Appeon Demo Applications Tutorial

Appeon® 6.0 for PowerBuilder®

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Appeon Corporation, 1/F, Shell Industrial Building, 12 Lee Chung Street, Chai Wan District, Hong Kong.

Contents

1 About This Book

1.1 Audience

This book is written for developers using Appeon® 6.0 for PowerBuilder®.

1.2 How to use this book

This document guides the user through running the Appeon demos as Sybase® PowerBuilder® applications and moving them onto the Web. Altogether there are eight Chapters:

Chapter 1: About This Book

A general description of the contents of this book.

Chapter 2: Getting Started

An overview of the demo applications, including installation requirements.

Chapter 3: Running Sales Application Demo

Instructions for using the Sales Application, including application workflow notes and explanations of the various Windows in the application.

Chapter 4: Running Appeon Code Examples

Instructions for using the Appeon Code Examples, including an introduction to the UI layout and explanations of the various types of code examples.

Chapter 5: Running ACF Examples

Instructions for using the Appeon ACF Example, including application workflow notes and explanations of the various Windows in the application ACF Example.

Chapter 6: Running Appeon Pet World

Instructions for using the Appeon Pet World Example, including application workflow notes and explanations of the various Windows in the application.

Chapter 7: Deploying the PowerBuilder Demos to Web

Instructions for verifying the configuration in Appeon Developer, using the previews, supported features analysis, deployment wizard and launching AEM.

Chapter 8: Viewing Web Demo Applications

Important information regarding the converted Web application demos.

1.3 Related documents

Appeon provides the following user documents to assist you in understanding Appeon for PowerBuilder and its capabilities:

Appeon provides the following user documents to assist you in understanding Appeon for PowerBuilder and its capabilities:

- *Appeon Demo Applications Tutorial*:

Introduces Appeon's demo applications, including the Appeon Sales Application Demo, Appeon Code Examples, Appeon ACF Demo, and Appeon Pet World, which show Appeon's capability in converting PowerBuilder applications to the Web.

- *Appeon Developer User Guide* (or *Working with Appeon Developer Toolbar*)

Provides instructions on how to use the Appeon Developer toolbar in Appeon 6.0.

Working with Appeon Developer Toolbar is an HTML version of the *Appeon Developer User Guide*.

- *Appeon Server Configuration Guide*

Provides instructions on how to configure Appeon Server Status Monitor, establish connections between Appeon Server and Database Server, and configure AEM for maintaining Appeon Server and Appeon deployed Web applications.

- *Appeon Supported Features Guide* (or *Appeon Features Help*):

Provides a detailed list of what PowerBuilder features are supported and can be converted to the Web with Appeon 6.0 and what features are unsupported.

Appeon Features Help is an HTML version of the *Appeon Supported Features Guide*.

- *Appeon Installation Guide*:

Provides instructions on how to install *Appeon for PowerBuilder* successfully.

- *Appeon Migration Guide*:

A process-oriented guide that illustrates the complete diagram of the Appeon Web migration procedure and various topics related to steps in the procedure, and includes a tutorial that walks the user through the entire process of deploying a small PowerBuilder application to the Web.

- *Appeon Performance Tuning Guide*:

Provides instructions on how to modify a PowerBuilder application to achieve better performance with its *corresponding Web application*.

- *Appeon Troubleshooting Guide*:

Provides information about troubleshooting issues, covering topics such as product installation, Web deployment, AEM, Web application runtime, etc.

- *Introduction to Appeon*:

Guides you through all the documents included in Appeon 6.0 for PowerBuilder.

- *New Features Guide* (or *What's New in Appeon*):

Introduces new features and changes in Appeon 6.0 for PowerBuilder.

What's New in Appeon is an HTML version of the *New Features Guide*.

1.4 If you need help

Each Sybase installation that has purchased a support contract has one or more designated people who are authorized to contact Sybase Technical Support, or an Authorized Sybase Support Partner. If you have any questions about this product, or if you need assistance during the installation process, ask a designated person to contact Sybase Technical Support, or an Authorized Sybase Support Partner based on your support contract. You may access the Technical Support Web site at http://www.sybase.com/support.

2 Getting Started

2.1 Overview

Appeon 6.0 for PowerBuilder provides three PowerBuilder application demos that highlight various features of the product and demonstrate Appeon's ability to automatically transform PowerBuilder applications into Web applications.

The three demos included with Appeon 6.0 for PowerBuilder are:

- Appeon Sales Application Demo – demonstrates Appeon's ability to convert the complex UI and event-driven logic of an average PowerBuilder application. There are 35~40 windows in the Appeon Sales Application Demo.
- Appeon Code Examples – highlights many essential and robustly supported features used in most PowerBuilder applications. It is highly recommended that PowerBuilder developers study the Appeon Code Examples and Appeon Features Help in order to have a solid grasp of the features that Appeon supports, as well as the code for best implementing these supported PowerBuilder features.
- Appeon ACF Examples – is a PowerBuilder application created by Appeon Corporation that features a Multiple Document Interface (MDI) application that showcases dozens of code examples. It is designed to demonstrate Appeon 6.0's ability to successfully convert a PFC-based application to a Web application.

Each Appeon demo contains a set of source code for the deployment and application profile.

Table 2-1 lists all available demo applications and where they are stored.

Table 2-1: Demo applications

Application Name	Folder
sales_application_demo	%APPEON_DEVELOPER%\Appeondemo
appeon_acf_demo	%APPEON_DEVELOPER%\Appeondemo
appeon_code_examples	%APPEON_DEVELOPER%\Appeondemo
appeon_code_examples_server	%APPEON_DEVELOPER%\Appeondemo
pet_world	%APPEON_DEVELOPER%\Appeondemo

Notes: 1) %APPEON_DEVELOPER% is the Appeon Developer installation directory. For example, C:\Program Files\Appeon\Developer6.0\appeondemo.

2) *Appeon_code_examples_server* is a Appeon Server/EAServer component application that is deployed into the Appeon Server/EAServer. This application does not contain a script for the open event and thus cannot be run through the Run facility.

The Web application demos deployed to Appeon Servers running on Windows support Web enhanced features such as print view, image view saving to different file format, and zoom in/zoom out on Image DataWindows. Refer to Section 8.4: *Web Enhancements* for more details.

3) Currently, some demo application examples and features are not available with Appeon Server for UNIX and LINUX, but are only available for Windows. In these cases, a message stating that the example or the feature is not supported in Sun Solaris will display. For a detailed list of these examples and features, please refer to relevant sections and chapters.

2.2 Demo installation

The PowerBuilder source code and Appeon-converted Web files of the three demos are provided in the Appeon installation package. The quickest and easiest way to get the demos up and running without having to perform any real configuration is by following these instructions.

- Install Sybase PowerBuilder and Sybase Adaptive Server® on a single machine.
- Install EAServer, IIS, Weblogic, WebSphere on the same machine. Once you install anyone of them, it will function as both the Web server and the application server in the demo configuration.
- Install Appeon Server on the same machine and use the “Complete” installation option.
- Install Appeon Developer on the same machine and use the “Complete” installation option. Make sure you select the “Automatically configure Appeon Developer” option. Detailed installation instructions are provided in the *Appeon Installation Guide*.
- (Optional) Install PDFPrinter on the same machine if EAServer is installed and used as the application server. The PDF printing functionality will not work with the WebLogic, WebSphere application server.

Detailed installation and configuration instructions are provided in the *Appeon Installation Guide*.

If you wish to install Appeon Server for UNIX or LINUX, configure Appeon Developer to work with Appeon Server for UNIX and LINUX after the installation is completed. For detailed instructions, refer to the *Appeon Developer User Guide*

2.3 Verify demo installation (EAServer only)

The Appeon installation program installs and fully configures the demos so that they are ready for use without any additional configuration.

Verify that all the tasks outlined below have been performed correctly, and that your system is able to accept these settings. This will ensure that you do not experience any technical difficulties with the demos or this tutorial.

The installation program performs the following installation and configuration tasks:

- Copies the three demos (PowerBuilder demos) into the folder where Appeon Developer was installed.
- Adds the AppeonSample database service in Adaptive Server Anywhere, and sets the service to start automatically.
- Creates two listeners in the application server:
  - appeonserverhttp (host name: localhost, port number: 9988)
  - appeonserveriiop (host name: localhost, port number: 9989)
- Creates ASInterface and AppeonCodeExamples packages in the application server.

- Creates the component appeon_distributed_service in the AppeonCodeExamples package.
- Adds two services in the application server:
    - ASInterface/CorbaHousekeeperService
    - ASInterface/HoursekeeperService
    - ASInterface/LogServer
- Configures the JDBC connection cache appeonsample using the JDBC-ODBC Bridge driver.
- Configures Appeon Developer for the demos (Windows + EAServer only):
    - Creates five application profiles
    - Creates two server profiles for the locally installed EAServer - one for the Web server and one for the application server.
    - Creates a local deployment profile that includes the preceding two configured server profiles.
- Configures AEM for the demos:
    - Configures the connection cache appeonsample for the transaction object SQLCA in each demo.
    - All other settings use AEM default values.

2.4 Start the PowerBuilder demos

2.4.1 Overview

This chapter guides the user through the running of the demos in PowerBuilder, and introduces the functions of the demos.

2.4.2 Load Appeon Demo PowerBuilder workspace

Appeon Demo PowerBuilder Workspace is the location of the PowerBuilder source code for the three Appeon demos. There are two methods to access this workspace:

1) Use the Windows shortcut created in the Start menu during installation.

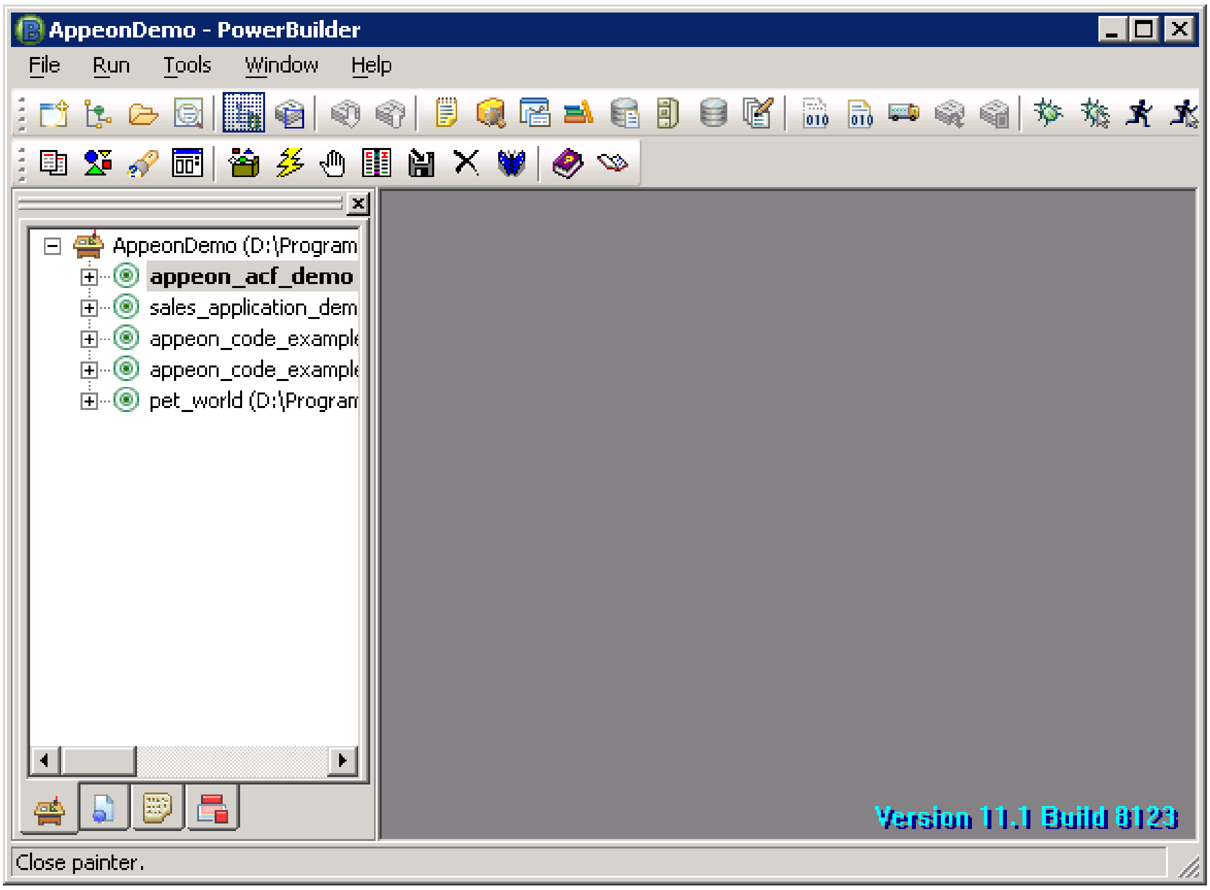
2) Open the demo workspace from the PowerBuilder IDE.

2.4.2.a Method 1: From the newly-added Windows shortcut

Once installation is complete, a menu item entitled *Appeon 6.0 for PowerBuilder* is added to the Windows Programs menu. You can access the Appeon Demo PowerBuilder Workspace directly from the menu by selecting Windows Start menu | Programs | Appeon 6.0 for PowerBuilder | Appeon Developer | Appeon Demos | Appeon Demo PB Workspace to open the Appeon Demo PowerBuilder Workspace.

When PowerBuilder starts, the demos will be loaded into the AppeonDemo workspace, as shown in Figure 2-1. Refer to Figure 2-1 for more details.

Figure 2-1: AppeonDemo workspace in PowerBuilder IDE



2.4.2.b Method 2: Open the demo workspace from the PowerBuilder IDE

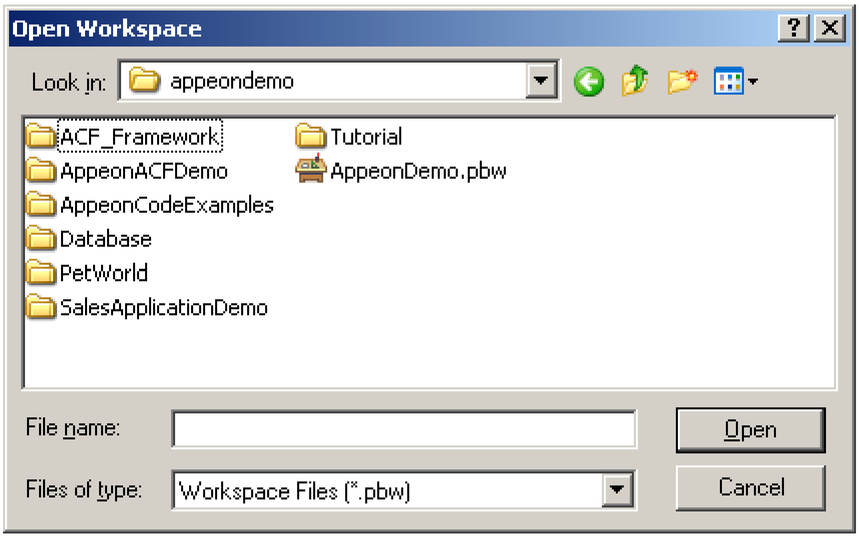
When PowerBuilder starts, the Appeon Developer toolbar will be displayed within the PowerBuilder IDE, but the Appeon demos will not be loaded. The user needs to manually open the source code of the demos in PowerBuilder.

Open the source code by performing the following steps:

Step 1 – Right-click on “No Workspace” in the PowerBuilder System Tree and select “Open Workspace”.

Step 2 – Go to the AppeonDemo folder for the Appeon Demo PowerBuilder Workspace (AppeonDemo.pbw). The AppeonDemo folder is located directly under the Appeon Developer installation directory. At default installation, the path is %APPEON_DEVELOPER%\appeondemo. %APPEON_DEVELOPER% is the Appeon Developer installation directory (for example: C:\Program Files\Appeon\Developer6.0\appeondemo). Refer to Figure 2-2.

Figure 2-2: Open Appeon Demo PowerBuilder workspace manually



Step 3 – Select the AppeonDemo.pbw file to open it. The source code for the Appeon demos is loaded in PowerBuilder. Refer to Figure 2-1.

2.5 Start Appeon Server

Appeon Server must be started before you perform any operations with Appeon Code Examples Demo or attempt to run any demo Web application.

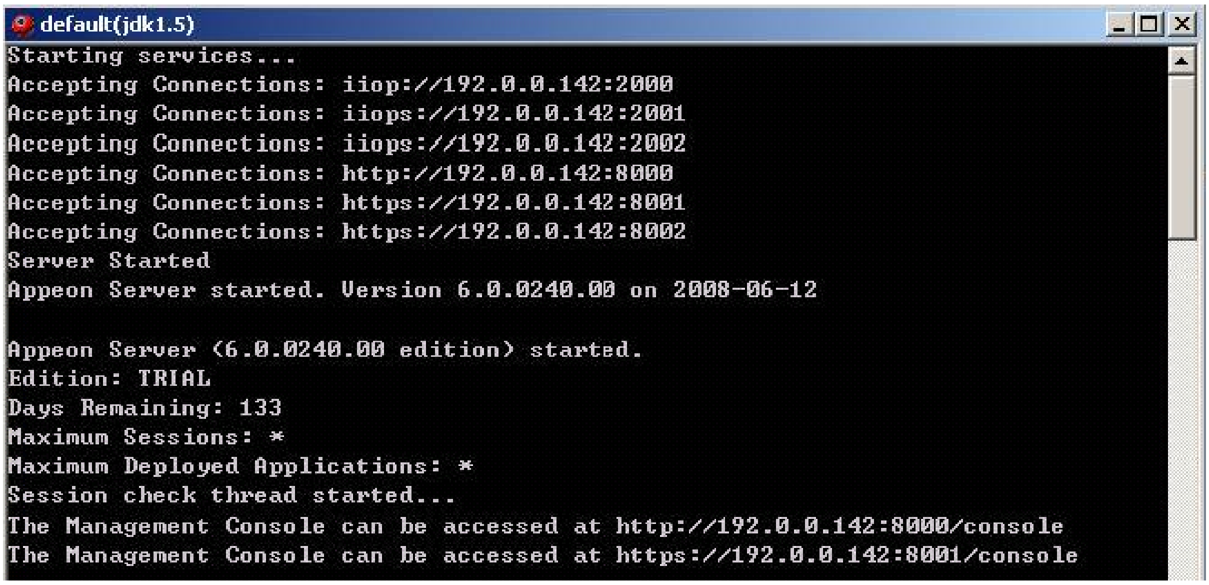
2.5.1 Start EAServer

To start EAServer on Windows, follow the steps below.

Step 1 – Select Windows Start menu | Programs | Appeon 6.0 for PowerBuilder | Appeon Server | *InstanceName*. EAServer starts in a command window.

Step 2 – Wait until the “Accepting connections” command line prompt appears in the command window. This indicates that EAServer has been started successfully. Refer to Figure 2-3.

Figure 2-3: Start EAServer



```
Starting services...
Accepting Connections: iiop://192.0.0.142:2000
Accepting Connections: iiops://192.0.0.142:2001
Accepting Connections: iiops://192.0.0.142:2002
Accepting Connections: http://192.0.0.142:8000
Accepting Connections: https://192.0.0.142:8001
Accepting Connections: https://192.0.0.142:8002
Server Started
Appeon Server started. Version 6.0.0240.00 on 2008-06-12

Appeon Server (6.0.0240.00 edition) started.
Edition: TRIAL
Days Remaining: 133
Maximum Sessions: *
Maximum Deployed Applications: *
Session check thread started...
The Management Console can be accessed at http://192.0.0.142:8000/console
The Management Console can be accessed at https://192.0.0.142:8001/console
```

To start EAServer in UNIX/LINUX

Navigate to the $JAGUAR/appeon/bin/ folder and run the appeonserverstart.sh file using the following command. $JAGUAR indicates the installation path of EAServer.

```
./appeonserverstart.sh
```

2.5.2 Start WebLogic, WebSphere

Appeon Server can be installed to WebLogic, WebSphere that serves as the host application server. To start Appeon Server, you must primarily start the host application server. A successful startup will start Appeon Server.

Table 2-2: Start Appeon Server

Appeon Server	Operating System	To start Appeon Server…
WebLogic	Windows	Select Windows Start | Programs | Appeon 6.0 for PowerBuilder | Appeon Server for WebLogic | Start WebLogic.
	UNIX/LINUX	Run the *appeonserver.sh* file in the $appeon/bin/ folder, for example, $BEA_HOME/user_projects/domains/mydomain/appeon/bin/. $BEA_HOME indicates the installation direction of WebLogic.
WebSphere	Windows	Select Windows Start | Programs | Appeon 6.0 for PowerBuilder | Appeon Server for WebSphere | Start WebSphere.
	UNIX/LINUX	Run the *appeonserver.sh* file in the $appeon/bin/ folder, for example, $WebSphere/AppServer/appeon/bin/.$WebSphere indicates the installation directory of WebSphere.

3 Running Sales Application Demo

3.1 Overview

The Sales Application Demo is a sample sales application that tracks customers, orders, and product information. It also provides application security at a window-level that allows users access to some windows but not others, and allows for personalization, on a user-by-user basis, of the various reports in the Report menu. In this application, you can:

1) Log in as the administrator. The administrator can view and manage all the security settings for the application, including settings for group and user accounts. For more details, refer to Section 3.4: *Security settings*.

2) Add new customers to the system. Users can add new customers into the system and manage information for existing customers. For more details, refer to Section 3.5: *Customer information management*.

3) Add new orders for customers. A new order must be associated with an existing customer. A new customer must be added to the system before their order can be placed. For more details, refer to Section 3.6: *Order information management*.

4) Process orders. Once an order has been placed, it enters the processing queue. Orders can be marked as in-process or completed. For more details, refer to Section 3.6: *Order information management*.

5) Ship orders. Completed orders can be shipped. For more details, refer to Section 3.6: *Order information management*.

6) Send statements and receive payments. Users can track unpaid orders and send statements to customers. For more details, refer to Section 3.6: *Order information management*.

7) Manage the product categories and products, add new products, and view the entire product catalog. For more details, refer to Section 3.7: *Product information management*.

8) View the sales and customer reports by order type, product category, and customer. For more details, refer to Section 3.8: *Reports*.

The following sections show how to work with the demo.

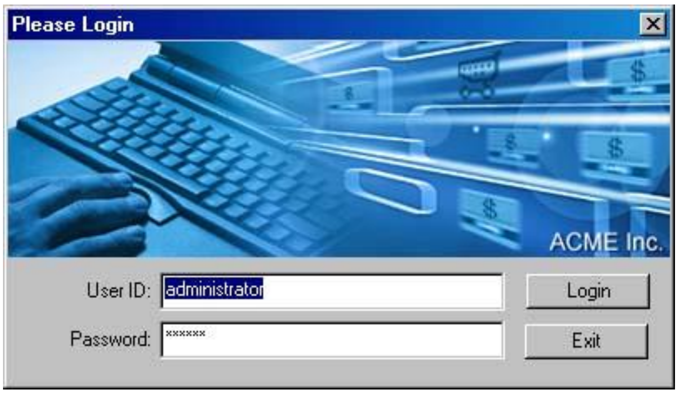
3.2 Run Sales Application Demo

To run the Sales Application Demo, follow the steps below.

Step 1 – Click the *Select and Run* button in the PowerBar and select “sales_application_demo” to run the demo.

Step 2 – Log in to the Sales Application Demo. The default User ID and password display in the login window. Click the *Login* button to log into the demo. Refer to Figure 3-1.

Figure 3-1: Sales Application Demo login



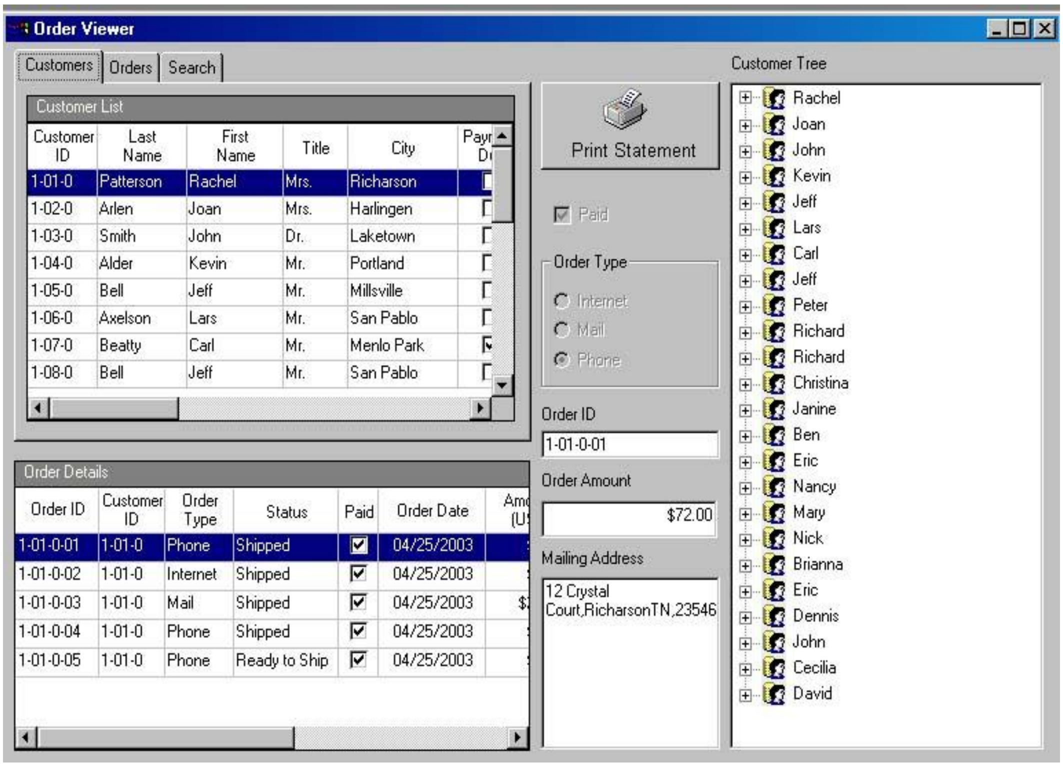
User ID: administrator

Password: ******

3.3 Order Viewer

Click the *Order Viewer* button in the toolbar of the demo main window or select Order Viewer from the File menu. The Order Viewer window will display as shown in Figure 3-2. It is a read-only window with three tabs available for users to view and search for the latest order and customer information. The TreeView is a quick and easy way to traverse through the records displayed in the Customer tab and Order tab. Refer to Figure 3-2. For more information on controls/objects in the Order View window, refer to Table 3-1.

Figure 3-2: The Order Viewer window



Customer List

Customer ID	Last Name	First Name	Title	City	Payr D
1-01-0	Patterson	Rachel	Mrs.	Richarson	☐
1-02-0	Arlen	Joan	Mrs.	Harlingen	☐
1-03-0	Smith	John	Dr.	Laketown	☐
1-04-0	Alder	Kevin	Mr.	Portland	☐
1-05-0	Bell	Jeff	Mr.	Millsville	☐
1-06-0	Axelson	Lars	Mr.	San Pablo	☐
1-07-0	Beatty	Carl	Mr.	Menlo Park	☑
1-08-0	Bell	Jeff	Mr.	San Pablo	☐

Order Details

Order ID	Customer ID	Order Type	Status	Paid	Order Date	Amo (U
1-01-0-01	1-01-0	Phone	Shipped	☑	04/25/2003	
1-01-0-02	1-01-0	Internet	Shipped	☑	04/25/2003	
1-01-0-03	1-01-0	Mail	Shipped	☑	04/25/2003	$
1-01-0-04	1-01-0	Phone	Shipped	☑	04/25/2003	
1-01-0-05	1-01-0	Phone	Ready to Ship	☑	04/25/2003	

☑ Paid

Order Type
○ Internet
○ Mail
● Phone

Order ID
1-01-0-01

Order Amount
$72.00

Mailing Address
12 Crystal Court,RicharsonTN,23546

Customer Tree
- Rachel
- Joan
- John
- Kevin
- Jeff
- Lars
- Carl
- Jeff
- Peter
- Richard
- Richard
- Christina
- Janine
- Ben
- Eric
- Nancy
- Mary
- Nick
- Brianna
- Eric
- Dennis
- John
- Cecilia
- David

Table 3-1: Controls/Objects in the Order View window

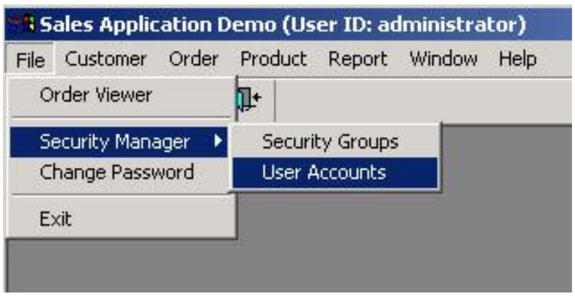
Control/Object		Description
Customers tab page	Customer List	A grid DataWindow for users to view customer information.
	Order Details	A grid DataWindow displaying details of selected customers' order(s).
Orders tab page	Order List	A grid DataWindow for users to view order information.
	Customer Details	A freeform DataWindow displaying the customer details for a selected order.
Search tab page	Search	Contains a list box for users to select a search type: Customer ID, Order ID, Order Type, and Paid. Once the search type is selected, an editable column or dropdown list box appears, allowing users to set the search criteria. Click the *Search* button to perform the search.
	Search Result	A DataWindow displaying search results that meet specified search criteria. All records are searched.
Print Statement		Prints a customer statement that contains both paid and unpaid orders for the current customer.
Paid		Displays the payment status of a selected order.
Order Type, Order ID, Order Amount		Displays order information for a selected order.
Mailing Address		Displays the mailing address of the current customer.
Customer Tree		A TreeView of customers. Click on a name in the TreeView to view a customer's contact and order details. Selecting a specific order in the TreeView will highlight that order in the Order Detail DataWindow.

3.4 Security settings

The administrator has full rights to view and manage all group and user account settings. Other users whose accounts are created in the application can be set to access only certain features of the application depending on the rights of the group they are in.

There are two windows available to manage the security of the application: Security Groups and User Accounts. To access the windows, click File | Security Manager. Refer to Figure 3-3.

Figure 3-3: Security Manager menu

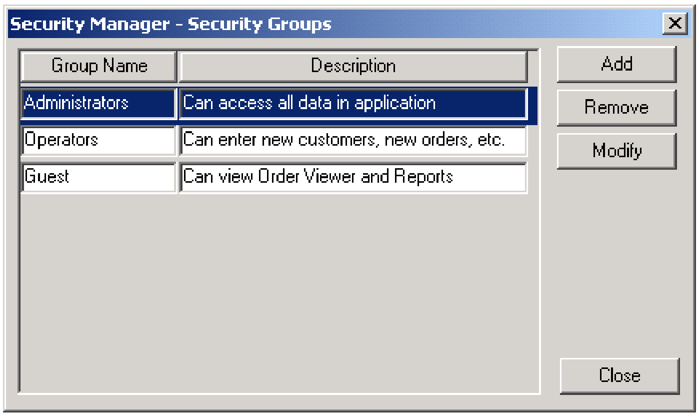


3.4.1 Security Groups

Step 1 – Click File | Security Manager | Security Groups.

The Security Groups window allows users to add new groups, remove groups, and modify the settings for existing groups. Refer to Figure 3-4.

Figure 3-4: Manage Security Groups

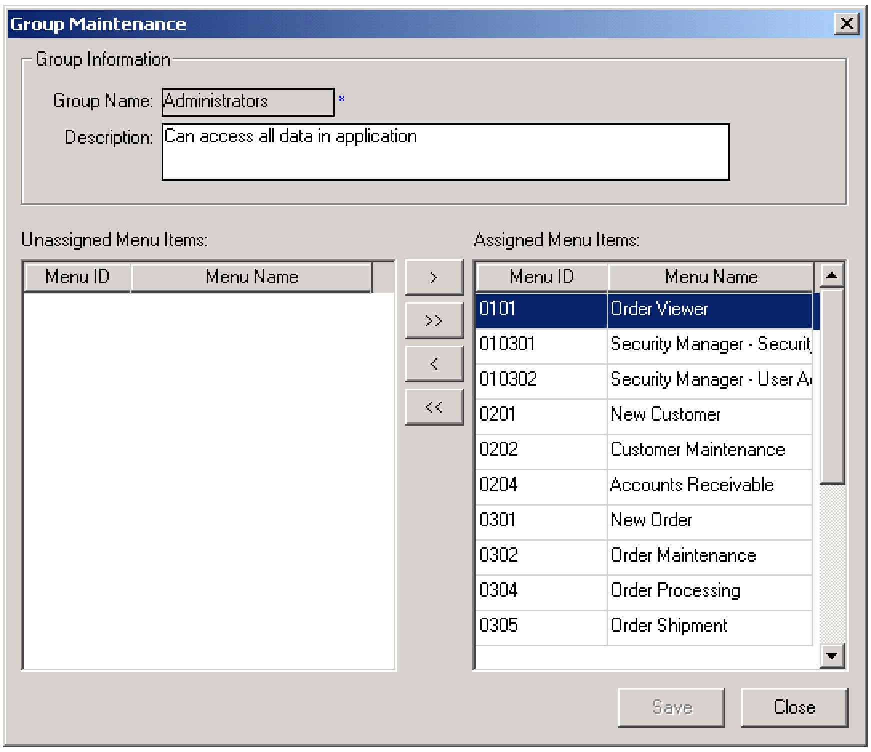


Security Manager - Security Groups

Group Name	Description
Administrators	Can access all data in application
Operators	Can enter new customers, new orders, etc.
Guest	Can view Order Viewer and Reports

Step 2 – Click the *Modify* button and view the settings for the selected group in the Group Maintenance window that appears. Refer to Figure 3-5.

Figure 3-5: Group maintenance



Group Maintenance

Group Information

Group Name: Administrators *

Description: Can access all data in application

Unassigned Menu Items:

Menu ID	Menu Name

Assigned Menu Items:

Menu ID	Menu Name
0101	Order Viewer
010301	Security Manager - Securit
010302	Security Manager - User A
0201	New Customer
0202	Customer Maintenance
0204	Accounts Receivable
0301	New Order
0302	Order Maintenance
0304	Order Processing
0305	Order Shipment

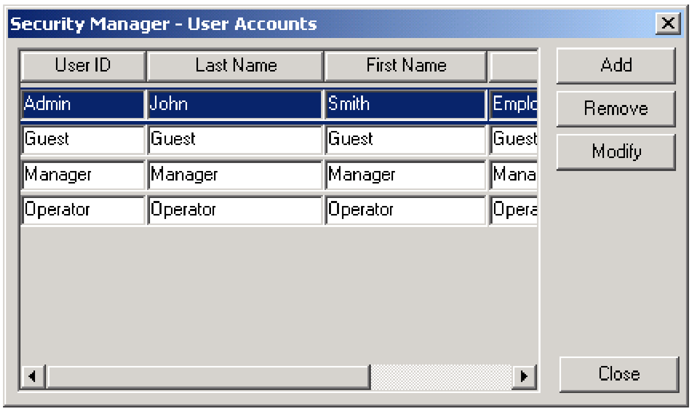
To assign rights to a group, use the arrow buttons to move menu items from “Unassigned Menu Items” to “Assigned Menu Items”. The Group Name field is read-only in this window.

Step 3 – Save the settings and close the Group Maintenance and Security Groups windows.

3.4.2 User Accounts

Step 1 – Click File | Security Manager | User Accounts. The User Accounts window is displayed. Refer to Figure 3-6.

Figure 3-6: Manage User Accounts



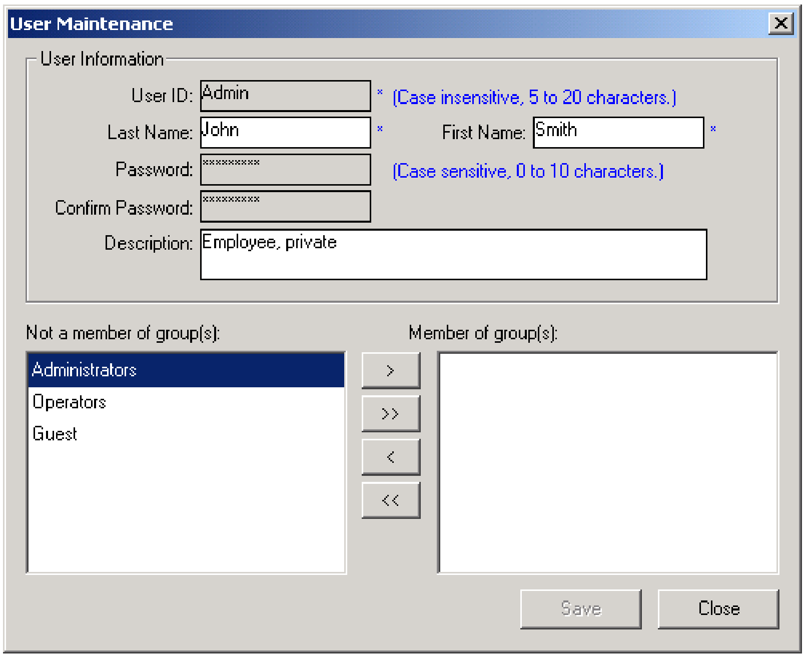
Security Manager - User Accounts

User ID	Last Name	First Name	
Admin	John	Smith	Emplo
Guest	Guest	Guest	Guest
Manager	Manager	Manager	Mana
Operator	Operator	Operator	Opera

Users can add, remove, or modify the user account settings.

