



**Welcome
to the ARPEGGIO™
Information Publisher**

Welcome to the ARPEGGIO Information Publisher

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Preface

What is this Guide about?

This Guide introduces the main concepts and primary tasks associated with the ARPEGGIO product suite.

Who should read this?

Welcome to the ARPEGGIO Information Publisher is for those who are:

- Evaluating the product
- Using an ARPEGGIO product for the first time

How is it organized?

This Guide provides information first to the mainstream business users and then to the power users. Chapters 3 and 4 (the Report Viewer and Data Organizer) explain how to use predefined reports, queries, and transfers. Chapters 5 and 6 (Data Access and the Report Designer) instruct power users in how to create queries, transfers, and reports.

In contrast, the following table lists major activities and their tasks **in the order in which they are most frequently performed.**

Activities/Tasks	Chapter
Installing ARPEGGIO software	2 Installing ARPEGGIO software
Working with ARPEGGIO Reports Connecting to a data source Creating a report Distributing reports Running predefined reports Incorporating reports into applications	6 Report Designer 6 Report Designer 6 Report Designer 3 Report Viewer 7 Custom Applications
Working with ARPEGGIO Data Access and Data Organizer Connecting to a data source Building SQL queries and data transfers Distributing predefined reports, transfers, and queries in Data Organizer documents Displaying data from predefined Data Access queries in your favorite PC application Incorporating ODBC drivers into applications	5 Data Access 5 Data Access 4 Data Organizer 4 Data Organizer 7 Custom Applications

Chapter 1

What is ARPEGGIO Software?

In today's highly competitive business environment, decision makers at all levels need ready access to corporate information. For example:

- Marketing managers need customer activity information to track the effectiveness of advertising strategies.
- Sales managers need up-to-the-minute information to measure and report on performance.
- Financial executives need summary accounting information to prepare reports and analyze corporate strategies.

In trying to meet the increasing demands of their users, and the drive for greater productivity and profitability, MIS departments are finding themselves stretched to the limit. What they need is an information access system that gives the mainstream business users the ability to access data without any knowledge of programming languages or SQL. One that enables power users to customize queries and reports and publish them across the enterprise. One that gives professional developers the tools they need to integrate data access and publishing capabilities into custom applications.

To meet the information access and publishing needs of today's corporate decision makers, Wall Data has created an innovative suite of products under the ARPEGGIO™ brand. ARPEGGIO software enables business users at all levels to unlock information wherever it resides in the corporate enterprise and publish it across the corporate network (via LANs, intranets, the Internet, printer, fax or e-mail).

This chapter covers the following topics:

- ARPEGGIO product family
 - ARPEGGIO components:
 - ARPEGGIO help system
-

ARPEGGIO product family

The ARPEGGIO product family makes it easy for business users to access enterprise data, convert it into useful information, and publish it to others.

ARPEGGIO Viewer

The Business Information Viewer: The ARPEGGIO Viewer gives business users access to specific business information with point-and-click simplicity. They can view predefined queries, data transfers, and reports. The Data Organizer utility feature makes it easy to customize all each users's workspaces with the queries, transfers, and reports related to their jobs. The queries, transfers, reports, and other files are created by others using ARPEGGIO For The Desktop and ARPEGGIO For The Developer.

ARPEGGIO For The Desktop

The Business Information Publisher: ARPEGGIO For The Desktop enables business users to take control of valuable data stored throughout the corporation, turn it into **usable** information, and publish it throughout the company corporate enterprise. In using ARPEGGIO Data Access and Report Designer, business users can create their own data queries and file transfers and custom design their own reports.

ARPEGGIO For The Developer

Customized Business Information: ARPEGGIO For The Developer enables professional developers to seamlessly integrate data access and publishing capabilities into custom applications programmed in languages such as C, C++, PowerBuilder[®], Delphi, and Visual Basic[®]. It includes the ARPEGGIO For The Desktop components, plus APIs that allow programmatic access to the Report Designer[®] and Report Viewer. It also includes the RUMBA[®] ODBC Driver for DB2[®] API, which developers can incorporate into any custom ODBC application.

ARPEGGIO components:

All of the ARPEGGIO components communicate directly with the data sources in your network environment, always allowing access to the most current data you need and use.

Report Viewer

The ARPEGGIO Report Viewer displays predefined ARPEGGIO reports created by report developers with ARPEGGIO For The Desktop or ARPEGGIO For The Developer. With the Report Viewer, you can preview data by simply clicking an icon. ARPEGGIO reports always retrieve the most current data from the data sources in your company.

Data Organizer

The ARPEGGIO Data Organizer is a versatile tool that PC users at all skill levels can take advantage of.

Use the Data Organizer if you want to simply view and use preselected information. You can work with predefined Data Access queries and transfers, predefined ARPEGGIO reports, and other PC files. The Data Organizer provides instant point-and-click access to data stored on data sources, as well as data stored in PC files throughout your network.

You can also use the ARPEGGIO Data Organizer to distribute the ARPEGGIO reports, and ARPEGGIO Data Access queries and transfers, that you create. The Data Organizer also enables you to build and run batches that automate data retrieval and publishing.

Data Access

ARPEGGIO Data Access is an easy-to-use tool you use to view, manage, and move data in the corporate environment. With Data Access, you can view the data, such as database tables and procedures that are stored on your data sources. Using Data Access builders and tools, you can create your own queries that search for specific data, or transfers that move data between a data source and your PC. The intuitive user interface of Data Access makes query building and file transfer easy. With Data Access, you can also import data into your favorite PC applications, where you can edit and work with the data any way you like.

Data Access also enables you to create custom data source views that display only the data views you want to work with. Moreover, you can then save these custom views in Data Access profiles and distribute them to other users throughout the company throughout the company. Or, you can use the Data Organizer to distribute custom data views in addition to queries and data transfers.

You can further customize your queries by simply dragging and dropping the Data Access query onto the Report Designer. Using the Report Designer, you turn a data query into a formatted report.

Report Designer

The ARPEGGIO Report Designer is an information access and reporting tool that enables you to produce publication-quality reports, to select, analyze, summarize, and present data from commonly available data sources or from Data Access queries. A Report Designer report is a custom layout and presentation of data drawn from one or more tables. This layout can take the form of a customer list, sales analysis, invoice, form letter, mailing labels, or project schedule, to name just a few examples.

Using the Report Designer, you can format your data for corporate-quality presentation. With drag-and-drop simplicity, you can move text and data freely around the screen. You can apply fonts and styles to selected areas of the report. You can easily incorporate calculations, totals, conditional processing, and make use of many other functions. You can also preview the report on screen at any time, print it, export it to another format, or save the report output to a disk file.

You can distribute your ARPEGGIO reports to other users either as individual report files or as objects in a Data Organizer file. Any other ARPEGGIO software user can run the reports and always see the most current data.

ARPEGGIO help system

The ARPEGGIO help system consists of both Help Desk and WinHelp help files. These files are listed in Table 1-1.

Component	Icon name	Help format
Data Access	ARPEGGIO Help Desk	Help Desk
Data Organizer	ARPEGGIO Help Desk	Help Desk
Report Designer	ARPEGGIO Report Designer Help	WinHelp
Report Viewer	ARPEGGIO Report Viewer Help	WinHelp

Table 1-1 List of online help sources

Note: Depending on the ARPEGGIO product you installed and/or the nature of your install, you may not have all of the applications listed in the Table 1-1.

There are two ways to access a WinHelp file:

- From the Start menu, click the specific help file icon (all WinHelp files are designated by a question mark) in the ARPEGGIO program folder (Microsoft® Windows® 95 and Windows NT™ 4.0), or choose the help icon from the ARPEGGIO group (Windows NT 3.51).
- From the application's main menu, click Help.

There are two ways to access the Help Desk:

- From the Start menu, click the Help Desk icon in the ARPEGGIO program folder (Microsoft Windows 95 and Windows NT 4.0), or choose the help icon from the ARPEGGIO group (Windows NT 3.51).
- From the application's main menu, click Help.

Quick tour of Help Desk

You start the Help Desk by double-clicking the Help Desk icon from the ARPEGGIO program folder.

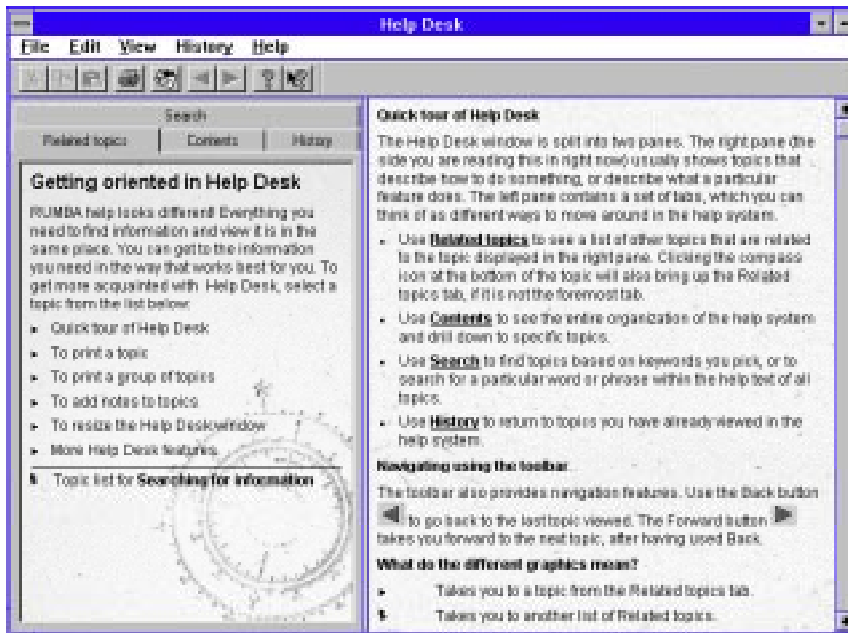


Figure 1-1 ARPEGGIO Help Desk





The Help Desk window is split into two panes. The right pane usually shows topics that describe how to do something or describe what a particular feature does. The left pane contains a set of tabs at the top, which you can think of as different ways to move around in the help system. The content in the left pane is determined by the tab you select.

