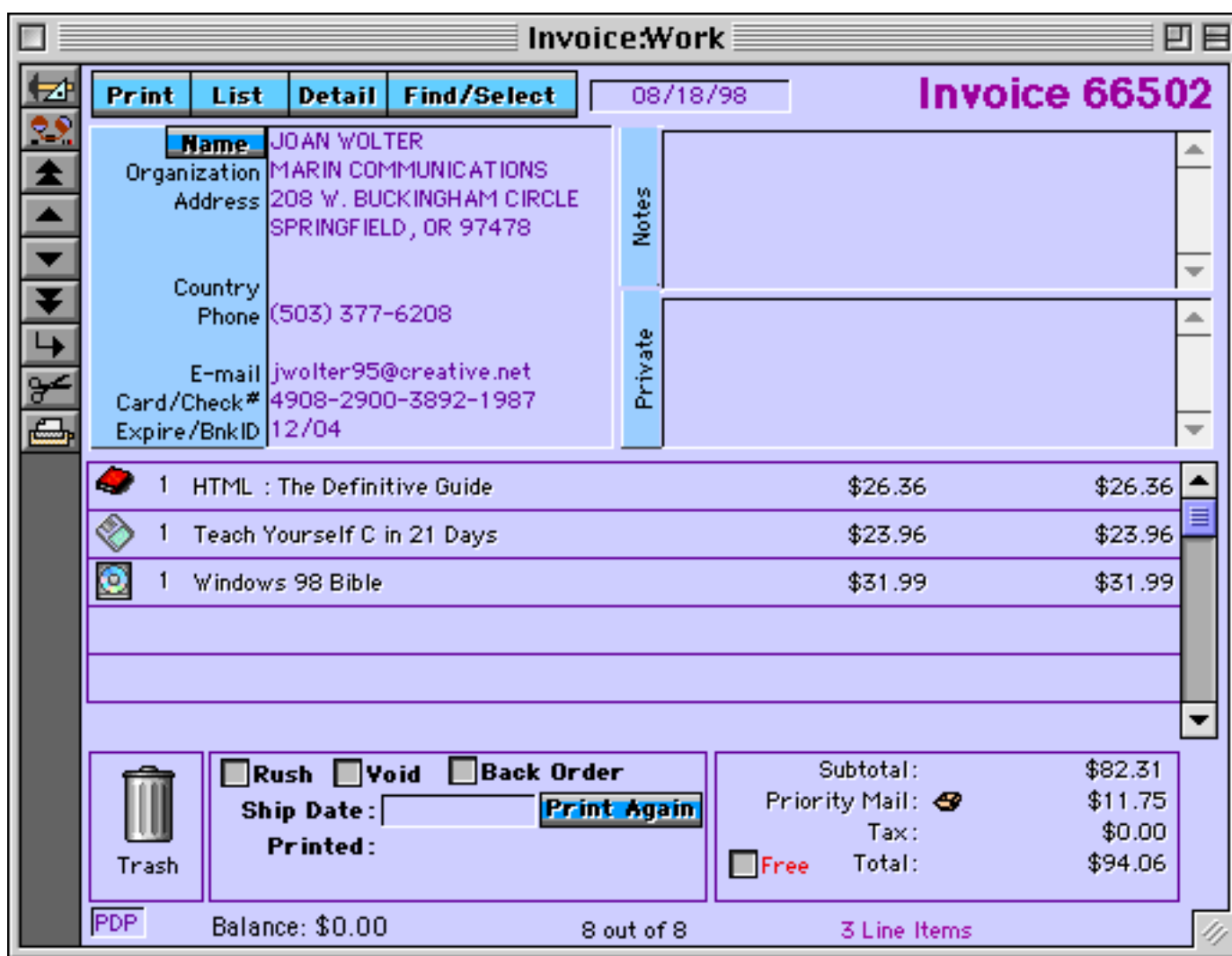
The system has actually analyzed this information and split it into separate fields (see “[Natural Data Entry](#)” on page 530 of *Formulas & Programming*). To see the actual separate database fields press the **Detail** button. This opens the window shown here, which allows you to see and edit the individual database fields.

The screenshot shows the 'Header' window, which displays the contact information in individual fields. The fields are as follows:

Name:	JOAN	WOLTER
Organization:	MARIN COMMUNICATIONS	
Address:	208 W. BUCKINGHAM CIRCLE	
City:	SPRINGFIELD	State: OR Zip: 97478
Country:		Internet: jwolter95@creative.net
Phone:	(503) 377-6208	Fax:
Shipping:		
Payment:	Visa	<input type="checkbox"/> Non-Taxable
Card #:	4908-2900-3892-1987	Expiration: 12/04
NameOnCard:	JOAN WOLTER	

Close the detail window when you are through with it.