Step 2 – Click the *Modify* button. The User Maintenance window displays. Refer to Figure 3-7.

Figure 3-7: User Maintenance



User Maintenance

User Information

User ID: Admin * (Case insensitive, 5 to 20 characters.)

Last Name: John * First Name: Smith *

Password: ********** (Case sensitive, 0 to 10 characters.)

Confirm Password: **********

Description: Employee, private

Not a member of group(s):

- Administrators
- Operators
- Guest

Member of group(s):

Use the arrow buttons to assign membership to a group. The User ID, Password, and Confirm Password fields are read-only in this window.

Step 3 – Save changes and close the User Maintenance window to return to the User Accounts window. Click *Close* in the User Accounts window.

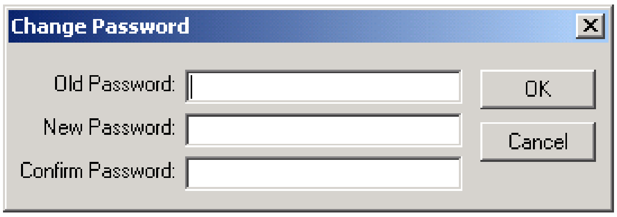
Step 4 – Any changes made to the user account will not take effect until the user exits the application and logs in again.

3.4.3 Change password for current user

The Change Password window will change the password for the user currently logged in to the system (in this case, the administrator). By default, the administrator password is set to Null.

Step 1 – Click File | Change Password. The Change Password window is displayed. Refer to Figure 3-8.

Figure 3-8: Change Password



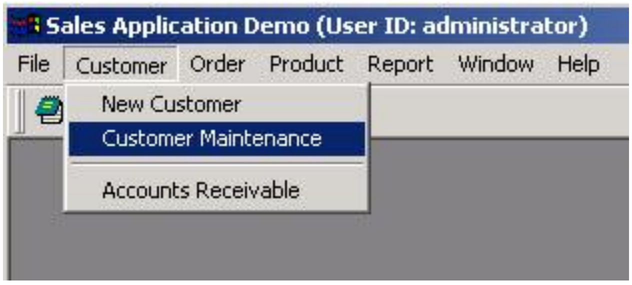
Step 2 – Type the old and new passwords and confirm the new password.

Step 3 – Any changes made to the password for the current user will not take effect until the user exits the application and logs back in again with the new password.

3.5 Customer information management

The Customer menu in the MDI window of the Sales Application Demo allows users access to windows for adding new customers, maintaining customer information, and performing accounts receivable tasks. Refer to Figure 3-9.

Figure 3-9: The Customer menu

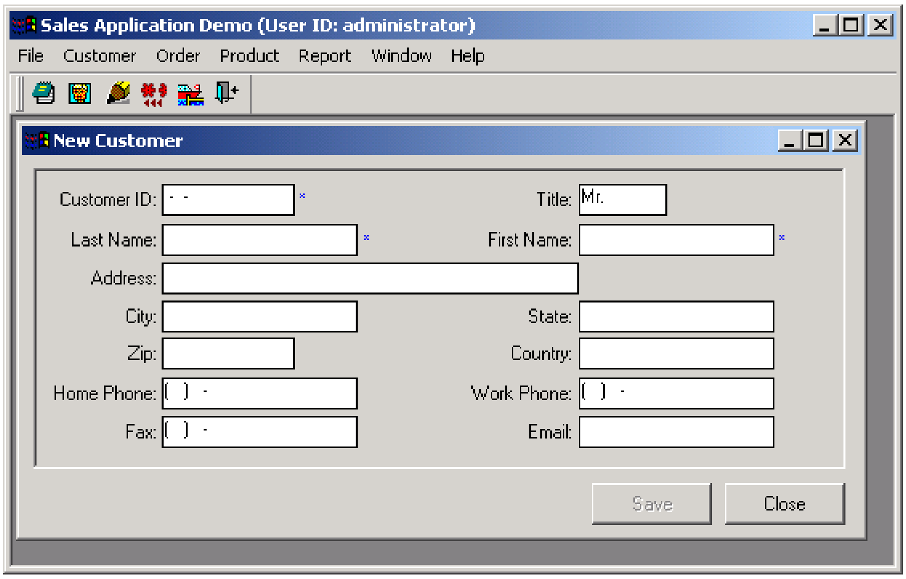


3.5.1 New Customer

You must complete a new customer's information before filling any orders for that customer.

Step 1 – Click the *New Customer* icon (▣) in the toolbar or select Customer | New Customer from the menu. Refer to Figure 3-10.

Figure 3-10: Adding a new customer


Sales Application Demo (User ID: administrator)
File Customer Order Product Report Window Help
New Customer
Save
Close

Customer ID:	- - *	Title:	Mr.
Last Name:	*	First Name:	*
Address:			
City:		State:	
Zip:		Country:	
Home Phone:	( ) -	Work Phone:	( ) -
Fax:	( ) -	Email:	

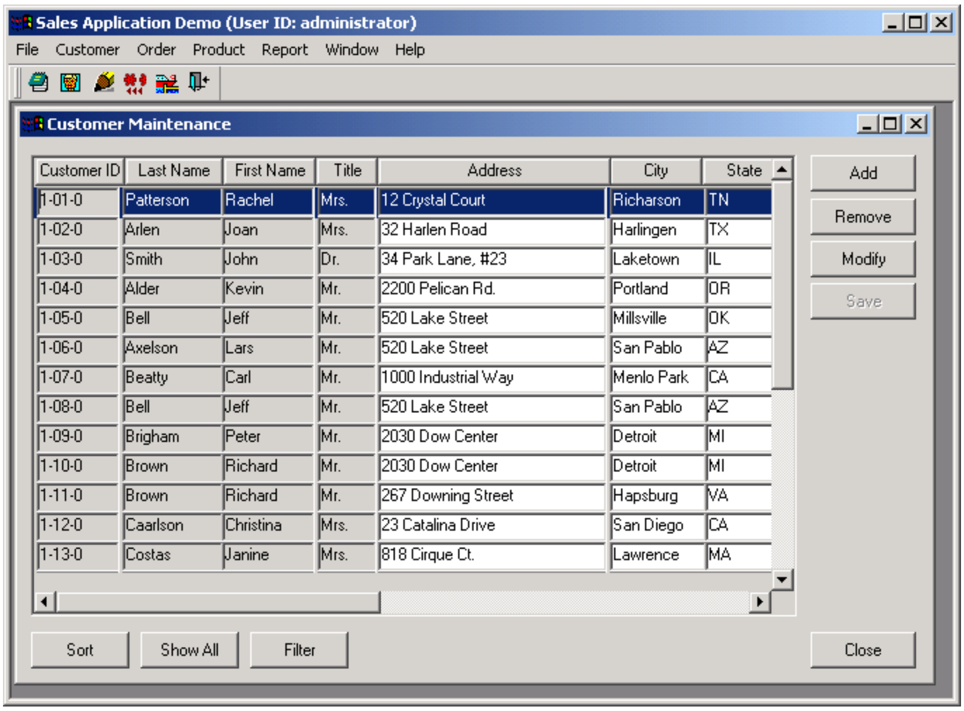
Step 2 – Enter the customer information. The customer ID, First Name, Last Name, and Title information cannot be edited once they are saved.

Step 3 – Save the new customer information and close the new customer window.

3.5.2 Customer Maintenance

Step 1 – Click Customer | Customer Maintenance. The Customer Maintenance window is displayed. Refer to Figure 3-11.

Figure 3-11: Customer Maintenance


Sales Application Demo (User ID: administrator)
File Customer Order Product Report Window Help
Customer Maintenance
Add
Remove
Modify
Save
Sort
Show All
Filter
Close

Customer ID	Last Name	First Name	Title	Address	City	State
1-01-0	Patterson	Rachel	Mrs.	12 Crystal Court	Richarson	TN
1-02-0	Arlen	Joan	Mrs.	32 Harlen Road	Harlingen	TX
1-03-0	Smith	John	Dr.	34 Park Lane, #23	Laketown	IL
1-04-0	Alder	Kevin	Mr.	2200 Pelican Rd.	Portland	OR
1-05-0	Bell	Jeff	Mr.	520 Lake Street	Millsville	OK
1-06-0	Axelson	Lars	Mr.	520 Lake Street	San Pablo	AZ
1-07-0	Beatty	Carl	Mr.	1000 Industrial Way	Menlo Park	CA
1-08-0	Bell	Jeff	Mr.	520 Lake Street	San Pablo	AZ
1-09-0	Brigham	Peter	Mr.	2030 Dow Center	Detroit	MI
1-10-0	Brown	Richard	Mr.	2030 Dow Center	Detroit	MI
1-11-0	Brown	Richard	Mr.	267 Downing Street	Hapsburg	VA
1-12-0	Caarlson	Christina	Mrs.	23 Catalina Drive	San Diego	CA
1-13-0	Costas	Janine	Mrs.	818 Cirque Ct.	Lawrence	MA

Add, remove, or modify customer information. The Customer ID, Last Name, First Name, and Title information are read-only and cannot be edited. A customer can only be removed if the customer has not placed any orders. Orders can only be removed if they have not been processed or shipped (for example, those with New Order status).

Step 2 – Modify a field directly by typing in the field and click *Save* to accept the change, or select a customer from the list and click *Modify* to display the Customer Maintenance window and change the customer's information. The Customer ID, Last Name, First Name, and Title information are read-only and cannot be edited.

Note: If you edit the fields directly in the customer maintenance window and then edit a particular row using the Modify button, always remember to save the edited information before clicking the *Modify* button.

Step 3 – Save changes and close to return to the Customer Maintenance window.

3.5.2.a Sort, show all and filter

The *Sort*, *Show All*, and *Filter* buttons help the user to display rows in the DataWindow that meet certain criteria.

Click the *Sort* button to select the sort criteria. (You can also select any column header to sort the information by the selected column).

Click the *Filter* button to set criteria for displaying certain customer information. Users can filter customer information using a number of criteria including Customer ID, Name, city, state, country, and payment status.

Click the *Show All* button to show all customers.

3.5.3 Accounts Receivable

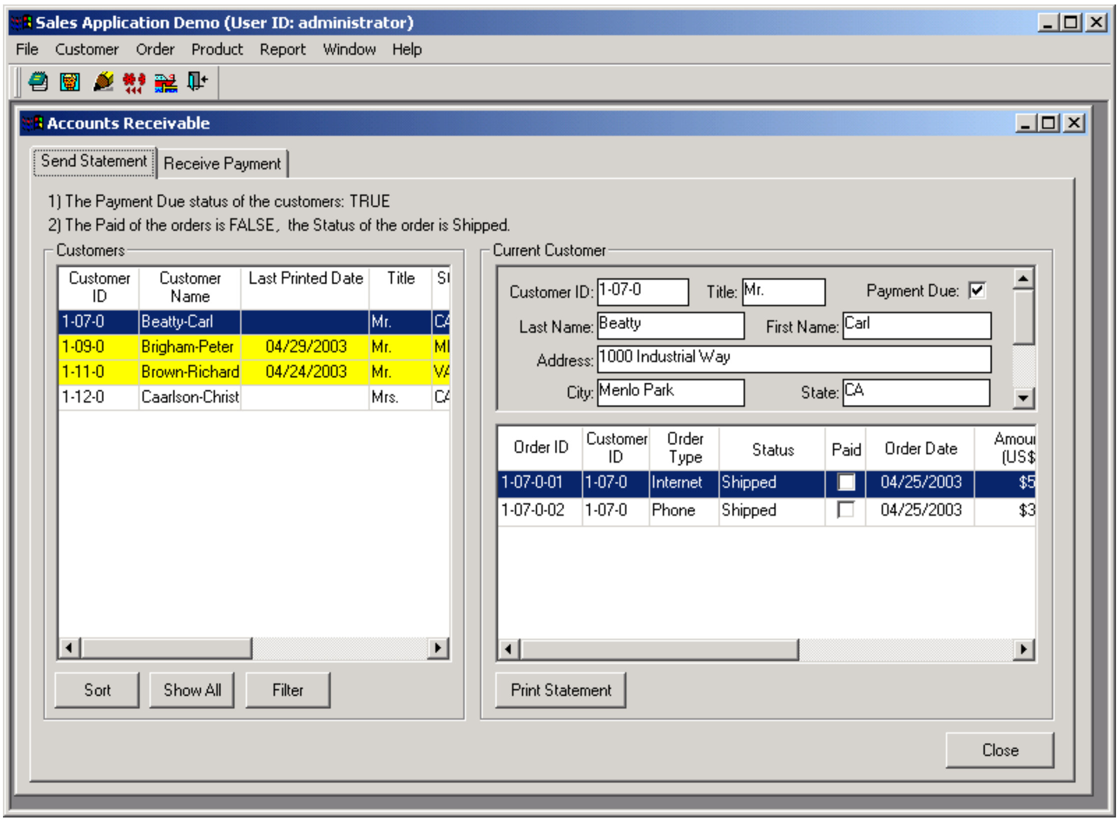
The Accounts Receivable window tracks orders that have been shipped to customers but have not been paid for yet. Users can:

- view customer and order information for orders that are unpaid,
- print statements to send to customers, and
- mark an order as paid once payment is received.

3.5.3.a Send Statement tab

Step 1 – Click Customer | Accounts Receivable. The Accounts Receivable window is displayed. Refer to Figure 3-12.

Figure 3-12: The Send Statement tab in the Accounts Receivable window



1) The Payment Due status of the customers: TRUE
2) The Paid of the orders is FALSE, the Status of the order is Shipped.

Customer ID	Customer Name	Last Printed Date	Title	St
1-07-0	Beatty-Carl		Mr.	CA
1-09-0	Brigham-Peter	04/29/2003	Mr.	MI
1-11-0	Brown-Richard	04/24/2003	Mr.	VA
1-12-0	Caarlson-Christ		Mrs.	CA

Customer ID: 1-07-0 Title: Mr. Payment Due: ☑
Last Name: Beatty First Name: Carl
Address: 1000 Industrial Way
City: Menlo Park State: CA

Order ID	Customer ID	Order Type	Status	Paid	Order Date	Amou (US$
1-07-0-01	1-07-0	Internet	Shipped	□	04/25/2003	$5
1-07-0-02	1-07-0	Phone	Shipped	□	04/25/2003	$3

Step 2 – Click the Send Statement tab in the Accounts Receivable window.

Users can view customers with unpaid orders. Customer information highlighted in yellow indicates that a statement has already been printed.

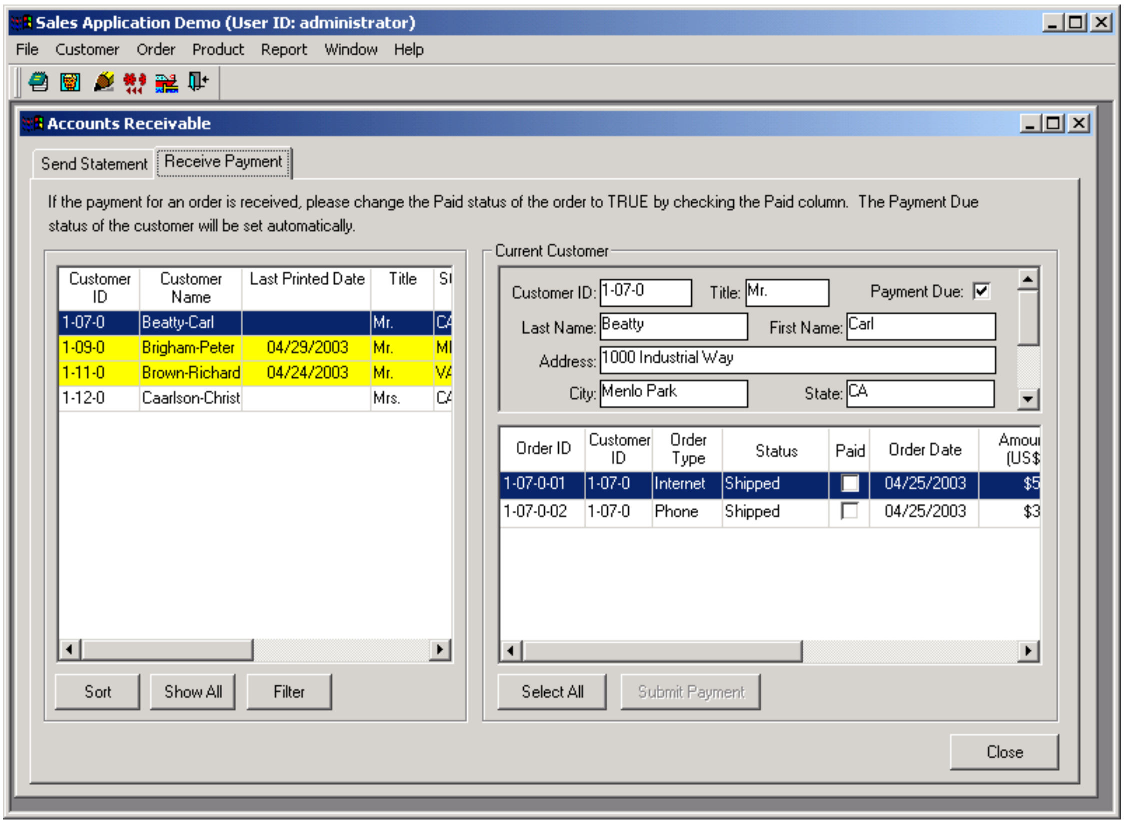
Click on a name in the Customers group box to view the customer's details (in the Current Customer group box) and corresponding orders. The information in these fields is read-only and cannot be modified from this screen.

Step 3 – Click the *Print Statement* button in the Send Statement tab to print an invoice for the shipped but unpaid orders.

3.5.3.b Receive Payment tab

Step 1 – Click the *Receive Payment* tab in the Accounts Receivable window. Refer to Figure 3-13.

Figure 3-13: The Receive Payment tab in the Accounts Receivable window



If the payment for an order is received, please change the Paid status of the order to TRUE by checking the Paid column. The Payment Due status of the customer will be set automatically.

Customer ID	Customer Name	Last Printed Date	Title	St
1-07-0	Beatty-Carl		Mr.	CA
1-09-0	Brigham-Peter	04/29/2003	Mr.	MI
1-11-0	Brown-Richard	04/24/2003	Mr.	VA
1-12-0	Caarlson-Christ		Mrs.	CA

Customer ID: 1-07-0 Title: Mr. Payment Due: ☑

Last Name: Beatty First Name: Carl

Address: 1000 Industrial Way

City: Menlo Park State: CA

Order ID	Customer ID	Order Type	Status	Paid	Order Date	Amou (US$
1-07-0-01	1-07-0	Internet	Shipped	□	04/25/2003	$5
1-07-0-02	1-07-0	Phone	Shipped	□	04/25/2003	$3

Users can view customers with unpaid orders. Customer information highlighted in yellow indicates that a statement has already been printed.

Click on a name in the Customers group box to view the customer's details and orders. All the information in these fields, except for the Paid checkbox, is read-only and cannot be modified from this screen.

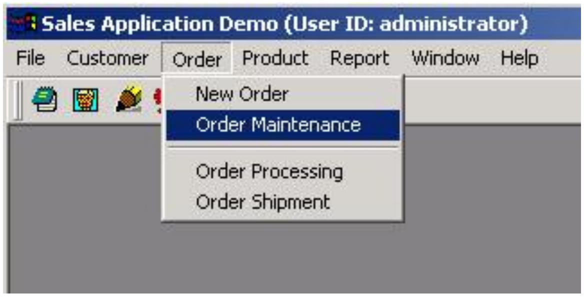
Click the *Select All* button to mark all orders for a customer as paid.

Step 2 – To mark an order as paid, select a customer. Click the Paid checkbox for an order that has been paid or click *Select All* to select all orders. Click the *Submit Payment* button. The customer's name will be automatically removed from the Accounts Receivable system if the customer has paid for all orders.

3.6 Order information management

The Order menu in the MDI window of the Sales Application Demo allows users access to windows for adding new orders, maintaining information on existing customers, and performing order processing and shipping tasks. Refer to Figure 3-14.

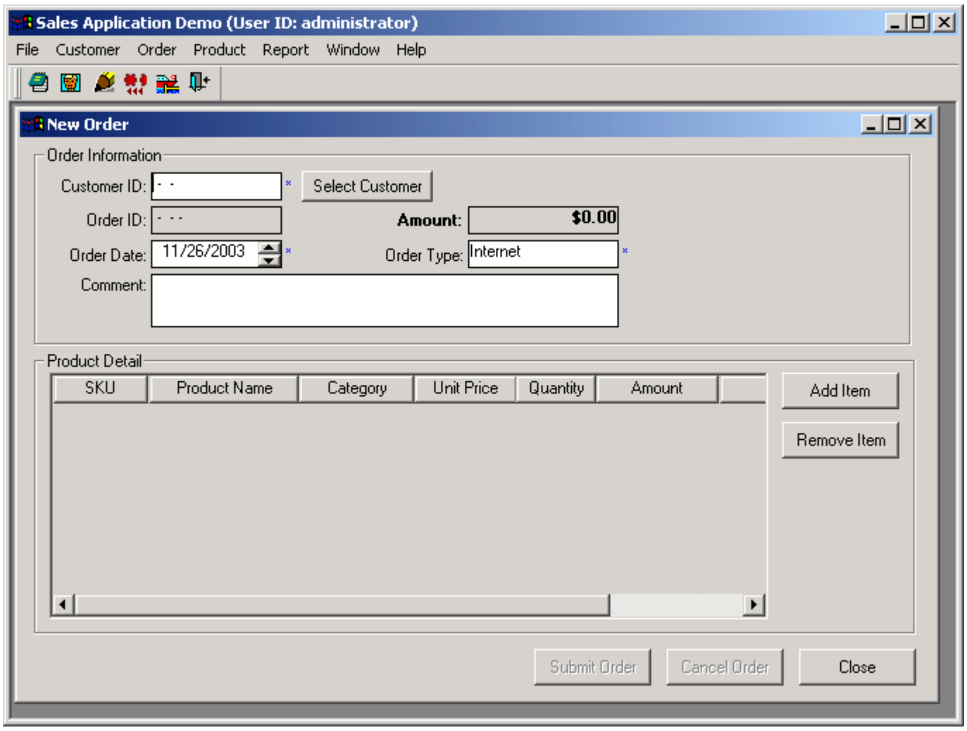
Figure 3-14: The Order menu



3.6.1 New order

Step 1 – Click the *New Order* icon () in the toolbar or select Order | New Order from the menu. The New Order window appears. Refer to Figure 3-15.

Figure 3-15: The New Order window



Order Information

Customer ID: - - *

Select Customer

Order ID: - - -

Amount: **$0.00**

Order Date: 11/26/2003 *

Order Type: Internet *

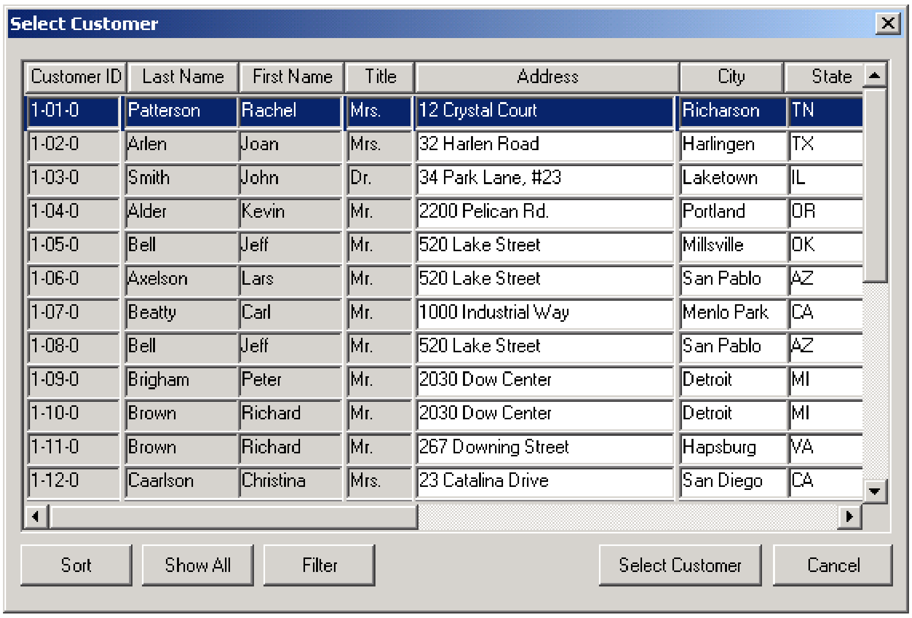
Comment:

Product Detail

SKU	Product Name	Category	Unit Price	Quantity	Amount

Step 2 – Click the *Select Customer* button to select the customer that the order belongs to or key in the customer ID. If the order belongs to a new customer, remember to create a new customer before entering an order for that customer. Refer to Figure 3-16.

Figure 3-16: The Select Customer window



Customer ID	Last Name	First Name	Title	Address	City	State
1-01-0	Patterson	Rachel	Mrs.	12 Crystal Court	Richarson	TN
1-02-0	Arlen	Joan	Mrs.	32 Harlen Road	Harlingen	TX
1-03-0	Smith	John	Dr.	34 Park Lane, #23	Laketown	IL
1-04-0	Alder	Kevin	Mr.	2200 Pelican Rd.	Portland	OR
1-05-0	Bell	Jeff	Mr.	520 Lake Street	Millsville	OK
1-06-0	Axelson	Lars	Mr.	520 Lake Street	San Pablo	AZ
1-07-0	Beatty	Carl	Mr.	1000 Industrial Way	Menlo Park	CA
1-08-0	Bell	Jeff	Mr.	520 Lake Street	San Pablo	AZ
1-09-0	Brigham	Peter	Mr.	2030 Dow Center	Detroit	MI
1-10-0	Brown	Richard	Mr.	2030 Dow Center	Detroit	MI
1-11-0	Brown	Richard	Mr.	267 Downing Street	Hapsburg	VA
1-12-0	Caarlson	Christina	Mrs.	23 Catalina Drive	San Diego	CA

Step 3 – Select a customer by clicking on the appropriate row. The Customer ID, Last Name, First Name, and Title information is read-only and cannot be edited in this window.

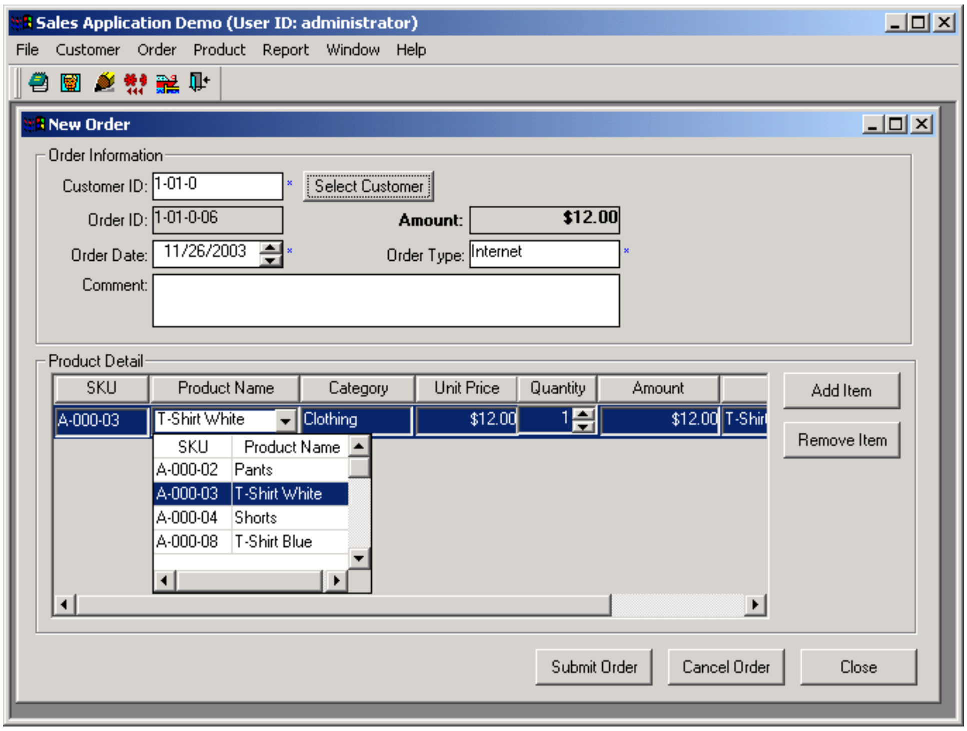
Step 4 – Click the *Select Customer* button. The customer information will be displayed in the window.

Step 5 – Select the Order Date from the scroll box or type the order date. Select the Order Type.

Step 6 – Click the *Add Item* button to add items to the order. A row appears in the Product Detail window.

Step 7 – Click the Product Name field to select a product from the DropDownListBox, and select the quantity from the Quantity scroll box or type the quantity. Continue adding additional items by clicking the *Add Item* button. Remove items by clicking the *Remove Item* button. Refer to Figure 3-17.

Figure 3-17: Add a product



Customer ID: 1-01-0 *

Order ID: 1-01-0-06

Amount: **$12.00**

Order Date: 11/26/2003 *

Order Type: Internet *

Comment:

SKU	Product Name	Category	Unit Price	Quantity	Amount	
A-000-03	T-Shirt White	Clothing	$12.00	1	$12.00	T-Shir

SKU	Product Name
A-000-02	Pants
A-000-03	T-Shirt White
A-000-04	Shorts
A-000-08	T-Shirt Blue

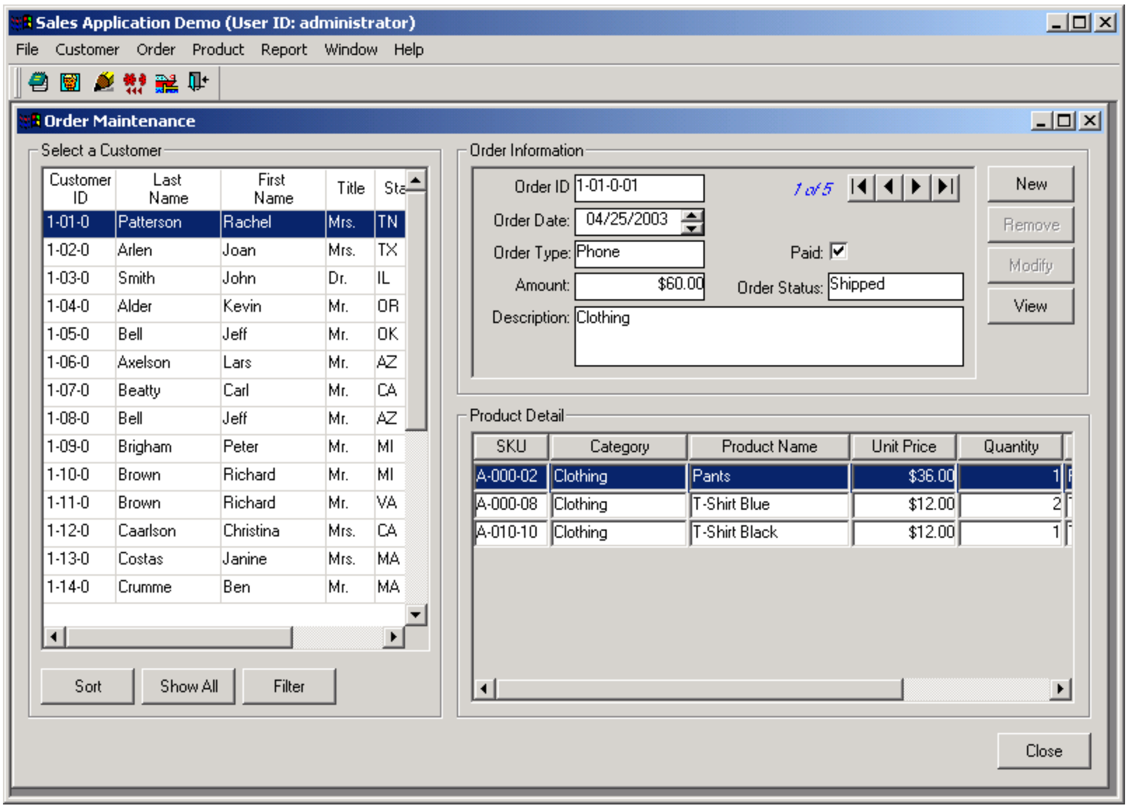
Step 8 – Once all the desired items are added to the order, click the *Submit Order* button.

Once an order is submitted or canceled, the New Order window remains active until it is actively closed so that you can submit an order for another customer.

3.6.2 Order maintenance

Step 1 – Select Order | Order Maintenance from the dropdown menu. The Order Maintenance window is displayed. Refer to Figure 3-18.

Figure 3-18: The Order Maintenance window



Customer ID	Last Name	First Name	Title	Sta
1-01-0	Patterson	Rachel	Mrs.	TN
1-02-0	Arlen	Joan	Mrs.	TX
1-03-0	Smith	John	Dr.	IL
1-04-0	Alder	Kevin	Mr.	OR
1-05-0	Bell	Jeff	Mr.	OK
1-06-0	Axelson	Lars	Mr.	AZ
1-07-0	Beatty	Carl	Mr.	CA
1-08-0	Bell	Jeff	Mr.	AZ
1-09-0	Brigham	Peter	Mr.	MI
1-10-0	Brown	Richard	Mr.	MI
1-11-0	Brown	Richard	Mr.	VA
1-12-0	Caarlson	Christina	Mrs.	CA
1-13-0	Costas	Janine	Mrs.	MA
1-14-0	Crumme	Ben	Mr.	MA

Order ID 1-01-0-01 1 of 5

Order Date: 04/25/2003

Order Type: Phone Paid: ☑

Amount: $60.00 Order Status: Shipped

Description: Clothing

SKU	Category	Product Name	Unit Price	Quantity
A-000-02	Clothing	Pants	$36.00	1
A-000-08	Clothing	T-Shirt Blue	$12.00	2
A-010-10	Clothing	T-Shirt Black	$12.00	1

Create a new order, remove an order, modify an order, or view the order details from the Order Maintenance window. Orders can only be removed or modified if they have not been processed or shipped (for example, has a New order status).

All the information in the Order Maintenance window is read-only and cannot be directly modified in this window.

Select a customer by clicking on a row in the Select a Customer window. The corresponding order information for that customer appears in the Order Information window, and the products ordered are displayed in the Product Detail window.

Order Information: When a customer is selected, the relevant order information is displayed in the Order Information window.

Click the arrow buttons to scroll among orders for a customer.

Click the *New* button to add a new order for a customer. For instructions on adding a new order, refer to Section 3.6.1: New order.

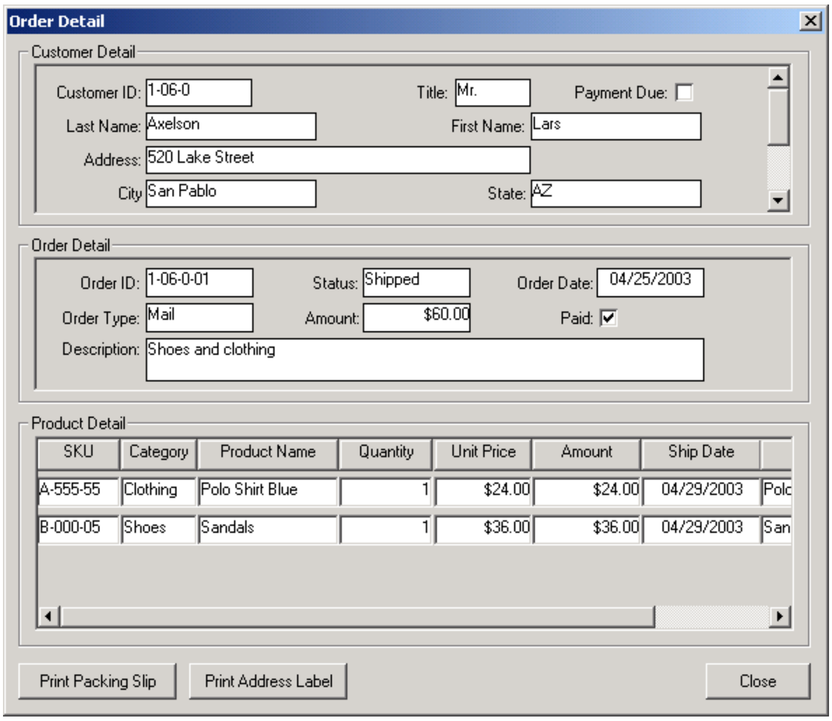
Click the *Remove* button to remove an order for a customer. Only orders with New Order status can be removed. Once the order is in Process (Order Status is set to Processing) or an order has been shipped (Order status is set to Shipped), it cannot be removed.