- Use the **Contents** tab to see the entire organization of the help system.
- Use the **Search** tab to find topics based on keywords you pick or to search for a particular word or phrase within the help text of all topics.

- Use the **Related topics** tab to see a list of other topics that are related to the topic displayed in the right pane. You can click on the compass icon at the bottom of the topic to see the Related topics tab.
- Use the **History** tab to view a list of topics you have viewed during the current session and return to any topic in this list.


Navigating using the toolbar

The toolbar provides additional navigation features. Use the Back button to regress to the last topic viewed. The Forward button returns you to the most recent topic.

Icon	Definition
	Takes you to a topic from the Related topics tab.
	Takes you to another list of Related topics.
	Takes you to a different topic in the right pane, usually one that explains more about the topic you are reading.
	Brings the Related topics tab to the front if it is not already the foremost tab. This graphic also is displayed in the <i>What's this?</i> help from dialog boxes. Clicking it opens the Help Desk to a topic with more information.

Conventions Used in This Guide

The following table lists the conventions used in this Guide.

Convention	Definition
Italics	Italicized words represent terms and concepts specific to the ARPEGGIO product. Glossary definitions for italicized words are located at the back of this Guide.
Note:	A note provides important information or material of interest.
	This graphic points to additional information. This information can be located in this Guide or in the ARPEGGIO online help system.

Chapter 2

Installing ARPEGGIO software

Installing ARPEGGIO software is simple. The Setup program asks you questions and installs ARPEGGIO software according to your answers. You can modify your installation to add or remove ARPEGGIO components as your needs change.

This chapter provides details on:

- System specifications
- Instructions for installing ARPEGGIO software
- Additional information about installing ARPEGGIO software

System specifications

Your workstation needs to meet certain hardware requirements in order for ARPEGGIO software to function properly. You may also need software to connect to your data source if that is not included with ARPEGGIO software. This section provides details on these two requirements:

- Required workstation environment
- Data source support

The information on workstation environment requirements and supported data sources is subject to change. For the most current data available regarding ARPEGGIO software, consult the ARPEGGIO section of the Wall Data home page on the World Wide Web (<http://www.walldata.com>).

Information about technical support options is also provided in the ARPEGGIO online help.

Required workstation environment

The following list represents the minimum requirements for a workstation when ARPEGGIO software is installed.

- Personal computer with a 386DX or higher processor
- Microsoft® Windows® 95 or Windows NT™ workstation 3.51 or greater
- 8 MB of memory for Windows 95; 16 MB of memory for Windows NT
- Typical available hard disk space required 20-30 MB
- VGA or higher resolution graphics card
- Mouse or compatible pointing device

Data source support

There are many different kinds of Data Sources that are supported by ARPEGGIO software. To connect to a remote data source requires three different components working together:

- Database Driver—options are listed in Table 2-1
- Connectivity option—options are listed in Table 2-2
- ODBC API—options are listed in Table 2-3

Database drivers

The following table provides information on the currently available database drivers and the databases they support.

Driver	Database
Btrieve®	Supports Btrieve version 5.0 and higher.
DB2/2™	Supports DB2 for OS/2® and DB2 for Windows NT, DB2/6000™, and through DDCS or DDCS/5000 gateway: SQL/400®, MVS® DB2, and SQL/DS™.
DBASE	Supports dBASE® III, dBASE IV, dBASE V files, Clipper files, FoxPro®, and FoxBASE® files.
Excel	Supports Excel versions 2, 3, and 4.
Excel5	Supports Excel version 5.
FoxPro®	Supports FoxPro 3.0 database containers. Note that the FoxPro 3.0 driver functionality is also built into the dBASE drivers.
INFORMIX®	Supports the INFORMIX database system using version 5.x of the INFORMIX-Net or INFORMIX-Star product.
INFORMIX7	Supports the INFORMIX database system using version 7.x of the INFORMIX-Net or INFORMIX-Star product.
INGRES™4	Supports INGRES 6.4/04.
Micro Decisionwear	Through the Micro Decisionware Gateway, supports DB2 and InfoHub.
OpenIngres	Supports INGRES 6.4/04.
ORACLE7®	Supports ORACLE version 7.
Paradox®	Supports Paradox versions 3.0, 3.5, 4.0, 4.5, 5.0, and 7.0 tables.
SQLBase™	Supports the Gupta SQLBase database system and Gupta SQLHost gateway to DB2.
SQLServer6	Supports the SLQ Server database system version 6 from Microsoft and the Sybase® Net gateway.
Sybase System10	Supports the System 10 database system from Sybase.
Visual FoxPro™	Supports Visual FoxPro 3.0 database containers.

Table 2-1 ARPEGGIO database drivers

Connectivity options

ARPEGGIO software supports the following connectivity options.

Option	Component
RUMBA® Router	DFT, DLC for Token Ring and Ethernet™
Microsoft SNA® Server	Microsoft SNA Client

Table 2-2 Supported Connectivity Options

Microsoft ODBC APIs

ARPEGGIO software supports all Core Level I 1 and II applications, including:

Vendor	Product
Borland	Delphi 2.0
Microsoft	Excel 7.0, Access 7.0, Visual Basic® 4.0, Visual C++™ 4.0, Visual FoxPro™ 3.0
IBM	Lotus® 1-2-3 Release 5, Lotus Notes® Release 3, PowerBuilder® 4.0

Table 2-3 Supported ODBC APIs

Instructions for installing ARPEGGIO software

This section provides step-by-step procedures for installing ARPEGGIO software. This information applies to a first-time installation from a CD or from a LAN server.

Note: To receive ARPEGGIO software on diskettes, fill out the diskette distribution request postcard and return it to Concentric. To install from diskettes, follow the instructions for installing from a CD.

How to install ARPEGGIO software from a CD

To install from a CD, follow these steps:

1. Insert the CD in the drive.

The installation program usually runs automatically when the CD is inserted. If not, run **setup.exe** in the root directory of the CD.

When installing from diskette, you need to run **setup.exe** on disk 1. You are prompted to insert additional diskettes.

2. Type your serial number and product key.
3. Read and accept the Software License Agreement.
4. Accept the defaults, or type the user and company name.
5. Select an installation type: Custom, Minimal, or Express.
If you choose Express, proceed to step 7.
6. Add or Remove ARPEGGIO software components as necessary.
7. Accept the defaults, or type the location for the Destination, Private, and Interface directories.

Note: If you have RUMBA software or ARPEGGIO software installed on your workstation, you cannot change the destination, private, or interface directories.

8. Register your ARPEGGIO product.

When you choose to register online you can also print out a form that you can use to mail your registration.

How to install ARPEGGIO software from an ARPEGGIO LAN server

To install from an ARPEGGIO LAN server, ask your system administrator on which network server the ARPEGGIO Setup directory is located, and then follow these steps:

1. Connect to the appropriate network server.
2. From the network server, run **setup.exe**.
3. Accept the defaults, or type the user and company name.

4. Accept the defaults, or select the components you do not need to install.
5. Accept the defaults, or type the location for the Private and Interface directories.

Note: If you are prompted for a product key, consult your system administrator. You may need to follow the instructions for installing from a CD.

Additional information about installing ARPEGGIO software

We provide two additional resources to help you install and configure ARPEGGIO software:

- ARPEGGIO Setup Help
- ARPEGGIO Getting Started Guide

ARPEGGIO Setup Help

ARPEGGIO Setup Help provides specific procedural information about installing, updating, and upgrading ARPEGGIO software. Most dialog boxes displayed by Setup contain a Help button. Click Help to start Setup Help.

Use Setup Help to answer your questions about the Setup procedures you need to follow when you:

- Install ARPEGGIO software for the first time
- Modify your ARPEGGIO software installation
- Update your ARPEGGIO software
- Upgrade your ARPEGGIO software
- Uninstall ARPEGGIO software

Tip: You can also start Setup Help by running **setup.hlp**. This file is located in the \Setup\mri(n) directory (where n=language code, mri2924=English).

ARPEGGIO Getting Started Guide

The ARPEGGIO Getting Started Guide is provided in two forms: as online help and as an Adobe® Acrobat® document. To view the Getting Started Guide, click the Getting Started button in the initial dialog box displayed by ARPEGGIO Setup.

To view the Getting Started Guide in Adobe Acrobat format, follow the instructions contained in the online help Getting Started Guide.

Use the Getting Started Guide when you want to learn more about:

- Planning your ARPEGGIO software installation
- The process of installing ARPEGGIO software
- Advanced options you can use to install ARPEGGIO software

Tip: After ARPEGGIO software is installed, you can view the Getting Started Guide by selecting its icon from the ARPEGGIO Administrative Tools folder.

You can also view the online help version of the Getting Started Guide by running **gshelp.hlp** in the \Setup\mri(n) directory (where n=language code, mri2924=English).