To add new items to the order drag them from the [Product Collections](#) or [Products](#) database just as you did for the previous order.



Since this order is outside of California, no sales tax is charged. If the address is changed to a California address sales tax will be added.

InvoiceWork 08/18/98 **Invoice 66502**

Print List Detail Find/Select

Name JOAN WOLTER
Organization MARIN COMMUNICATIONS
Address 208 W. BUCKINGHAM CIRCLE
 SPRINGFIELD, CA 97478
Country
Phone (503) 377-6208
E-mail jwolter95@creative.net
Card/Check# 4908-2900-3892-1987
Expire/BnkID 12/04

Notes
Private

Qty	Description	Unit Price	Total Price
1	HTML : The Definitive Guide	\$26.36	\$26.36
1	Teach Yourself C in 21 Days	\$23.96	\$23.96
1	Windows 98 Bible	\$31.99	\$31.99

Subtotal: \$82.31
Priority Mail: \$11.75
Tax: \$6.38
Total: \$100.44

Rush Void Back Order
Ship Date: **Print Again**
Printed:

Trash

PDP Balance: \$0.00 8 out of 8 3 Line Items

The state for which sales tax is charged is defined in the [TaxAndTotal](#) procedure. If your company is in a different state you'll need to modify this procedure.

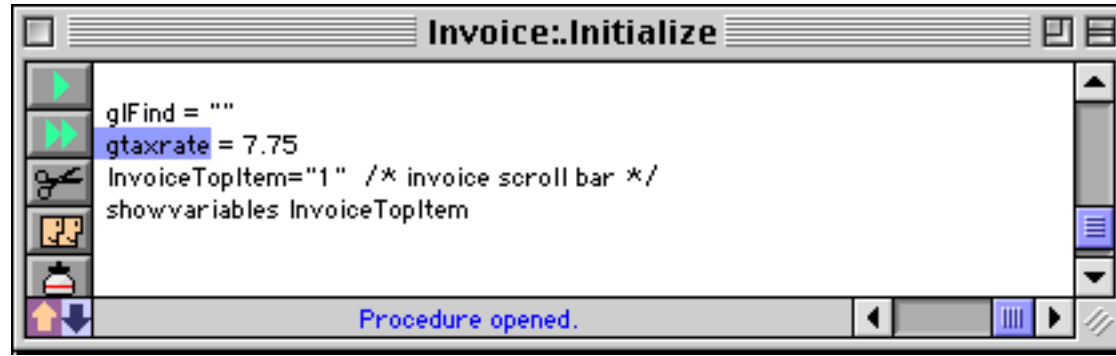
```

Invoice:TaxAndTotal
Tax=?((State="CA" and NonTaxable="" and Free="",TaxableTotal*gtaxrate)/100,0)
//Tax=?(NonTaxable="" and Free="",TaxableTotal*gtaxrate)/100,0)
Shipping=BaseShipping+(ItemShipping*ShippingFactor) + ?(PaymentMethod = "COD",4.75,0)
GrandTotal=Val(pattern(? (Free="",SubTotal+Shipping+Tax,0),"#.#*"))
If PaymentMethod contains "net" or PaymentMethod = "COD"
Balance = ?(ShipDate = 0,GrandTotal,Balance)
else
Balance = 0.0
EndIf

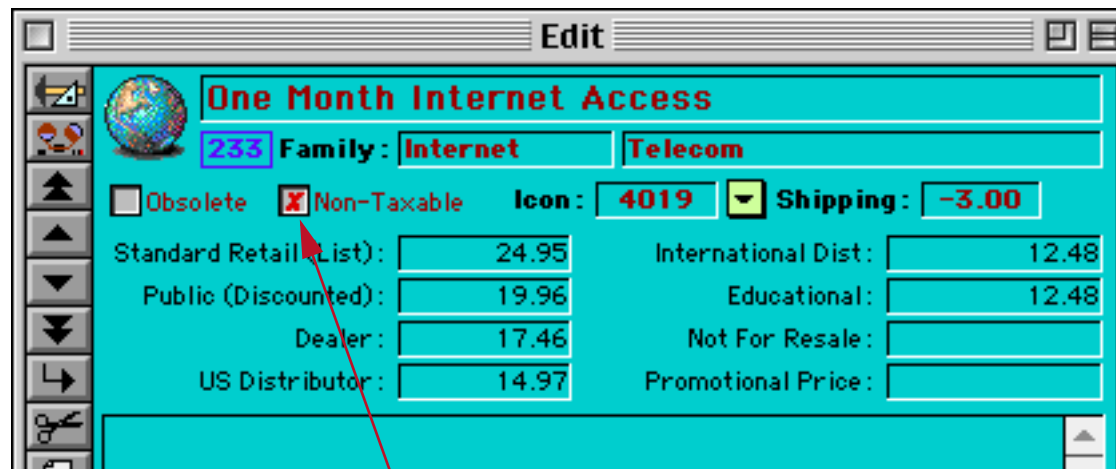
```

Procedure opened.