Click the *Modify* button to modify an order. Once the order is in Process or has been shipped, it cannot be modified.

Click the *View* button to view all the information about an order in the Order Detail window that has the functionality to print a packing slip or address label.

Step 2 – Click the *View* button. The Order Detail window displays. Refer to Figure 3-19.

Figure 3-19: The Order Detail window



Order Detail

Customer Detail

Customer ID: 1-06-0 Title: Mr. Payment Due: □

Last Name: Axelson First Name: Lars

Address: 520 Lake Street

City San Pablo State: AZ

Order Detail

Order ID: 1-06-0-01 Status: Shipped Order Date: 04/25/2003

Order Type: Mail Amount: $60.00 Paid: ☑

Description: Shoes and clothing

Product Detail

SKU	Category	Product Name	Quantity	Unit Price	Amount	Ship Date	
A-555-55	Clothing	Polo Shirt Blue	1	$24.00	$24.00	04/29/2003	Polo
B-000-05	Shoes	Sandals	1	$36.00	$36.00	04/29/2003	San

Step 3 – Click the *Print Packing Slip* and *Print Address Label* buttons to print packing slips and address labels. Click *Close* to return to the Order Maintenance window.

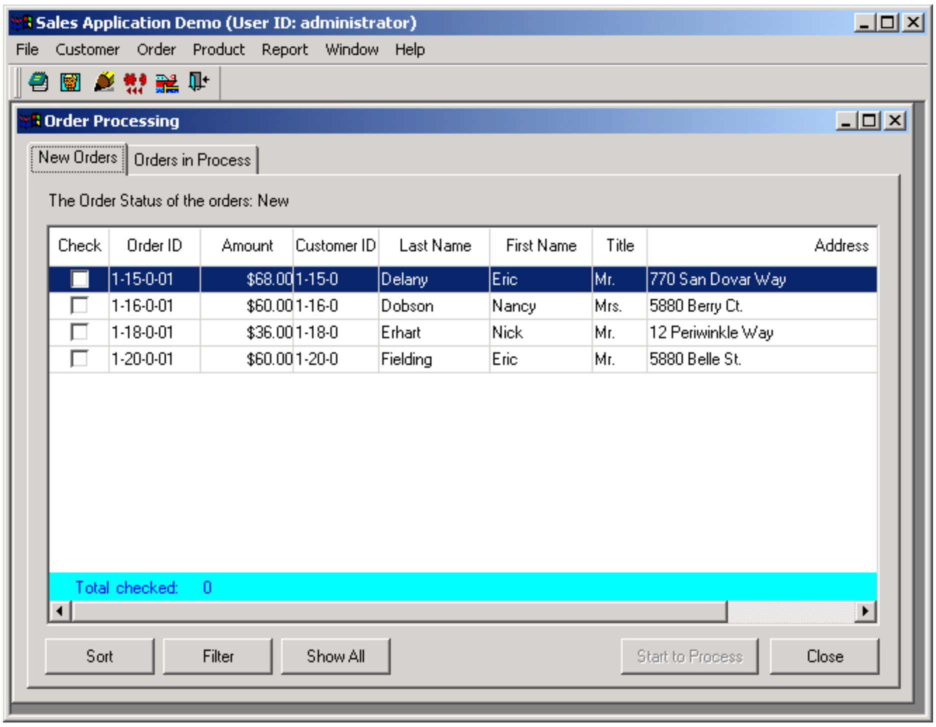
The *Print Address Label* will fail to work if you are running the application on an Appeon Server running on UNIX/LINUX.

Step 4 – Click *Close* in the Order Maintenance window.

3.6.3 Order processing

Step 1 – Click the *Order Processing* icon () in the toolbar or select Order | Order Processing from the menu. The Order Processing window is displayed and the New Orders tab is activated. Refer to Figure 3-20.

Figure 3-20: The Order Processing window (New Orders tab)


Sales Application Demo (User ID: administrator)
File Customer Order Product Report Window Help
Order Processing
New Orders
Orders in Process
Sort
Filter
Show All
Start to Process
Close

The Order Status of the orders: New

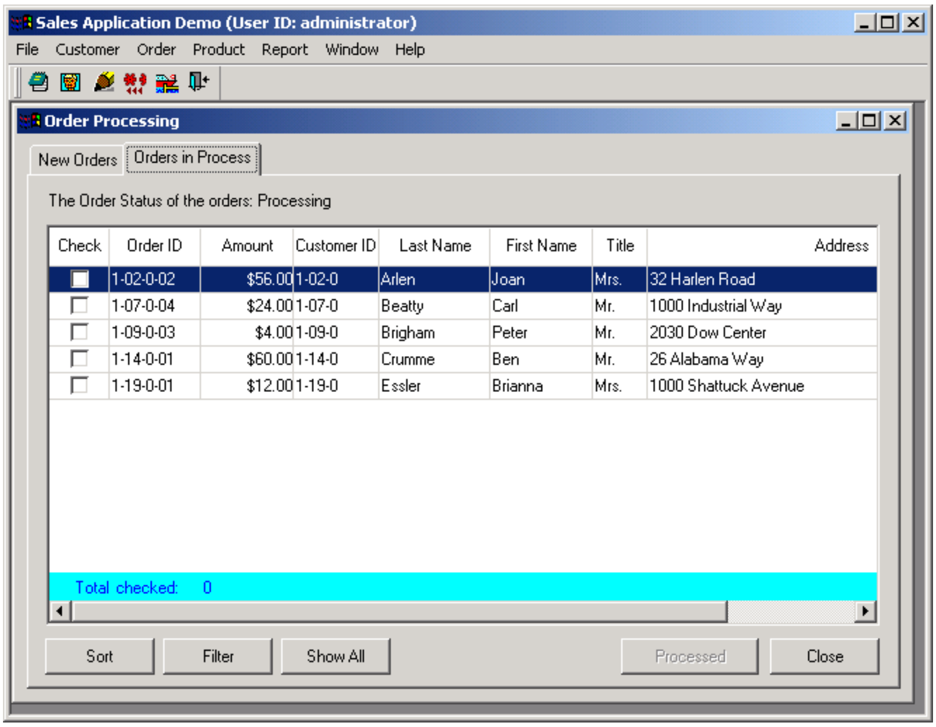
Check	Order ID	Amount	Customer ID	Last Name	First Name	Title	Address
□	1-15-0-01	$68.00	1-15-0	Delany	Eric	Mr.	770 San Dovar Way
□	1-16-0-01	$60.00	1-16-0	Dobson	Nancy	Mrs.	5880 Berry Ct.
□	1-18-0-01	$36.00	1-18-0	Erhart	Nick	Mr.	12 Periwinkle Way
□	1-20-0-01	$60.00	1-20-0	Fielding	Eric	Mr.	5880 Belle St.

Total checked: 0

Step 2 – Check the orders that are to be processed, and click the *Start to Process* button. The orders will be removed from the New Orders tab page and will appear in Orders on the Process tab page. For example, select orders 1-15-0-01 and 1-16-0-01 by checking the checkbox next to the two orders and click the *Start to Process* button.

Step 3 – Select the Orders in the Process tab. The orders selected for processing are displayed in this tab. Refer to Figure 3-21.

Figure 3-21: Orders in process


Sales Application Demo (User ID: administrator)
File Customer Order Product Report Window Help
Order Processing
New Orders
Orders in Process
Sort
Filter
Show All
Processed
Close

The Order Status of the orders: Processing

Check	Order ID	Amount	Customer ID	Last Name	First Name	Title	Address
□	1-02-0-02	$56.00	1-02-0	Arlen	Joan	Mrs.	32 Harlen Road
□	1-07-0-04	$24.00	1-07-0	Beatty	Carl	Mr.	1000 Industrial Way
□	1-09-0-03	$4.00	1-09-0	Brigham	Peter	Mr.	2030 Dow Center
□	1-14-0-01	$60.00	1-14-0	Crumme	Ben	Mr.	26 Alabama Way
□	1-19-0-01	$12.00	1-19-0	Essler	Brianna	Mrs.	1000 Shattuck Avenue

Total checked: 0

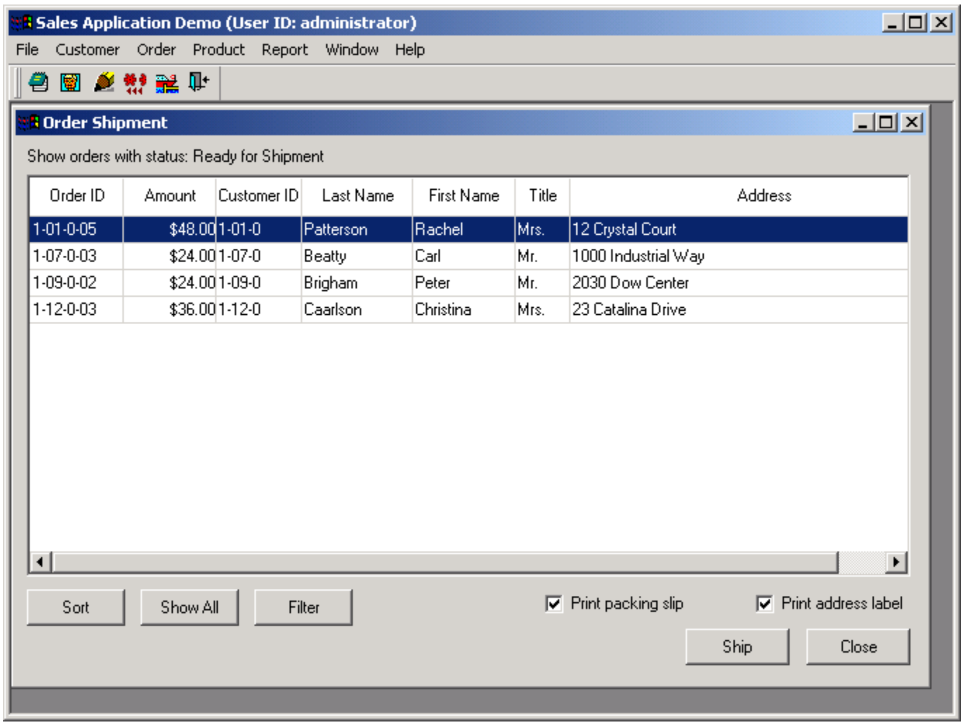
Step 4 – Check the orders that have been processed (ready to be shipped), and click the *Processed* button. The orders will be removed from the Orders in Process tab page and will appear in the Orders Shipment window. For example, select orders 1-15-0-01 and 1-16-0-01 by checking the checkbox next to the two orders and click the *Processed* button.

Step 5 – Click *Close* in the Order Processing window.

3.6.4 Order shipment

Step 1 – Click the Order Shipment icon () in the toolbar or select Order | Order Shipment from the menu. The Order Shipment window is displayed. Refer to Figure 3-22.

Figure 3-22: The Order Shipment window



Show orders with status: Ready for Shipment

Order ID	Amount	Customer ID	Last Name	First Name	Title	Address
1-01-0-05	$48.00	1-01-0	Patterson	Rachel	Mrs.	12 Crystal Court
1-07-0-03	$24.00	1-07-0	Beatty	Carl	Mr.	1000 Industrial Way
1-09-0-02	$24.00	1-09-0	Brigham	Peter	Mr.	2030 Dow Center
1-12-0-03	$36.00	1-12-0	Caarlson	Christina	Mrs.	23 Catalina Drive

☑ Print packing slip ☑ Print address label

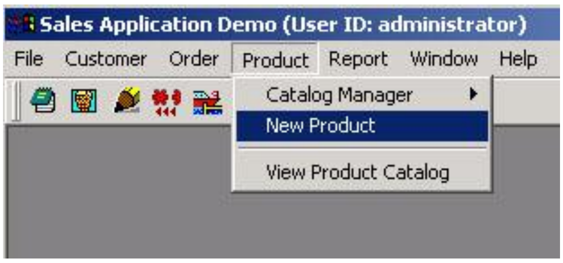
All the orders that have been processed in the Order Processing window will now appear in the Order Shipment window.

Step 2 – Select the orders that are ready to be shipped and click the *Ship* button. The orders will be removed from the Order Shipment window. All orders that have been shipped will then appear in the Send Statement tab of the Accounts Receivable window.

3.7 Product information management

The Product menu in the MDI window of the Sales Application Demo allows users to access windows for managing the product categories and products, adding new products, and viewing the entire product catalog. Refer to Figure 3-23.

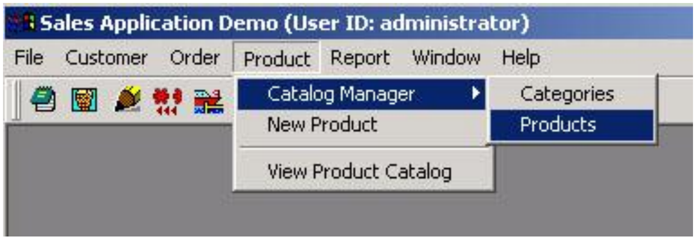
Figure 3-23: The Product menu



3.7.1 Catalog manager

There are two items to select in the Catalog manager menu: Categories and Products. Refer to Figure 3-24.

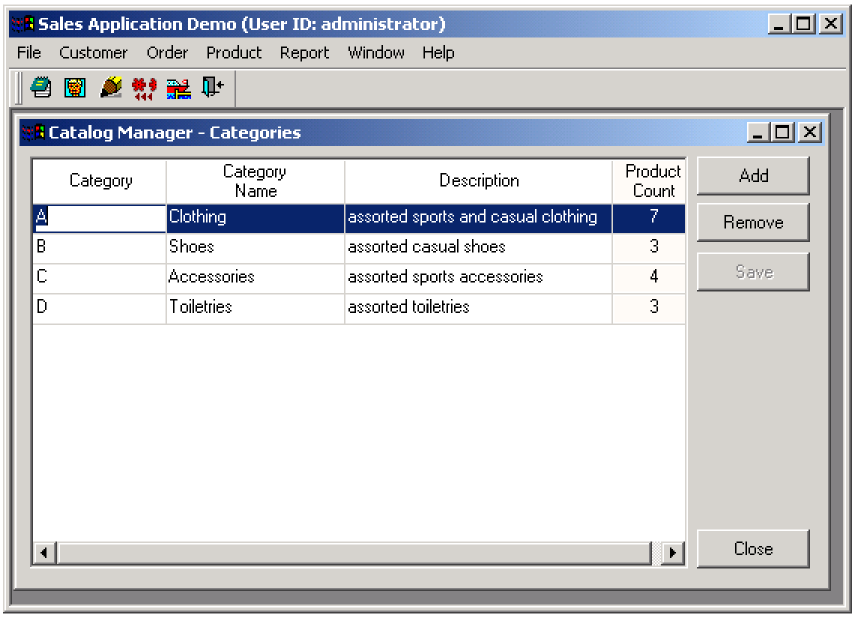
Figure 3-24: The Catalog Manager submenus



3.7.1.a Categories

Step 1 – Click Product | Catalog Manager | Categories from the MDI dropdown menu. The Catalog Manager – Categories window displays. Refer to Figure 3-25.

Figure 3-25: Catalog Manager – Categories


Sales Application Demo (User ID: administrator)
File
Customer
Order
Product
Report
Window
Help
Catalog Manager - Categories
Add
Remove
Save
Close

Category	Category Name	Description	Product Count
A	Clothing	assorted sports and casual clothing	7
B	Shoes	assorted casual shoes	3
C	Accessories	assorted sports accessories	4
D	Toiletries	assorted toiletries	3

Step 2 – Click directly in a field to modify the Category Name or Description. The category name cannot be modified if there are products for this category. Click *Save* to save any changes. The product count is automatically updated as changes are made to the product list, reflecting the total product count for the given category.

Step 3 – Click the *Add* button to add a new category. A new row appears. Type the new category information into the fields.

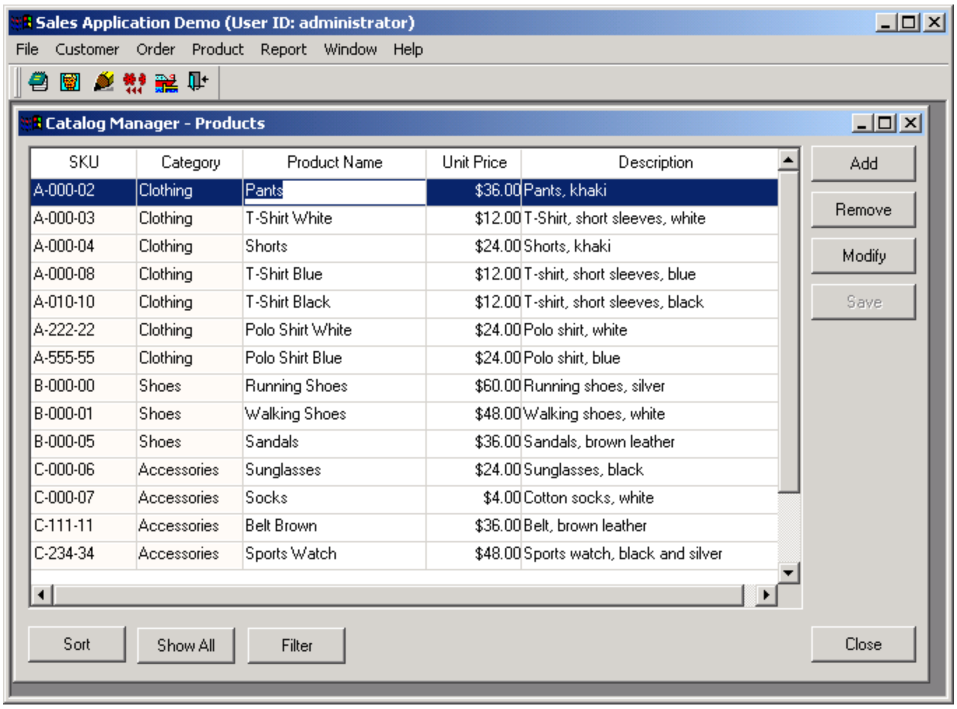
Step 4 – Click the *Remove* button to delete a category. Only a category with no products defined in it can be deleted from the Categories window.

Step 5 – Click *Close* to close the Categories window.

3.7.1.b Products

Step 1 – Click Product | Catalog Manager | Products from the MDI menu. The Catalog Manager – Products window is displayed. All the products are listed in the Products window. Refer to Figure 3-26.

Figure 3-26: Catalog Manager – Products


Sales Application Demo (User ID: administrator)
File Customer Order Product Report Window Help
Catalog Manager - Products
Add
Remove
Modify
Save
Sort
Show All
Filter
Close

SKU	Category	Product Name	Unit Price	Description
A-000-02	Clothing	Pants	$36.00	Pants, khaki
A-000-03	Clothing	T-Shirt White	$12.00	T-Shirt, short sleeves, white
A-000-04	Clothing	Shorts	$24.00	Shorts, khaki
A-000-08	Clothing	T-Shirt Blue	$12.00	T-shirt, short sleeves, blue
A-010-10	Clothing	T-Shirt Black	$12.00	T-shirt, short sleeves, black
A-222-22	Clothing	Polo Shirt White	$24.00	Polo shirt, white
A-555-55	Clothing	Polo Shirt Blue	$24.00	Polo shirt, blue
B-000-00	Shoes	Running Shoes	$60.00	Running shoes, silver
B-000-01	Shoes	Walking Shoes	$48.00	Walking shoes, white
B-000-05	Shoes	Sandals	$36.00	Sandals, brown leather
C-000-06	Accessories	Sunglasses	$24.00	Sunglasses, black
C-000-07	Accessories	Socks	$4.00	Cotton socks, white
C-111-11	Accessories	Belt Brown	$36.00	Belt, brown leather
C-234-34	Accessories	Sports Watch	$48.00	Sports watch, black and silver

Step 2 – Click directly in a field to modify the Product Name, Unit Price, or Description. Click *Save* to save any changes.

Note: If you edit the fields directly in the "Catalog Manager – Products" window and then edit a particular record using the modify button, always remember to save the edited information before clicking the *Modify* button.

Step 3 – Click the *Add* button to add a new product. Refer to Section 3.7.2: *New product* for instructions.

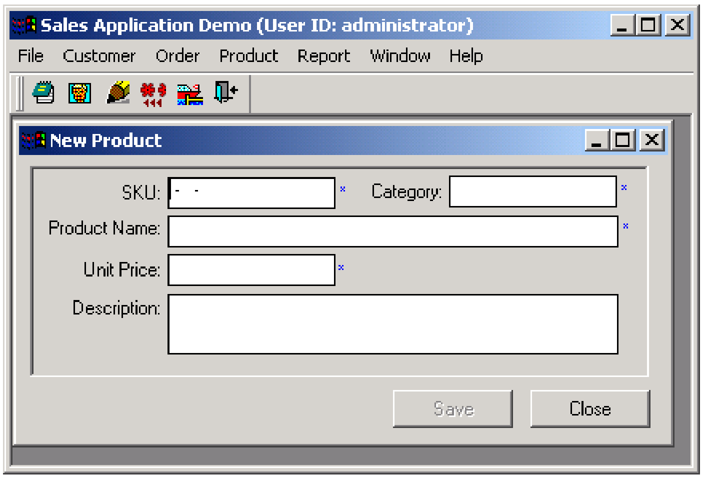
Step 4 – Click the *Remove* button to delete a product. Only a product that has not been ordered can be deleted from the Categories window.

Step 5 – Click *Close* to close the Categories window.

3.7.2 New product

Step 1 – Click Product | New Product from the MDI menu. The New Product window displays. Refer to Figure 3-27.

Figure 3-27: The New Product window


Sales Application Demo (User ID: administrator)
File Customer Order Product Report Window Help
New Product
SKU:
Category:
Product Name:
Unit Price:
Description:
Save
Close

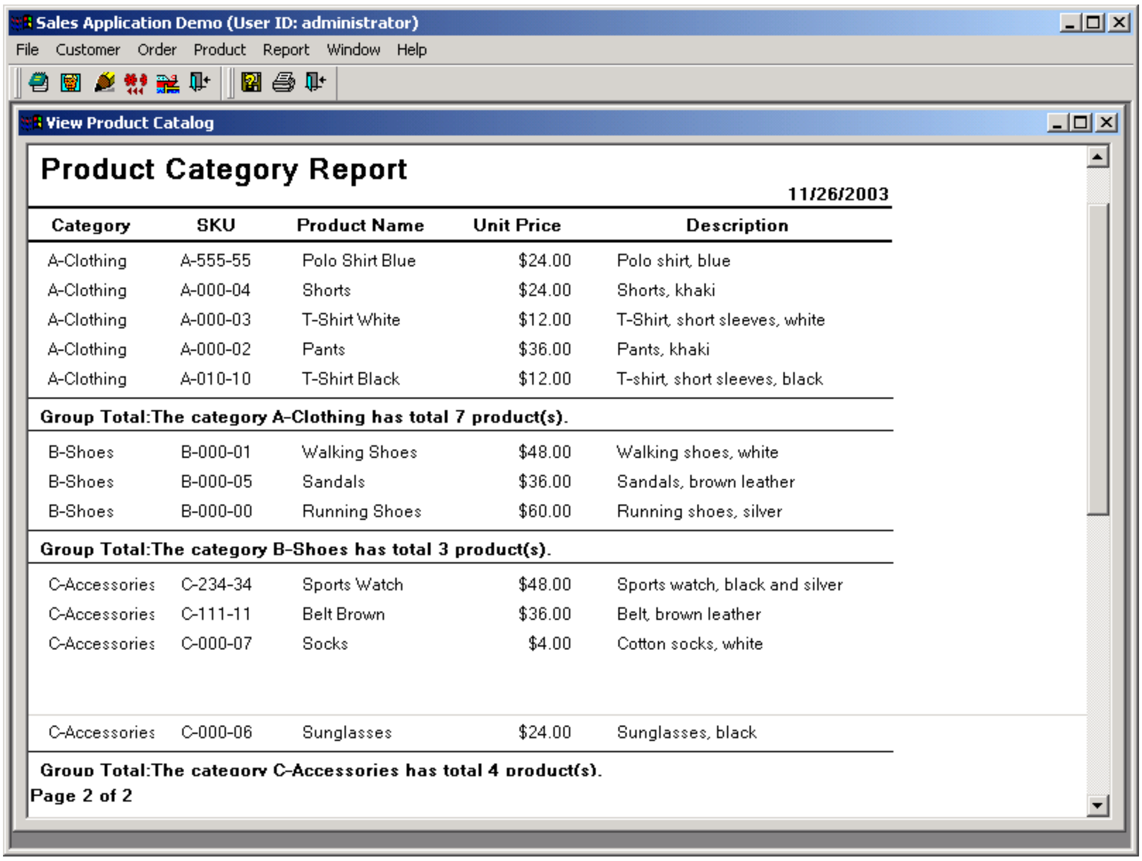
Step 2 – Enter the information for the product.

Step 3 – Save the new product into the system. The new product will appear in the Products window of the Catalog Manager as well as in the Product Catalog. When a product is saved, the New Product window remains active until closed.

3.7.3 View product catalog

Step 1 – Click Product | View Product Catalog from the menu. The Product Catalog window is displayed. Refer to Figure 3-28.

Figure 3-28: The Product Catalog window


Sales Application Demo (User ID: administrator)
File Customer Order Product Report Window Help
View Product Catalog

Product Category Report

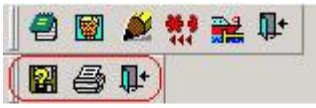
11/26/2003

Category	SKU	Product Name	Unit Price	Description
A-Clothing	A-555-55	Polo Shirt Blue	$24.00	Polo shirt, blue
A-Clothing	A-000-04	Shorts	$24.00	Shorts, khaki
A-Clothing	A-000-03	T-Shirt White	$12.00	T-Shirt, short sleeves, white
A-Clothing	A-000-02	Pants	$36.00	Pants, khaki
A-Clothing	A-010-10	T-Shirt Black	$12.00	T-shirt, short sleeves, black
Group Total:The category A-Clothing has total 7 product(s).				
B-Shoes	B-000-01	Walking Shoes	$48.00	Walking shoes, white
B-Shoes	B-000-05	Sandals	$36.00	Sandals, brown leather
B-Shoes	B-000-00	Running Shoes	$60.00	Running shoes, silver
Group Total:The category B-Shoes has total 3 product(s).				
C-Accessories	C-234-34	Sports Watch	$48.00	Sports watch, black and silver
C-Accessories	C-111-11	Belt Brown	$36.00	Belt, brown leather
C-Accessories	C-000-07	Socks	$4.00	Cotton socks, white
C-Accessories	C-000-06	Sunglasses	$24.00	Sunglasses, black
Group Total:The category C-Accessories has total 4 product(s).				

Page 2 of 2

Step 2 – Work in the product catalog window using three additional buttons that appear in the MDI window. Refer to Figure 3-29.

Figure 3-29: Product Catalog toolbar



Click the *SaveAs* button to save the catalog in a number of different formats. Note that the SaveAs feature can save DataWindow contents to a Metafile, Text, Excel or HTML table format in Windows; whereas only Text format saving is available in UNIX and LINUX.

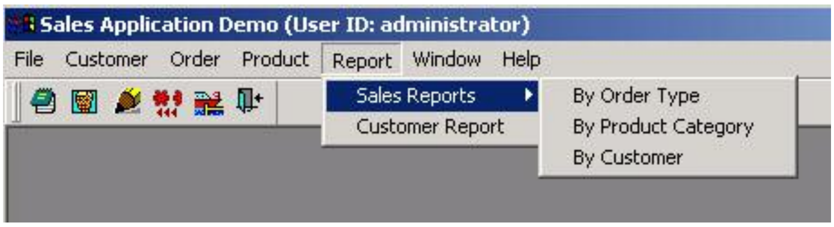
Click the *Print* button to print the product catalog.

Click the *Exit* button to close the Product Catalog window.

3.8 Reports

The Reports menu in the Sales Application Demo window allows users to access the sales and customer reports. The Sales reports can be viewed by order type, product category, and customer. These three report view types do not work with Appeon Servers running on UNIX/LINUX Refer to Figure 3-30.

Figure 3-30: The Report menu

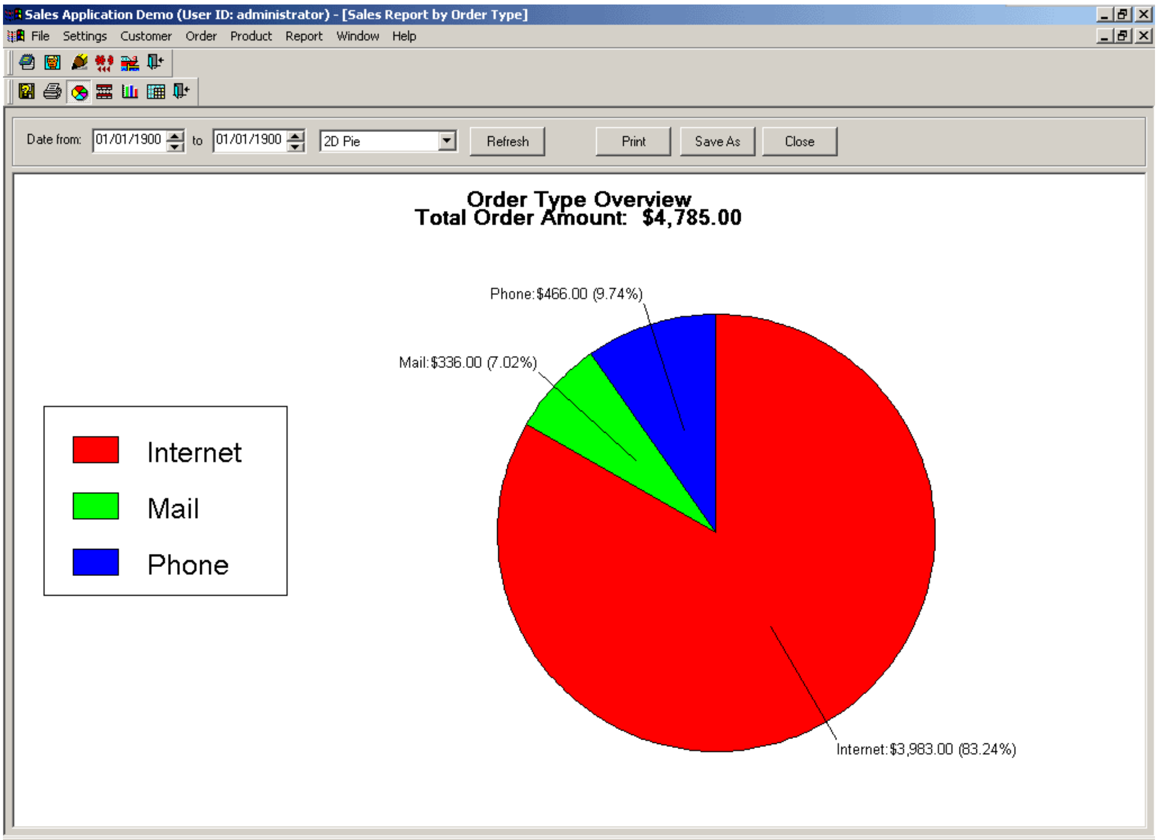


3.8.1 Sales reports by order type

The Sales Report by Order Type window displays the total sales for each order type: Internet, phone, and mail.

Step 1 – Click Report | Sales Report | by Order Type from the menu. The Sales Report By Order Type window is displayed. Refer to Figure 3-31.

Figure 3-31: The Sales Report by Order Type window


Sales Application Demo (User ID: administrator) - [Sales Report by Order Type]
File Settings Customer Order Product Report Window Help
Date from: 01/01/1900 to 01/01/1900
2D Pie
Refresh
Print
Save As
Close
Order Type Overview
Total Order Amount: $4,785.00
Phone:$466.00 (9.74%)
Mail:$336.00 (7.02%)
Internet:$3,983.00 (83.24%)
Internet
Mail
Phone

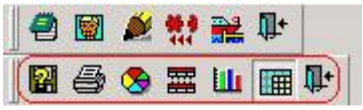
Step 2 – Specify the date to be included in the report by selecting the date range. To get all the data involved, keep the date scope from 00/00/0000 to 00/00/0000.

Step 3 – Specify the format to display the data from the dropdown list box or from the 2D Pie, 2D Bar Stacked, 3D Column, or Grid Data buttons.

Step 4 – Click the *Refresh* button to display data. If the Auto Refresh option is enabled under the Settings menu, there is no need to use this button unless you have changed the Date scope for the report.

Step 5 – Work in the sales report window with seven additional icons that appear when the report is opened. Refer to Figure 3-32.

Figure 3-32: Sales Report by Order Type toolbar



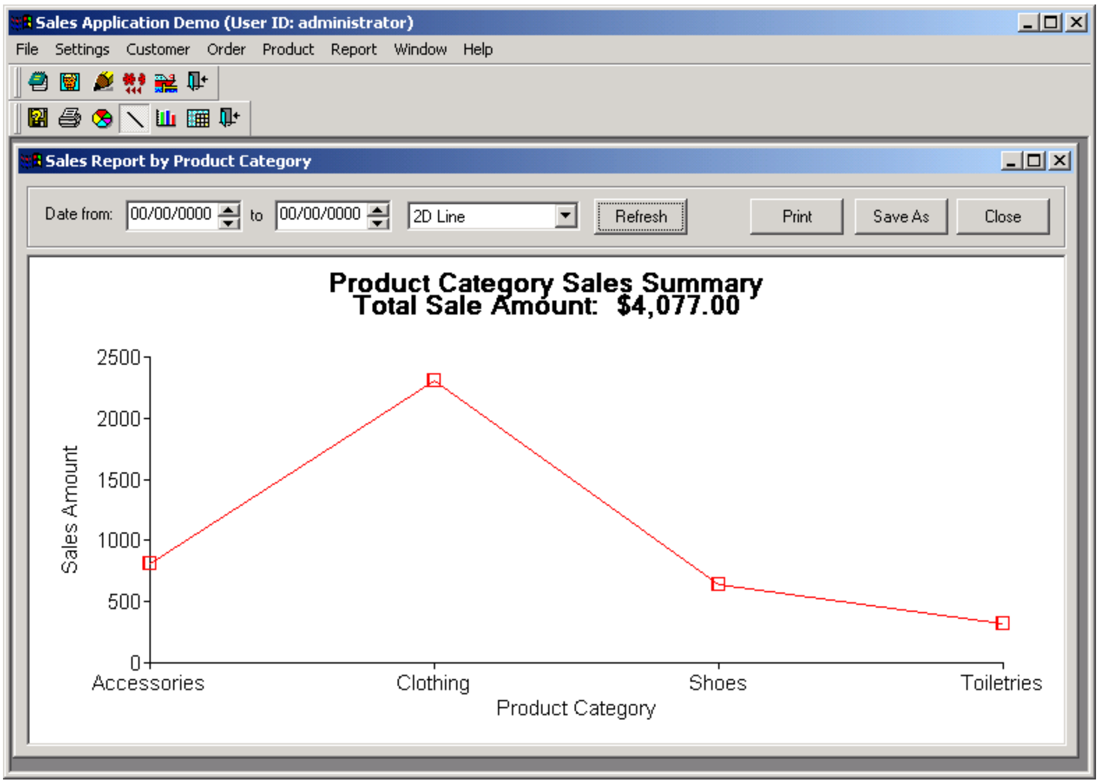
Step 6 – Adjust the settings from the Settings menu in the Sales Application Demo window. For further instructions on changing the settings, refer to Section 3.8.5: *Settings menu*.

3.8.2 Sales reports by product category

Click Report | Sales Report | by Product Category from the menu. The Sales Report by Product Category window displays.

The Sales Report by Product Category window displays the total sales for each category. Follow the instructions given in the Sales Report by Order Type window shown previously in Section 3.8.1. Refer to Figure 3-33.