Chapter 3

Report Viewer

With ARPEGGIO Report Viewer, you can view and print predefined Report Designer reports. You can run reports exactly as they were defined in Report Designer, or you can override one or more characteristics of each saved report. As long as the data source definitions for any databases used by the reports you will be running are correctly configured on your system, Report Viewer will connect to the proper database when you run a report.

To make running reports even easier, you can use the Report Shortcut Maker utility to create a shortcut icon for each report. You can group related reports into folders and run reports simply by double-clicking on the appropriate icons.

Additional flexibility in controlling report output is provided through the use of a *control file* to modify a wide range of report characteristics (or, with ARPEGGIO For The Developer, through a programming interface using the Viewer DLL or Custom Control). For example, you can use a control file to override portions of the SELECT statement for the report, the *filter* saved with the report, or the report's output destination.

This chapter covers the following information:

- Prerequisites
- Overview of Report Viewer
- Running reports with Report Viewer
- Creating a report shortcut

Prerequisites

Before running reports with the Report Viewer, first make sure that your PC has been properly set up:

- The Report Viewer must be installed, and the predefined reports you want run, as well as all data files required by those reports, must be accessible.
- Data sources for each of the ODBC drivers used by the reports must have been defined.
- All files required for connecting to the target database must be installed.
- You must have all appropriate permissions to connect to the server and the database.

Overview of Report Viewer

When you run an ARPEGGIO report with the Viewer, you can preview, print, or export report data. Buttons at the top of the Viewer window (see Figure 3-1) enable you to page forward and backward through a multi-page report, magnify portions of the page, print the currently displayed page or the entire report, and pause or cancel the preview.

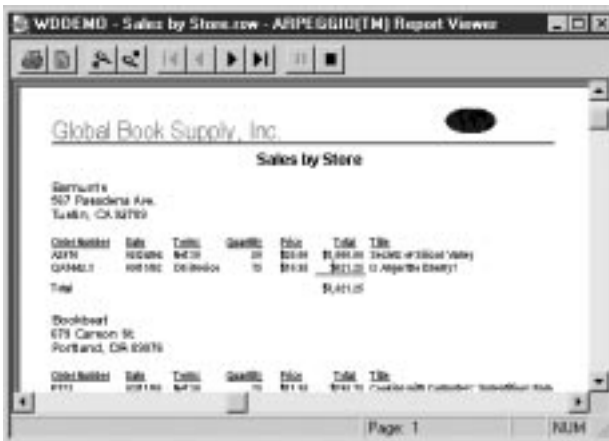


Figure 3-1 Report Viewer Preview display

Running reports with Report Viewer

You can run a report with Report Viewer in any of the following ways:

- Double-click the ARPEGGIO Report Viewer icon and select a report from those listed.
- Drag and drop a report file onto the Report Viewer icon.
- Double-click a report shortcut icon.
- Double-click a report file (for example, in Windows Explorer).
- Double-click a report file stored in a Data Organizer file.
- Enter a command-line prompt.

When you start Report Viewer by double-clicking the Viewer icon, a dialog box lists all report files in the default report folder.

To use Report Viewer to run and view a predefined report:

1. Start the Report Viewer by double-clicking the Report Viewer icon in the ARPEGGIO folder. The Open Report dialog box lists all predefined reports in the default report folder.
2. Highlight the name of the report you want to run (or navigate to a different folder and highlight the appropriate report), and click Open.
3. Preview and print the report.

When you run a report in this manner, the report is run exactly as it was defined in Report Designer. If you want to modify some report characteristics, you can create either a database file or a text file to serve as a control file. You can find complete instructions on creating and using a control file in the Report Viewer help file.

Note: When you highlight a report on the Open Report dialog box, the Data Source box identifies the data source used to define the report in Report Designer. You can select a different data source — for example, a similarly configured data source with a different name, or a data source that points to data in a different folder — as long as the new data has the same structure as the original data.



For more information about using the Report Viewer, type any of the following search terms in the Index tab of the Report Viewer Winhelp file:

executing the viewer

preview window

using control tables and files

Creating a report shortcut

Use the Report Shortcut Maker utility (see Figure 3-2) to make a shortcut to any report. This utility creates program icons that will reside on your desktop or in the folder of your choice. You can then simply double-click an icon to run a report.

When you create a report shortcut, you can specify several actions to occur when the shortcut is run:

- In the Output Destination box, you can specify whether to preview the report before printing it. Select **Preview Before Print**, **Print Without Preview** (report goes directly to the printer), or **Prompt** (choice of previewing or printing directly can be made when the report is run).
- In the User Prompts box, you can specify that the print dialog box be displayed when the report is run to enable selection of a different printer.
- Also in the User Prompts box, you can specify that the Insert Condition dialog box be displayed. Using this dialog, you can add or modify a report filter to limit the range of records that Report Viewer will retrieve.

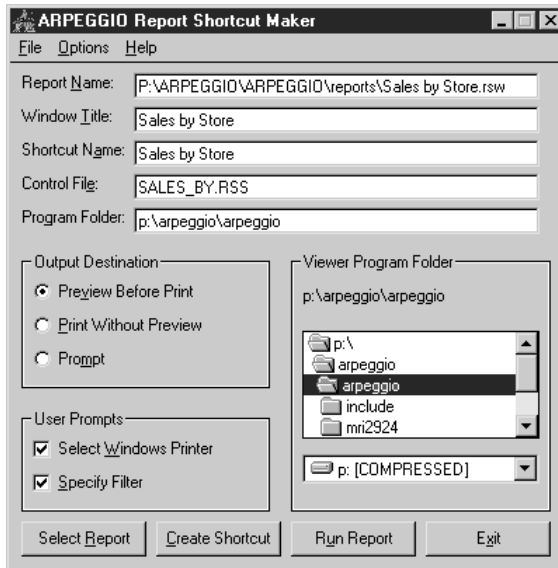


Figure 3-2 Report Shortcut Maker dialog box

To create a shortcut for quick access to a report:

1. Start the Report Shortcut Maker by double-clicking the Report Shortcut Maker icon in the ARPEGGIO Folder.
2. Click Select Report and double-click any report in the Open Report window to select it.
3. Optionally, you can enter new settings for Window Title, Shortcut Name, and Program Folder.
4. Click Create Shortcut to create the shortcut icon.



For more information about additional information about creating report shortcuts, see the Shortcut Maker online help file (**rswicon.hlp**). When running the Shortcut Maker, you can press F1 to run this help file.

Chapter 4

Data Organizer

Data Organizer is an application that provides business users point-and-click access to the queries, transfers, and reports created by power users in the Data Access and Report Designer applications.

This chapter introduces all users to the following basic tasks:

- Where do I start with Data Organizer?
- Opening your first Data Organizer document
 - Understanding elements of Data Organizer
 - Displaying and printing data using your favorite PC applications
 - Running queries , reports, and transfers

This chapter introduces power users to the following tasks:

- Creating Data Organizer documents
- Distributing Data Organizer documents

Where do I start with Data Organizer?

Where you start with Data Organizer depends on what type of user you are.

- Power users start by grouping related *objects*, including queries, transfers, and reports, into *Data Organizer documents*, and distributing those documents to business users.
- Business users start by opening a Data Organizer document and immediately working with the predefined queries, transfers, and reports created by the power user.

Opening your first Data Organizer document

Prerequisites

Before you can work with a Data Organizer document, your system administrator needs to do the following:

- Install the Data Organizer and Report Viewer applications on your PC.
- Install the appropriate ODBC drivers required to connect to the data sources in your network environment on your PC.
- Provide access privileges for the data sources to which your Data Organizer documents connect.

Where do I start?

You start by double-clicking the icon of the Data Organizer document that you want to work with. All Data Organizer documents use the **.dbo** file extension.

Data Organizer opens and displays the contents of the Data Organizer document.

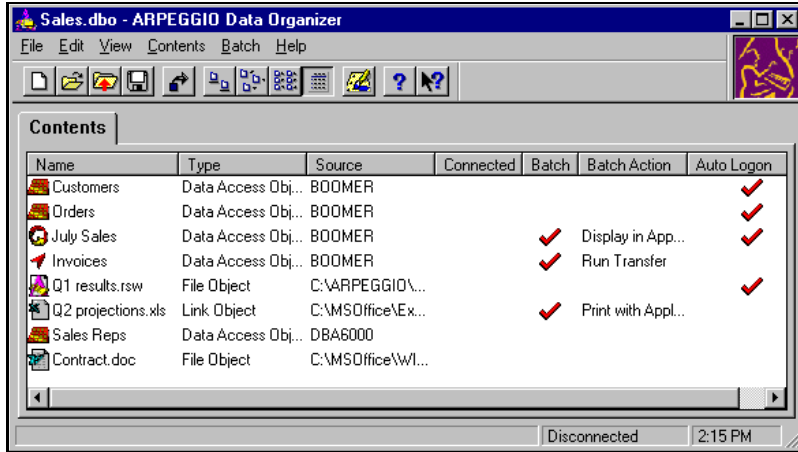


Figure 4-1 The Data Organizer window

A Data Organizer document stores a group of objects. The Contents tab displays all of the objects stored in your Data Organizer document. You work with an object by right-clicking the object and choosing commands from a *popup menu*. Each object's popup menu provides commands specific to that particular object.

In Data Organizer, you use objects to:

- Connect to a source and work with the latest data stored on a *data source* or in a PC file
- Browse records stored in a *table*
- Run *reports, queries, and transfers*
- Work with data stored in spreadsheets, text documents, and other PC files

For example, in Figure 4-1, the July Sales object is a query that connects to a data source and finds all of the current sales data from the month of July. You can preview the July sales data within the Data Organizer window, or you can send the data to a favorite PC application, by right-clicking the query and choosing the appropriate command from the popup menu.