The sales tax rate itself is defined in the .Initialize procedure.

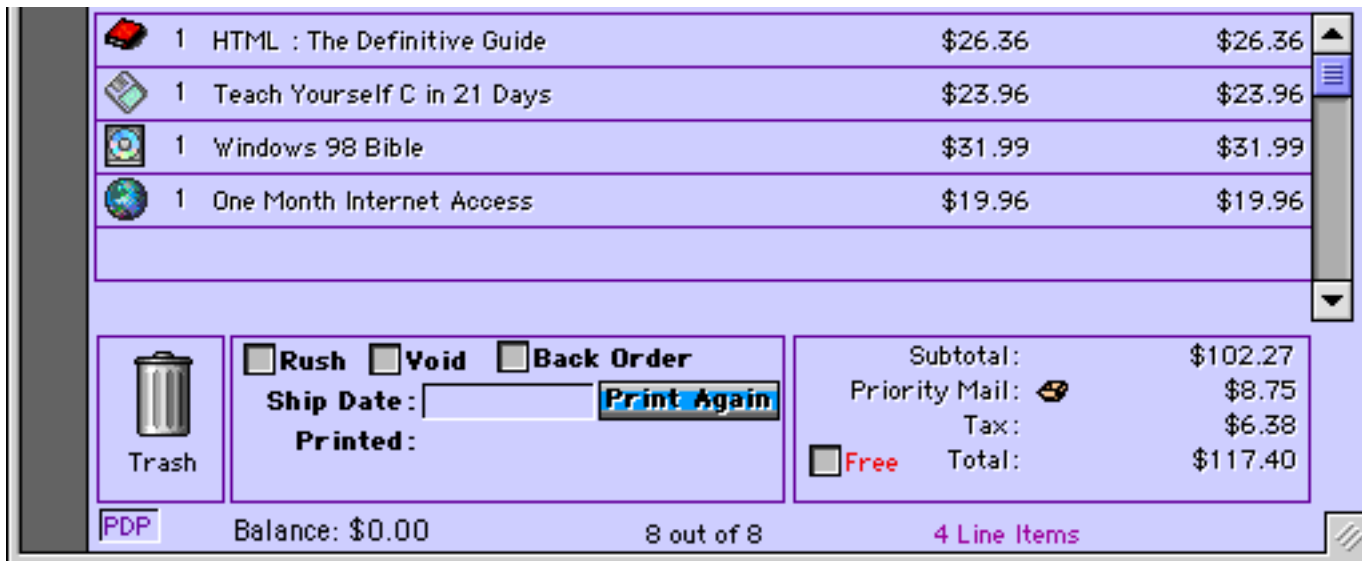


In the product database you can define an item as non-taxable.



tax should not be charged on this item

When a non-taxable item is added to the invoice that item is not included in the tax calculation.



To change the shipping method click on the tiny shipping box. You can select the shipping option from the list on the left. The system will calculate the price for you or you can manually type it in. If the customer wants to pay for the shipping directly you can enter the account number on the right.

Trash	<input type="checkbox"/> Rush	<input type="checkbox"/> Void	<input type="checkbox"/> Back Order	Subtotal:	\$102.27	
	Ship Date: <input type="text"/>	Print Again		Priority Mail:	\$8.75	
Printed:				Tax:	\$6.38	
				<input type="checkbox"/> Free	Total:	\$117.40
PDP	Balance: \$0.00		8 out of 8	4 Line Items		

Shipping Options

Shipping Options

- Priority Mail
- UPS Ground
- UPS Blue
- UPS Red
- Airborne AM
- Airborne PM
- Airborne 2nd Day

Shipping/Handling: \$35.12

Shipper Account:

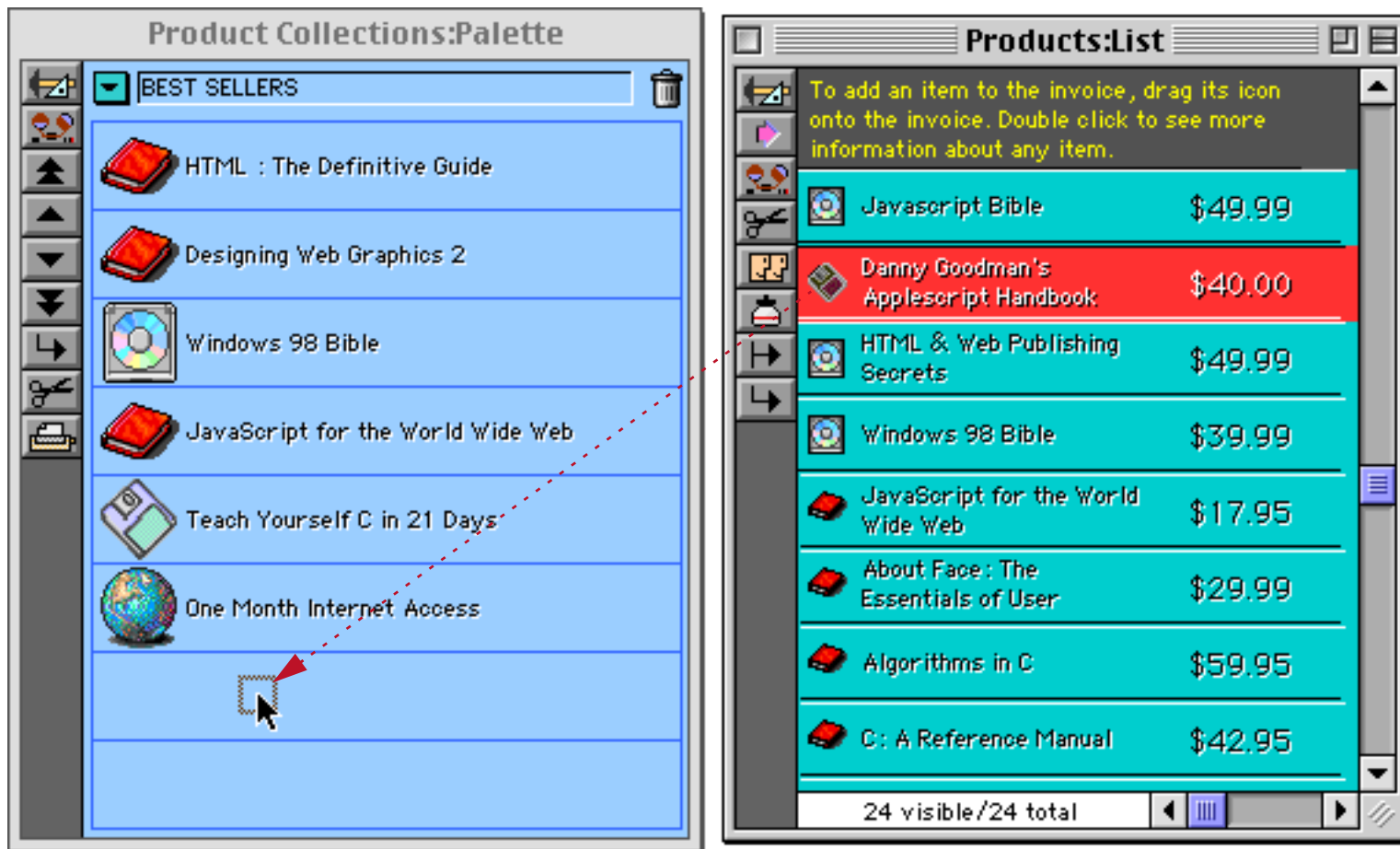
Enter the Shipper Account if you want to bill the shipping to your own account. For example, enter your FedEx or DHL account number here. Make sure you select the same shipping method from the list on the left as the shipping account number that you supply.

In some cases you may want to supply an order for no charge. To do this simply click the **Free** button.