Figure 3-33: The Sales Report by Product Category window

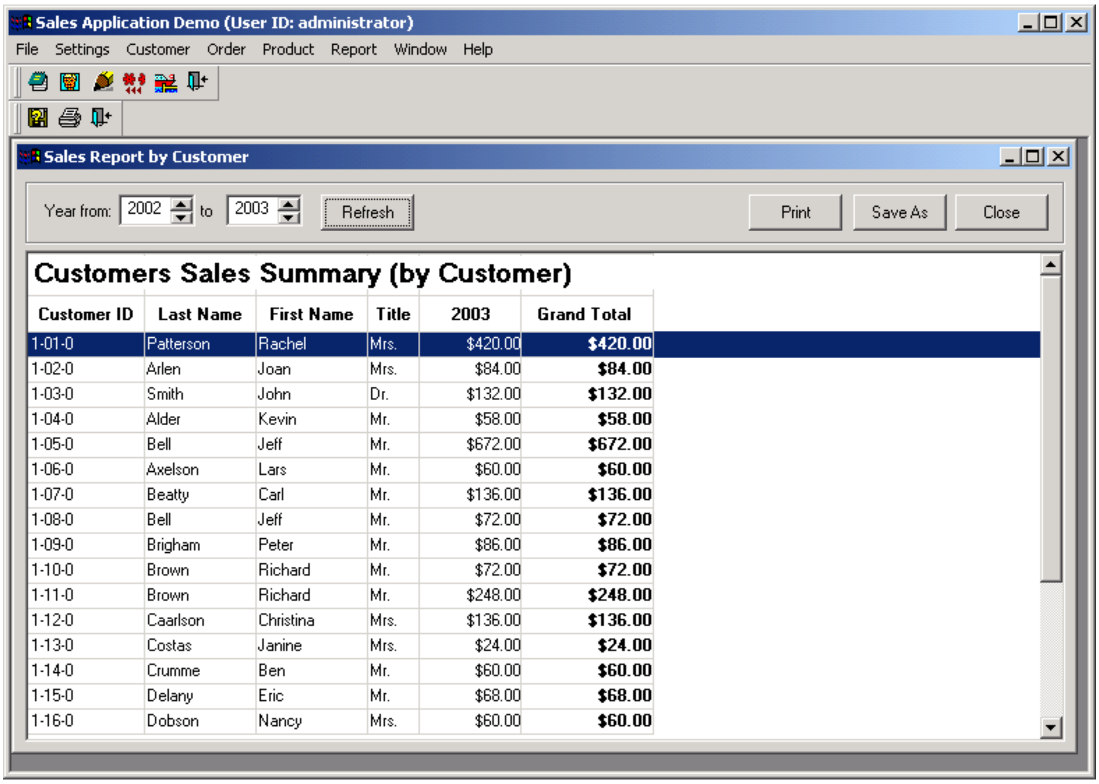

Sales Application Demo (User ID: administrator)
File Settings Customer Order Product Report Window Help
Sales Report by Product Category
Date from: 00/00/0000 to 00/00/0000
2D Line
Refresh
Print
Save As
Close
Product Category Sales Summary
Total Sale Amount: $4,077.00
Sales Amount
2500
2000
1500
1000
500
0
Accessories
Clothing
Shoes
Toiletries
Product Category

3.8.3 Sales reports by customer

The Sales Report by Customer window displays the total sales for each customer in a table by the date range that the user specifies.

Step 1 – Click Report | Sales Report | By Customer from the menu. The Sales Report By Customer window is displayed. Refer to Figure 3-34.

Figure 3-34: The Sales Report by Customer window


Sales Application Demo (User ID: administrator)
File Settings Customer Order Product Report Window Help
Sales Report by Customer
Refresh
Print
Save As
Close

Year from: 2002 to 2003

Customers Sales Summary (by Customer)

Customer ID	Last Name	First Name	Title	2003	Grand Total
1-01-0	Patterson	Rachel	Mrs.	$420.00	**$420.00**
1-02-0	Arlen	Joan	Mrs.	$84.00	**$84.00**
1-03-0	Smith	John	Dr.	$132.00	**$132.00**
1-04-0	Alder	Kevin	Mr.	$58.00	**$58.00**
1-05-0	Bell	Jeff	Mr.	$672.00	**$672.00**
1-06-0	Axelson	Lars	Mr.	$60.00	**$60.00**
1-07-0	Beatty	Carl	Mr.	$136.00	**$136.00**
1-08-0	Bell	Jeff	Mr.	$72.00	**$72.00**
1-09-0	Brigham	Peter	Mr.	$86.00	**$86.00**
1-10-0	Brown	Richard	Mr.	$72.00	**$72.00**
1-11-0	Brown	Richard	Mr.	$248.00	**$248.00**
1-12-0	Caarlson	Christina	Mrs.	$136.00	**$136.00**
1-13-0	Costas	Janine	Mrs.	$24.00	**$24.00**
1-14-0	Crumme	Ben	Mr.	$60.00	**$60.00**
1-15-0	Delany	Eric	Mr.	$68.00	**$68.00**
1-16-0	Dobson	Nancy	Mrs.	$60.00	**$60.00**

Step 2 – Specify the date to be included in the report by selecting the date range in years.

Step 3 – Click the *Refresh* button to display data. If the Auto Refresh option is enabled under the Settings menu, there is no need to use this button unless you have changed the Date range for the report.

Step 4 – Operate in the sales report window using three additional buttons that appear when the report is opened: SaveAs, Print, and Exit.

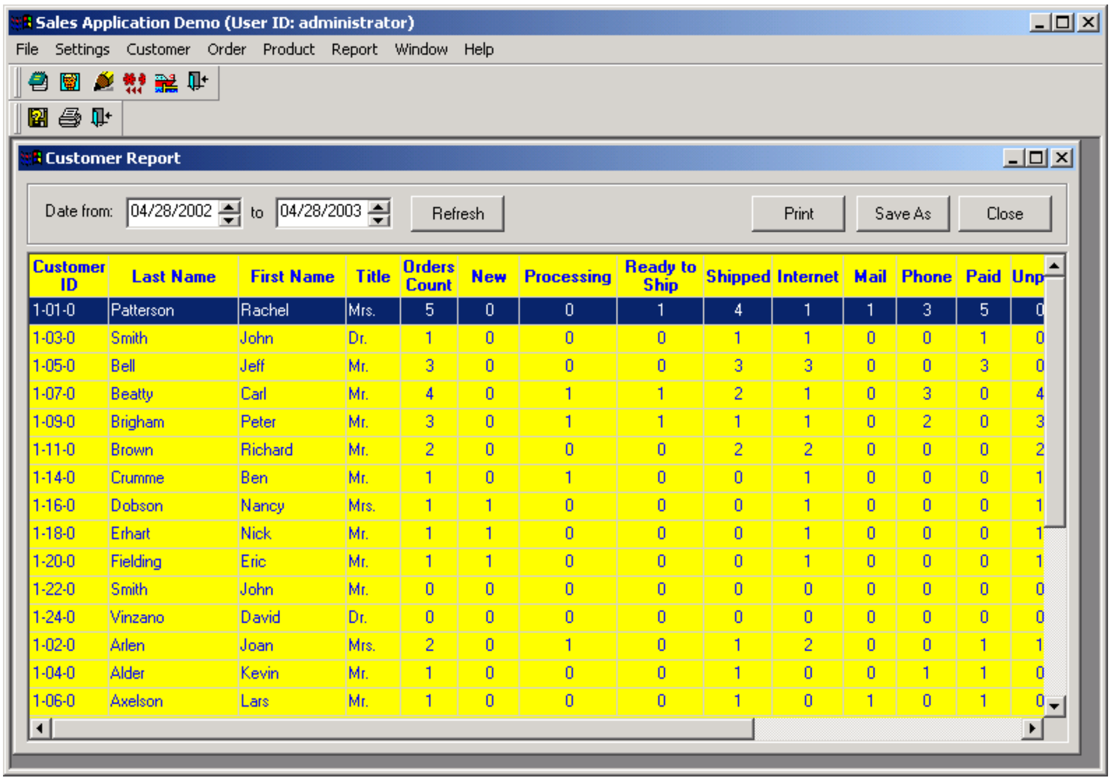
Step 5 – Adjust the settings from the Settings menu in the MDI window. For further instructions on changing the settings, refer to Section 3.8.5: *Settings menu*.

3.8.4 Customer report

The Customer Report window displays a table containing all the customer data.

Step 1 – Click Report | Customer Report from the menu. The Customer Report window displays. Refer to Figure 3-35.

Figure 3-35: The Customer Report window


Sales Application Demo (User ID: administrator)
File Settings Customer Order Product Report Window Help
Customer Report
Refresh
Print
Save As
Close

Date from: 04/28/2002 to 04/28/2003

Customer ID	Last Name	First Name	Title	Orders Count	New	Processing	Ready to Ship	Shipped	Internet	Mail	Phone	Paid	Unp
1-01-0	Patterson	Rachel	Mrs.	5	0	0	1	4	1	1	3	5	0
1-03-0	Smith	John	Dr.	1	0	0	0	1	1	0	0	1	0
1-05-0	Bell	Jeff	Mr.	3	0	0	0	3	3	0	0	3	0
1-07-0	Beatty	Carl	Mr.	4	0	1	1	2	1	0	3	0	4
1-09-0	Brigham	Peter	Mr.	3	0	1	1	1	1	0	2	0	3
1-11-0	Brown	Richard	Mr.	2	0	0	0	2	2	0	0	0	2
1-14-0	Crumme	Ben	Mr.	1	0	1	0	0	1	0	0	0	1
1-16-0	Dobson	Nancy	Mrs.	1	1	0	0	0	1	0	0	0	1
1-18-0	Erhart	Nick	Mr.	1	1	0	0	0	1	0	0	0	1
1-20-0	Fielding	Eric	Mr.	1	1	0	0	0	1	0	0	0	1
1-22-0	Smith	John	Mr.	0	0	0	0	0	0	0	0	0	0
1-24-0	Vinzano	David	Dr.	0	0	0	0	0	0	0	0	0	0
1-02-0	Arlen	Joan	Mrs.	2	0	1	0	1	2	0	0	1	1
1-04-0	Alder	Kevin	Mr.	1	0	0	0	1	0	0	1	1	0
1-06-0	Axelson	Lars	Mr.	1	0	0	0	1	0	1	0	1	0

Step 2 – Specify the date to be included in the report by selecting the date range. To get all the data involved, keep the date scope from 00/00/0000 to 00/00/0000.

Step 3 – Click the *Refresh* button to display the data. If the Auto Refresh option is enabled under the Settings menu, there is no need to use this button unless you have changed the Date range for the report.

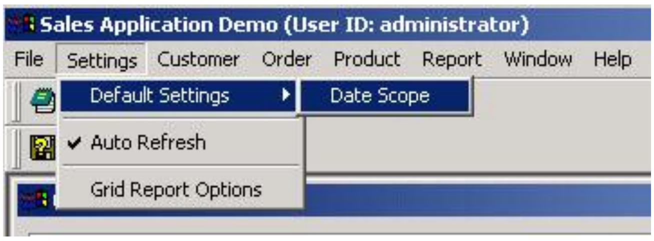
Step 4 – Operate in the sales report window using three additional buttons that appear when the report is opened: SaveAs, Print, and Exit.

Step 5 – Adjust the settings from the Settings menu in the MDI window. For further instructions on changing the settings, refer to Section 3.8.5: *Settings menu*.

3.8.5 Settings menu

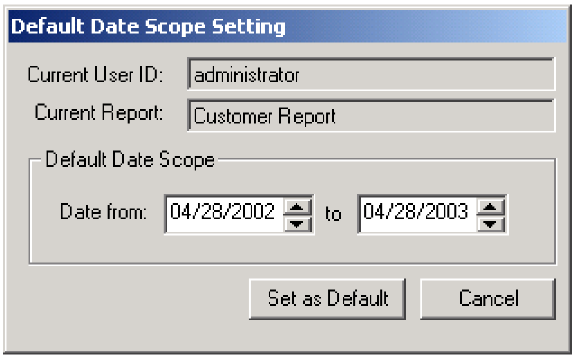
Step 1 – When a report is opened, a Settings menu automatically appears to the right of the File menu. Open the Settings menu. Refer to Figure 3-36.

Figure 3-36: The Settings menu


Sales Application Demo (User ID: administrator)
File Settings Customer Order Product Report Window Help
Default Settings
Date Scope
✓ Auto Refresh
Grid Report Options

Step 2 – Select Settings | Default Settings | Date Scope. The Default Date Settings window will display. Refer to Figure 3-37.

Figure 3-37: Default date scope setting



Default Date Scope Setting

Current User ID: administrator

Current Report: Customer Report

Default Date Scope

Date from: 04/28/2002 to 04/28/2003

Specify a default date range for the reports by selecting a “date from” and “date to” in the spin text boxes.

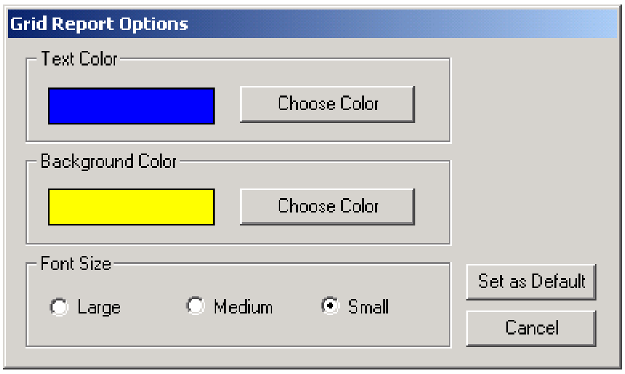
Click the *Set as Default* button to set the date. Now the reports display data based on the default date range.

The reports are loaded automatically in the selected format when Auto Refresh from the Settings menu is selected. The format can be changed by clicking the report style buttons, or by selecting a style from the dropdown list box in the report itself.

Step 3 – Select Settings | Auto Refresh. The Auto Refresh setting enables the report to be loaded automatically when the report style or date range is changed. This allows data to instantly appear without requiring the user to click the *Refresh* button in the report each time a setting changes. The Auto Refresh setting can be selected or unselected. A check mark appears next to the Auto Refresh setting in the menu if it is active.

Step 4 – Select Settings | Grid Report Options. The Grid Report Options window will be displayed. Refer to Figure 3-38.

Figure 3-38: Grid Report Options dialog



Grid Report Options

Text Color

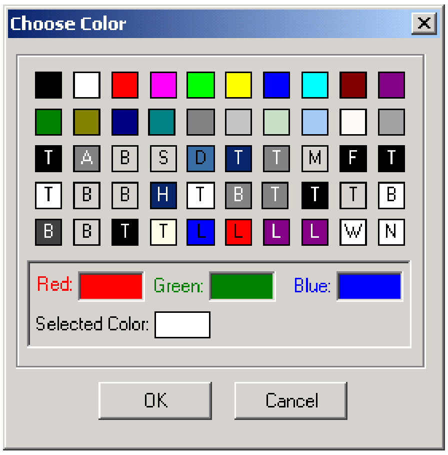
Background Color

Font Size: ○ Large ○ Medium ● Small

Grid Report Options allows the user to select the text color, background color, and font size for the grid report style.

Click the *Choose Color* button for text and background color. A Choose Color window is displayed. Refer to Figure 3-39.

Figure 3-39: Choose Color window



Select a color and click *OK*.

Select a font size by clicking on the *Large*, *Medium*, or *Small* radio buttons.

Click the *Set as Default* button to set the selected Grid report settings as default. Now, when a report is displayed in the Grid report style, it will automatically appear with the set text color, background color, and font size.

4 Running Appeon Code Examples

4.1 Overview

The Appeon Code Examples demo provides users with working examples of supported PowerBuilder features that Appeon can transfer to the Web. This chapter deals with the PowerBuilder version of Appeon Code Examples.

The Appeon Code Examples demo (*appeon_code_examples*) is a set of PowerBuilder source code. It is divided into six categories: DataWindow, PowerScript, SQL, Standard Controls, User Objects, and N-Tier Support. Each category deals with a number of PowerBuilder or Appeon features. Table 4-1 introduces the central features of, and examples included in, each category.

Table 4-1: Examples in Appeon Code Examples demo

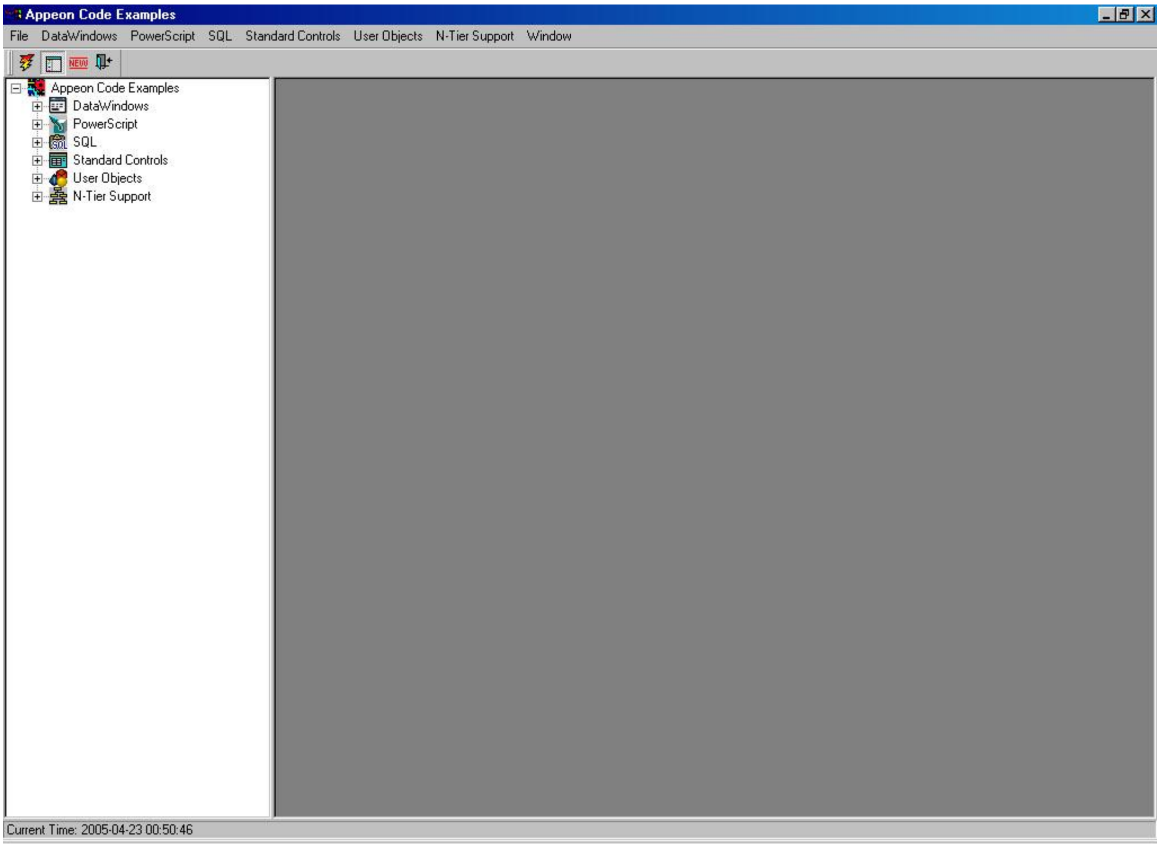
Category	Features	Sub-category / Example
DataWindow	PowerBuilder DataWindow features that Appeon supports.	1. Dot notation 2. EditMask 3. Events and Functions 4. Performance 5. Presentation Styles 6. Retrieval 7. Runtime Modification 8. Updating 9. Objects 10. Runtime Creation 11. Query Mode
PowerScript	PowerScript features that Appeon supports.	1. Functions 2. Inheritance 3. Menu Techniques 4. Object Communication 5. System Objects 6. Drag & Drop 7. MAPI 8. OLE Object

SQL	SQL related functionalities that Appeon supports.	1. Dynamic SQL Format 1 2. Dynamic SQL Format 2 3. Dynamic SQL Format 3 4. Dynamic SQL Format 4 5. Embedded SQL 6. Operating Cursor and Stored Procedure 7. Parse SQL Statement 8. SelectBlob and UpdateBlob 9. Stored Procedure Source DataWindows 10. Update Trigger 11. User-Defined Transaction 12. Using Transaction Objects to Call Stored Procedures
Standard Controls	Standard PowerBuilder controls that Appeon supports.	There are 32 examples
Graphs	Graph related functionalities that Appeon supports.	1. Adding an ‘Other’ Category to Graph 2. Dynamically Adding a Series to a Graph 3. Graphs & Shared DataWindow 4. Open the Employee Salary by Department Graph
User Objects	Use of User objects.	1. Business Class 2. Custom Visual User Objects 3. Dynamic TabPage Objects 4. Dynamic User Objects 5. Maintain DataWindow with UserObject 6. Parse SQL Statement 7. Text Style Changer 8. User Objects for Changing Colors
N-Tier Support	Uses N-Tier NVOs to work around unsupported features, or call to other server components.	1. Distributed Data Window 2. Dynamic SQL Format 4 3. NVO Call DLL 4. NVO Call Other Component 5. System Functions

4.2 Run Appeon Code Examples

To run the Appeon Code Examples, click the *Select and Run* button () in the PowerBar and select “appeon_code_examples”. Refer to Figure 4-1.

Figure 4-1: Appeon Code Examples main screen



The application has:

- A menu at the top of the window that provides access to different examples and four common actions: execute example, show examples panel, show only new examples, and exit.
- A toolbar directly below the menu that provides icons to the preceding four common actions. Refer to Table 4-2 for more details.
- A TreeView (example panel) on the left that provides a second method for accessing the different examples. To display or hide the TreeView example panel, select or deselect "Show Example Panel" on the Window menu, or click or release the *Show Examples Panel* button on the toolbar.
- An MDIClient object for displaying the current example.
- A MicroHelp that displays the current time in the status bar.

Table 4-2: Application menu and toolbar

Common Action	Toolbar Icon	Description
File | Execute Example	⚡	Executes the current example on the Examples Panel. To run an example, the user can double-click the example on the panel or select the example from the menu. If the example panel does not display or there is no current example, clicking the icon has no effect.
File | Exit	🚪	Closes the application and returns to the PowerBuilder IDE.

Window | Show Examples Panel	🗔	By default, this option is enabled and the Examples Panel displays. There are six example categories provided: DataWindow, PowerScript, SQL, Standard Controls, User Object, and N-Tier Support. If you un-check the option, the Examples Panel does not display and you can only run an example by selecting it from the menu.

4.3 DataWindow

There are 11 sub-categories of DataWindow code examples. You can view all sub-category items by expanding the DataWindow item in the Examples Panel or by clicking the DataWindow menu. The sub-categories are:

- Dot Notation – demonstrates use of dot notation to copy between DataWindows or to change the properties of a DataWindow control.
- EditMask – demonstrates support for DataWindow EditMask.
- Events and Functions – demonstrates the key events and functions Appeon supports.
- Performance – tests the speed when retrieving large amounts of data.
- Presentation Styles – demonstrates DataWindow presentation styles that Appeon supports.
- Retrieval – demonstrates different retrieval cases in which the data source is a stored procedure, there are different DataWindow bands, or a DataWindow has computed columns, etc.
- Runtime Modification – demonstrates how to dynamically change to properties, data, and/or the presentation style of a DataWindow.
- Updating – demonstrates how to maintain DataWindows using User Objects or DataWindow buttons, and how to update DataWindows that have computed columns, an SQL server Text data type, or a customized error message.
- Objects – showcases DataWindow objects that Appeon supports.
- Runtime Creation – demonstrates how to dynamically create a DataWindow using SQL or DataWindow syntax.
- Query Mode – demonstrates how to retrieve or sort data using the QueryMode and QuerySort properties.

4.3.1 Dot Notation

There are two examples provided to demonstrate the Dot Notation feature.

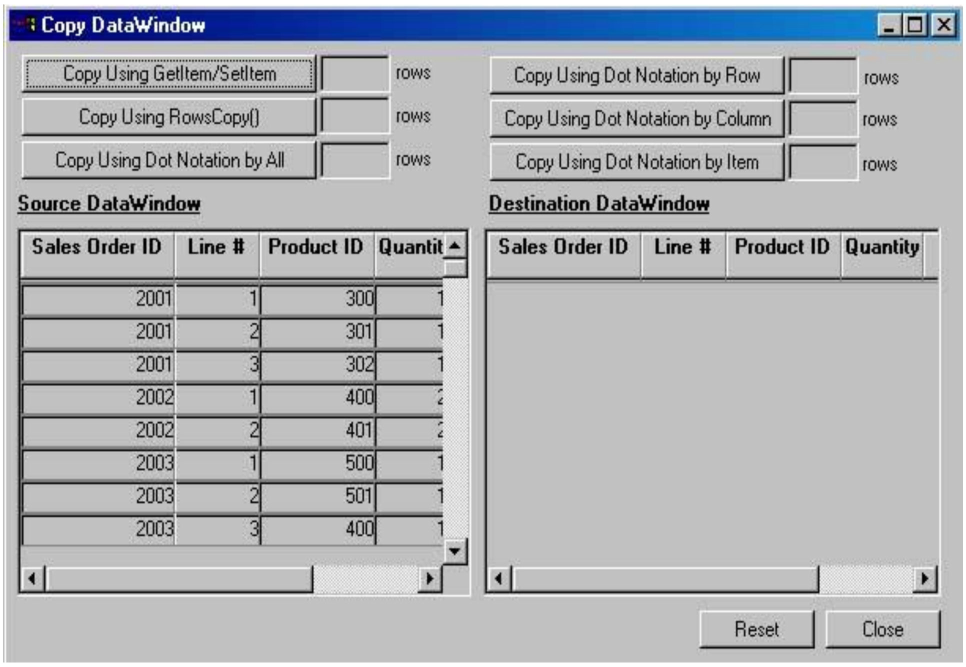
This section explains how to work with the “Copy DataWindow” example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

To run the “Copy DataWindow” example:

Step 1 – Click the plus sign next to Dot Notation in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click “Copy DataWindow” to run the example.

You can also run the example by selecting DataWindow | Dot Notation | Copy DataWindow. Refer to Figure 4-2.

Figure 4-2: The Copy DataWindow example


Copy DataWindow
Copy Using GetItem/SetItem
rows
Copy Using RowsCopy()
rows
Copy Using Dot Notation by All
rows
Copy Using Dot Notation by Row
rows
Copy Using Dot Notation by Column
rows
Copy Using Dot Notation by Item
rows
Reset
Close

Source DataWindow

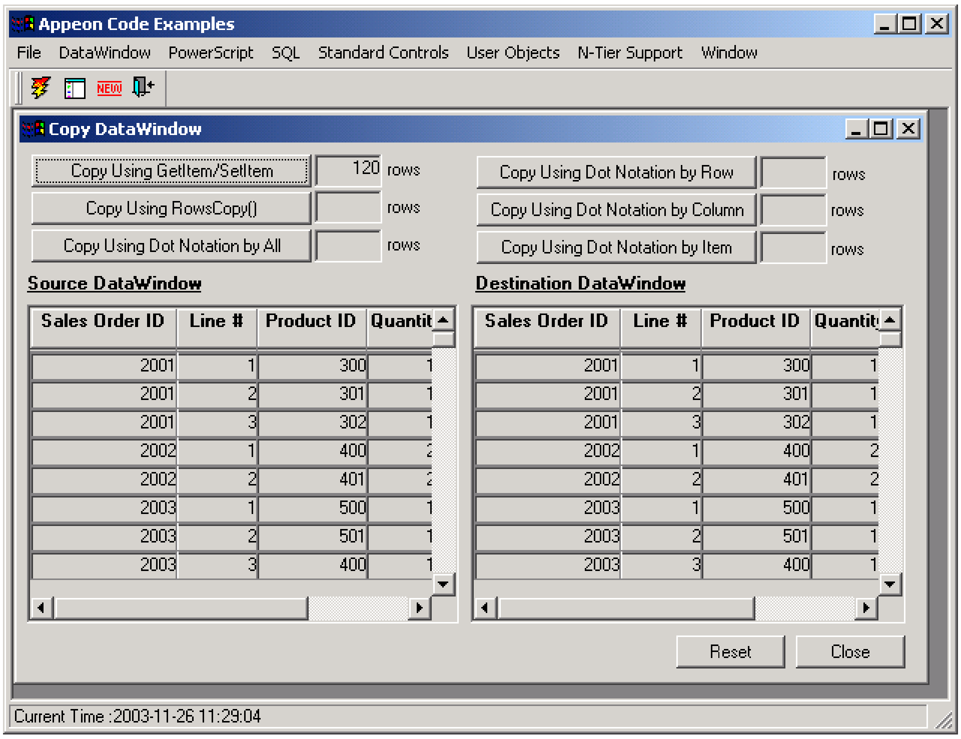
Sales Order ID	Line #	Product ID	Quantit
2001	1	300	1
2001	2	301	1
2001	3	302	1
2002	1	400	2
2002	2	401	2
2003	1	500	1
2003	2	501	1
2003	3	400	1

Destination DataWindow

Sales Order ID	Line #	Product ID	Quantity

Step 2 – By clicking the *Copy Using …* button (for example, *Copy Using GetItem/SetItem*), data in the source DataWindow is copied into the destination DataWindow. Refer to Figure 4-3.

Figure 4-3: Data copied from the source DataWindow to the destination DataWindow



Copy Using GetItem/SetItem: 120 rows

Source DataWindow

Sales Order ID	Line #	Product ID	Quantit
2001	1	300	1
2001	2	301	1
2001	3	302	1
2002	1	400	2
2002	2	401	2
2003	1	500	1
2003	2	501	1
2003	3	400	1

Destination DataWindow

Sales Order ID	Line #	Product ID	Quantit
2001	1	300	1
2001	2	301	1
2001	3	302	1
2002	1	400	2
2002	2	401	2
2003	1	500	1
2003	2	501	1
2003	3	400	1

Current Time :2003-11-26 11:29:04

Step 3 – There are six copying methods provided in the example. If you want to try another method, click the *Reset* button first and then click another *Copy Using …* button.

The window object in the example is w_dw_copy. The primary (not complete) syntaxes in the Clicked event of the buttons are shown in the following Table 4-3.

Table 4-3: Six copying methods

Button	In the Clicked event of the control…

Copy Using GetItem/SetItem	li_Data = dw_source.GetItemNumber(ll_Cnt, "id")
	dw_dest.SetItem(ll_New, "id", li_Data)
	……

Copy Using RowsCopy()	dw_source.RowsCopy(1, il_Rows, Primary!, dw_dest, 1, Primary!)
Copy Using Dot Notation by All	dw_dest.object.data = dw_source.object.date
Copy Using Dot Notation by Row	For ll_Cnt = 1 To il_Rows dw_dest.object.data[ll_cnt] = dw_source.object.data[ll_cnt] …… Next
Copy Using Dot Notation by Column	dw_dest.object.id[1,il_rows] = dw_source.object.id[1,il_rows] dw_dest.object.line_id[1,il_rows] = dw_source.object.line_id[1,il_rows] …
Copy Using Dot Notation by Item	For ll_Cnt = 1 To il_Rows dw_dest.object.id[ll_cnt] = dw_source.object.id[ll_cnt] … Next

4.3.2 EditMask

There is one example provided to demonstrate the EditMask feature - DataWindow EditMask.

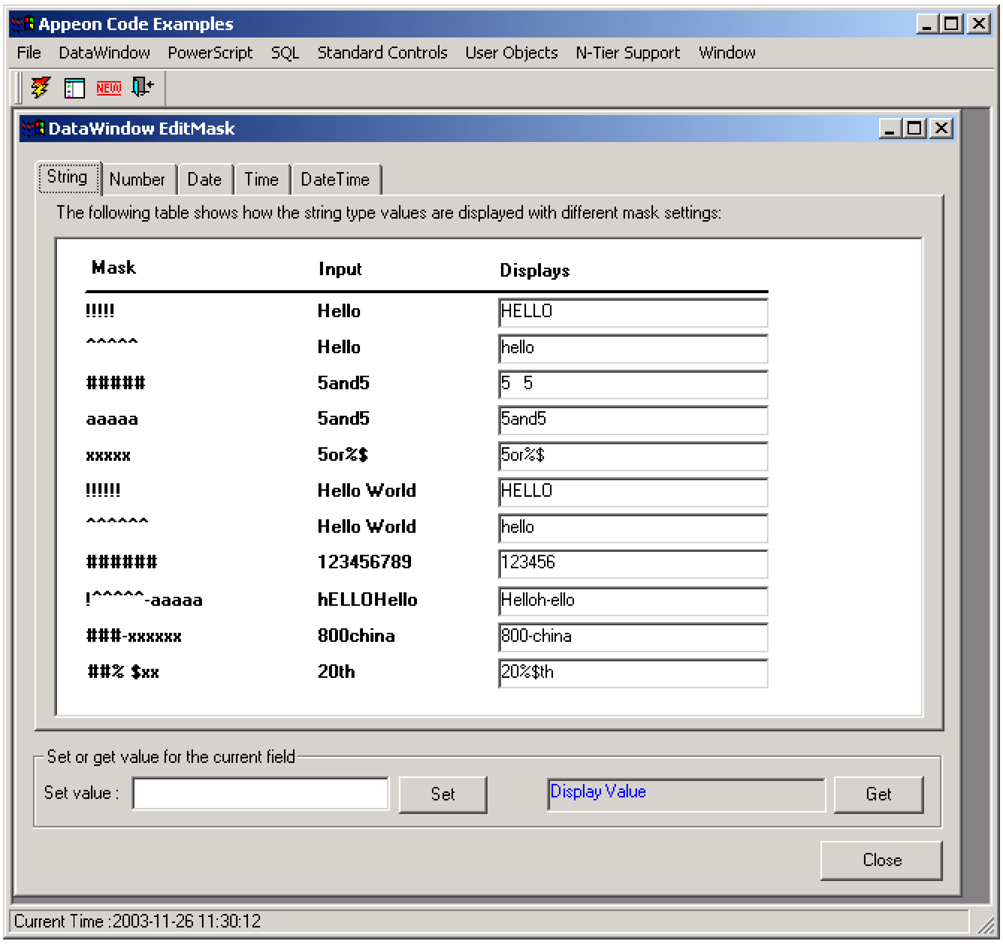
Perform the following steps to run it:

Step 1 – Click the plus sign next to EditMask in the Examples Panel. The sub-category is expanded and the “DataWindow EditMask” example is displayed. Double-click “DataWindow EditMask” to run the example.

You can also run the example by selecting DataWindow | EditMask | DataWindow EditMask.

Step 2 – Click the String tab. The table illustrates how a string typed into the “Set value” text box is displayed once the mask is applied. Set the cursor in any text box in the Displays section. Type any value in the “Set value” text box and click the *Set* button. The value entered in the “Set value” text box appears in the Displays text box with the appropriate mask applied. Refer to Figure 4-4.

Figure 4-4: DataWindow EditMask example (String mask)



The following table shows how the string type values are displayed with different mask settings:

Mask	Input	Displays
!!!!!	Hello	HELLO
^^^^^	Hello	hello
#####	5and5	5 5
aaaaa	5and5	5and5
xxxxx	5or%$	5or%$
!!!!!!	Hello World	HELLO
^^^^^^	Hello World	hello
######	123456789	123456
!^^^^^-aaaaa	hELLOHello	Helloh-ello
###-xxxxxx	800china	800-china
##% $xx	20th	20%$th

Set or get value for the current field

Set value :

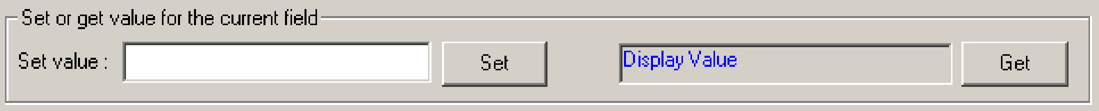
Display Value

Current Time :2003-11-26 11:30:12

In this example, “test” is entered in the “Set value” text box and the focus is on the first text box that is using the “!!!!!” mask in the Display section. The string will appear in all caps: “TEST”.

Step 3 – Click the *Get* button to retrieve the value from the text box of the “!!!!!” Display column. Refer to Figure 4-5.

Figure 4-5: Set or get mask value



Set or get value for the current field

Set value :

Display Value

Step 4 – Click the Number tab. The functionality in this tab is similar to that in the String tab. Enter a number in the “Set value” text box and set the cursor in any of the Display text boxes. Click the *Set* button and the value entered in the “Set value” text box appears in the text box that has focus and the appropriate mask is applied. Click the *Get* button to get the value from the Display text box.

Step 5 – Click the Date tab and enter a date in the “Set value” text box. Set the cursor in any of the Displays text boxes and click the *Set* button to display the date in the appropriate Displays text box with the correct Mask. Click the *Get* button to retrieve the value from the Display text box.

Step 6 – The Time tab and the DateTime tab work in the same way as the Date tab. The difference is that the mask data type is time, datetime, or date.

4.3.3 Events & Functions

There are 18 examples provided to demonstrate the DataWindow events & functions features.

This section explains how to work with the "Copy, Move, and Discard DataWindow Rows" example and "Conditional BitMaps" example. Perform the following steps to test this example. You can also run the other examples by performing similar steps.