Understanding elements of Data Organizer

The Contents tab displays important information about each object stored in your Data Organizer document, including the type of object, the source of the object's data, and whether the object is included in a *batch*.

- The Type column shows whether an object is associated with a data source or a PC file. Data Access objects, such as the July Sales query shown in Figure 4-1, retrieve data from a data source. *File objects*, such as the **Contract.doc** object, open a read-only copy of a PC file. *Link objects*, such as the **Q2 projections.xls** object, open a PC file, and allow you read and write privileges.
- The Source column shows the data source or PC file to which an object connects, and the Connected column shows whether the object is currently connected to its source. In Figure 4-1, the Customers table connects to a data source named BOOMER, and the Sales Reps table connects to a data source named DBA6000. The **Q2 projections.xls** object opens an Excel document named **Q2 projections.xls**, stored in C:\MSOffice\Excel\Documents.
- The Batch column shows which objects are included in a batch, and the Batch Action column shows what each object is set to do when the batch runs. A batch is a group of objects that run automatically, one after the other. The batch in the Data Organizer document, shown in Figure 4-1, displays the July Sales query data in a PC application, runs the Invoices transfer, and prints the **Q2 projections.xls** PC file.
- The Auto Logon column shows a check mark for objects that are set to log onto a data source automatically. Objects that do not have a check mark in the Auto Logon column require the user to type a user ID and password each time the object connects to the data source.



For additional information about working in the Data Organizer window, type the following search term in the Search tab of the Help Desk.

Data Organizer, overview

Displaying and printing data using your favorite PC applications

When you right-click a Data Access object, such as the July Sales query or the Customers table shown in Figure 4-1, the popup menu includes the following commands:

- Display in <application>
- Print with <application>

You can use these commands to work with data locally and to take advantage of your favorite features in other PC applications. For example, if you display the July Sales query, in Microsoft Excel, you can create charts and graphs based on the data the query retrieves. If you display the Customers table, in Microsoft Word, you can create mail merge documents using the address data stored in the table.

Choosing the Display or Print command

To print or display data:

1. Right-click the object.
2. From the popup menu, choose Display in <application> or Print with <application>.

The specific application that appears on the object's popup menu depends on the object's property settings. The default application is the application that your Windows system associates with the **.txt** file extension, such as Notepad or Wordpad. In an object's Properties dialog box, you can specify an alternate application, such as Excel, in the Display/Print Application box.

Selecting a Display/Print Application

You select a Display/Print Application in the PC Destination tab, found in the object's Properties dialog box. Figure 4-2 shows the PC Destination tab in the July Sales query's Properties dialog box, where the current Display/Print Application is set to Excel.

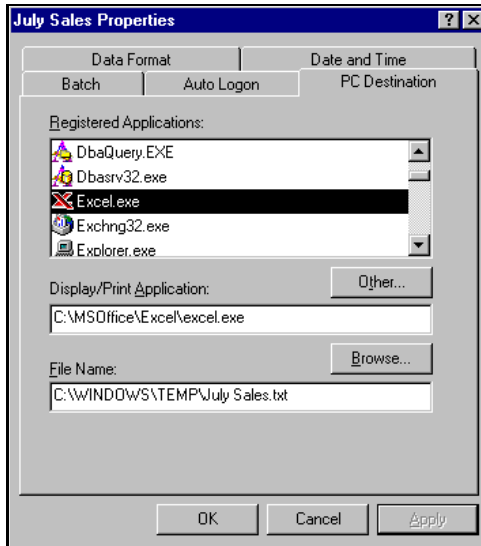


Figure 4-2 The PC Destination tab

To select a display or print application:

1. Right-click the object.
2. From the popup menu, choose Properties.
3. Click the PC Destination tab.
4. In the Registered Applications box, select a PC application.
5. Click OK to exit the Properties dialog box.

The selected Display/Print Application displays on the object's popup menu. The PC Destination settings shown in Figure 4-2 specify that the display and print commands on the July Sales query's popup menu say Display in Excel, and Print with Excel.



For more information about displaying and printing data in PC applications, type the following search terms in the Search tab of the Help Desk.

displaying data
printing data

Running queries

When you run a query from Data Organizer, you can preview the data retrieved by the query within Data Organizer, or you can display the data in a PC application (see preceding section). If you preview a query, Data Organizer displays the query's data in a separate tab within the Data Organizer window.

To preview a query:

1. Right-click the object.
2. From the popup menu, choose Preview Query.

You can switch between the Contents tab and tabs that preview data, simply by clicking the desired tab.



For more information about working with query objects, type the following search term in the Search tab of the Help Desk.

query objects, in Data Organizer

Running reports

When you run a report from Data Organizer, the Report Viewer opens and displays the report in Preview mode.

To run a report:

1. Right-click the report object.
2. From the popup menu, choose Open.

From the Report Viewer, you can browse the data returned by the report, or you can print the report.



For more information about working in the Report Viewer, see the following chapter and topic in this guide:

Chapter 3, Overview of Report Viewer

Running transfers

When you run a transfer from Data Organizer, the transfer simply copies data from one location to another location.

To run a transfer:

1. Right-click the object.
2. From the popup menu, choose Run Transfer.

During a transfer, the Transfer Status window displays, showing you the progress of the transfer. You can stop a transfer by clicking Cancel in the Transfer Status window. Once the transfer completes, the Transfer Status window closes and you return to the Data Organizer window.



For more information about working with transfer objects, type the following search term in the Search tab of the Help Desk.

transfer objects, in Data Organizer

Opening file and link objects

When you open a file or link object, the PC file associated with that object opens in its *native application*.

To open and link objects:

1. Right-click the object.
2. From the popup menu, choose Open.

When you open a file object, a read-only copy of the PC file opens in its native application. When you open a link object, the corresponding PC file opens in its native application, and you can edit the file as desired.



For additional information about working with file and link objects, type the following search terms in the Search tab of the Help Desk.

file objects, in Data Organizer

link objects, in Data Organizer

Customizing Data Organizer documents to your PC setup

Most data objects work with PC files stored on your hard drive. When you receive a Data Organizer document from other users, you may have to change property settings for objects that specify paths which do not exist on your PC. For example, in Figure 4-2, the PC Destination tab specifies that the July Sales query sends data to the July Sales .txt PC file, stored in the Windows Temp directory. If the Windows Temp directory does not exist on the user's PC, the user has to change the path to specify an existing directory before the user can display or print the query.



For more information about working with Data Organizer documents, type the following search term in the Search tab of the Help Desk.

Data Organizer, overview

Creating Data Organizer documents

Prerequisites

To create Data Organizer documents, you should have the following ARPEGGIO applications installed: Data Organizer, Data Access, and Report Designer. Both Data Access and Report Designer have their own prerequisites. Please refer to the corresponding chapters in this Guide for more information about working with these applications.

Before you create a Data Organizer document, you need to prepare all of the queries, transfers, reports, and other PC files that you want to insert into your Data Organizer document.

Where do I start?

Open the Data Organizer application. A new Data Organizer window, as shown in Figure 4-3, displays a blank Contents tab into which you insert objects.

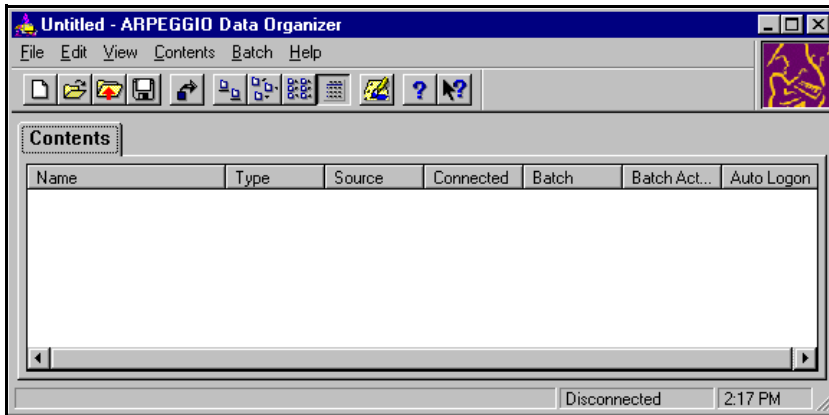


Figure 4-3 A new Data Organizer window

The Contents menu provides commands that insert objects into the Contents tab. The Batch menu provides commands that run a batch and set batch options for the document. Each individual object has a popup menu that provides commands for working with the object's data and setting the object's properties.

Inserting Data Access data objects

You insert Data Access objects into a Data Organizer document by simply dragging them from the Data Access window and dropping them onto the Contents tab in the Data Organizer window.

To insert Data Access objects:

1. Open the Data Access document that stores the object you want to insert.
2. Select an object. While pressing the CTRL key, drag the object from the Data Access window and drop it onto the Contents tab in the Data Organizer window.

When you drop a Data Access object into a Data Organizer document, it maintains its current property settings and object display name.

Inserting file and link objects

You insert file and link objects into a Data Organizer document using commands found on Data Organizer's Contents menu.

1. From the Contents menu, choose Insert File Object or Insert Link Object.
2. In the Insert Object dialog box, select the desired PC file from your hard drive, or from a network drive.
3. Click Open.



For more information about inserting objects, type the following search term in the Search tab of the Help Desk.