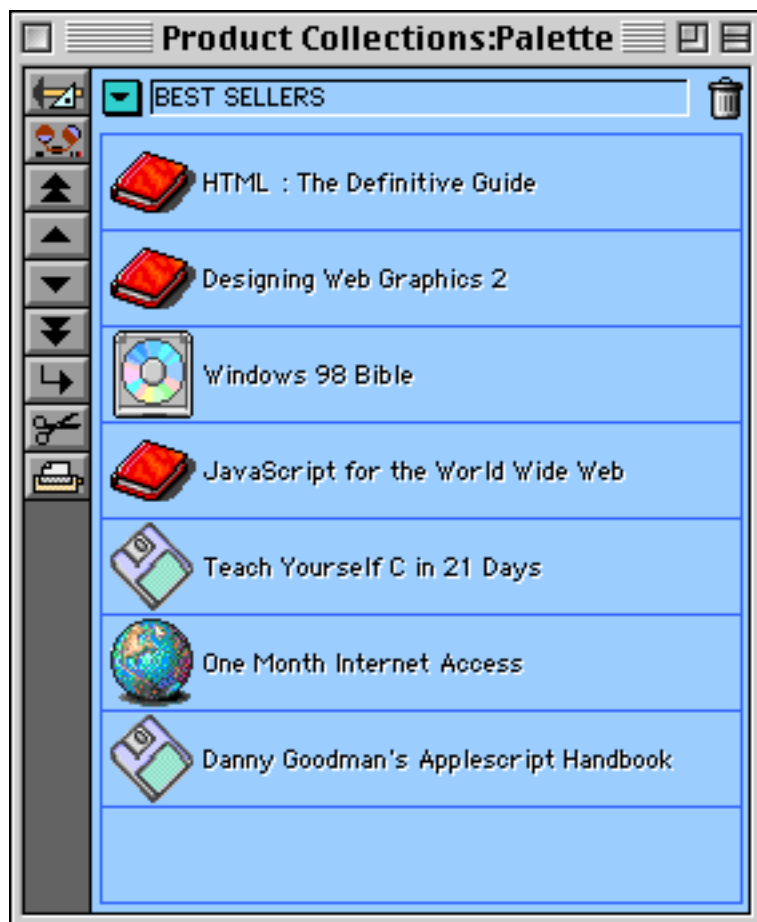
Trash	<input type="checkbox"/> Rush	<input type="checkbox"/> Void	<input type="checkbox"/> Back Order	Subtotal:	\$102.27	
	Ship Date: <input type="text"/>	Print Again		Airborne AM:	\$35.12	
Printed:				Tax:	\$0.00	
				<input checked="" type="checkbox"/> Free	Total:	\$0.00
PDP	Balance: \$0.00		8 out of 8	4 Line Items		

Adding Products to a Product Collection

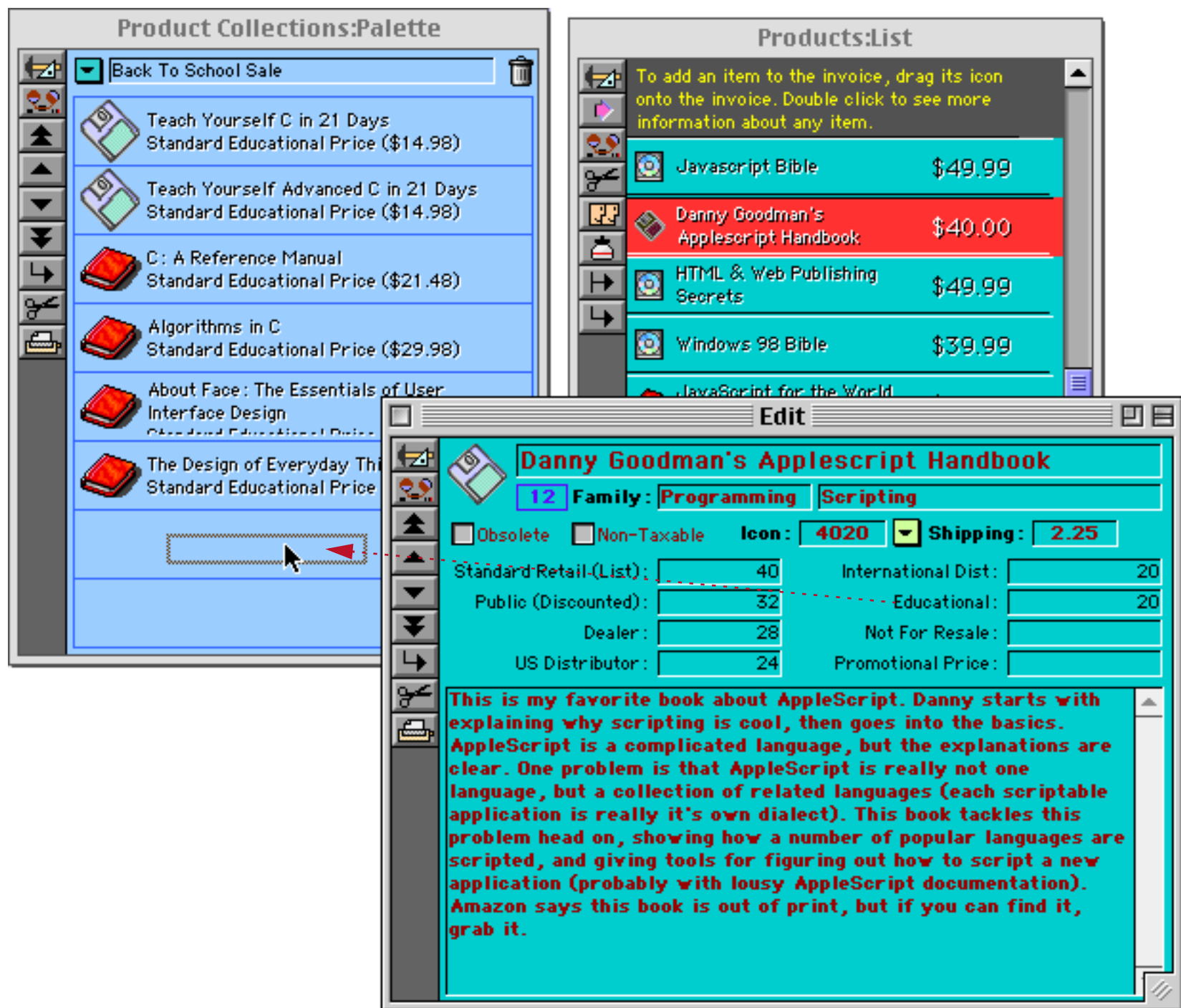
The **Product Collections** database contains lists of frequently ordered items. To add an item to a collection simply drag it from the **Product** database into the collection. (The illustration shows the item being dragged into an empty spot, but that is not necessary, you can drag anywhere in the form.)