4.3.3.a Copy, Move, and Discard DataWindow Rows

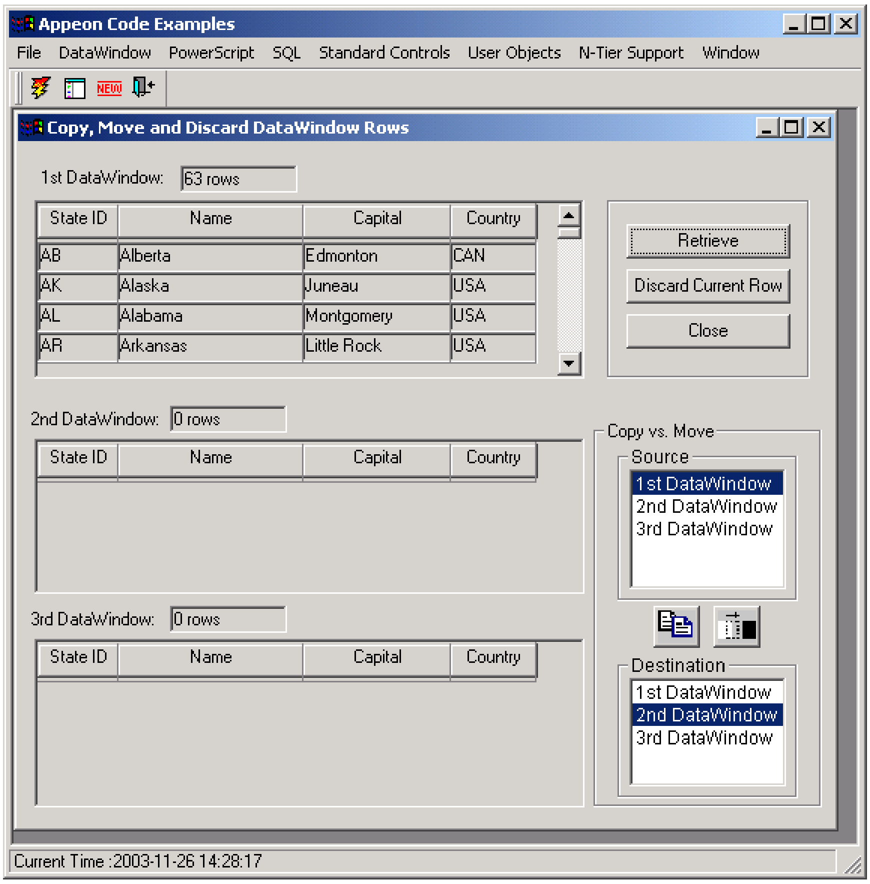
To run the "Copy, Move, and Discard DataWindow Rows" example:

Step 1 – Click the plus sign next to the Events & Functions in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click "Copy, Move, and Discard DataWindow Rows" to run this example.

You can also run the example by selecting DataWindow | Events & Functions | Copy, Move, and Discard DataWindow Rows.

Step 2 – Retrieve data into the first DataWindow by clicking the *Retrieve* button. Refer to Figure 4-6.

Figure 4-6: Copy, Move and Discard DataWindow Rows



1st DataWindow: 63 rows

State ID	Name	Capital	Country
AB	Alberta	Edmonton	CAN
AK	Alaska	Juneau	USA
AL	Alabama	Montgomery	USA
AR	Arkansas	Little Rock	USA

2nd DataWindow: 0 rows

State ID	Name	Capital	Country

3rd DataWindow: 0 rows

State ID	Name	Capital	Country

Current Time :2003-11-26 14:28:17

Step 3 – The *Discard Current Row* button is for discarding the current row in the first DataWindow. By default, the first row is the current row. You can also make a row the current row by clicking it..

The window object in the example is w_dw_rows, and the function in the Clicked event of the *Discard Current Row* button is RowsDiscard.

Step 4 – In the Copy vs. Move group box, select a source DataWindow and a destination DataWindow. The source DataWindow must have data in it, and the destination DataWindow must be a different window from the source DataWindow.

Step 5 – Click the *Copy* () button and the current row in the source DataWindow is copied into the destination DataWindow (both the source DataWindow and the destination DataWindow are contained in the row).

The function in the Clicked event of the *Copy* button is wf_copy_row. The function applies two DataWindow functions: RowsCopy and RowCount.

Step 6 – Click the *Move* () button and the current row in the source DataWindow is moved into the destination DataWindow (only the destination DataWindow has the current row).

The function in the Clicked event of the *Move* button is wf_move_row. The function applies two DataWindow functions: RowsMove and RowCount.

4.3.3.b Conditional BitMaps

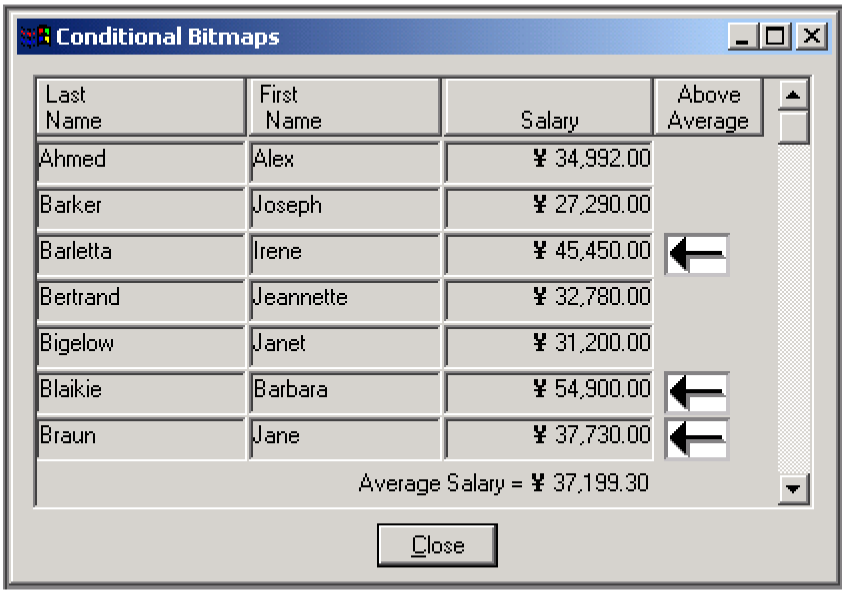
To run the "Conditional BitMaps" example:

Click the plus sign next to the Events & Functions in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click "Conditional BitMaps" to run this example.

You can also run the example by selecting DataWindow | Events & Functions | Conditional BitMaps.

Conditional bitmaps will automatically display according to whether the salary in each row is above the average, as shown in Figure 4-7.

Figure 4-7: Conditional Bitmaps



Conditional Bitmaps

Last Name	First Name	Salary	Above Average
Ahmed	Alex	¥ 34,992.00	
Barker	Joseph	¥ 27,290.00	
Barletta	Irene	¥ 45,450.00	←
Bertrand	Jeannette	¥ 32,780.00	
Bigelow	Janet	¥ 31,200.00	
Blaikie	Barbara	¥ 54,900.00	←
Braun	Jane	¥ 37,730.00	←

Average Salary = ¥ 37,199.30

4.3.4 Performance

There is one example for the Performance sub-category - 9K Records DataWindow.

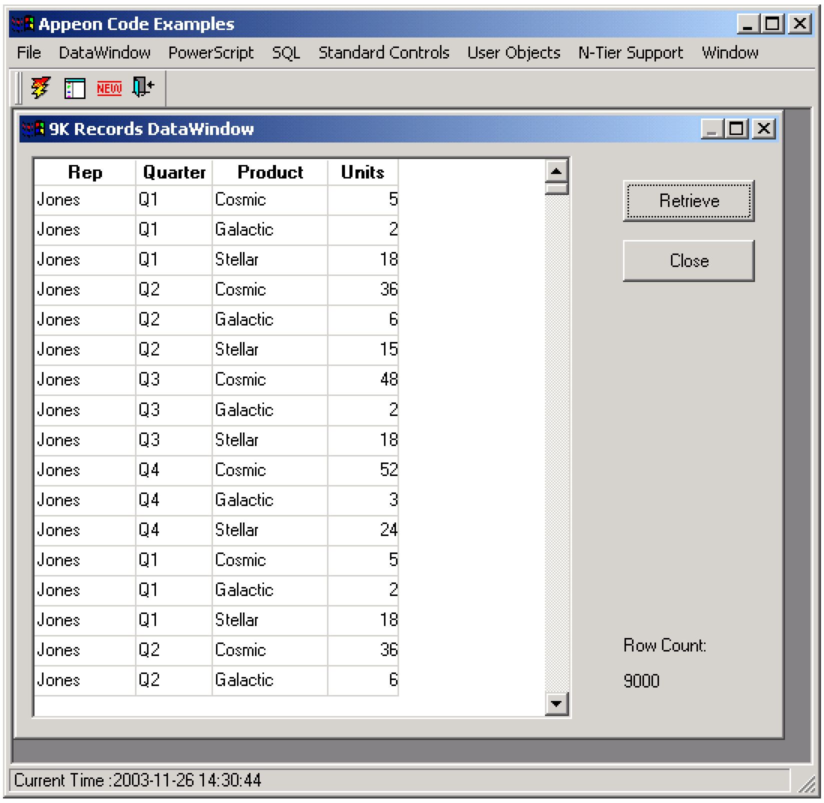
Perform the following steps to run it:

Step 1 – Click the plus sign next to the Performance in the Examples Panel. The sub-category is expanded and the "Copy DataWindow" example is displayed. Double-click "Copy DataWindow" to run this example.

You can also run the example by selecting DataWindow | Performance | 9K Records DataWindow.

Step 2 – On a click of the *Retrieve* button, up to 9000 records are retrieved into the DataWindow in one second. Refer to Figure 4-8.

Figure 4-8: Retrieve 9k rows of data into DataWindow



Rep	Quarter	Product	Units
Jones	Q1	Cosmic	5
Jones	Q1	Galactic	2
Jones	Q1	Stellar	18
Jones	Q2	Cosmic	36
Jones	Q2	Galactic	6
Jones	Q2	Stellar	15
Jones	Q3	Cosmic	48
Jones	Q3	Galactic	2
Jones	Q3	Stellar	18
Jones	Q4	Cosmic	52
Jones	Q4	Galactic	3
Jones	Q4	Stellar	24
Jones	Q1	Cosmic	5
Jones	Q1	Galactic	2
Jones	Q1	Stellar	18
Jones	Q2	Cosmic	36
Jones	Q2	Galactic	6

Row Count:

9000

Current Time :2003-11-26 14:30:44

The window object in the example is w_9k. The function in the Clicked event of the *Retrieve* button is dw_1.retrieve().

4.3.5 Presentation styles

There are ten examples provided to demonstrate nine DataWindow presentation styles.

This section uses "Group DataWindow" and "RichText DataWindows" to show how to work with the examples. Perform the following steps to test the example. You can also run the other examples by performing similar steps.

4.3.5.a Group DataWindow

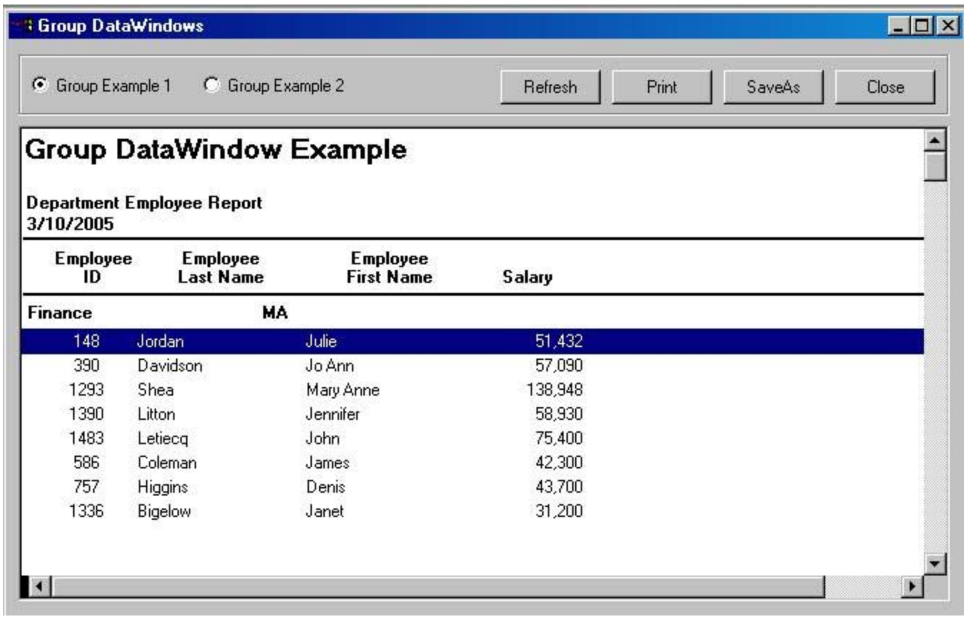
To run the "Group DataWindow" example:

Step 1 – Click the plus sign next to the Presentation Styles in the example panel. The sub-category is expanded and the titles of the examples are displayed. Double-click the "Group DataWindow" to run this example.

You can also run the example by selecting DataWindow | Presentation Styles | Group DataWindow.

Step 2 – Select one of the Group Examples (for example, Group Example 1) and Group Example 1 is displayed as shown in Figure 4-9.

Figure 4-9: Group DataWindow example



Group DataWindow Example

Department Employee Report
3/10/2005

Employee ID	Employee Last Name	Employee First Name	Salary
Finance		MA	
148	Jordan	Julie	51,432
390	Davidson	Jo Ann	57,090
1293	Shea	Mary Anne	138,948
1390	Litton	Jennifer	58,930
1483	Letiecq	John	75,400
586	Coleman	James	42,300
757	Higgins	Denis	43,700
1336	Bigelow	Janet	31,200

Step 3 – Click the *Print* button to print the DataWindow in PDF, or click the *SaveAs* button to save the DataWindow.

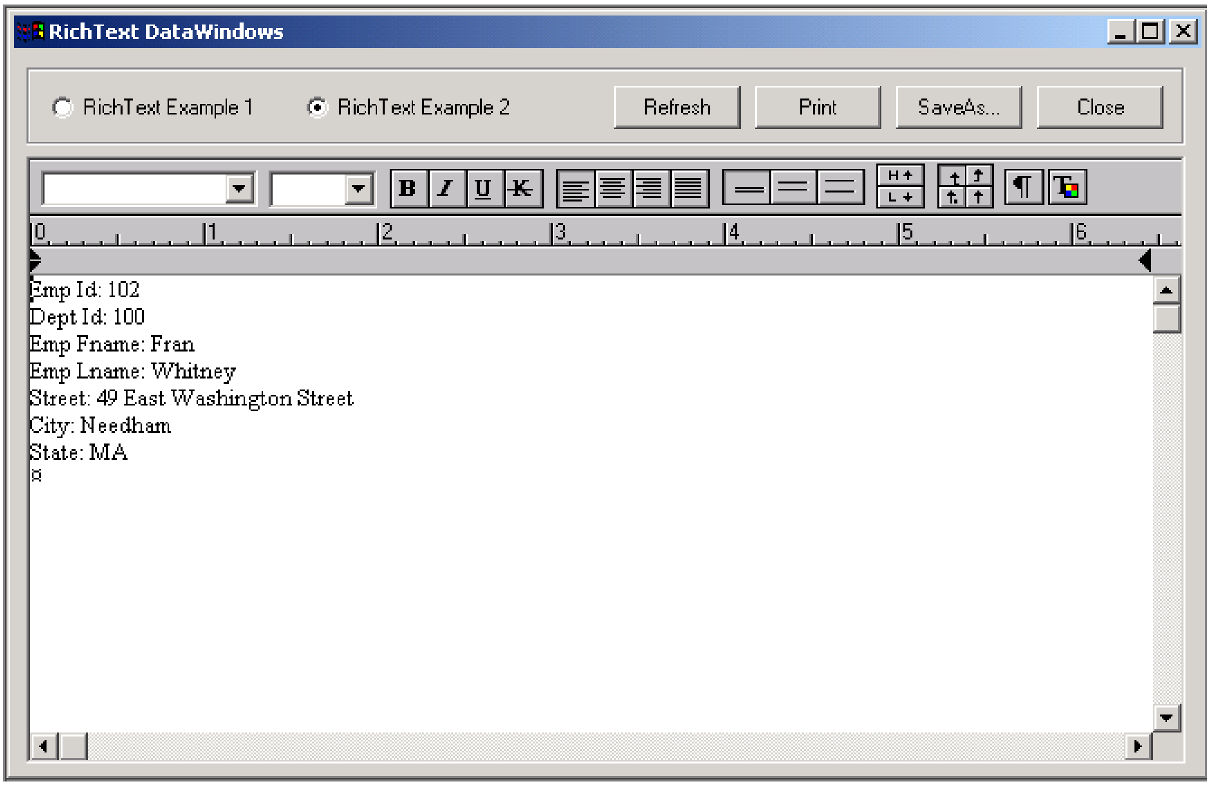
The window object in the example is w_dwstyle_group.

4.3.6 RichText DataWindows

Click the plus sign next to the Presentation Styles in the example panel. The sub-category is expanded and the titles of the examples are displayed. Double-click the "RichText DataWindows" to run this example.

In each RichText example, you are allowed to edit, refresh, print, and save another copy of the example.

Figure 4-10: RichText DataWindows example



Emp Id: 102
Dept Id: 100
Emp Fname: Fran
Emp Lname: Whitney
Street: 49 East Washington Street
City: Needham
State: MA

4.3.7 Retrieval

There are fourteen examples provided to demonstrate the DataWindow retrieval features.

This section uses “Stored Procedure Source DataWindows” and “Enhanced Crosstab DataWindow” to show how to work with the examples. Follow the instructions and test the example. You can also run the other examples by performing similar steps.

4.3.7.a Stored Procedure Source DataWindows

To run the “Stored Procedure Source DataWindows” example:

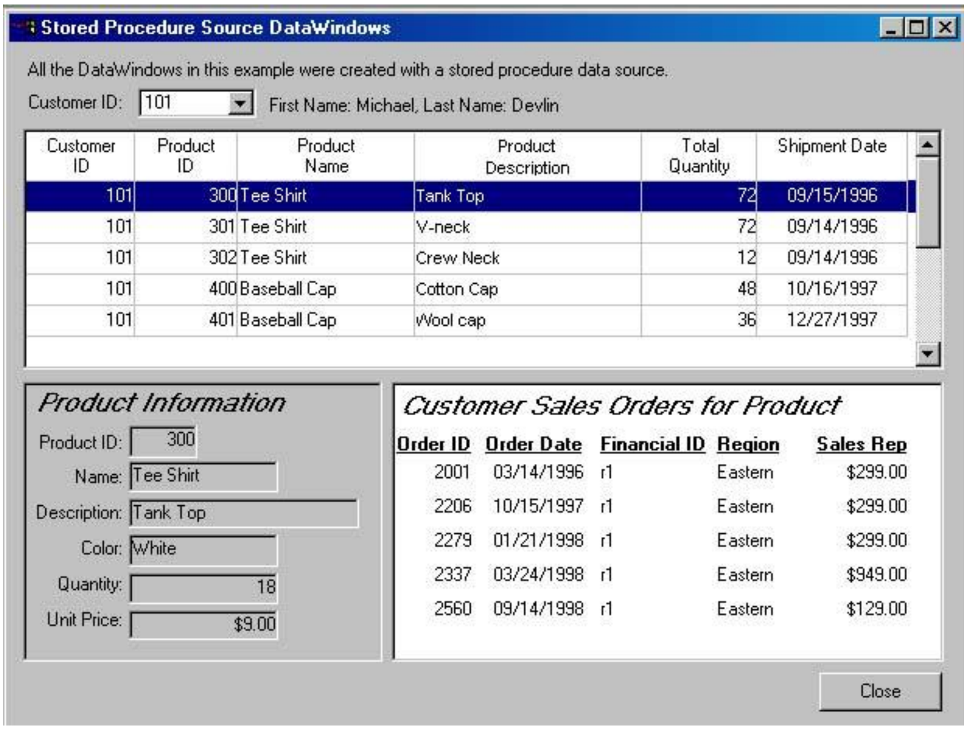
Step 1 – Click the plus sign next to Retrieval in the Examples Panel. The sub-category is expanded and the examples are displayed. Double-click “Stored Procedure Source DataWindows” to run this example.

You can also run the example by selecting DataWindow | Retrieval | Stored Procedure Source DataWindows.

Step 2 – Select a customer ID from the DropDownListBox.

By selecting the customer ID, you are entering the retrieval argument for the DataWindow stored procedure. As a result, the DataWindows retrieve data. Refer to Figure 4-11.

Figure 4-11: Stored Procedure Source DataWindows



All the DataWindows in this example were created with a stored procedure data source.

Customer ID: 101 First Name: Michael, Last Name: Devlin

Customer ID	Product ID	Product Name	Product Description	Total Quantity	Shipment Date
101	300	Tee Shirt	Tank Top	72	09/15/1996
101	301	Tee Shirt	V-neck	72	09/14/1996
101	302	Tee Shirt	Crew Neck	12	09/14/1996
101	400	Baseball Cap	Cotton Cap	48	10/16/1997
101	401	Baseball Cap	Wool cap	36	12/27/1997

Product Information

Product ID: 300

Name: Tee Shirt

Description: Tank Top

Color: White

Quantity: 18

Unit Price: $9.00

Customer Sales Orders for Product

Order ID	Order Date	Financial ID	Region	Sales Rep
2001	03/14/1996	r1	Eastern	$299.00
2206	10/15/1997	r1	Eastern	$299.00
2279	01/21/1998	r1	Eastern	$299.00
2337	03/24/1998	r1	Eastern	$949.00
2560	09/14/1998	r1	Eastern	$129.00

The window object in the example is w_dw_stored_proc. There are three DataWindows in the window. The one at the top is the Master DataWindow, which displays products that the customer has ordered. The Product Information DataWindow displays information about the current product in the Master DataWindow. The Customer Sales Orders for Product DataWindow displays related order information.

4.3.7.b Enhanced Crosstab DataWindow

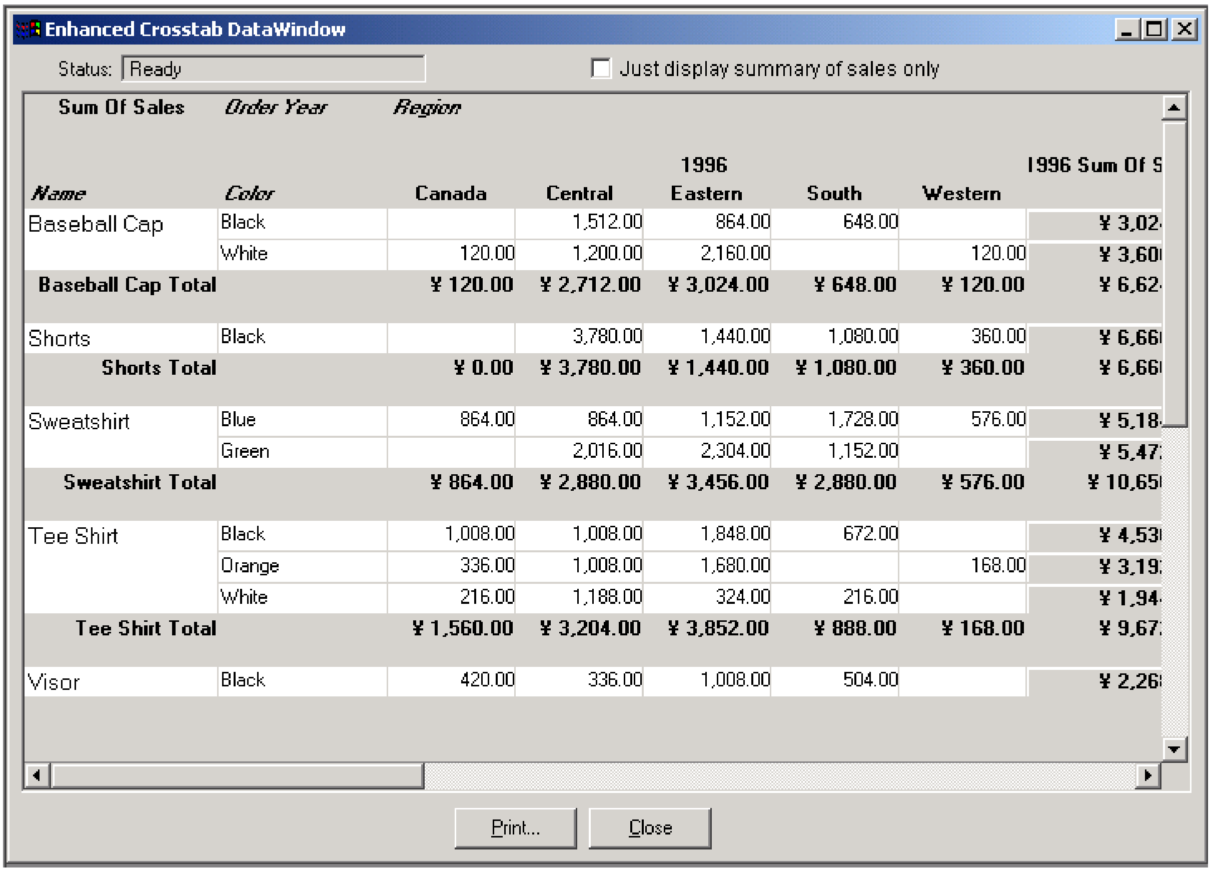
To run the “Enhanced Crosstab DataWindow” example:

Click the plus sign next to Retrieval in the Examples Panel. The sub-category is expanded and the examples are displayed. Double-click “Enhanced Crosstab DataWindow” to run this example.

You can also run the example by selecting DataWindow | Retrieval | Enhanced Crosstab DataWindow.

As shown in Figure 4-12, you have the option to display all the data or summary of sales only.

Figure 4-12: Enhanced Crosstab DataWindow



Status: Ready

□ Just display summary of sales only

Sum Of Sales	*Order Year*	*Region*					
				1996			1996 Sum Of S
Name	*Color*	Canada	Central	Eastern	South	Western	
Baseball Cap	Black		1,512.00	864.00	648.00		¥ 3,02
	White	120.00	1,200.00	2,160.00		120.00	¥ 3,60
Baseball Cap Total		**¥ 120.00**	**¥ 2,712.00**	**¥ 3,024.00**	**¥ 648.00**	**¥ 120.00**	**¥ 6,62**
Shorts	Black		3,780.00	1,440.00	1,080.00	360.00	¥ 6,66
Shorts Total		**¥ 0.00**	**¥ 3,780.00**	**¥ 1,440.00**	**¥ 1,080.00**	**¥ 360.00**	**¥ 6,66**
Sweatshirt	Blue	864.00	864.00	1,152.00	1,728.00	576.00	¥ 5,18
	Green		2,016.00	2,304.00	1,152.00		¥ 5,47
Sweatshirt Total		**¥ 864.00**	**¥ 2,880.00**	**¥ 3,456.00**	**¥ 2,880.00**	**¥ 576.00**	**¥ 10,65**
Tee Shirt	Black	1,008.00	1,008.00	1,848.00	672.00		¥ 4,53
	Orange	336.00	1,008.00	1,680.00		168.00	¥ 3,19
	White	216.00	1,188.00	324.00	216.00		¥ 1,94
Tee Shirt Total		**¥ 1,560.00**	**¥ 3,204.00**	**¥ 3,852.00**	**¥ 888.00**	**¥ 168.00**	**¥ 9,67**
Visor	Black	420.00	336.00	1,008.00	504.00		¥ 2,26

4.3.8 Runtime modification

There are eleven examples provided to demonstrate runtime modification features.

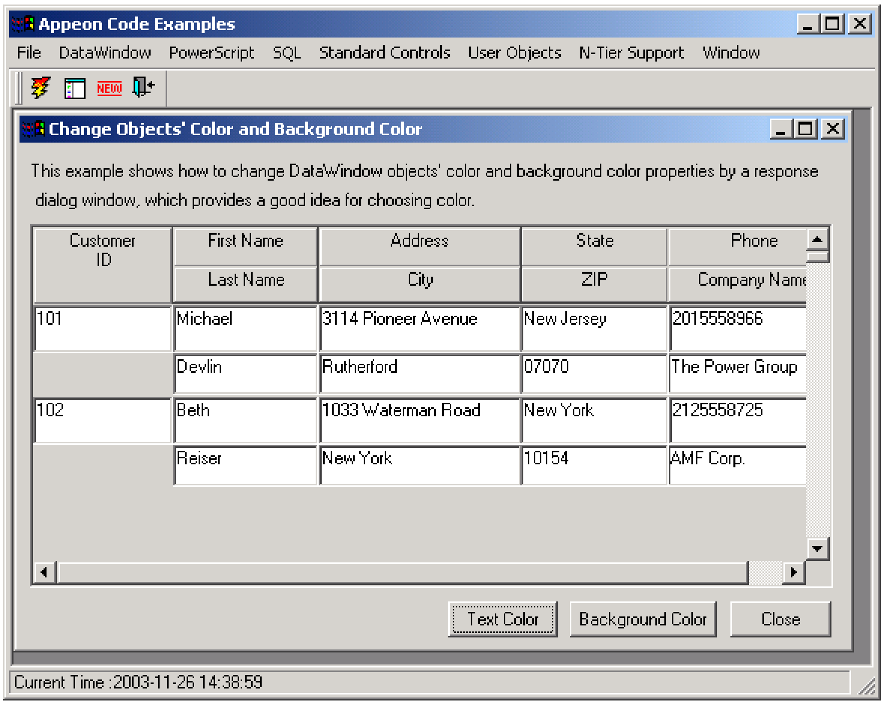
This section explains how to work with the “Change Object’s Color and Background Color” example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

To run the “Change Object’s Color and Background Color” example:

Step 1 – Click the plus sign next to Runtime Modification in the Examples Panel. The sub-category is expanded and the examples are displayed. Double-click “Change Object’s Color and Background Color” to run this example.

You can also run the example by selecting DataWindow | Runtime Modification | Change Object’s Color and Background Color. Refer to Figure 4-13.

Figure 4-13: The Change Object's Color and Background Color example



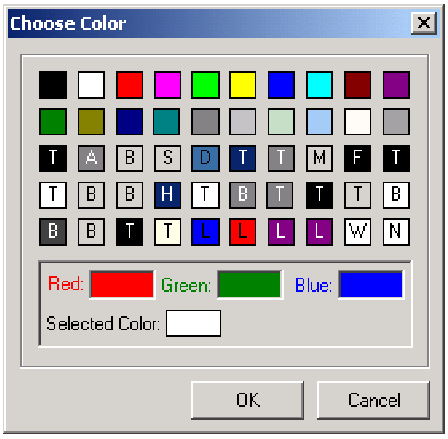
This example shows how to change DataWindow objects' color and background color properties by a response dialog window, which provides a good idea for choosing color.

Customer ID	First Name	Address	State	Phone
	Last Name	City	ZIP	Company Name
101	Michael	3114 Pioneer Avenue	New Jersey	2015558966
	Devlin	Rutherford	07070	The Power Group
102	Beth	1033 Waterman Road	New York	2125558725
	Reiser	New York	10154	AMF Corp.

Current Time :2003-11-26 14:38:59

Step 2 – Click the *Text Color* button and a Choose Color dialog box displays. Refer to Figure 4-14.

Figure 4-14: Choose Color dialog box



Step 3 – Select a color and click *OK*.

The window object for Choose Color is w_choose_color. When you click *OK*, the parameter is returned to the main window w_dw_changecolor through the syntax closewithreturn (parent,string(il_SelectedColor)). The main window gets the parameter through the syntax ls_Ret = message.stringparm. The DataWindow text is then displayed in the selected color.

Step 4 – Click the *Background Color* button and the same Choose Color dialog displays.

Step 5 – Select a color and then click *OK*. The selected background color appears.

4.3.9 Updating

There are eight examples provided to demonstrate the updating functionality.

This section explains how to work with the "Change Employee Salary" example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

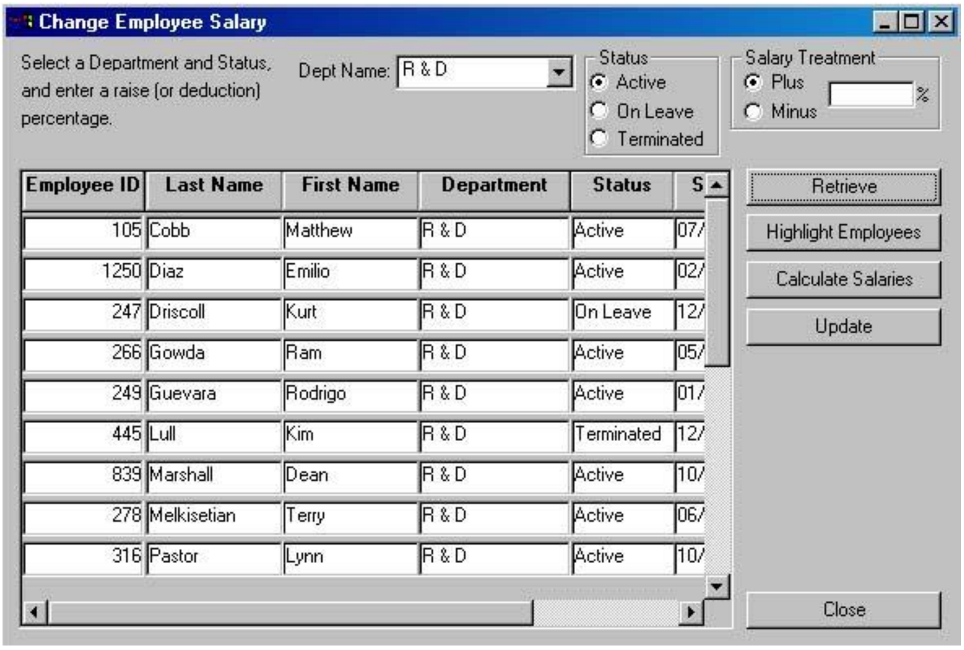
To run the "Change Employee Salary" example:

Step 1 – Click the plus sign next to Updating in the Examples Panel. The sub-category is expanded and the examples are displayed. Double-click "Change Employee Salary" to run this example.

You can also run the example by selecting DataWindow | Updating | Change Employee Salary.

Step 2 – Click the *Retrieve* button to retrieve data into the DataWindow. Refer to Figure 4-15.

Figure 4-15: The Change Employee Salary example



Select a Department and Status, and enter a raise (or deduction) percentage.

Dept Name: R & D

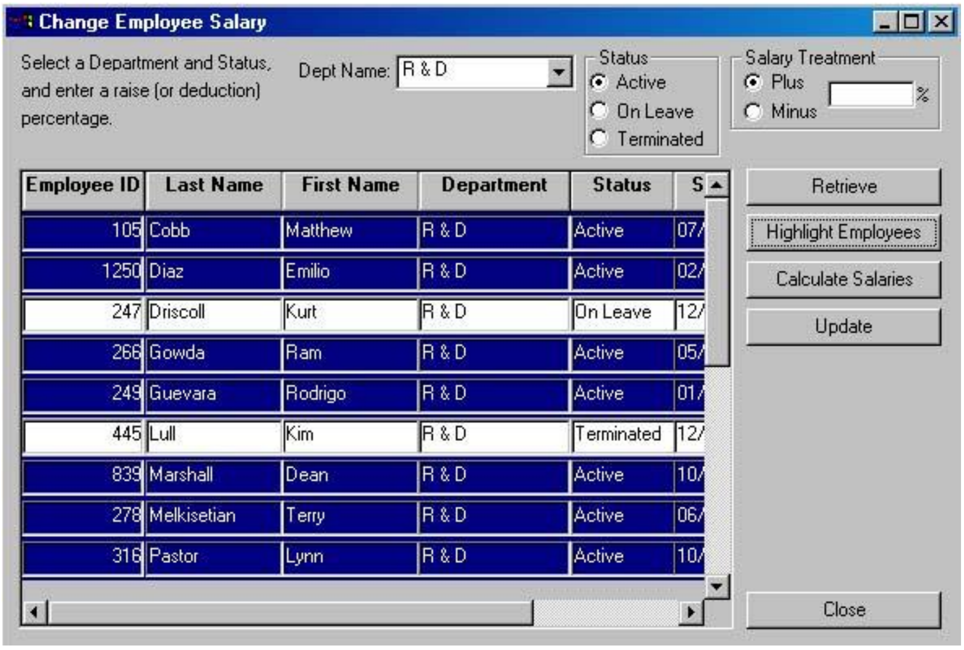
Status: ● Active ○ On Leave ○ Terminated

Salary Treatment: ● Plus ○ Minus %

Employee ID	Last Name	First Name	Department	Status	S
105	Cobb	Matthew	R & D	Active	07/
1250	Diaz	Emilio	R & D	Active	02/
247	Driscoll	Kurt	R & D	On Leave	12/
266	Gowda	Ram	R & D	Active	05/
249	Guevara	Rodrigo	R & D	Active	01/
445	Lull	Kim	R & D	Terminated	12/
839	Marshall	Dean	R & D	Active	10/
278	Melkisetian	Terry	R & D	Active	06/
316	Pastor	Lynn	R & D	Active	10/

Step 3 – Click the *Highlight Employee* button and the employees with "Active" status checked will be highlighted. Refer to Figure 4-16.

Figure 4-16: Highlight active employees



Select a Department and Status, and enter a raise (or deduction) percentage.

Dept Name: R & D

Status
● Active
○ On Leave
○ Terminated

Salary Treatment
● Plus %
○ Minus

Employee ID	Last Name	First Name	Department	Status	S
105	Cobb	Matthew	R & D	Active	07/
1250	Diaz	Emilio	R & D	Active	02/
247	Driscoll	Kurt	R & D	On Leave	12/
266	Gowda	Ram	R & D	Active	05/
249	Guevara	Rodrigo	R & D	Active	01/
445	Lull	Kim	R & D	Terminated	12/
839	Marshall	Dean	R & D	Active	10/
278	Melkisetian	Terry	R & D	Active	06/
316	Pastor	Lynn	R & D	Active	10/

Step 4 – You can increase or decrease the salaries of the highlighted employees by specifying the plus or minus percentage and clicking the *Calculate Salaries* button.