Data Organizer documents

Building a batch

A batch automatically runs a group of objects, one after the other. To build a batch, you set batch properties for each object that you want to include in the batch. A Data Organizer document's batch runs automatically when you open the Data Organizer document from your desktop, from the Windows Explorer, or from Windows NT File Manager.



For more information about batches, type the following search term in the Search tab of the Help Desk.

batches, in Data Organizer

Distributing Data Organizer documents

Many system administrators and other power users will use Data Organizer documents as a means to distribute queries, transfers, reports, and other PC files to business users who do not have the Data Access and Report Designer applications installed. Some administrators may also appreciate the convenience of being able to place related queries, transfers, reports, and PC files in a single window where business users can easily access data or files by simply clicking an object, rather than having to search network servers or databases.

To distribute a Data Organizer document from the Data Organizer application:

1. Open the Data Organizer document.
2. From the File menu, choose Send.

The Send command opens your e-mail system, where you can mail the open Data Organizer document, as an enclosure, to a selected group of users.

Chapter 5

Data Access

Data Access is an application that enables you to browse data sources and work with data in a graphical, user-friendly Windows environment. Data Access provides query building and transfer building tools that help you easily find and move data.

This chapter introduces you to the following basic tasks:

- Prerequisites
- Where do I start?
 - Connecting to a data source
 - Understanding elements of Data Access
- Creating your first query
- Creating your first transfer
- Creating a custom data source view
- Distributing Data Access documents

Prerequisites

To connect to a *data source* through Data Access, you need to have an ODBC driver installed on your PC, and you also need to have the appropriate data source setup information saved in your Windows Registry.

ODBC drivers

When you install ARPEGGIO software, the RUMBA ODBC driver is automatically selected for installation. Data Access can connect to any DB2 data source using the RUMBA ODBC driver. For other types of data sources, ARPEGGIO software provides several third-party ODBC drivers that you can install.

Data source setup

Data source setup requires you to define network parameters, choose an ODBC driver, and provide other detailed information that your PC uses to connect to and communicate with a data source. You can set up a data source from the Data Access application, or you can use the Microsoft 32bit ODBC utility found in your Windows Control Panel. Each data source setup is saved in your Windows Registry and can be used by any ODBC application, including Data Access and the Report Designer.

Where do I start?

You start using Data Access by opening the application and selecting the data source to which you want to connect.

Connecting to a data source

1. Open the Data Access application. In the new Data Access window, the SQL Data Sources dialog box lists the data sources set up on your PC.
2. In the SQL Data Sources dialog box, simply select the data source to which you want to connect.

Once the data source connection is opened, Data Access displays the contents of the data source.



For more information about connecting to data sources, type the following search term in the Search tab of the Help Desk.

connecting to a data source, in Data Access

Understanding elements of Data Access

When you connect to a data source, the Data Access window displays the Data Access Object Browser, as shown in Figure 5-1.

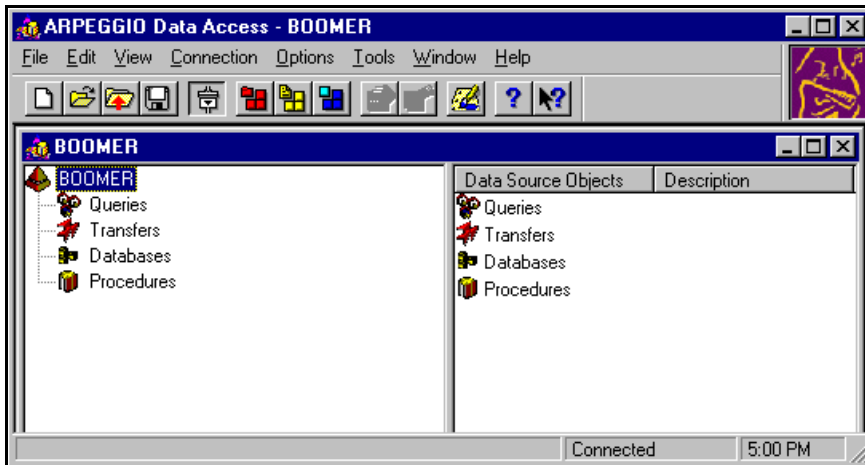


Figure 5-1 The Data Access window

The Object Browser

The Object Browser displays *objects* that are associated with the data source, such as *tables* stored on the data source, and *queries* and *transfers* that you create. The Object Browser organizes objects in a *tree view*, similar to the Windows Explorer and the Windows NT File Manager.

You work with an object by right-clicking the object and choosing commands from a *popup menu*. Each object's popup menu provides commands specific to that particular object. For example, in a table object's popup menu, you can choose commands that preview a table's data, or display a table's data in a PC application, such as Notepad or Excel.



For more information about displaying and printing an object's data, see the following chapter and topic in this guide:

Chapter 4, Displaying and printing data using your favorite PC applications

Data Access menus

In addition to standard Windows menus, such as File and Edit, the Data Access application provides the following menus in its main application window.

- The Connection menu provides commands that connect and disconnect Data Access from the data source.
- The Options menu provides commands that set preferences for the Data Access application.
- The Tools menu provides commands that open Data Access builders and other tools in which you can create queries and transfers.

Each window within Data Access, such as the Object Browser or the Query Builder, provides popup menus that you access by right-clicking the mouse within the window area.



For more information about working in the Object Browser, type the following search term in the Search tab of the Help Desk.

object browser

Creating your first query

You create a query in the Data Access Query Builder. Saved queries are displayed in the Object Browser and are stored on your PC in *Data Access documents*.

Understanding elements of the Query Builder

To open the Query Builder, choose Query Builder from the Tools menu. The Query Builder window opens in the right side of the Data Access application window, as shown in Figure 5-2. The Object Browser window remains on the left side of the Data Access application window, which provides direct access to the tables that you want to include in your query.

The Query Builder is divided into two main sections: the Table Area, and the Query Grid. The Table Area is the top half of the Query Builder, and it displays the tables that your query searches. The Query Grid is the lower half of the Query Builder, and the information entered in the grid defines the query's *SQL statement*. SQL statements specify which columns the query retrieves data from, what data the query searches for, and how the query presents the information to the user once it is retrieved from the data source.

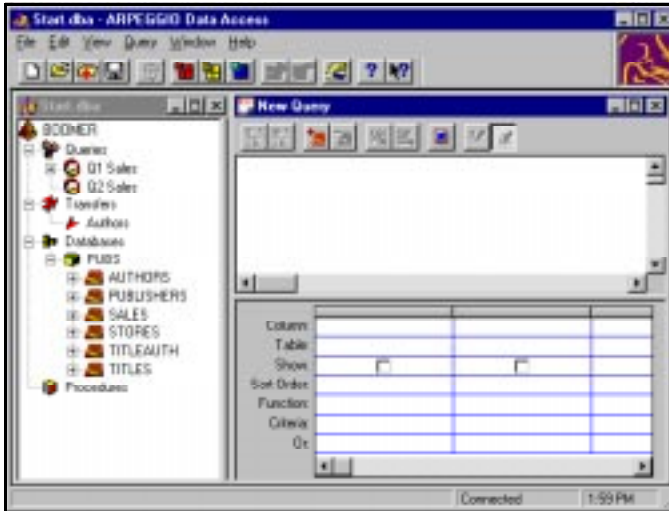


Figure 5-2 The Query Builder window

The Query Builder and the Object Browser function as separate windows within the Data Access application window. You can maximize, minimize, or move these windows within the Data Access application window. When the Query Builder window is active, the Query menu is added to the Data Access application window, and the Connect, Options, and Tools menus associated with the Object Browser are temporarily removed. When you click in the Object Browser window, the Query menu is removed and the Connect, Options, and Tools menus are restored.

Building a query

The following steps explain how to build a simple query. The completed query, shown in Figure 5-3, offers an example of what your Query Builder window will look like as you build your own query.

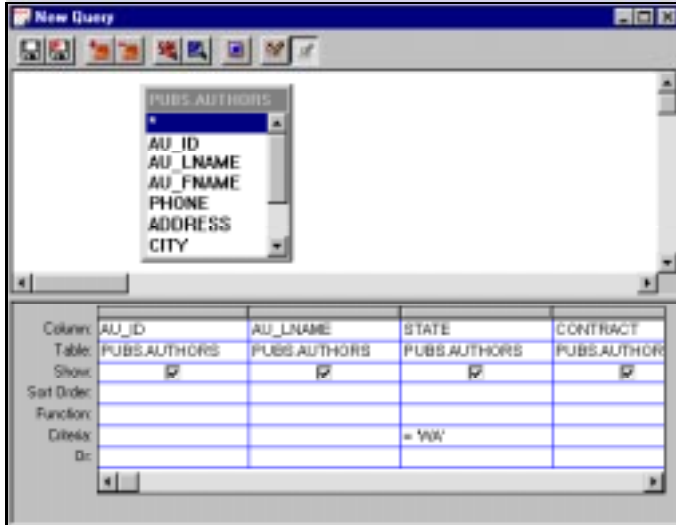


Figure 5-3 A completed query

To build a query:

1. From the Object Browser, drag the table that you want to search into the Table Area of the Query Builder. In the Table Area, the table becomes a list box that displays all of the columns stored in the table.
2. In the table's list box, select the columns that you want to retrieve data from and drag and drop them into the Query Grid. You can drag all of a table's columns into the Query Grid at once, by dragging the asterisk character (*) from the table list and dropping it into the Query Grid. Each column's Column name and Table name displays in the Column and Table rows.
3. In each column where you want to find specific data:

- a. Click in the Criteria row.
 - b. Type the data you want to find.
 - c. Press Enter.
4. From the Query menu, choose Save.
Your new query is displayed in the Object Browser.