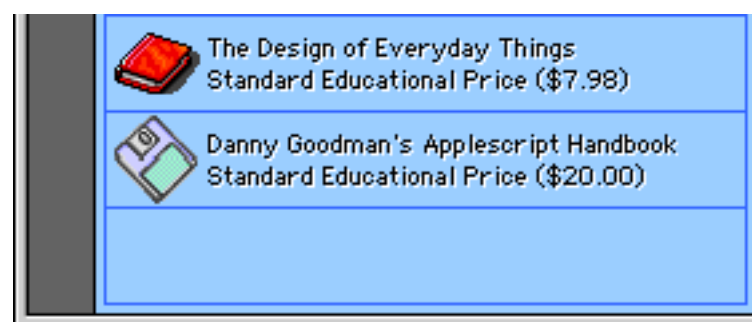
The item is added to the end of the collection.



If you open the detail window for a product (by double clicking on the product list) you can add the product to the collection with a specific price. Simply drag the price category onto the collection, in this case the educational price.



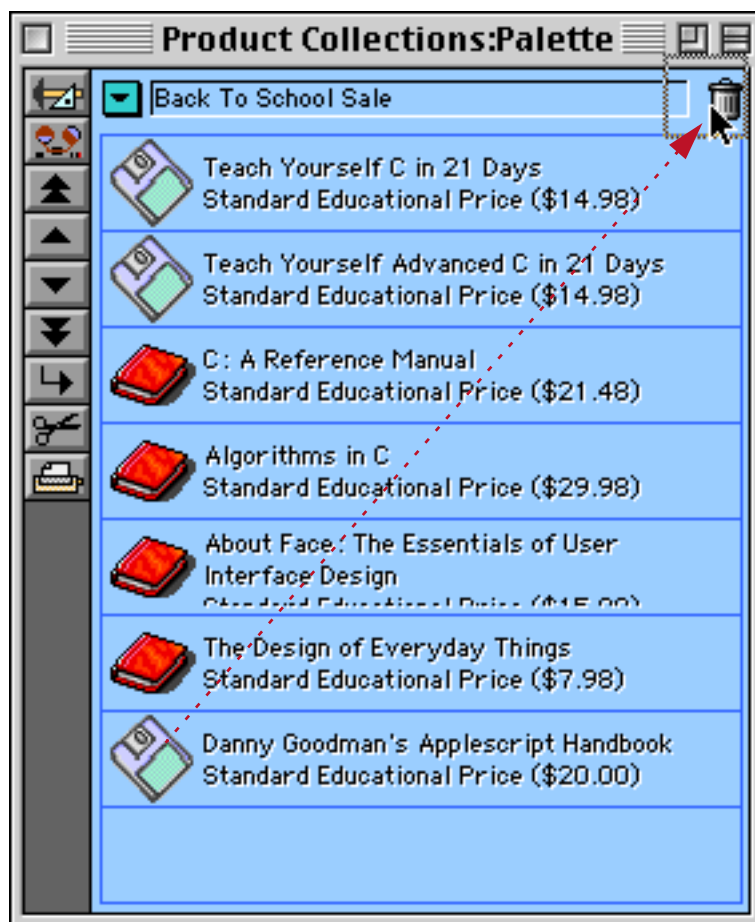
The educational price of the product is added to the collection.



If this product is dragged onto any invoice the item will appear at the educational price, no matter who the customer is. In this case the customer's normal discount level is ignored.