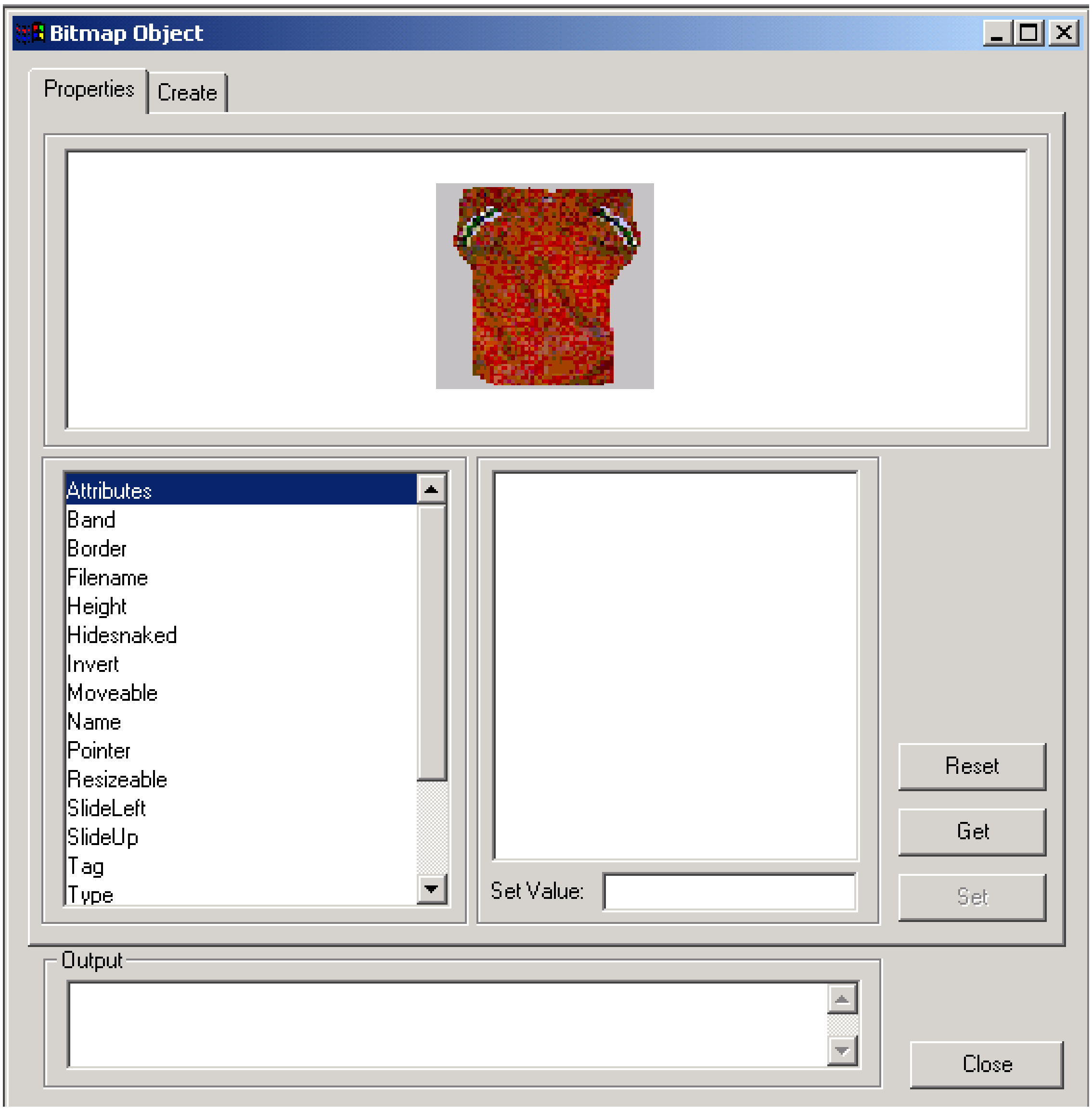
Step 5 – The salary changes do not take effect until you click the *Update* button.

The window object in this example is w_salary_admin. The syntax for update is dw_employees.Update().

4.3.10 Object

Ten examples are given to showcase the properties for the following DataWindow objects respectively, and how to create them: Bitmap, Button, Computed Field, GroupBox, Line, Oval, Rectangle, Report, RoundRectangle and Text. Refer to Figure 4-17.

Figure 4-17: Object sub-category

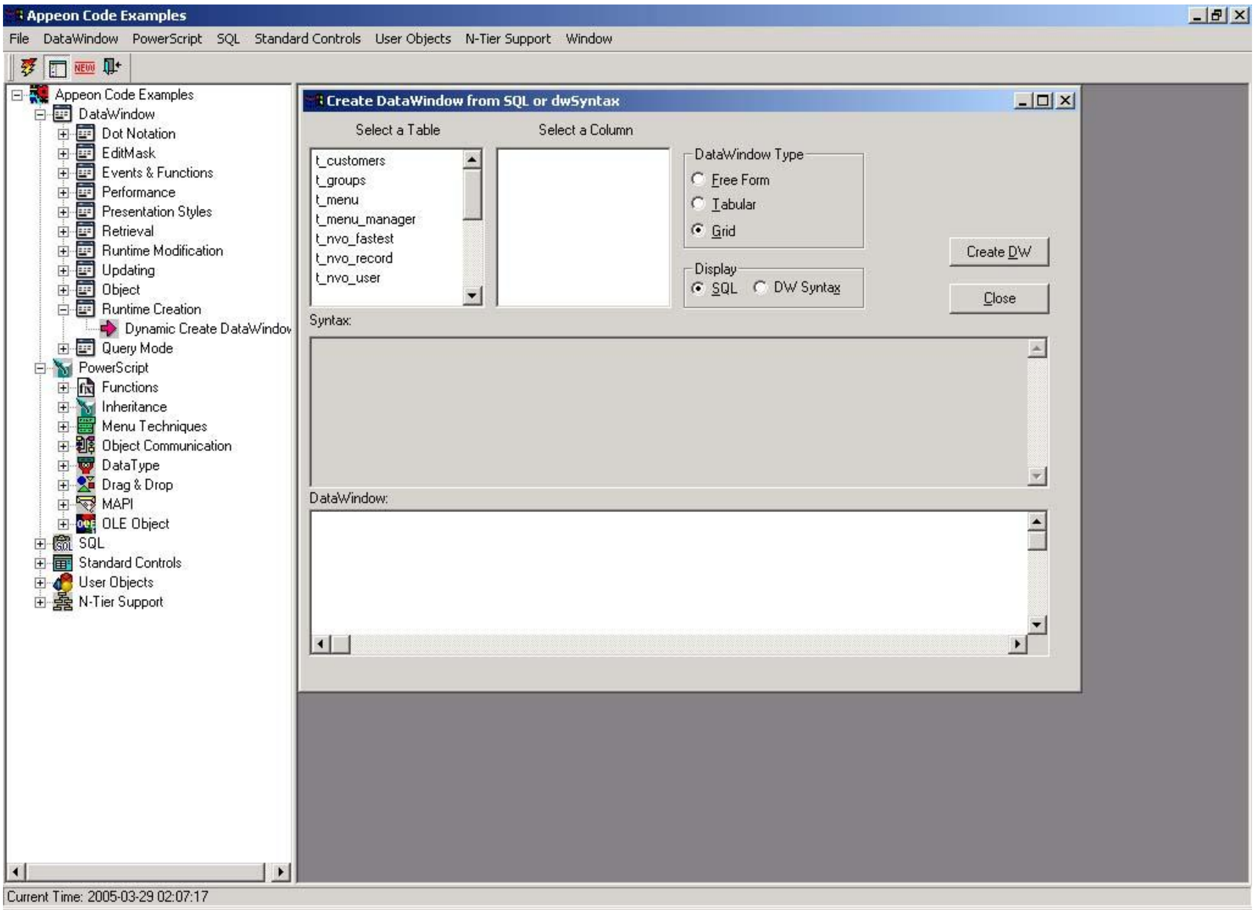


Details on how to run these examples are not given in this section, however, you also can run the examples easily by performing similar steps as shown in other sub-categories.

4.3.11 Runtime Creation

There is one example for the Runtime Creation sub-category: Dynamic Create DataWindow, which demonstrates how to dynamically create a DataWindow using SQL or DataWindow syntax. Refer to Figure 4-18.

Figure 4-18: Runtime Creation sub-category



DataWindow Type: ○ Free Form ○ Tabular ● Grid

Display: ● SQL ○ DW Syntax

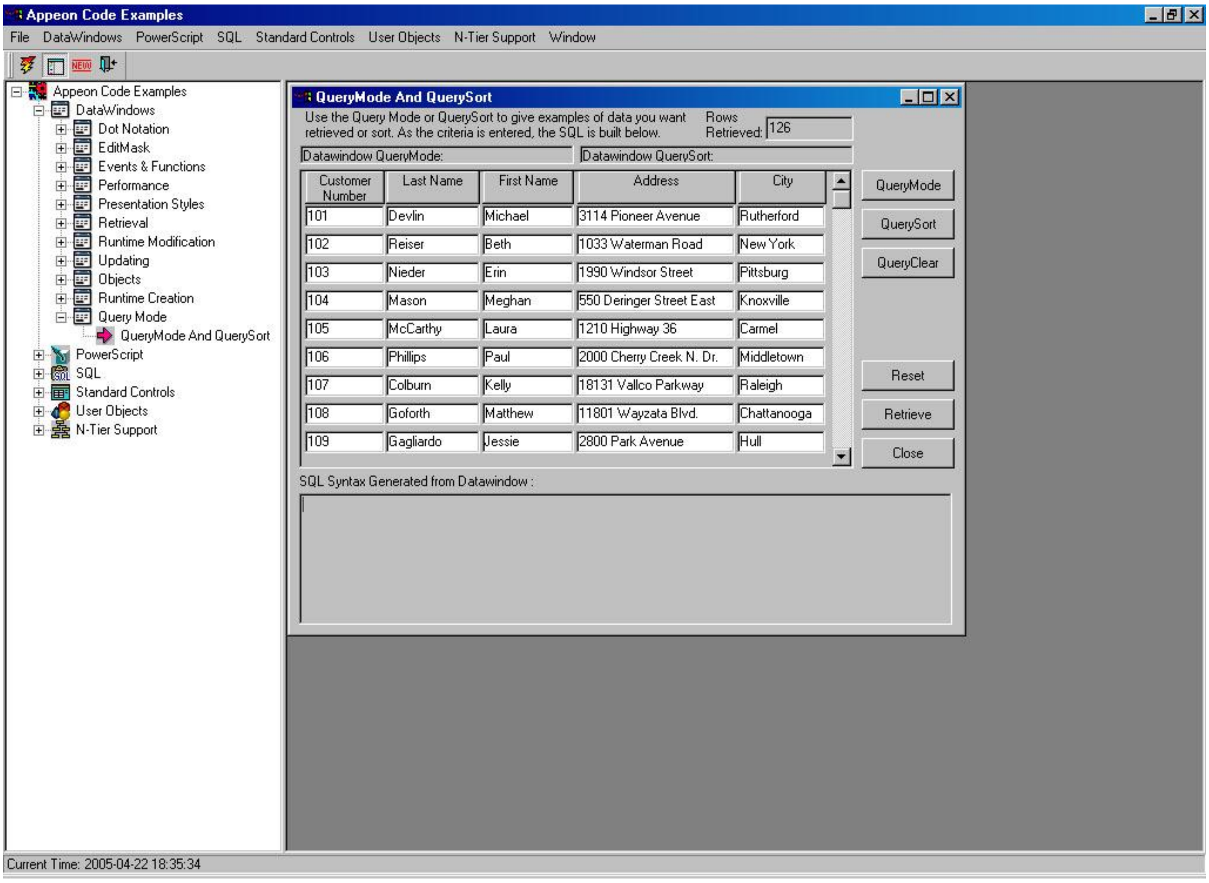
Current Time: 2005-03-29 02:07:17

Details on how to run this example are not given in this section, however, you also can run the example easily by performing similar steps as shown in other sub-categories.

4.3.12 Query Mode

There is one example for the Runtime Creation sub-category: QueryMode And QuerySort, which demonstrates how to retrieve and sort data using the QueryMode and QuerySort properties. Refer to Figure 4-19.

Figure 4-19: Query Mode sub-category



Use the Query Mode or QuerySort to give examples of data you want retrieved or sort. As the criteria is entered, the SQL is built below.

Rows Retrieved: 126

Datawindow QueryMode:

Datawindow QuerySort:

Customer Number	Last Name	First Name	Address	City
101	Devlin	Michael	3114 Pioneer Avenue	Rutherford
102	Reiser	Beth	1033 Waterman Road	New York
103	Nieder	Erin	1990 Windsor Street	Pittsburg
104	Mason	Meghan	550 Deringer Street East	Knoxville
105	McCarthy	Laura	1210 Highway 36	Carmel
106	Phillips	Paul	2000 Cherry Creek N. Dr.	Middletown
107	Colburn	Kelly	18131 Vallco Parkway	Raleigh
108	Goforth	Matthew	11801 Wayzata Blvd.	Chattanooga
109	Gagliardo	Jessie	2800 Park Avenue	Hull

SQL Syntax Generated from Datawindow :

Current Time: 2005-04-22 18:35:34

Details on how to run this example are not given in this section, however, you also can run the example easily by performing similar steps as shown in other sub-categories.

4.4 PowerScript

There are eight sub-categories of DataWindow code examples. You can view all the sub-category items by expanding the PowerScript item in the Examples Panel or by clicking the PowerScript menu.

The sub-categories are:

- Functions – demonstrates how the Date functions, String functions, system functions, overloading functions, and functions in a UserObject are executed.
- Inheritance – demonstrates the inherited business rule, the inherited DataWindow, and the inherited UserObject.
- Menu Techniques – demonstrates the new feature of dynamically changing menus.
- Object Communication – demonstrates how to pass parameters between different controls and different windows/DataWindows.
- System Objects – demonstrates how to work with the system objects.
- Drag & Drop – demonstrates how the Drag & Drop feature works.
- MAPI – demonstrates how to use the mailMessage object.
- OLE Object – demonstrates how to work with the OLE object.

4.4.1 Functions

There are 18 examples provided to demonstrate the functions Appeon supports.

This section explains how to work with the “Function Overloading” example and the “Dynamic Create Objects” example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

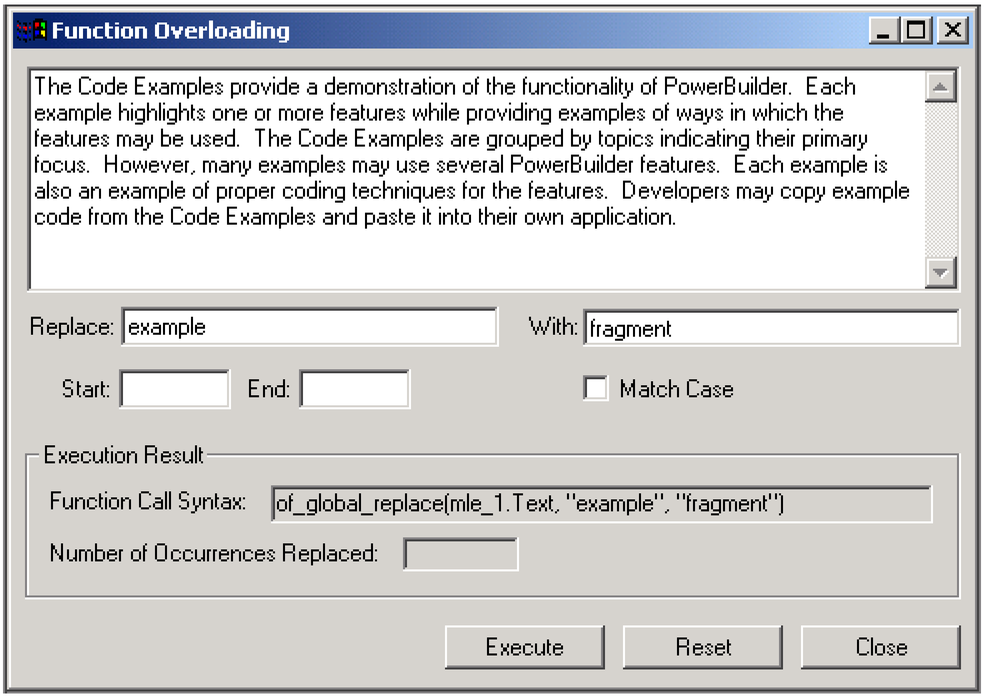
4.4.1.a Function Overloading

To run the “Function Overloading” example:

Step 1 – Click the plus sign next to Functions in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click “Function Overloading” to run this example.

You can also run the example by selecting PowerScript | Functions | Function Overloading. Refer to Figure 4-20.

Figure 4-20: The Function Overloading example



The Code Examples provide a demonstration of the functionality of PowerBuilder. Each example highlights one or more features while providing examples of ways in which the features may be used. The Code Examples are grouped by topics indicating their primary focus. However, many examples may use several PowerBuilder features. Each example is also an example of proper coding techniques for the features. Developers may copy example code from the Code Examples and paste it into their own application.

Replace: example With: fragment

Start: End: □ Match Case

Execution Result

Function Call Syntax: of_global_replace(mle_1.Text, "example", "fragment")

Number of Occurrences Replaced:

Step 2 – Specify arguments (replace criteria) for the function of_global_replace in the fields.

Step 3 – Click the *Execute* button.

The window object in this example is w_global_replace. As shown in the Clicked event of the *Execute* button, the Clicked event calls one of the following three functions according to the specified replacement criteria:

li_Cnt = of_global_replace(ls_text, ls_old, ls_new) //parent function

li_Cnt = of_global_replace(ls_text, ls_old, ls_new, True) //overloading function 1

li_Cnt = of_global_replace(ls_text, ls_old, ls_new, lb_case, ldb_Start, ldb_End)

The text in the MultiLineEdit control is changed according to the replaced criteria.

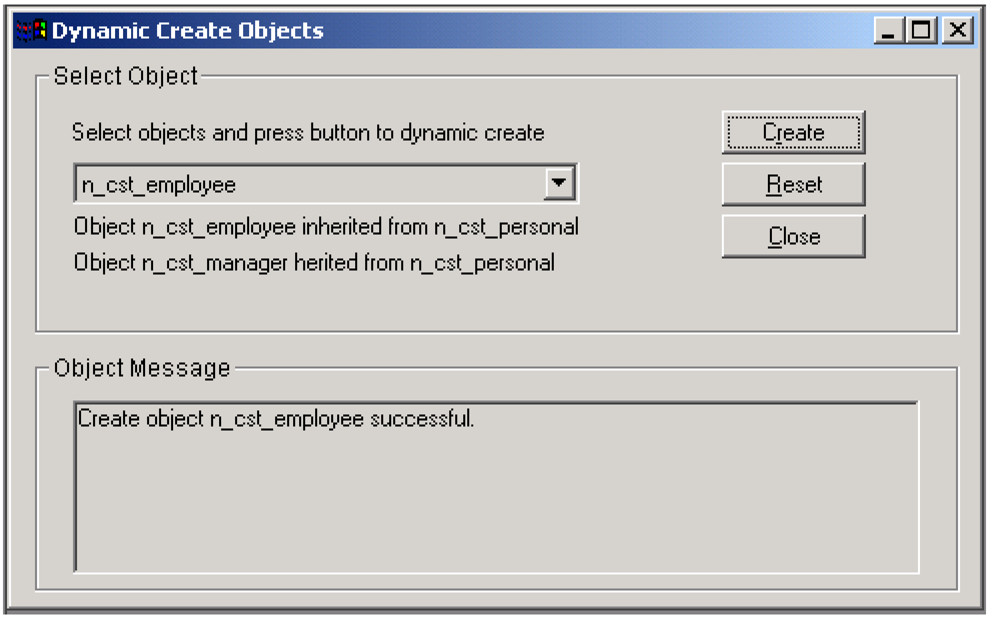
4.4.1.b Dynamic Create Objects

To run the “Dynamic Create Objects” example:

Step 1 – Click the plus sign next to Functions in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click “Dynamic Create Objects” to run this example.

You can also run the example by selecting PowerScript | Functions | Dynamic Create Objects. Refer to Figure 4-21.

Figure 4-21: Dynamic Create Objects



Select objects and press button to dynamic create

n_cst_employee

Object n_cst_employee inherited from n_cst_personal

Object n_cst_manager herited from n_cst_personal

Create object n_cst_employee successful.

Step 2 – Select an object from the dropdown list and click *Create*. A message will display in the Object Message box saying if the operation is successful. Click Reset to restore the settings.

4.4.2 Inheritance

There are three examples provided to demonstrate the inheritance feature.

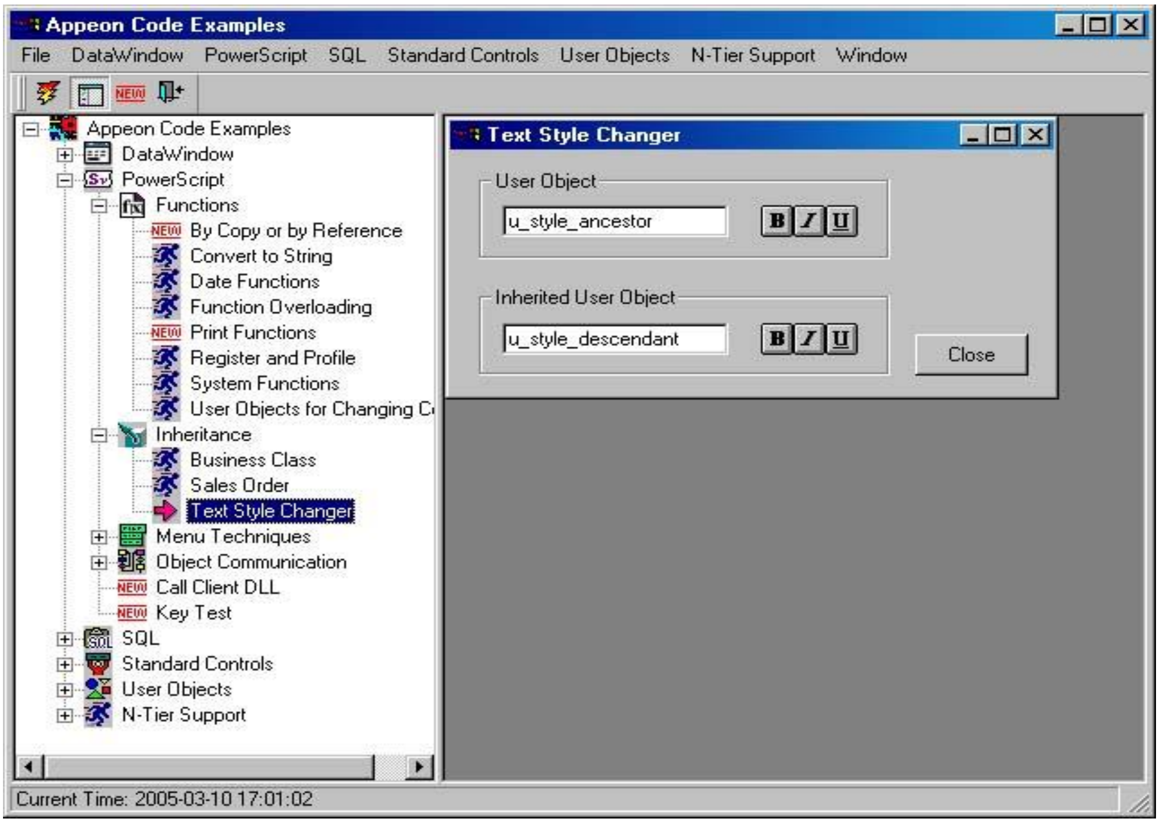
This section explains how to work with the “Text Style Changer” example. Perform the following steps to test the example. You can also run the other examples by performing similar steps.

To run the “Text Style Changer” example:

Step 1 – Click the plus sign next to Inheritance in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click “Text Style Changer” to run this example.

You can also run the example by selecting PowerScript | Inheritance | Text Style Changer. Refer to Figure 4-22.

Figure 4-22: The Text Style Changer example



User Object: u_style_ancestor

Inherited User Object: u_style_descendant

Current Time: 2005-03-10 17:01:02

Step 2 – Click the *Bold*, *Italic* and *Underline* buttons in the User Object group box. The text style in the group box is changed accordingly.

Step 3 – Click the *Bold* button in the Inherited User Object group box. Instead of the text changing to bold, the text changes to “bold not allowed” because the child user object overloads the logic in the parent user object.

By clicking the *Italic* or *Underline* button in the Inherited User Object group box, different behavior occurs in the text box than in the User Object group box. The window object in this example is w_style_uos. In the two group boxes, there are two user objects - u_style_ancestor and u_style_descendent. U_style_descendent is inherited from the u_style_ancestor object.

4.4.3 Menu Techniques

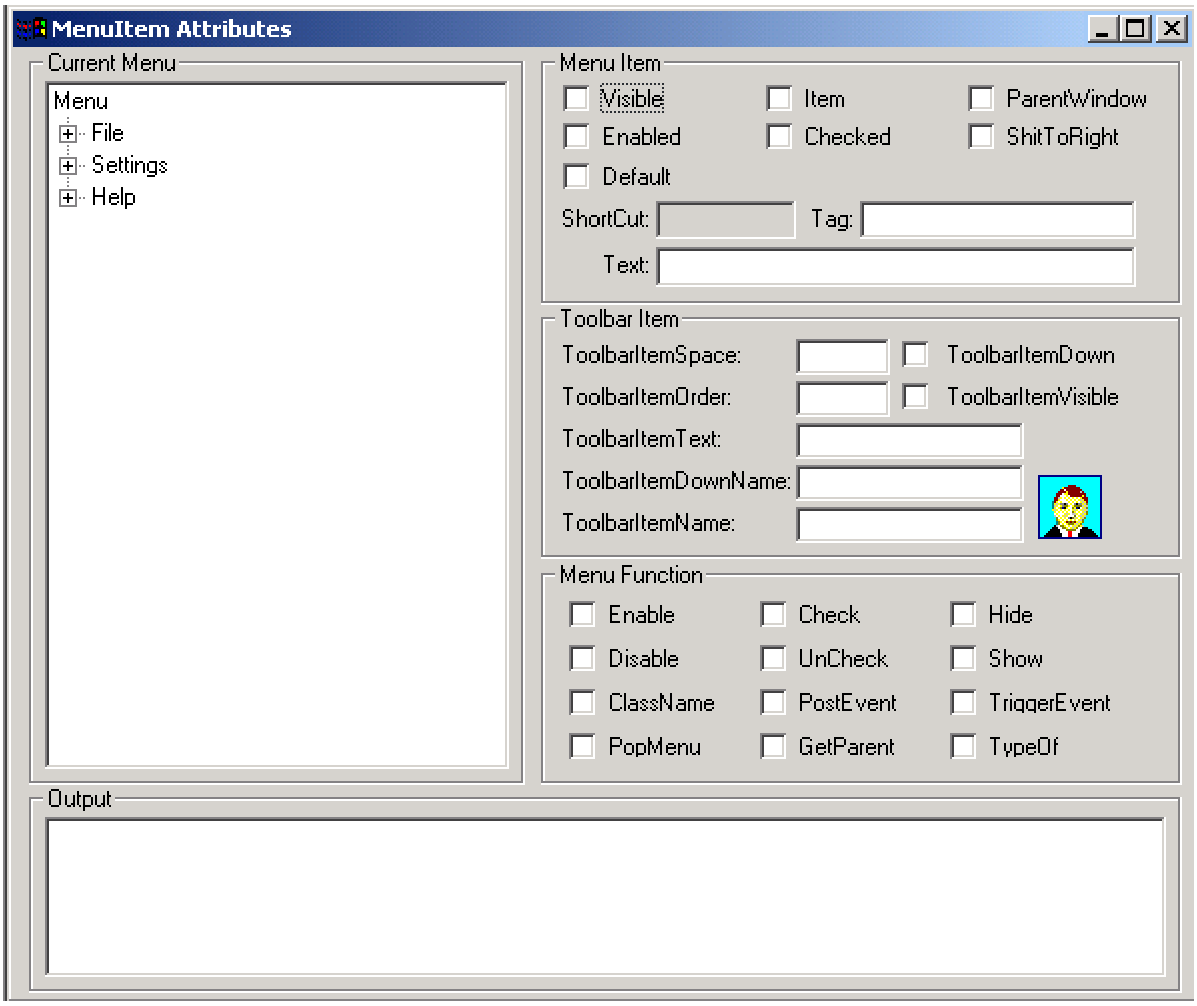
There are two examples for the Menu Techniques: “Cascading menu”, and “MenuItem Attributes”. This section explains how to work with the “MenuItem Attributes” example. Perform the following steps to test the example. You can also run the other example by performing similar steps.

To run the “MenuItem Attributes” example:

Step 1 – Click the plus sign next to Menu Techniques in the Examples Panel. The sub-category is expanded and the “MenuItem Attributes” example is displayed. Double-click “MenuItem Attributes” to run this example.

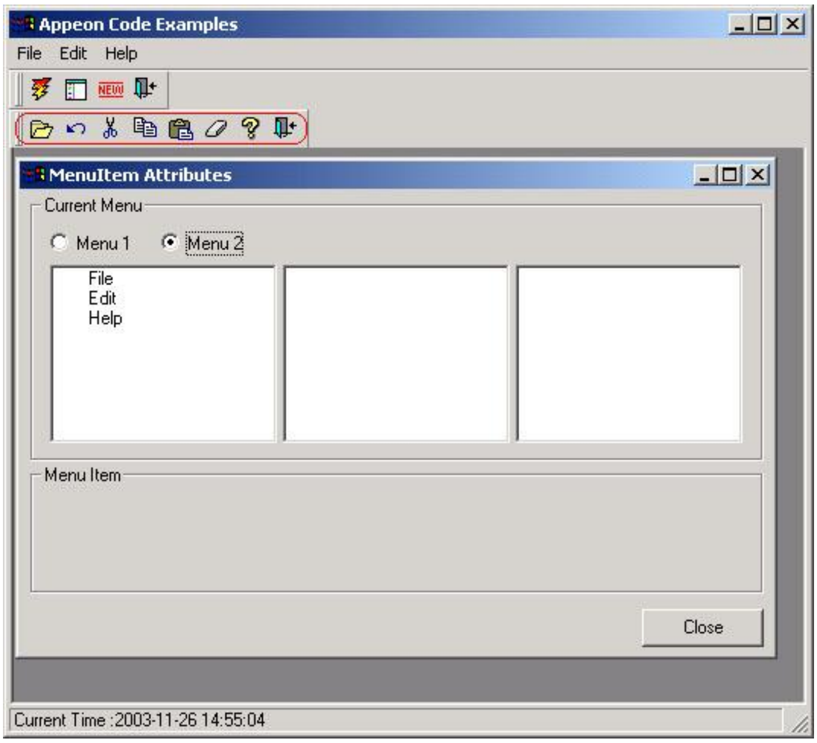
You can also run the example by selecting the PowerScript | Menu Techniques | MenuItem Attributes menu item. Refer to Figure 4-23.

Figure 4-23: The MenuItem Attributes example



Step 2 – You may find that the menu in the Appeon Code Examples window application has already changed. If you click the Menu 2 radio button, the menu of the application will change again. Refer to Figure 4-24.

Figure 4-24: Dynamic changing toolbar



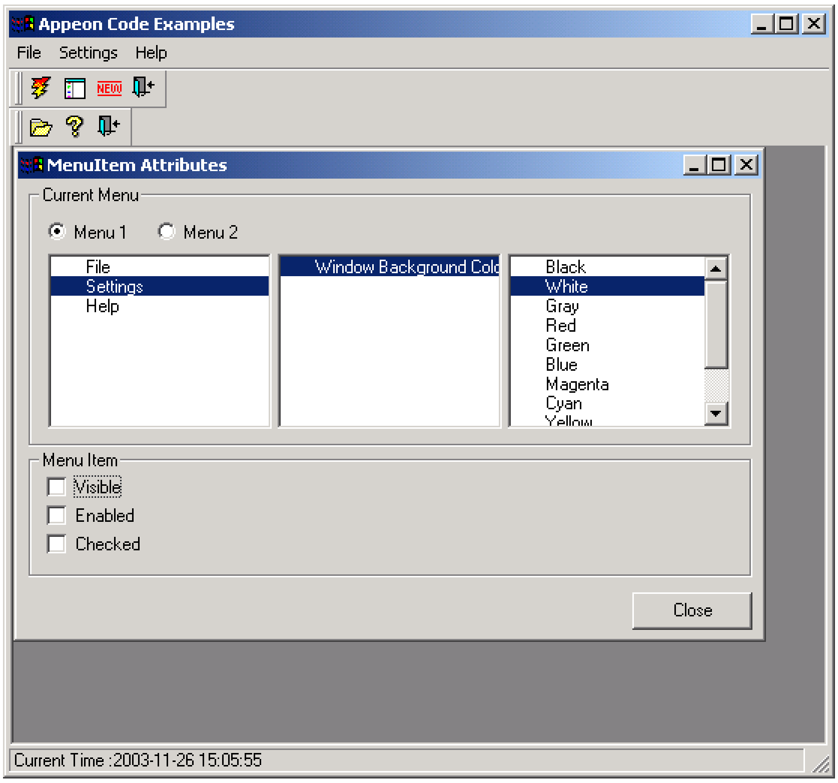
○ Menu 1 ● Menu 2

File
Edit
Help

Current Time :2003-11-26 14:55:04

Step 3 – Select an item and change its attributes. Refer to Figure 4-25.

Figure 4-25: Change the attribute of a menu item



● Menu 1 ○ Menu 2

File
Settings
Help

Window Background Colo

Black
White
Gray
Red
Green
Blue
Magenta
Cyan
Yellow

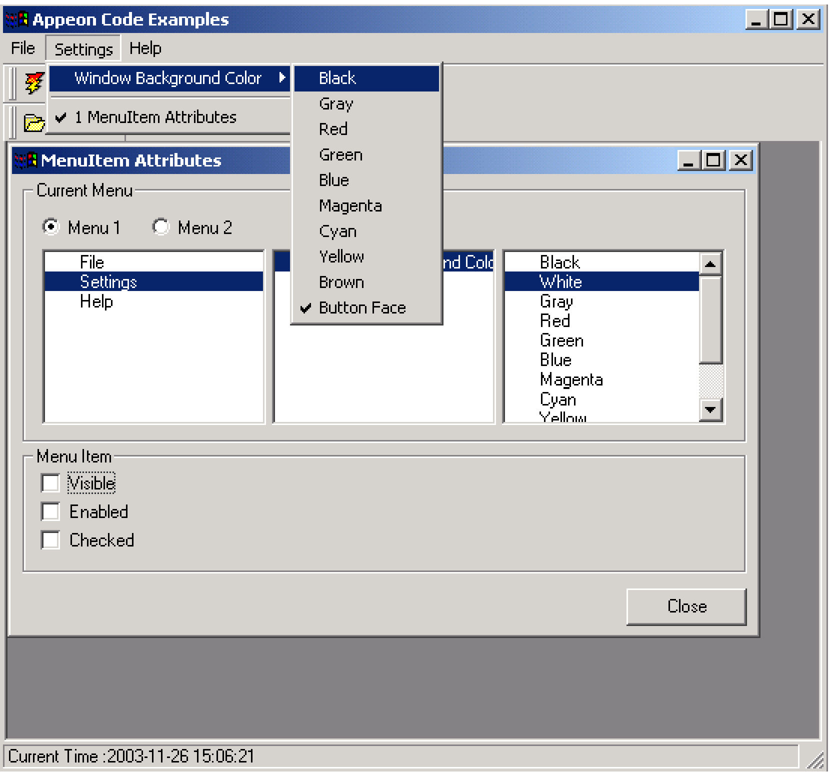
□ Visible
□ Enabled
□ Checked

Current Time :2003-11-26 15:05:55

The properties in the Settings | Window Background Color | White menu item are changed to invisible, disabled, and unchecked.

Step 4 – Go to the Settings | Window Background Color menu. The White menu item disappears (because it is invisible on the menu). Refer to Figure 4-26.

Figure 4-26: Hide the "White" menu item



The window object in this example is w_menu_functions. The syntax in the Clicked event of the Menu 1 radio button is *parent.ChangeMenu(m_menu_functions_main)*. The menu of the application can be dynamically changed.

4.4.4 Object Communication

There are five examples provided to demonstrate the Object Communication functionality.