Running a query

Requirements: To run a query in Data Access, you right-click the query object in the Object Browser and choose commands from the object's popup menu. Using these commands, you can preview the data that a query retrieves, or you can display the data in a PC application. You can also use the query as a source of data when you build transfers (see the following section).

The Help Desk provides very detailed information about query concepts, building advanced queries, and using other Data Access query tools, such as the Criteria Builder and the Expression Builder. The Help Desk also provides a sample query that novice users, in particular, may find especially helpful.



For more information about queries, type the following search term in the Search tab of the Help Desk.

queries, concepts

Creating your first transfer

You create transfers in the Data Access Transfer Builder. Saved transfers are displayed in the Object Browser, and are stored on your PC in Data Access documents.

Understanding elements of the Transfer Builder

To open the Transfer Builder, choose Transfer Builder from the Tools menu. A new Transfer Builder window opens in the right side of the Data Access application window, as shown in

Figure 5-4. The Object Browser window remains on the left side of the Data Access application window.

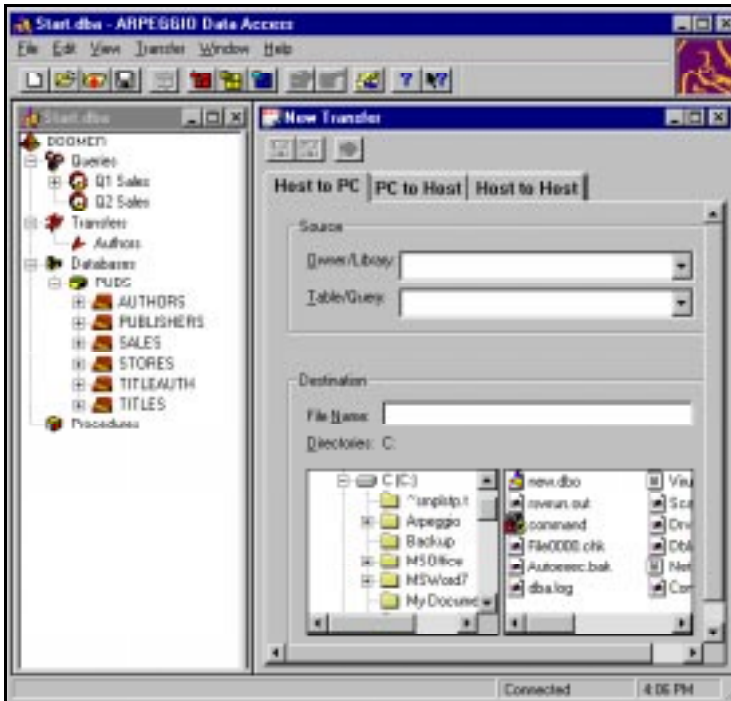


Figure 5-4 *The Transfer Builder window*

The Transfer Builder contains three tabs, and each tab defines a particular type of transfer. When you work in the Transfer Builder, click the tab that defines the type of transfer you want to create. You then select a transfer source and a transfer destination. When you choose Save from the TITER menu, only the transfer defined in the active tab is saved.

Building a transfer

The following steps explain how to build a Host to PC transfer, which copies data from the data source and writes it to a file on your PC. The completed transfer, shown in Figure 5-5, offers an example of what your Transfer Builder window will look like as you build your own Host to PC transfer.

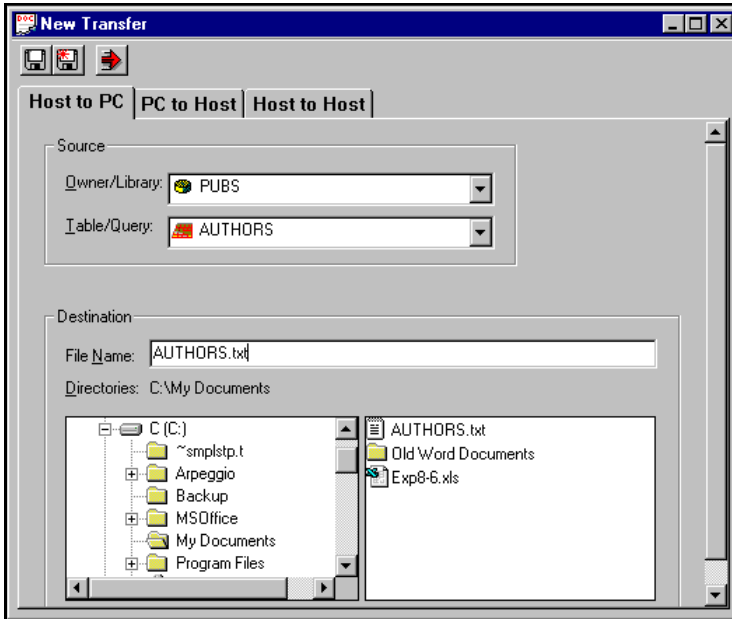


Figure 5-5 A completed Host to PC transfer

To build a Host to PC transfer:

1. From the Owner/Library box, select the database that stores the data you want to transfer. If the data source that you are connected to is a single database, this box is dimmed.
2. From the Table/Query box, select the table or query that represents the data you want to transfer.
3. In the first Directories box, find the directory that stores the PC file to which you want to transfer the data.
4. In the second Directories box, select the PC file to which you want to transfer the data. Once you select a PC file, it displays in the File Name box.
5. From the Transfer menu, choose Save. The Object Browser displays your new transfer.

Running a transfer

To transfer an object:

1. In the Object Browser, right-click the transfer object.
2. From the popup menu, choose Run Transfer.

Before you run a transfer, you may want to change data format settings in the transfer object's Properties dialog box.



For more information about transfers, type the following search term in the Search tab of the Help Desk.

transfers

Creating a custom data source view

You can customize how the Object Browser displays the objects that belong to the *data source view*.

- You can assign user-friendly names to objects to help you easily identify their contents.
- You can delete unwanted objects, such as databases or tables that you never work with.
- You can add your own objects, such as queries and transfers.

Changes that you make to objects in your data source view do not affect the corresponding databases or tables stored on the data source. The changes apply only to your current data source view. You can save a data source view in a Data Access document for future use or for distribution to other users.



For more information about working with data source views, type the following search term in the Search tab of the Help Desk.

data source view

Distributing Data Access documents

System administrators and power users can use Data Access documents as a means to distribute data source views, including queries and transfers, to other users. Administrators can also use Data Access documents to provide user groups with custom data source views that display only the objects that the users in the group need.

To display Data Access documents:

1. Open the Data Access document.
2. From the File menu, choose Send.

The Send command opens your e-mail system, where you can mail the open Data Access document, as an enclosure, to one or more users.

Chapter 6

Report Designer

ARPEGGIO Report Designer is an information access and reporting tool that enables you to produce publication-quality reports to select, analyze, summarize, and present data from queries designed in Data Access or directly from commonly available SQL databases.

A Report Designer report is a custom layout and presentation of data drawn from one or more tables. This layout can take the form of a customer list, sales analysis, invoice, form letter, mailing labels, or project schedule, to name just a few examples. Reports can be viewed on-screen for quick queries, or they can be printed for publication.

Powerful editing capabilities, such as drag-and-drop and multi-field editing, make Report Designer extremely easy to use. In addition, relational capabilities combined with spreadsheet calculations and pre-processed totals enable powerful data analysis. Grouping and subtotaling options enable you to quickly summarize data. Word-processor style formatting features make it easy to present results with visual appeal.

- This chapter covers the following information:
- Prerequisites
- Overview of Report Designer
- General procedures for creating reports
- Connecting to a data source
- Getting help
- Sample reports and templates
- Distributing reports

Prerequisites

Before using Report Designer to create reports, make sure that:

- The appropriate database drivers have been installed.
- You have access to the data files you plan to use.
- One or more data sources have been defined for the databases you plan to report on.

Overview of Report Designer

You produce a report with Report Designer by selecting and presenting information from selected tables, or from the tables and views identified in a user-entered SQL SELECT statement, according to a report definition that you create. This report definition always includes:

- Depending on the kind of report you create, either the name of the master table that serves as the primary source of data for the report or the SQL SELECT statement used to select data from the database
- A report layout that indicates where text and data will be placed on the report; you can either begin with an automatically generated default layout (called an instant report), or you can build a layout from scratch
- Print information that specifies how to print the report, display it, save it as a file, or export it to another format

Optionally, the report definition can also include information that controls how data is selected, analyzed, and presented. For example, the report definition can also include:

- Database join information that indicates which other related tables will provide information for the report and how the information in these tables is related to the master table or to other tables
- Sort and group information to specify the order in which to sort the data and the categories in which to group it
- Field definitions for calculations and totals derived from data in your tables

- Selection conditions (referred to as a filter) to specify which records you want to include in the report
- Formatting information that specifies which fonts and/or styles will be used in the report
- Imported images for presentation quality
- Lines and boxes added as graphic enhancements

No matter how you structure your report, the data in your tables remains the same. Report Designer simply permits you to view the data from a variety of perspectives.

Figure 6-1 identifies the components of the Report Designer window.