1	One Month Internet Access	\$19.96	\$19.96
1	Danny Goodman's Applescript Handbook	\$20.00	\$20.00

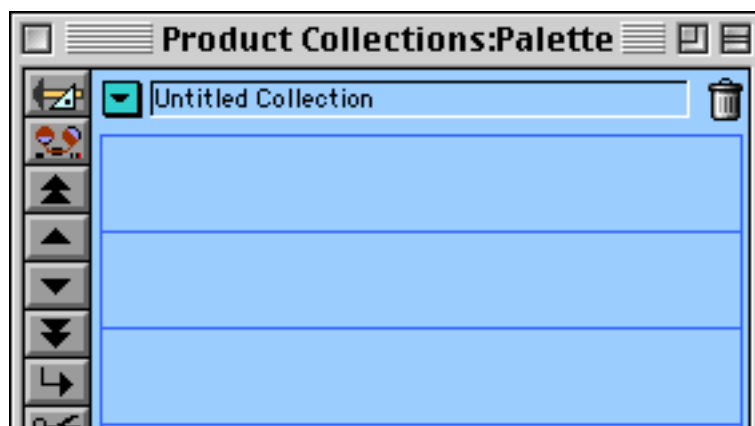
To remove an item from a collection simply drag it into the trash can at the top of the window.



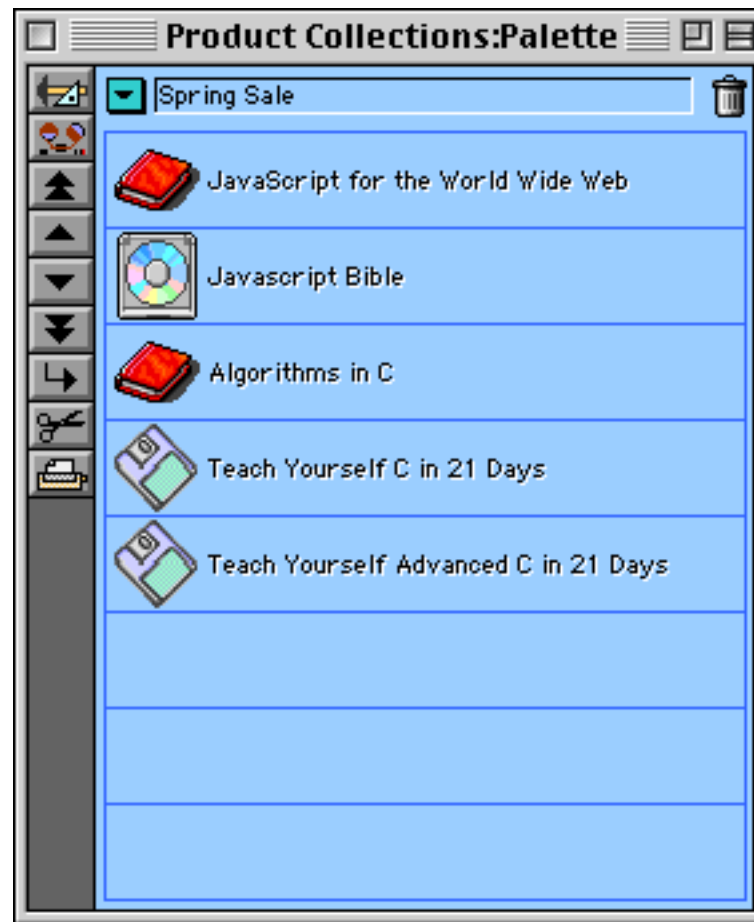
Use the pop-up menu to add a completely new collection.



The new collection is initially untitled, but you can type in any name you want.



To complete the new collection drag items from the **Products** database on to it.