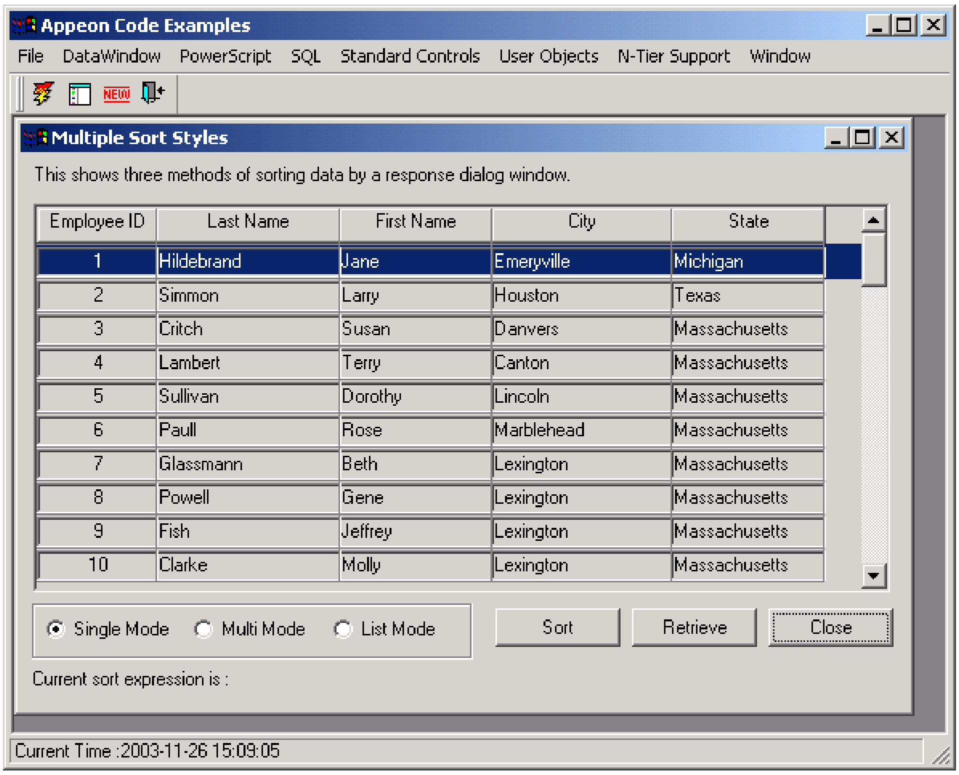
This section explains how to work with the "Multi-Style Sort" example. Perform the following steps to test the example. You can also run the other examples by performing similar steps.

To run the "Object Communication" example:

Step 1 – Click the plus sign next to Object Communication in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click "Multi-Style Sort" to run this example.

You can also run the example by selecting PowerScript | Object Communication | Multi-Style Sort. Refer to Figure 4-27.

Figure 4-27: The Multiple Sort Style example



This shows three methods of sorting data by a response dialog window.

Employee ID	Last Name	First Name	City	State
1	Hildebrand	Jane	Emeryville	Michigan
2	Simmon	Larry	Houston	Texas
3	Critch	Susan	Danvers	Massachusetts
4	Lambert	Terry	Canton	Massachusetts
5	Sullivan	Dorothy	Lincoln	Massachusetts
6	Paull	Rose	Marblehead	Massachusetts
7	Glassmann	Beth	Lexington	Massachusetts
8	Powell	Gene	Lexington	Massachusetts
9	Fish	Jeffrey	Lexington	Massachusetts
10	Clarke	Molly	Lexington	Massachusetts

● Single Mode ○ Multi Mode ○ List Mode

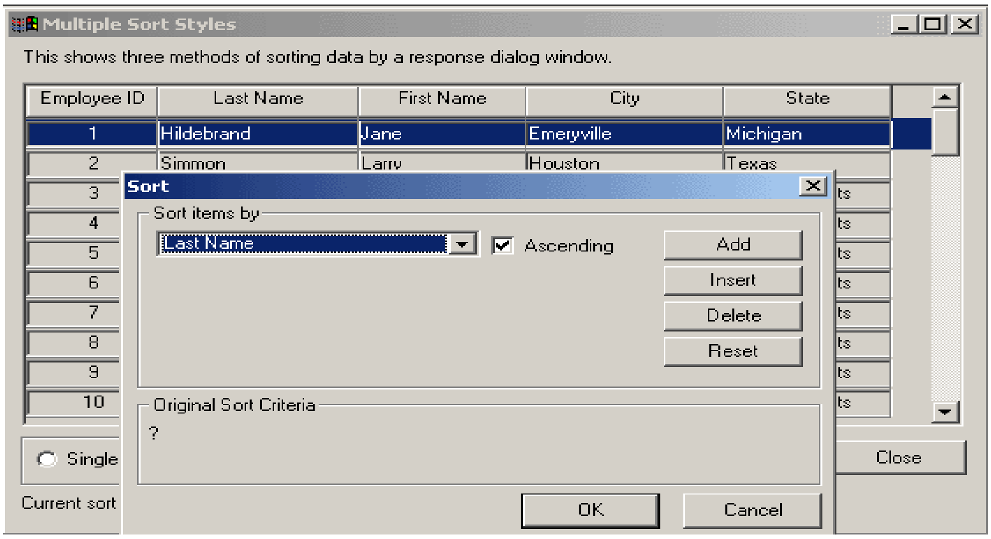
Current sort expression is :

Current Time :2003-11-26 15:09:05

Step 2 – Select one of the sort modes (for example, Multi Mode).

Step 3 – Click the *Sort* button and the Sort dialog box is displayed. Refer to Figure 4-28.

Figure 4-28: The Sort dialog box



This shows three methods of sorting data by a response dialog window.

Sort items by: Last Name ☑ Ascending

Original Sort Criteria

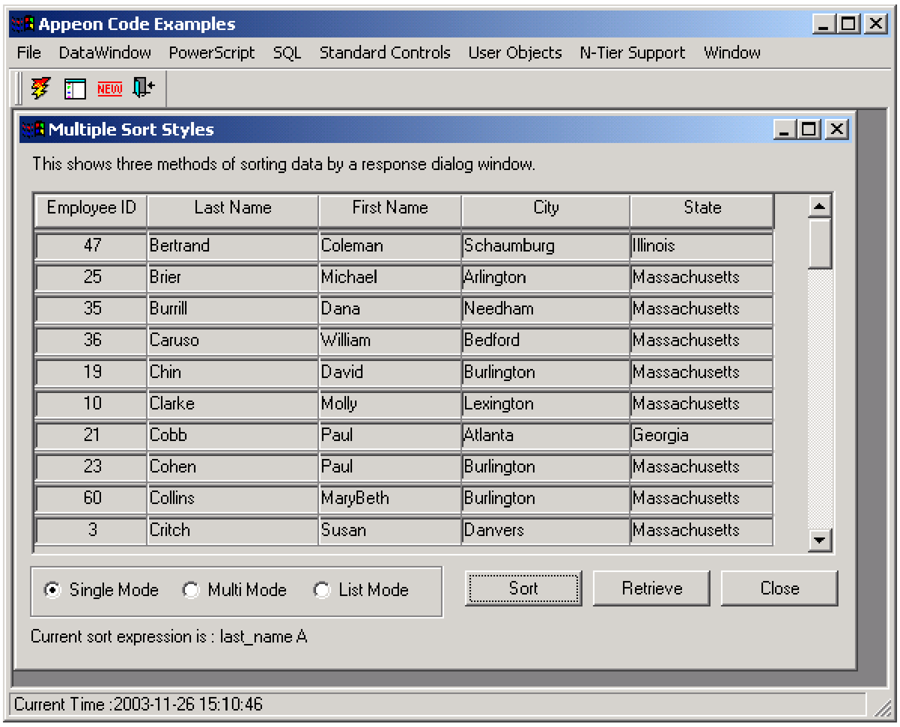
?

Current sort

Step 4 – You can set the sort criteria by selecting a column title from the dropdown listbox. In addition, you can add more sort criteria by clicking the *Add* or *Insert* button. After the sort criteria are set, click *OK*.

The DataWindow will be sorted according to the sort criteria. Refer to Figure 4-29.

Figure 4-29: Sort DataWindow data


Appeon Code Examples
File DataWindow PowerScript SQL Standard Controls User Objects N-Tier Support Window
Multiple Sort Styles

This shows three methods of sorting data by a response dialog window.

Employee ID	Last Name	First Name	City	State
47	Bertrand	Coleman	Schaumburg	Illinois
25	Brier	Michael	Arlington	Massachusetts
35	Burrill	Dana	Needham	Massachusetts
36	Caruso	William	Bedford	Massachusetts
19	Chin	David	Burlington	Massachusetts
10	Clarke	Molly	Lexington	Massachusetts
21	Cobb	Paul	Atlanta	Georgia
23	Cohen	Paul	Burlington	Massachusetts
60	Collins	MaryBeth	Burlington	Massachusetts
3	Critch	Susan	Danvers	Massachusetts

● Single Mode ○ Multi Mode ○ List Mode

Current sort expression is : last_name A

Current Time :2003-11-26 15:10:46

The window object in this example is w_dw_sortstyle. There are several object communications as follows:

- The choice of radio button will be communicated to the Clicked event of the *Sort* button to open the corresponding window.
- Once the sort criteria is set, the sort criteria is returned to the w_dw_sortstyle, and the text under the radio buttons is changed.

4.4.5 System Objects

There are two examples provided to demonstrate the System Objects functionality.

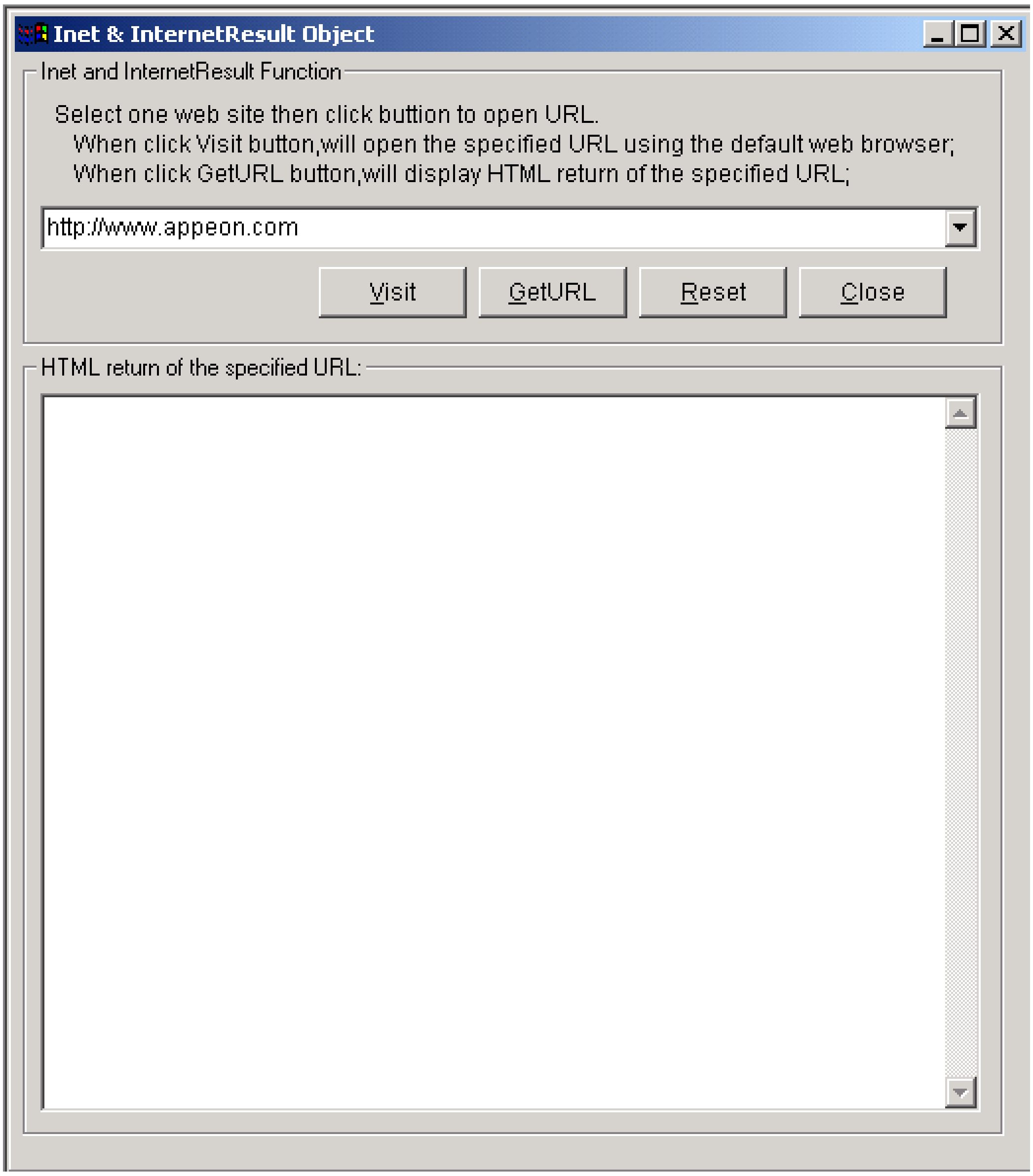
This section explains how to work with the “Inet & InternetResult Object” example. Perform the following steps to test the example. You can also run the other examples by performing similar steps.

To run the “Inet & InternetResult Object” example:

Step 1 – Click the plus sign next to System Objects in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click “Inet & InternetResult Object” to run this example.

You can also run the example by selecting PowerScript | System Objects | Inet & InternetResult Object.

Figure 4-30: Inet & InternetResult Object



Inet & InternetResult Object
Inet and InternetResult Function

Select one web site then click buttion to open URL.
When click Visit button,will open the specified URL using the default web browser;
When click GetURL button,will display HTML return of the specified URL;

http://www.appeon.com

Visit
GetURL
Reset
Close
HTML return of the specified URL:

Step 2 – Select one web site and click *Visit* to open the URL. Click *GetURL* to view HTML return of the specified URL. Click *Reset* to restore the settings. Click *Close* to leave this window.

4.5 SQL statements

There are twelve SQL code examples demonstrating the SQL syntaxes that Appeon supports including dynamic SQL format 1, dynamic SQL format 2, embedded SQL, cursor statements, stored procedure statements, etc.

This section explains how to work with the "Dynamic SQL Format 2" example and "Using Transaction Objects to Call Stored Procedures" example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

4.5.1 Dynamic SQL Format 2

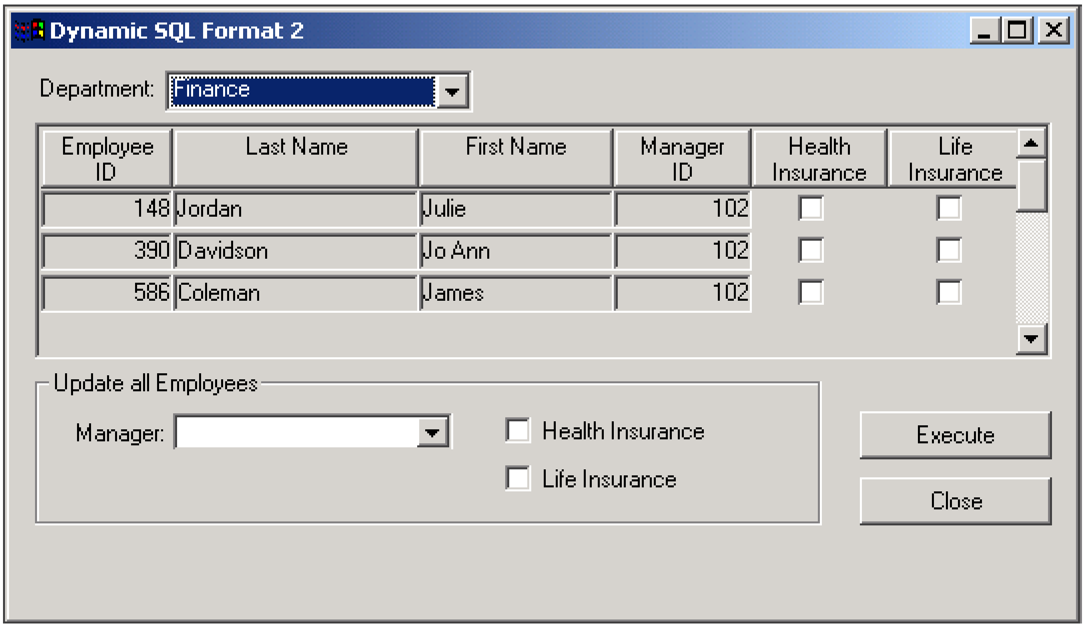
To run the "Dynamic SQL Format 2" example:

Step 1 – Click the plus sign next to SQL in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click “Dynamic SQL Format 2” to run this example.

You can also run the example by selecting SQL | Dynamic SQL Format 2.

Step 2 – Select a department from the dropdown list box to retrieve data into the DataWindow. Refer to Figure 4-31.

Figure 4-31: Select the department Finance

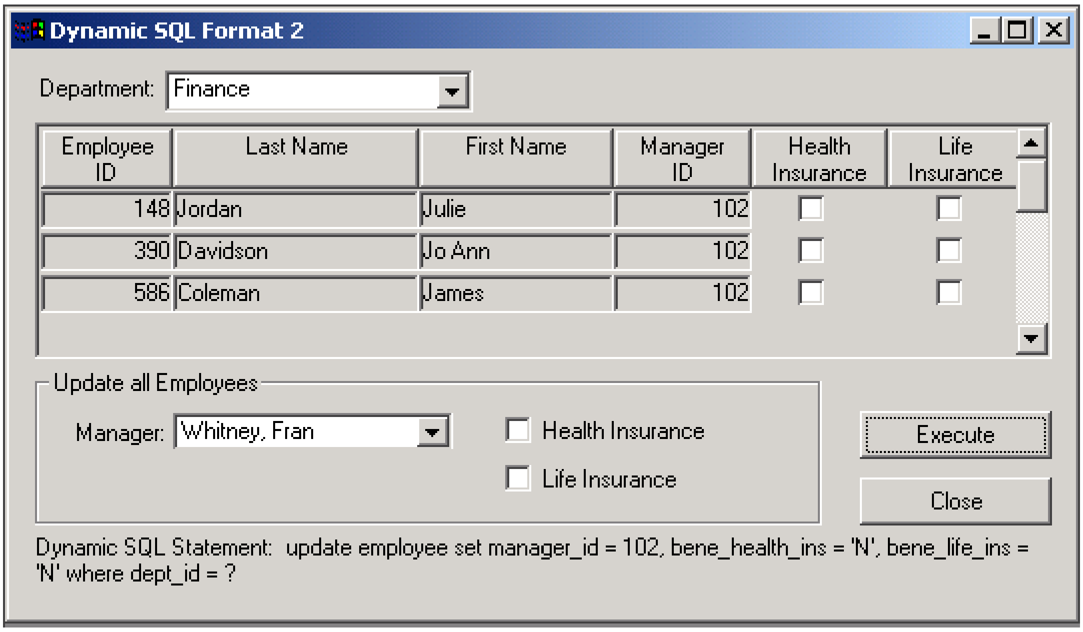


Department: Finance

Employee ID	Last Name	First Name	Manager ID	Health Insurance	Life Insurance
148	Jordan	Julie	102	□	□
390	Davidson	Jo Ann	102	□	□
586	Coleman	James	102	□	□

Step 3 – In the “Update all Employees” group box, specify the dynamic SQL statement and then click the *Execute* button, as shown in the following screenshot (Figure 4-32):

Figure 4-32: Execute dynamic SQL statement (type 2)



Department: Finance

Employee ID	Last Name	First Name	Manager ID	Health Insurance	Life Insurance
148	Jordan	Julie	102	□	□
390	Davidson	Jo Ann	102	□	□
586	Coleman	James	102	□	□

Manager: Whitney, Fran

Dynamic SQL Statement: update employee set manager_id = 102, bene_health_ins = 'N', bene_life_ins = 'N' where dept_id = ?

Step 4 – The DataWindow is updated according to the criteria.

The window object in this example is w_dynsql_format2. The syntax for dynamic SQL format 2 is as follows:

prepare SQLSA from :ls_sql;

execute SQLSA using :li_dept_id;

4.5.2 Using Transaction Objects to Call Stored Procedures

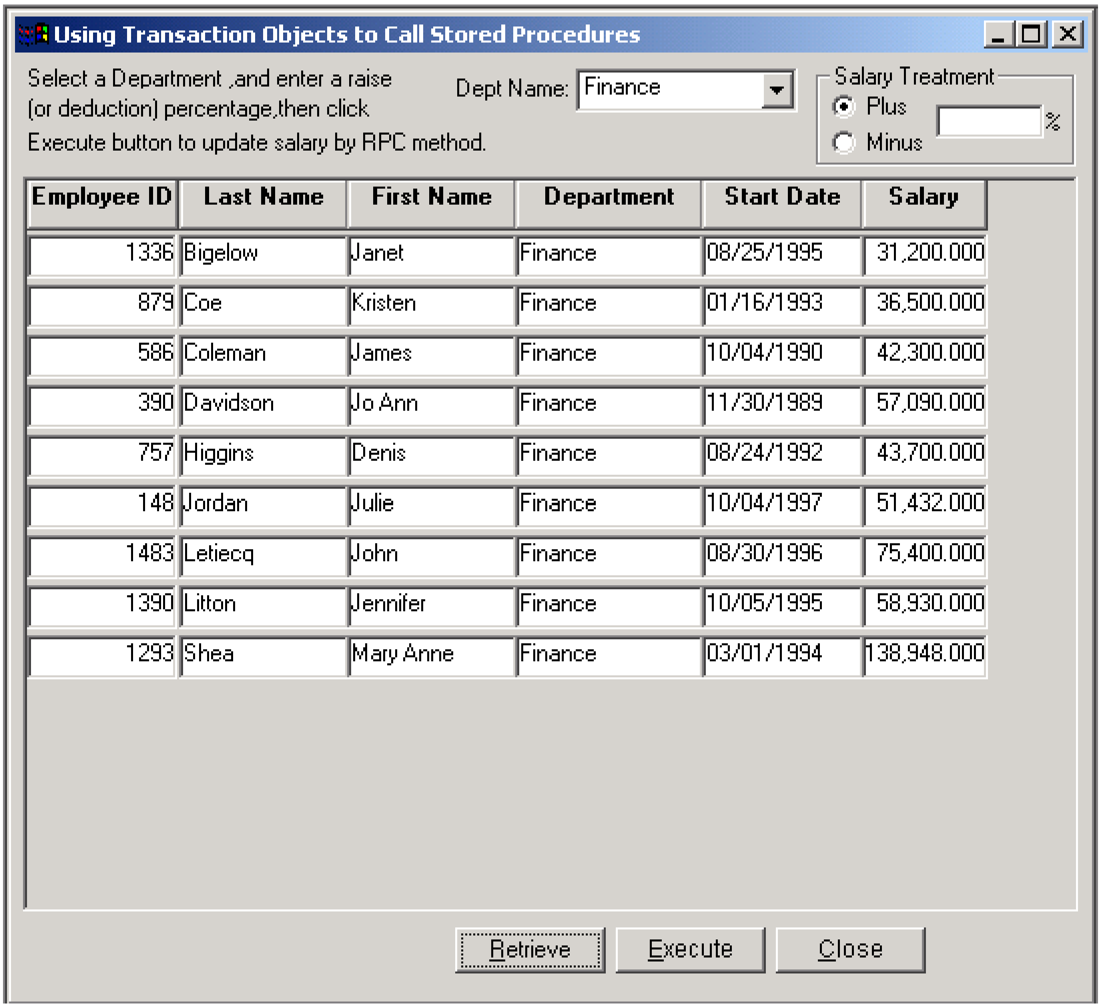
To run the “Using Transaction Objects to Call Stored Procedures” example:

Step 1 – Click the plus sign next to SQL in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click “Using Transaction Objects to Call Stored Procedures” to run this example.

You can also run the example by selecting SQL | Using Transaction Objects to Call Stored Procedures.

Step 2 – Select a department from the dropdown list box to retrieve data into the DataWindow. Refer to Figure 4-33.

Figure 4-33: Using transaction objects to call stored procedures



Using Transaction Objects to Call Stored Procedures

Select a Department ,and enter a raise (or deduction) percentage,then click Execute button to update salary by RPC method.

Dept Name: Finance

Salary Treatment
● Plus
○ Minus
%

Employee ID	Last Name	First Name	Department	Start Date	Salary
1336	Bigelow	Janet	Finance	08/25/1995	31,200.000
879	Coe	Kristen	Finance	01/16/1993	36,500.000
586	Coleman	James	Finance	10/04/1990	42,300.000
390	Davidson	Jo Ann	Finance	11/30/1989	57,090.000
757	Higgins	Denis	Finance	08/24/1992	43,700.000
148	Jordan	Julie	Finance	10/04/1997	51,432.000
1483	Letiecq	John	Finance	08/30/1996	75,400.000
1390	Litton	Jennifer	Finance	10/05/1995	58,930.000
1293	Shea	Mary Anne	Finance	03/01/1994	138,948.000

Step 3 – In the “Salary Treatment” box, click “Plus” or “Minus”, then click the *Execute* button.

Step 4 – The DataWindow is updated according to the criteria.

4.6 Standard controls

There are 32 standard control code examples, each representing a standard control that Appeon supports. By running the examples, you can test the functions, events, and properties of the standard controls.

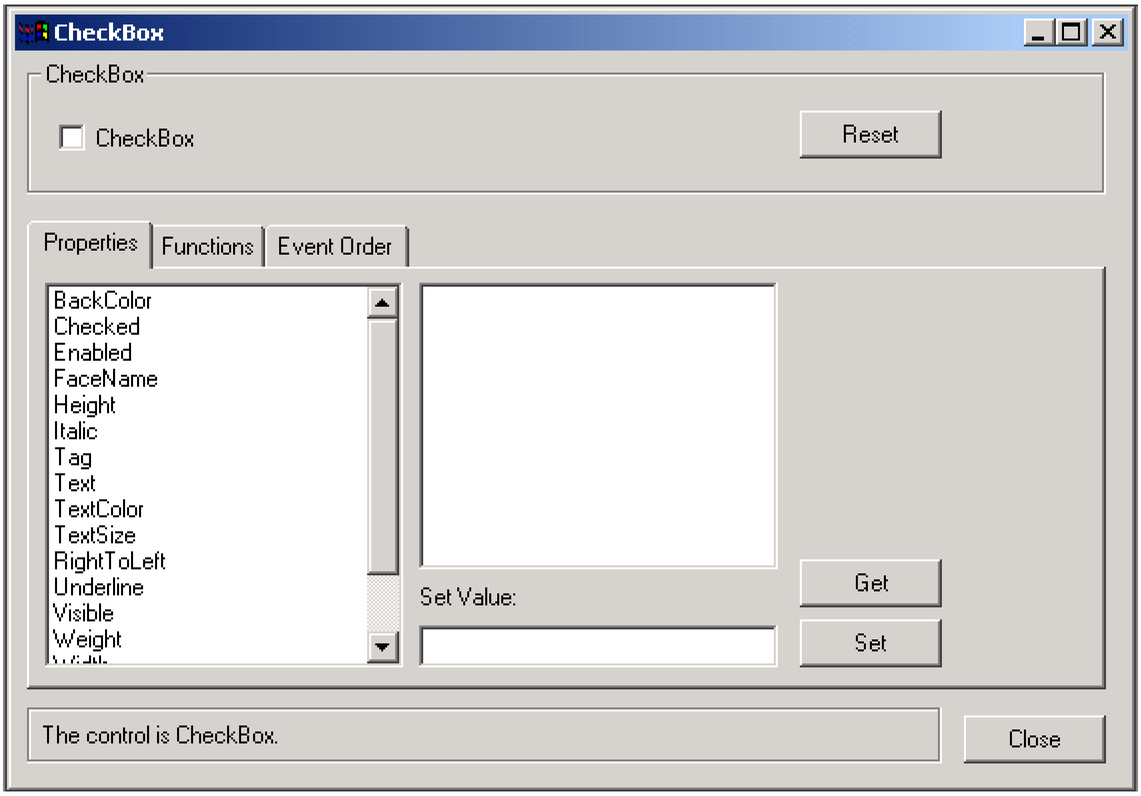
This section explains how to work with the “CheckBox” example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

To run the “CheckBox” example:

Step 1 – Click the plus sign next to the Standard Controls in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click “CheckBox” to run this example.

You can also run the example by selecting Standard Controls | CheckBox. Refer to Figure 4-34.

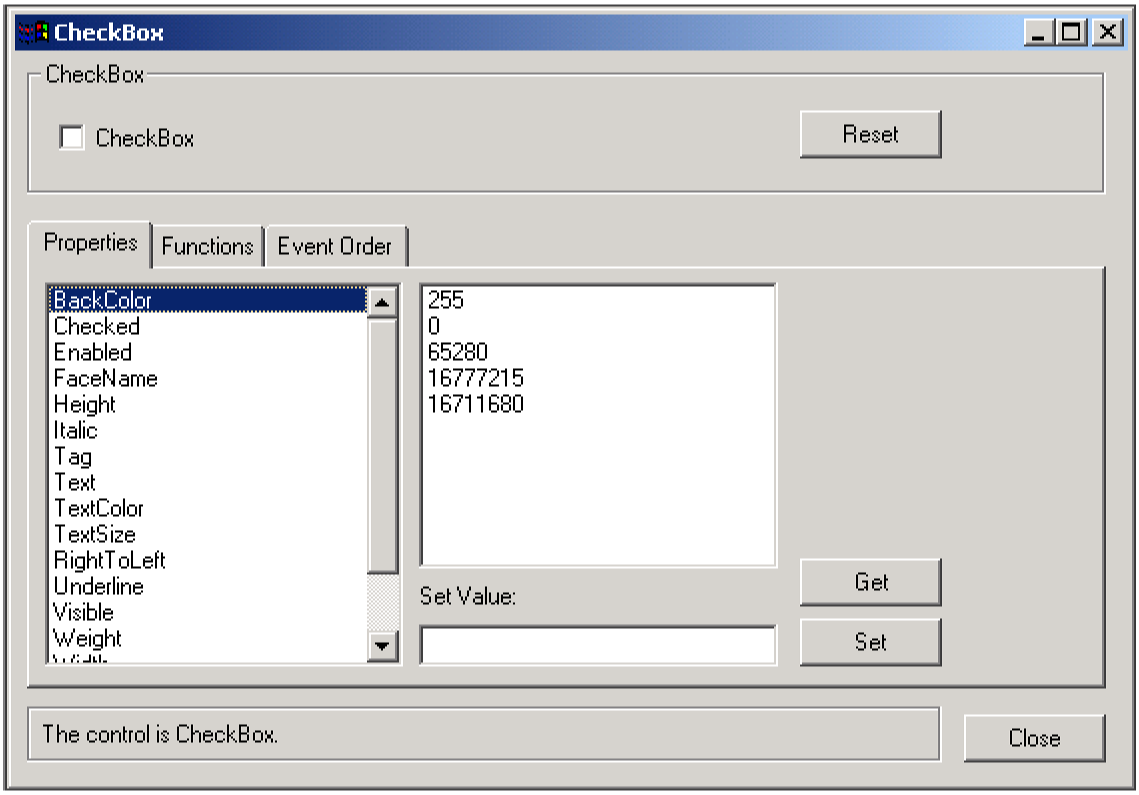
Figure 4-34: The CheckBox example



The control is CheckBox.

Step 2 – There are three tab pages: Properties, Functions, and Event Order. In the Properties tab page, select a property (for example, BackColor). Refer to Figure 4-35.

Figure 4-35: Select CheckBox BackColor property

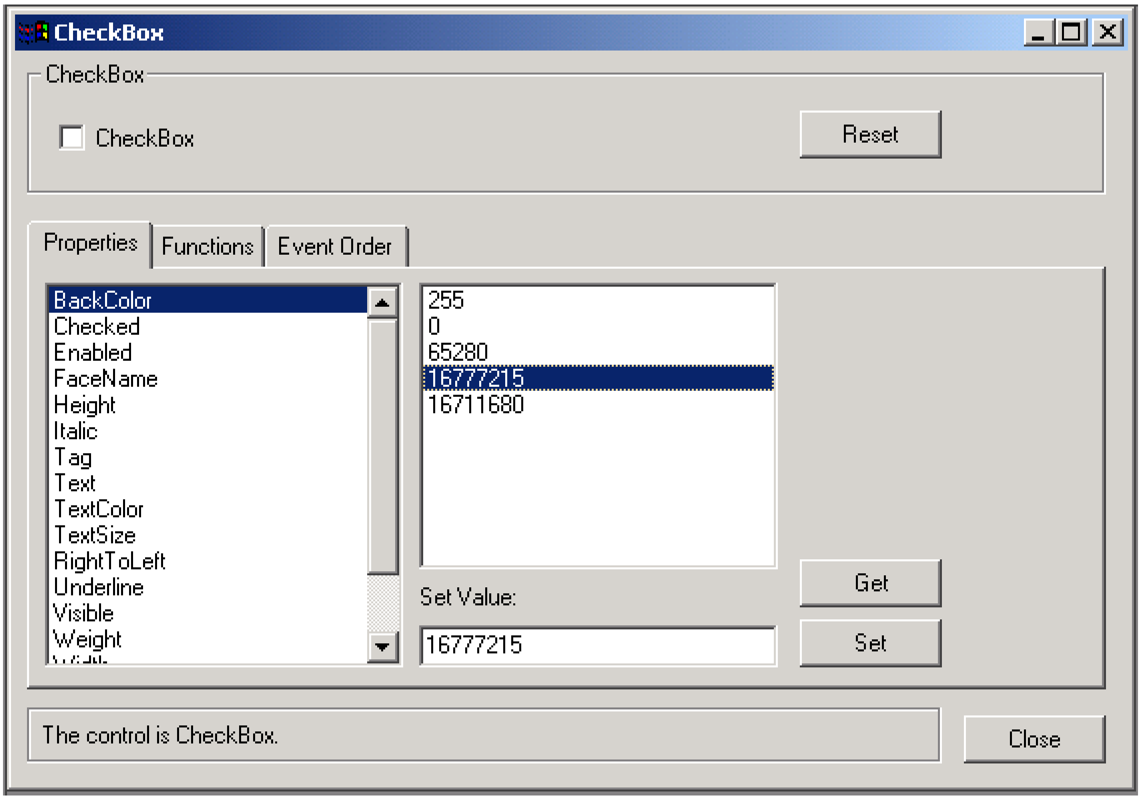


The control is CheckBox.

Step 3 – Set the BackColor to a specific value. There are several options provided (255, 0, 65280, etc.). Select an option listed in the list box or enter a valid value in the "Set Value" text box.

Step 4 – Click the *Get* button. At the bottom of the window, the current value of the BackColor property is displayed. Refer to Figure 4-36.

Figure 4-36: Get the value of the BackColor property

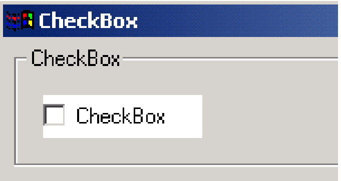


Set Value: 16777215

The control is CheckBox.

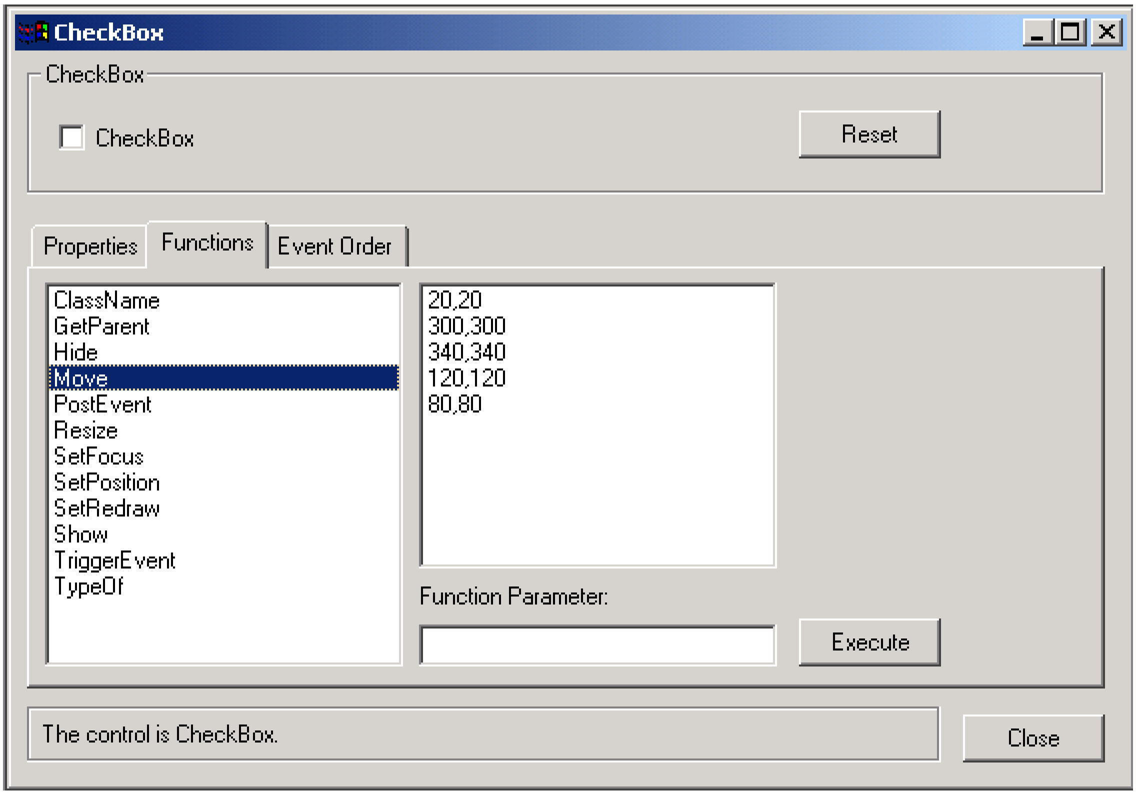
Step 5 – Click the *Set* button and the property is set to the specified value. The control displays, as it is set. Refer to Figure 4-37.