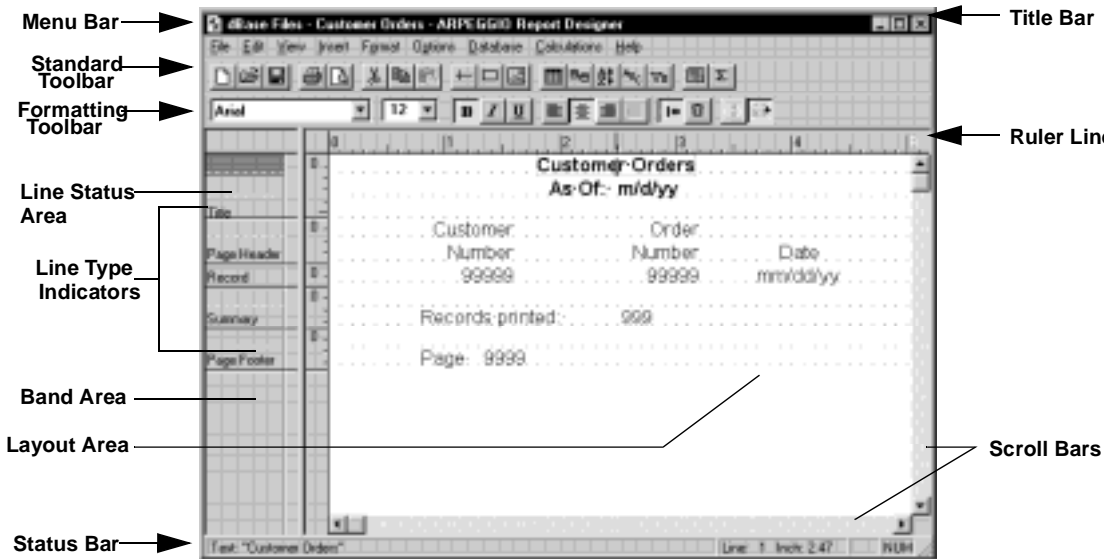


Figure 6-1 Main Report Designer window

The Report Designer window is divided into two main areas:

- The Band Area — the area at the left of the screen, which identifies the type and status of every band line on the layout

- The Layout Area — the large area on the right in which you create a report layout, a schematic representation of your report that contains the fields, text, and other objects that will appear on your report

The band type of each line in the Layout Area determines where the data on that line will appear when the report is run:

- Title band lines print or display once per report at the beginning of the first page or on a separate title page.
- The Page Header band line appears at the top of each page.
- The Record band constitutes the body of the report; data from fields placed in the Record band is printed or displayed for each report record. Note that the Record band displays as a single line on the layout, but the printed or previewed report may have many record lines — one for each record in the database.
- Summary band lines appear once per report at the end of the last page or on a separate summary page.
- Page Footer band lines appear at the bottom of each page.

Figure 6-2 shows a simple report layout.

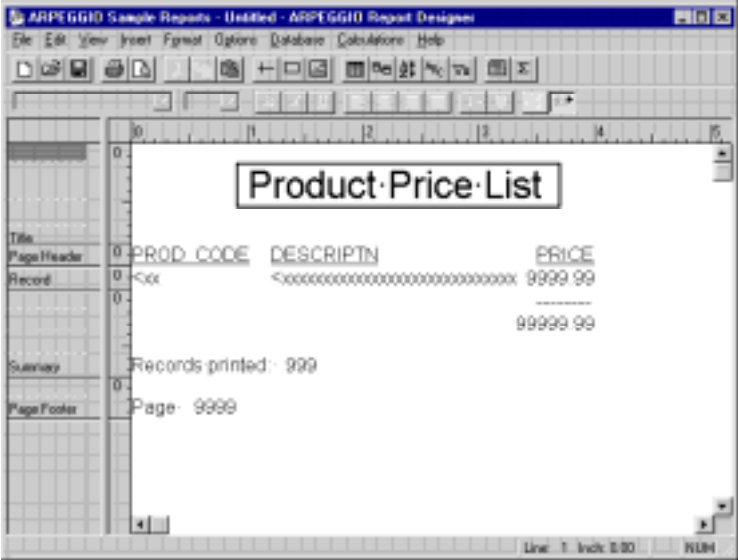


Figure 6-2 Report layout with formatting

General procedures for creating reports

Table 6-1 presents a general set of procedures for creating a report and, where applicable, identifies the menu command and/or toolbar button used for each task.

Note that each report you create will have unique requirements; therefore, some of the steps listed here will not be applicable in all cases.













Task	Menu Command	Button
1 Create a new report and select a data source	File New	
2 Choose a master table	n/a	n/a
3 Specify related tables	Database Joins	
4 Create calculated fields	Calculations Calculated Field	
5 Create total fields	Calculations Total Field	
6 Specify sorting	Database Sort	
7 Specify grouping	Database Group	
8 Define a filter	Database Filter	
9 Create band areas and insert band lines	Insert Create Band Line, Insert Band Line	n/a
10 Insert and position fields	Insert Field	n/a
11 Enhance layout by adding lines and boxes	Insert Line, Insert Box	 
12 Enhance layout by inserting graphics	Insert Picture	
13 Save the report	File Save	
14 Print the report	File Print	

Table 6-1 General procedures for creating a report

Connecting to a data source

ARPEGGIO software includes database drivers that support Microsoft's Open Database Connectivity (ODBC) standard. These ODBC drivers are Dynamic-Link Library files that map ODBC-standard SQL syntax to specific database engines and file systems, allowing Report Designer to access data from a variety of database management systems.

For each ODBC driver you want to use, you must have at least one data source, which associates a particular driver with the database system you want to access (SQL Server, Oracle, dBASE, etc.).

To create or configure a data source in Report Designer:

1. Select File Data Source Connections and click Configure to display the Data Sources dialog box (see Figure 6-3). The dialog box lists existing data sources using the following format:

Data Source Name (ODBC Driver)

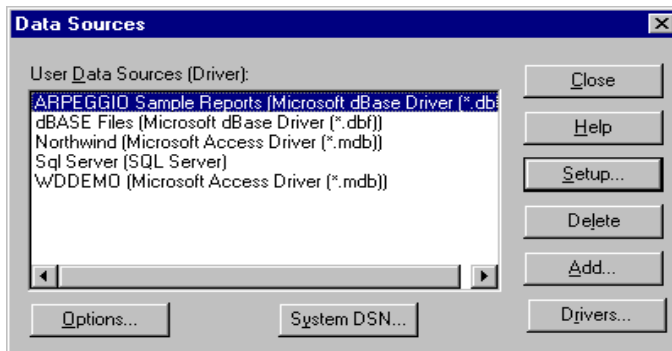


Figure 6-3 Data Sources dialog box

2. To modify an existing data source, highlight the name and click Setup.

To add a new data source definition, click Add. Highlight the name of the ODBC driver you want to use and click OK.

3. Enter the necessary information on the ODBC driver setup dialog box. The required information differs from one driver to another; Figure 6-4 shows the ODBC setup dialog box for Microsoft Access.
4. Click OK to exit the driver setup dialog box and save your settings, then Close to return to the Data Source Connections dialog box

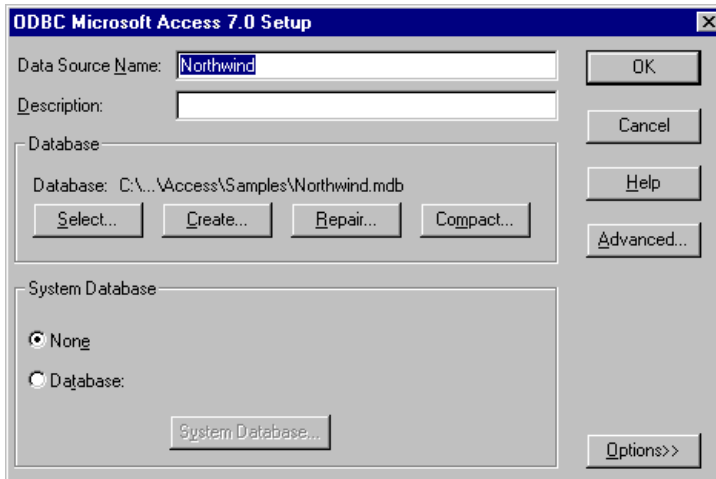


Figure 6-4 ODBC Microsoft Access driver setup dialog box

At a minimum, a data source definition includes a unique name and an associated driver. For some drivers, the data source definition must also include additional connection information, such as a server name. For all of the drivers, you can include the name of a default database or data directory in the data source definition.

Most ODBC drivers include on-line help that describes the required and optional configuration settings. For information about the settings for each driver, select Help on the ODBC Driver Setup dialog box.

You can define multiple data sources for any driver. For example, you might be working with an SQL Server system that includes personnel and payroll databases. You might define two data sources called "Personnel" and "Payroll." Each of these data source definitions includes a server name and a default database name.

When you create a report, you select (when prompted by the Data Source Connections dialog box) which data source you want to use. Report Designer uses the information defined in the data source to connect to the database. When you save a report, the associated data source name is saved with the report definition.

Getting help



For more information about creating and modifying reports, consult the following topics in the Report Designer help file.

Inserting Fields

Field Format

Creating and Editing Totals

Calculated Fields

Introduction (Adding Lines, Boxes, Shading)

Importing an Image

Previewing and Printing a Report

Sample reports and templates

ARPEGGIO software comes with sample reports in five commonly used formats:

- Basic Columnar Report
- Multi-Line Columnar Report
- Grouped Columnar Report
- Summary Columnar Report
- Mailing Labels Report

If you chose the Sample Files option during installation, these reports are available in the Sample subdirectory of the ARPEGGIO program directory. The reports use only the sample tables provided with the ARPEGGIO program.