Adding a New Product

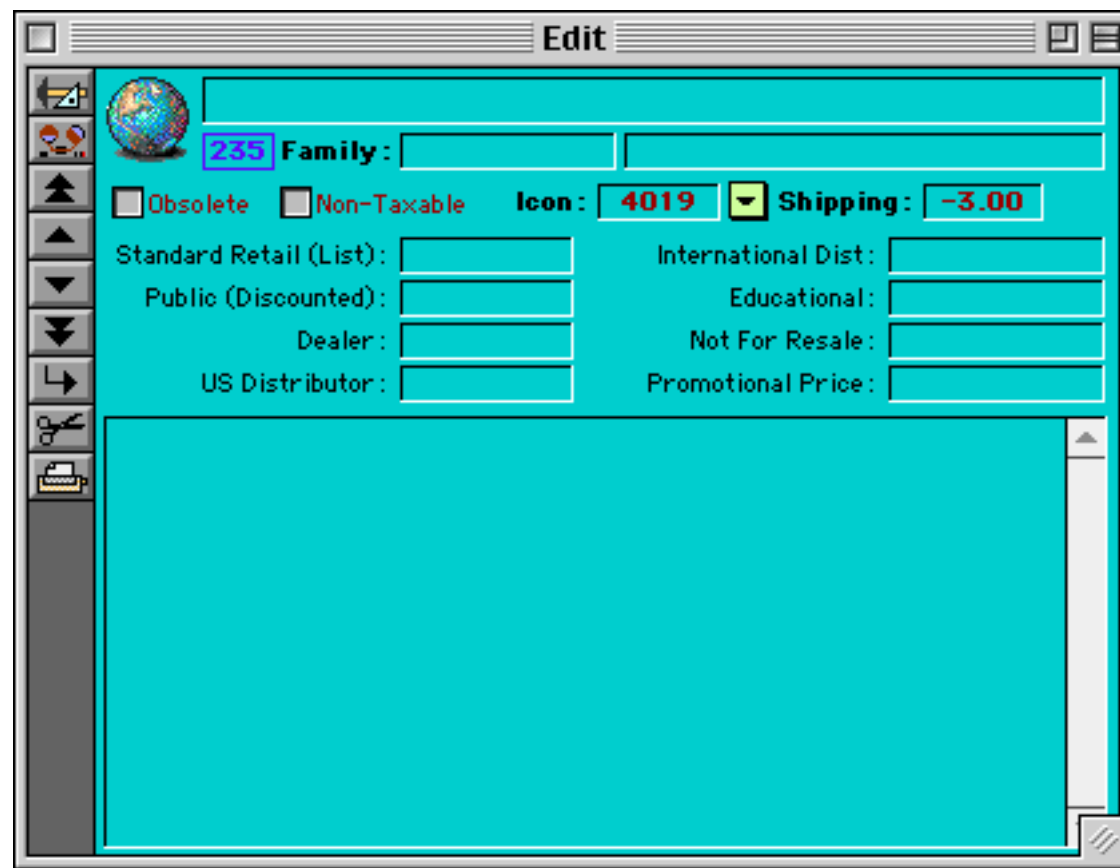
To add a new product, start by using the **Add New Record** tool.



A new, empty product is added to the bottom of the list.



Double click this empty product to open the detail window.



Enter the name, product family, subfamily, icon and shipping weight (pounds). The product number is assigned automatically (in this case 235). If the product is non-taxable click the **Non-Taxable** button.



Type in the standard retail price for the new product.

Products:Edit

APL Programming for the New Millenium

235 Family: Programming APL

Obsolete Non-Taxable Icon: 4004 Shipping: 1.50

Standard Retail (List): 24.95 International Dist: _____

Public (Discounted): _____ Educational: _____

Dealer: _____ Not For Resale: _____

US Distributor: _____ Promotional Price: _____

When you press the **Enter** key, the system asks if you would like it to calculate all of the other prices for you.

! Would you like to set other prices automatically?

No Yes

Press the **Yes** button. After a slight delay the other prices will appear. You can use these calculated prices as is or edit them for your needs.

Products:Edit

APL Programming for the New Millenium

235 Family: Programming APL

Obsolete Non-Taxable Icon: 4004 Shipping: 1.50

Standard Retail (List): 24.95 International Dist: 12.47

Public (Discounted): 19.96 Educational: 12.47

Dealer: 17.46 Not For Resale: _____

US Distributor: 14.97 Promotional Price: _____

The system as automatically added the prices to the **Prices** database for you. You don't ever need to edit this database directly.

FullCode	ProductCode	PriceCode	Price
234UDP	234	UDP	149.97
234IDP	234	IDP	124.98
234SEP	234	SEP	124.98
235SRP	235	SRP	24.95
235PDP	235	PDP	19.96
235SDP	235	SDP	17.46
235UDP	235	UDP	14.97
235IDP	235	IDP	12.47
235SEP	235	SEP	12.47

150 visible/150 total

The new product is ready to be used. Simply drag it onto the order form like any other product.

InvoiceWork 08/18/98 **Invoice 66503**

Name	MIKE CORNING
Organization	Guilford Software
Address	53 Deerhaven Mahwah, NJ 09631
Country	
Phone	(201) 877-4924
E-mail	mcorning@guilford.com
Card/Check#	
Expire/BnkID	

Notes
Private

1	APL Programming for the New Millenium	\$14.97	\$14.97
---	---------------------------------------	---------	---------

Rush Void Back Order
 Ship Date: **Print Again**
 Printed:

Subtotal: \$14.97
 Priority Mail: \$4.50
 Tax: \$0.00
 Free Total: \$19.47

UDP Balance: \$0.00 9 out of 9 1 Line Items

Of course you can also add the new product to the [Product Collections](#) database.

Learning More About the ProVUE Order Entry System

To learn more about this order entry system you can purchase our ProVUE 98 and ProVUE 99 CD-sets.



The ProVUE 98 set contains a session showing how this system was built. The ProVUE 99 set shows how to add an on-line shopping cart to this order entry system, allowing users to enter their orders automatically over the web. Update: These CD-sets are no longer available.