Also included with the sample files are several templates — partial report definitions that can be used as the starting point for creating reports. These templates are installed in the Template subdirectory of the ARPEGGIO program directory.

Distributing reports

You can distribute reports to users who have licensed copies of either ARPEGGIO Report Designer or ARPEGGIO Viewer. You and your users must have the same version of the Viewer, preferably the most recent one. To access reports with the Viewer, your users must also have the required ODBC driver(s) and the appropriate data source configuration(s) for access to the database files used by the reports you are distributing.

Note that Report Designer saves with each report the relevant data source information and the directory locations of tables, image files, text memo files, and any other files needed by that report. If the report files on the user's system will be in locations other than those saved with the report(s), you can create a control file to specify file locations.

Chapter 7

Custom applications

ARPEGGIO For The Developer is designed for the professional information systems developer who wants to integrate data access and publishing into custom applications.

This chapter covers:

- Developing applications
- Incorporating reports into your applications
- Incorporating the RUMBA ODBC driver for DB2 into your custom ODBC applications

Developing applications

ARPEGGIO For The Developer includes all of the applications that make up ARPEGGIO For The Desktop, plus a series of Application Programming Interfaces (APIs) that allow the developer to build seamless interfaces (using a DLL interface or ActiveX control) into commonly used applications such as those created using Visual Basic and Visual C++.

ARPEGGIO For The Developer contains the Report Viewer API, the ReportScript API, and the RUMBA ODBC Driver for DB2.

- The ODBC Driver API provides industry-standard open database connectivity to host, client/server and PC databases. It allows the professional developer to create robust, high-performance business applications with full read/write data access using standard SQL language statements. Included with each ODBC driver are all network client components needed to connect directly to industry-standard mainframe, AS/400, client/server and PC databases, without expensive host software or gateways.
- The Report Viewer API provides an advanced object interface using OLE/ActiveX technology. You can create predefined reports that business users can view, print, export and e-mail under full control of the application. The Report Viewer API also provides a DLL function call interface for integration with applications written in such development languages as C, C++, or Visual Basic.
- The ReportScript API provides a unique capability to dynamically create new reports or to integrate custom report wizards into the Report Designer. The ReportScript API allows you to create application-specific wizards so that you can provide your business users with familiar screens and terminology from which to design their own custom report. The ultimate in flexibility, ReportScript dynamically tailors report creation to suit ever-changing business requirements.
- The RUMBA ODBC Driver for DB2 provides a completely functional ODBC driver that you can integrate into any custom ODBC application. In addition to standard ODBC functions, the RUMBA ODBC Driver provides enhanced functionality for AS/400 record-level access. AS/400 developers can implement record-level access in their applications, enabling the end user to rapidly access and update data stored on AS/400 systems.

Incorporating reports into your applications

Using the Report Viewer, you can easily automate the viewing or printing of reports from your applications. You can directly access the Report Viewer executable (**rswrun.exe**) using a control table or file.



For more information about accessing the Report Viewer executable, type the following search term in the Index tab of the Report Developer Winhelp file.

using control tables and files

The Report Viewer **.dll** provides an Application Programming Interface (API) that is suitable for use by any high-level programming language.



For more information about the Report Viewer **.dll**, type the following search term in the Index tab of the Report Developer Winhelp file.

introduction (accessing the dll)

The ARPEGGIO Report Viewer ActiveX control (OCX) enables you to access the report viewer API from Visual Basic, C++, or any language that can call OLE controls.



For more information about the Report Viewer OCX, type the following search term in the Index tab of the Report Developer Winhelp file.

introduction (using the OLE control)

Here are several topics of interest to application developers who create ARPEGGIO reports for use in the Windows environment, whether the reports will be run via the Report Viewer or interactively:

Passing a user-specific report specification to Report Designer by means of a script file



For more information about script files, type the following search term in the Index tab of the Report Developer Winhelp file.

introduction (ReportScript)

Useful information for application developers who are creating reports for distribution to other users



For more information about distributing reports, type the following search term in the Index tab of the Report Developer Winhelp file.

introduction (distributing reports)

Equivalencies among the Custom Control properties, **.dll** routines, and Report Viewer executable control parameters, as well as the default value for each where applicable



For more information about equivalencies, type the following search term in the Index tab of the Report Developer Winhelp file.

introduction (Viewer equivalencies)

Incorporating the RUMBA ODBC driver for DB2 into your custom ODBC applications

Your custom ODBC applications can use the RUMBA ODBC Driver for DB2 to access any DB2 family of data. The RUMBA ODBC Driver is a fully functional ODBC driver that conforms to ODBC API Level 2. You can use any third-party development tool, such as C or C++, to incorporate the RUMBA ODBC Driver into your ODBC applications. Visual Basic developers, for example, can use the RUMBA ODBC Driver with the VB Remote Data Objects (RDO). In addition, AS/400 developers can take advantage of the speed that the RUMBA ODBC Driver provides through record-level access.



See the **Samples.hlp** WinHelp file for sample Power Builder application and code.

The RUMBA ODBC driver enables custom applications to access data on the AS/400 using record-level access and SQL access concurrently through a single session. The RUMBA ODBC Driver uses standard ODBC functions and navigation extensions to fully perform record-level access. The navigation extensions consist of support for additional standard ODBC functions and additional nonstandard options to use with three standard ODBC functions.



For information on concurrent record-level access and SQL access through a single session on an AS/400, see the following topic in the **Rumbasql.hlp** WinHelp file.

Making use of the record-level access API extension in your AS/400 applications

Glossary of terms for ARPEGGIO software

band area

The area at the far left of the Report Designer window that identifies the type and status of every band line on the layout.

band type

A label that identifies how the data in a particular area of the report layout will be presented when the report is run. The following band types are available: Title, Page Header, Group Header, Record, Group Footer, Summary, and Page Footer.

batch

A group of objects, stored in a Data Organizer document, that automatically run, one after the other.

control file

A text file or database table that identifies to the Report Viewer the report to be run and any changes to be made to report characteristics.

Data Access document

A document that stores all of the information related to a specific Data Access data source connection. This information can include the data source name, a view of the objects stored on the data source, and user-defined Data Access objects, such as queries and transfers.

Data Organizer document

A document that stores pre-defined ARPEGGIO objects, including queries, reports, and transfers. Data Organizer documents allow power users to organize groups of related ARPEGGIO objects, as well as links to related PC files, and distribute them to business users.

data source

A database or group of databases, often stored on a network server.

A definition specific to ARPEGGIO defines data source as: The combination of settings (database platform, server name, and network) used to connect to an ODBC driver.

data source view

The group of objects that are displayed in a Data Access Object Browser. Objects in a data source view can include databases, tables, queries, and transfers.

database

A collection of logically related data files (tables, views, data dictionary files). Depending on your SQL platform, these database elements might be contained in a single database file or in separate files and/or directories.

For example, an Employees database might include the tables EMPLOYEE, for employee names and addresses; BENEFITS, for benefits information; and SALARIES, for salary information.

file object

An object that stores a read-only copy of a PC file. File objects are found in the Data Organizer application, and they are represented by their native application's document icon.

filter

A set of user-defined selection conditions to include or exclude records.

Instant report

An automatically generated report layout that places all fields from the selected table in the Layout Area, with column titles inserted for each field. You can use the instant report as a starting point and modify it as necessary to build a custom report.

layout area

The main work area of the Report Designer window in which you create the report layout.

link object

An object that stores a link to a PC file. Link objects are found in the Data Organizer application, and they are represented by their native application's document icon.

Master table

The table that serves as the initial source of data for a report. Although the report can modify the data, the report does not change the master table.

native application

The application that Windows starts when you open a particular PC file. Windows determines a PC file's native application by the PC file extension. Documents that have an **.xls** extension, for example, use Microsoft Excel as their native application.

object

An individual unit that the Data Access and Data Organizer applications use to represent a database, a table, a query, a transfer, a report, a PC file, or a link to a PC file.

popup menu

A menu that you access by right-clicking your mouse within a window, or on a specific object. Popup menus are different from shortcut menus, in that they can contain commands that are found only on the popup menu, and not on a regular menu.

query

An object that stores an SQL statement. SQL statements find and retrieve specific data stored on a data source.

related table

In a database join, the table that is joined to the controlling table. To generate a report that draws information from more than one table, you first define database joins among the related tables you want to use.

report

A Report Designer document that contains the necessary information to select, analyze, summarize, and present data from a specific set of database files. This information includes the names and locations of all required database, text, and graphics files as well as formatting, page layout, and record layout settings.

report definition

The components that tell Report Designer how to select, analyze, summarize, and present data.

report layout

The arrangement of fields, text, and graphics in the Layout Area.

SQL statement

A string that uses the Structured Query Language (SQL) to find and retrieve specific data stored on a data source. The Structured Query Language allows you to specify which tables you want to search, what data you need to find, and how you want the data organized when it is returned to you.

table

A structured set of data, stored in a database. Tables store data in a row and column structure, similar to the way in which a spreadsheet organizes data. Databases usually have multiple tables that often contain related information, such as customers, products, and orders.

template

A report definition that can serve as the starting point for one or more reports.

transfer

An object that copies data from one location to another. Data Access transfers can copy data from the data source to your PC, from your PC to the data source, or from one location on the data source to another location on the same data source.

tree view

A hierarchical structure that represents a storage system. The Data Access Object Browser displays objects in a tree view, just as the Windows Explorer and Windows NT File Manager display directories and files in a tree view.



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