Figure 4-37: Set the value of the BackColor property



Step 6 – In the Functions tab page, select a function, enter the required arguments, and execute the function. Refer to Figure 4-38.

Figure 4-38: Execute CheckBox Move function



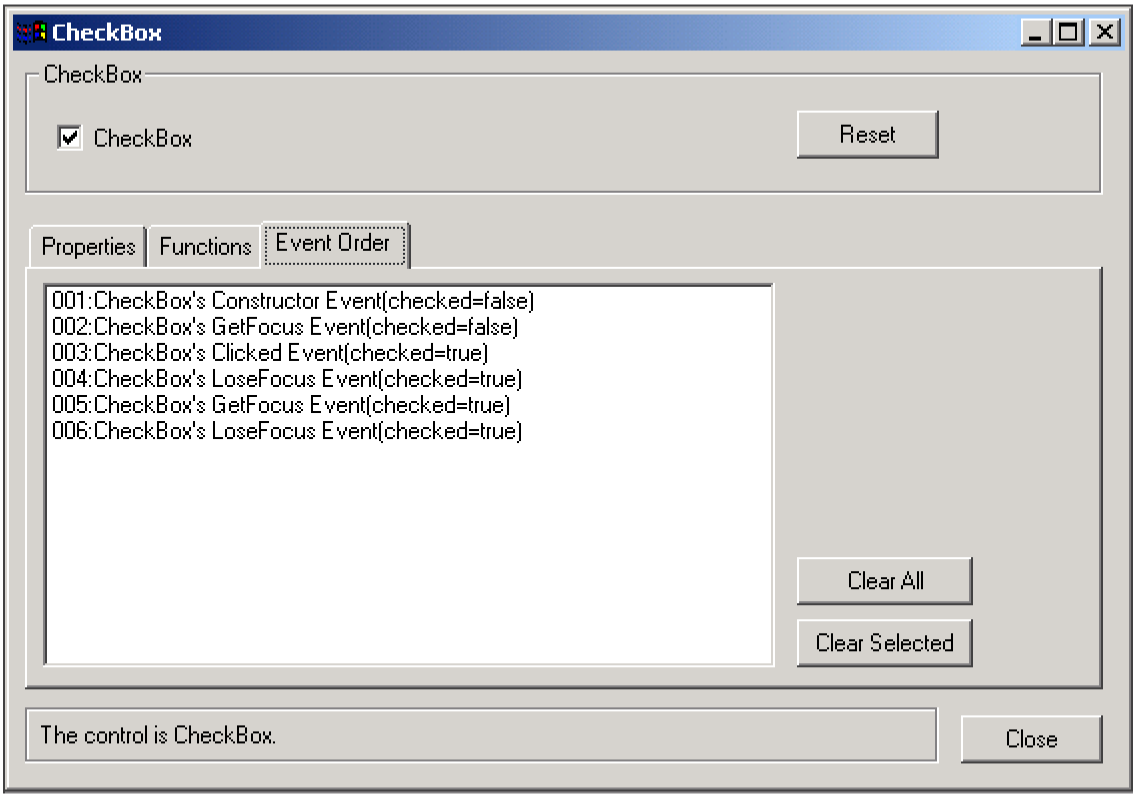
```
ClassName
GetParent
Hide
Move
PostEvent
Resize
SetFocus
SetPosition
SetRedraw
Show
TriggerEvent
TypeOf
```

```
20,20
300,300
340,340
120,120
80,80
```

The control is CheckBox.

Step 7 – In the Event Order tab page, view the records of the events that have been triggered. Refer to Figure 4-39.

Figure 4-39: Viewing the event sequence of CheckBox control



```
001:CheckBox's Constructor Event(checked=false)
002:CheckBox's GetFocus Event(checked=false)
003:CheckBox's Clicked Event(checked=true)
004:CheckBox's LoseFocus Event(checked=true)
005:CheckBox's GetFocus Event(checked=true)
006:CheckBox's LoseFocus Event(checked=true)
```

The control is CheckBox.

The window object in this example is w_checkbox_new.

4.7 Graphs

There are four sub-categories of Graph examples. You can view all the sub-category items by expanding the Graphs item in the Examples Panel or by clicking the Graphs menu.

The sub-categories are:

- Adding an ‘Other’ Category to Graph
- Dynamically Adding a Series to a Graph
- Graphs & Shared DataWindow
- Open the Employee Salary by Department Graph

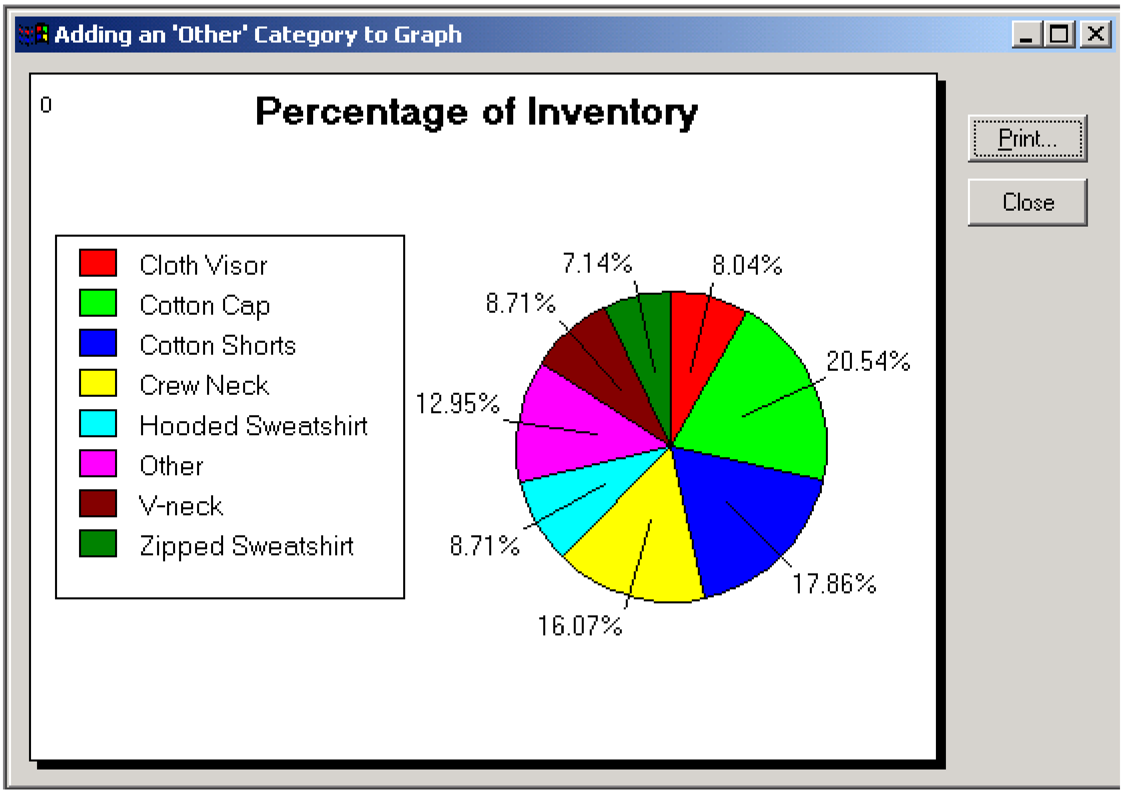
This section explains how to work with the “Adding an ‘Other’ Category to Graph” example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

Click the plus sign next to Graphs in the Examples Panel. The sub-category is expanded and the titles of the examples are displayed. Double-click “Adding an ‘Other’ Category to Graph” to run this example.

You can also run the example by selecting Graphs | Adding an ‘Other’ Category to Graph.

On the pie chart the “Other” category displays in pink, as shown in Figure 4-40.

Figure 4-40: Adding an “Other” category to Graph



4.8 User objects

There are eight user object code examples, each of which includes a user object. The user object can be visual/non-visual user objects or auto-instantiated/non auto-instantiated objects.

This section explains how to work with the “Maintain DataWindow with UserObject” example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

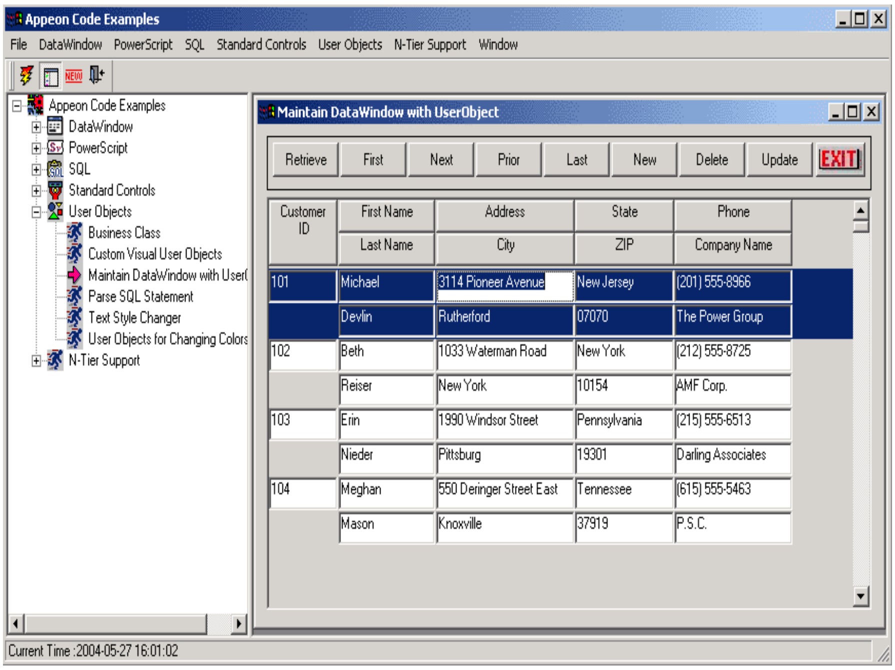
To run the “Maintain DataWindow with UserObject” example:

Step 1 – Click the plus sign next to User Objects in the Examples Panel. The sub-category is expanded and the examples are displayed. Double-click “Maintain DataWindow with UserObject” to run this example.

You can also run the example by selecting User Objects | Maintain DataWindow with UserObjects.

Step 2 – Click the *Retrieve* button for retrieving data into the DataWindow. Refer to Figure 4-41.

Figure 4-41: The Maintain DataWindow with UserObject example



Customer ID	First Name Last Name	Address City	State ZIP	Phone Company Name
101	Michael	3114 Pioneer Avenue	New Jersey	(201) 555-8966
	Devlin	Rutherford	07070	The Power Group
102	Beth	1033 Waterman Road	New York	(212) 555-8725
	Reiser	New York	10154	AMF Corp.
103	Erin	1990 Windsor Street	Pennsylvania	(215) 555-6513
	Nieder	Pittsburg	19301	Darling Associates
104	Meghan	550 Deringer Street East	Tennessee	(615) 555-5463
	Mason	Knoxville	37919	P.S.C.

Current Time :2004-05-27 16:01:02

Step 3 – Change the currently selected row by clicking the *First*, *Next*, *Prior*, and *Last* buttons.

Step 4 – Insert a new row by clicking the *New* button.

Step 5 – Delete the current row by clicking the *Delete* button.

Step 6 – Save the changes by clicking the *Update* button.

Step 7 – Exit the example by clicking the *Exit* button.

The window object in this example is w_uo_dw_record. The buttons group box at the top of the window is a visual user object, u_dw_ribbon_2.

4.9 N-Tier support

There are five N-Tier support code examples that will work only if Appeon Server uses *localhost* as the Host Name (*jagadmin* as the User Name) without a password. All examples call one or more 3-Tier NVOs that are deployed to Appeon Server. The 3-Tier NVOs contain

Appeon-unsupported functions, execute business logic, or call other server components such as CORBA components.

If you are running the application on an Appeon Server running on Sun Solaris, the following two features: Distributed DataWindow and NVO Call DLL will not work.

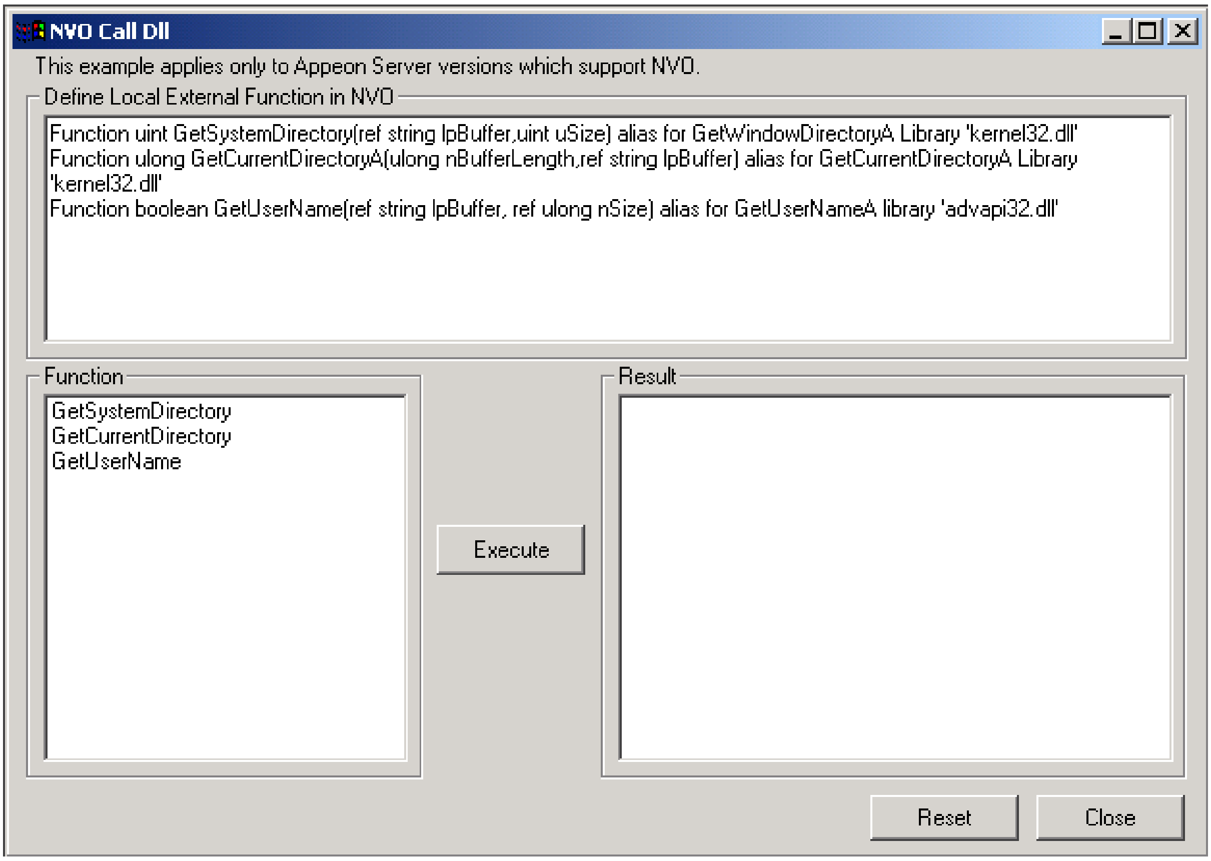
This section explains how to work with the "NVO Call DLL" example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

To run the "NVO Call DLL" example:

Step 1 – Click the plus sign next to n-Tier Support in the Example Panel. The sub-category is expanded and the examples are displayed. Double-click "NVO Call DLL" to run this example.

You can also run the example by selecting N-Tier Support | NVO Call DLL. Refer to Figure 4-42.

Figure 4-42: The NVO Call DLL example



NVO Call Dll

This example applies only to Appeon Server versions which support NVO.

Define Local External Function in NVO

```
Function uint GetSystemDirectory(ref string lpBuffer,uint uSize) alias for GetWindowDirectoryA Library 'kernel32.dll'
Function ulong GetCurrentDirectoryA(ulong nBufferLength,ref string lpBuffer) alias for GetCurrentDirectoryA Library
'kernel32.dll'
Function boolean GetUserName(ref string lpBuffer, ref ulong nSize) alias for GetUserNameA library 'advapi32.dll'
```

Function

GetSystemDirectory
GetCurrentDirectory
GetUserName

Step 2 – Select a function from the list box (GetSystemDirectory, GetCurrentDirectly or GetUserName) and click the *Execute button*. The example calls to the appeon_callserver NVO that is deployed to the Appeon Server and the NVO executes the selected function.

The window object in this example is w_calldll_n_tier. The 3-Tier NVO involved in the example is appeon_callserver.

5 Running ACF Examples

5.1 Overview

Appeon ACF Examples is a sample application specially designed by Appeon Corporation based on the PFC Example Application. To better understand the Appeon ACF Examples, users must have a clear understanding of the following terms:

PFC – an abbreviation for PowerBuilder Foundation Class Library. It is a collection of well-supported PowerBuilder Libraries designed by Sybase Corporation. PFC provides dozens of code examples that can be utilized for the creation of PowerBuilder applications with minimal additional scripting in a short amount of time.

PFC Examples Application – demonstrates a great number of features of the PowerBuilder Foundation Class Library (PFC). It is a Multiple Document Interface (MDI) application that showcases dozens of code examples, all utilizing PFC concrete and service class objects.

ACF – a collection of well-supported Appeon PowerBuilder Libraries designed by Appeon Corporation. Codes in ACF are all created based on the PFC, and they are always ready to be utilized by Appeon developers for creating Appeon PowerBuilder applications with minimal additional codes in a short amount of time.

Appeon ACF Examples – a PowerBuilder application created by Appeon Corporation. It is a Multiple Document Interface (MDI) application that showcases dozens of code examples. It is designed to demonstrate Appeon 6.0’s ability to successfully convert a PFC-based application to a Web application.

There are dozens of examples divided into six categories in the application. Each category deals with a number of PowerBuilder or Appeon functionalities. Refer to Table 5-1.

Table 5-1: Examples in Appeon ACF Examples demo

Category	Features	Examples
Application Services	Application functionalities in PFC that are supported by Appeon 6.0.	Date Services Example Error Services Example
DataWindow Services	DataWindow functionalities in PFC that are supported by Appeon 6.0.	DDDW Calculator and Calendar Drop-down Search Service Dynamic Filter Expressions Filter Service Dialogs Filter Service Settings Find and Replace Service Multiple Table Update Service Refresh Drop-down DataWindows Service Required Columns Service Row Manager Service Row Selection Service Sort Service Dialogs

Linkage Services	Linkage functionalities in PFC that are supported by Appeon 6.0.	Across Tab Pages Basic Filters Basic Retrieval Arguments Basic Scrolling Filter with Cascading Deletes Filter with Cascading Keys Retrieval with Auto-updates
Objects	Object functionalities in PFC that are supported by Appeon 6.0.	Split Bar 3 Pane Style Split Bar 3 Explorer Style
TreeView and ListView	TreeView and ListView functionalities in PFC that are supported by Appeon 6.0.	(5.x) Basic ListView (5.x) TreeView and a ListView (5.x) Update a TreeView Basic ListView Basic TreeView TreeView Linked to a ListView Update a TreeView
Window Services	Window functionalities in PFC that are supported by Appeon 6.0.	Resize Dynamic Tab Pages Save Process: All DW Scenarios Weighted Resize of a Window Window Resize Service

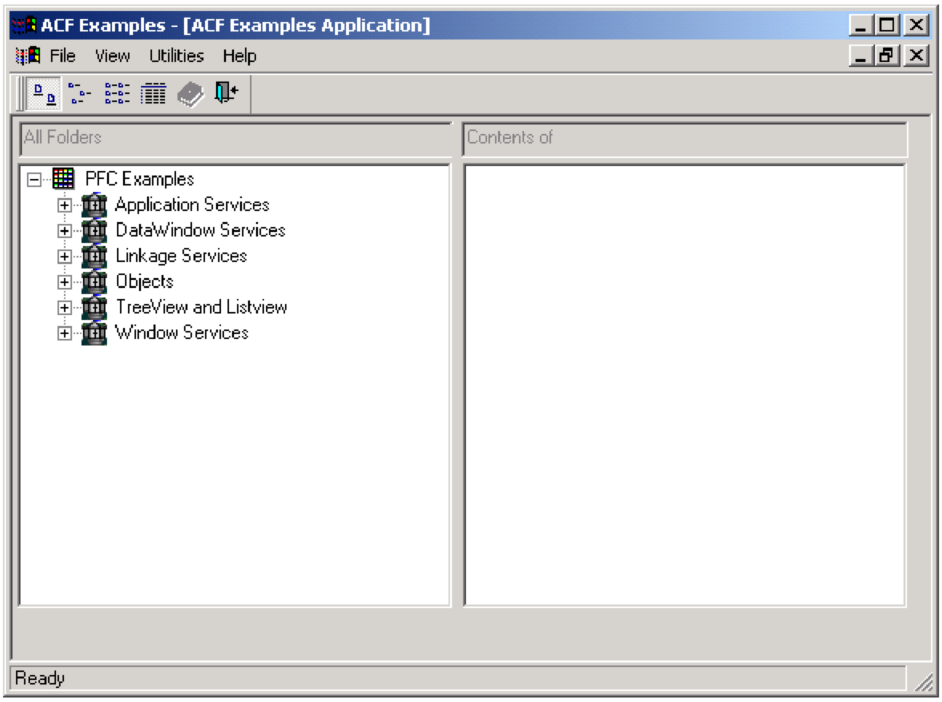
5.2 Run Appeon ACF Examples

To run the Appeon ACF Demo, perform the following steps.

Step 1 – Click the *Select and Run* button () in the PowerBar to open the *Select a target* window.

Step 2 – Select “appeon_acf_demo”. The ACF Examples demo displays as shown in Figure 5-1.

Figure 5-1: ACF Examples main screen



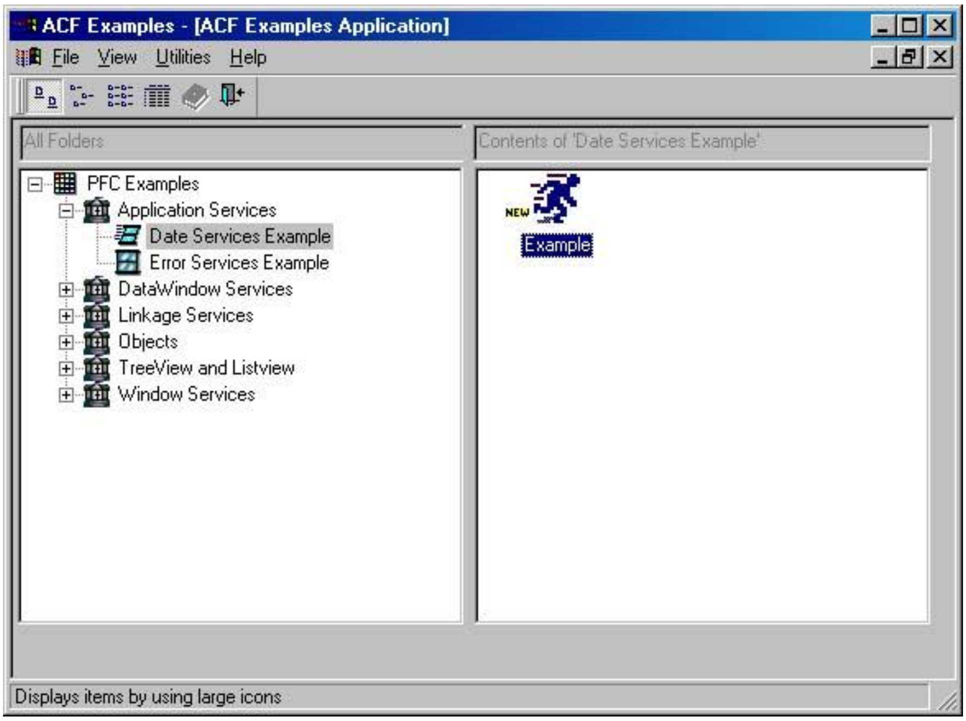
5.3 Application Services

There are two examples in the Application Services category. You can view them by expanding the Application Service item on the left. The examples are designed to demonstrate the application functionality that the developer can use to create other applications with minimal additional codes. This section explains how to work with the "Date Services Example". Perform the following steps to test it. You can also run the other examples by performing similar steps.

To run the "Date Services Example":

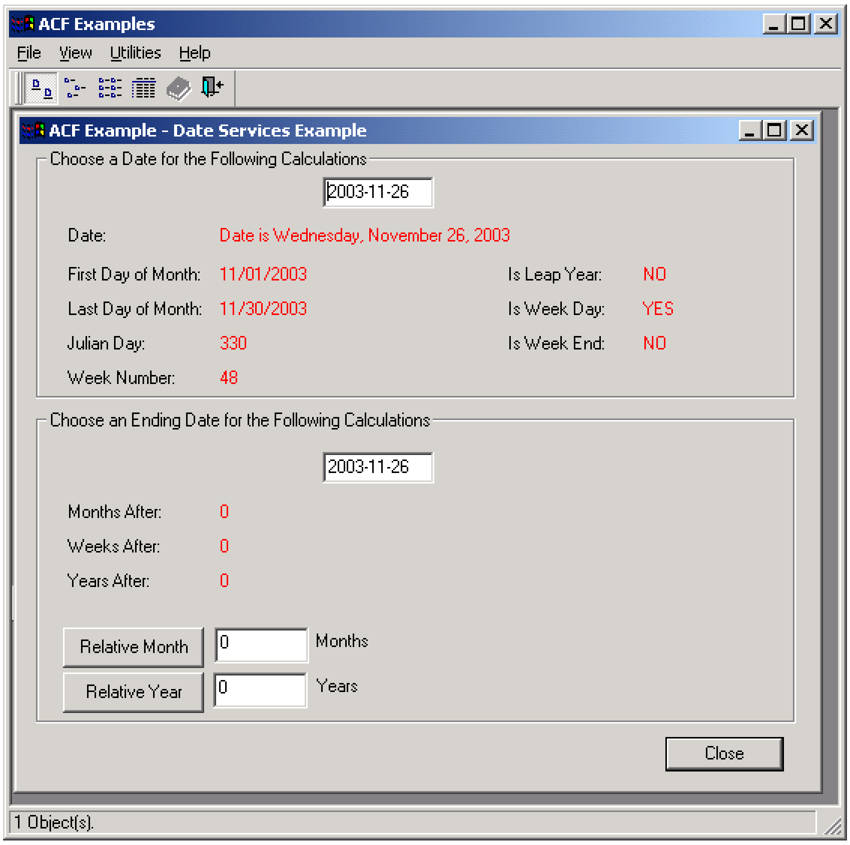
Step 1 – Expand the *Application Services* item and click "Date Services Example". An example icon is displayed in the right panel. Refer to Figure 5-2.

Figure 5-2: Running the Date Services Example



Step 2 – Double-click the example icon. The ACF Example - Date Services Example window is displayed. Refer to Figure 5-3.

Figure 5-3: The ACF Date Services Example



Choose a Date for the Following Calculations

2003-11-26

Date:	Date is Wednesday, November 26, 2003		
First Day of Month:	11/01/2003	Is Leap Year:	NO
Last Day of Month:	11/30/2003	Is Week Day:	YES
Julian Day:	330	Is Week End:	NO
Week Number:	48		

Choose an Ending Date for the Following Calculations

2003-11-26

Months After:	0
Weeks After:	0
Years After:	0

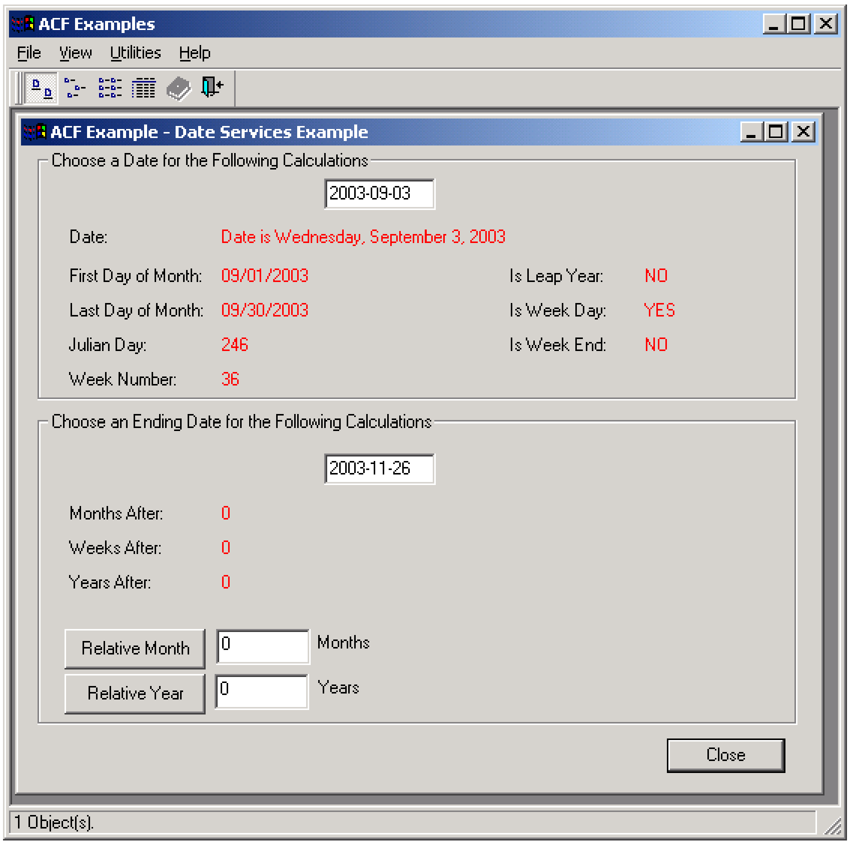
Relative Month 0 Months

Relative Year 0 Years

Date Service performs a series of date related mathematical calculations based on the date entered in the text box. The values displayed in red are the calculation results.

Step 3 – Enter a date in the text box and click the mouse on another field within the window. All values in red change accordingly. Refer to Figure 5-4.

Figure 5-4: Change date to re-calculate



Choose a Date for the Following Calculations

2003-09-03

Date: Date is Wednesday, September 3, 2003

First Day of Month: 09/01/2003 Is Leap Year: NO

Last Day of Month: 09/30/2003 Is Week Day: YES

Julian Day: 246 Is Week End: NO

Week Number: 36

Choose an Ending Date for the Following Calculations

2003-11-26

Months After: 0

Weeks After: 0

Years After: 0

Relative Month 0 Months

Relative Year 0 Years

5.4 DataWindow Service

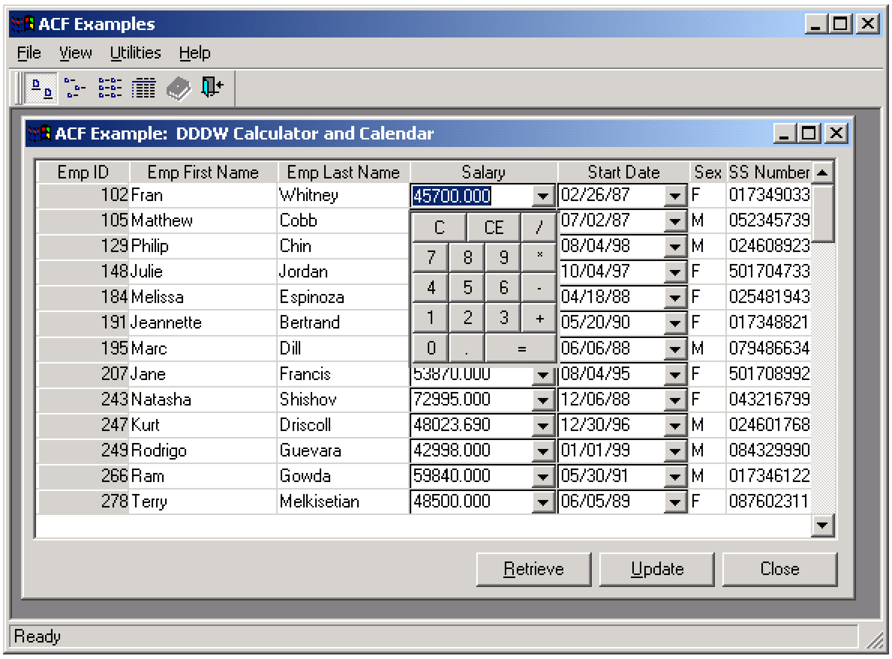
There are twelve examples in the DataWindow Service category. You can view all of them by expanding the DataWindow Service item in the left. Each example demonstrates a DataWindow-based functionality. This section explains how to work with the “DDDW Calculator and Calendar” example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

To run the “DDDW Calculator and Calendar” example:

Step 1 – Expand the DataWindow Services item and click “DDDW Calculator and Calendar”. An example icon is displayed in the right panel.

Step 2 – Double-click the example icon. The DDDW Calculator and Calendar window is displayed. Refer to Figure 5-5.

Figure 5-5: DDDW Calculator

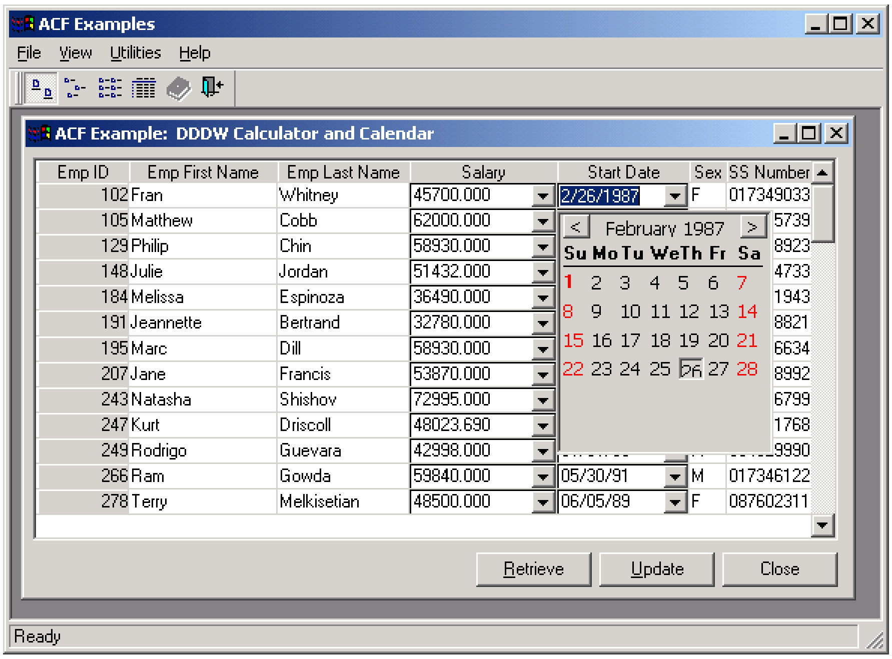


Emp ID	Emp First Name	Emp Last Name	Salary	Start Date	Sex	SS Number
102	Fran	Whitney	45700.000	02/26/87	F	017349033
105	Matthew	Cobb		07/02/87	M	052345739
129	Philip	Chin		08/04/98	M	024608923
148	Julie	Jordan		10/04/97	F	501704733
184	Melissa	Espinoza		04/18/88	F	025481943
191	Jeannette	Bertrand		05/20/90	F	017348821
195	Marc	Dill		06/06/88	M	079486634
207	Jane	Francis	53870.000	08/04/95	F	501708992
243	Natasha	Shishov	72995.000	12/06/88	F	043216799
247	Kurt	Driscoll	48023.690	12/30/96	M	024601768
249	Rodrigo	Guevara	42998.000	01/01/99	M	084329990
266	Ram	Gowda	59840.000	05/30/91	M	017346122
278	Terry	Melkisetian	48500.000	06/05/89	F	087602311

Step 3 – Click the arrow of a cell in the Salary column. A small calculator is displayed. You can conduct basic mathematical calculations for the cell with the calculator.

Step 4 – Click the arrow of a cell in the Start Date column. A calendar is displayed. You can pick a date from the calendar and the date is displayed in the cell. Refer to Figure 5-6.

Figure 5-6: DDDW calendar



Emp ID	Emp First Name	Emp Last Name	Salary	Start Date	Sex	SS Number
102	Fran	Whitney	45700.000	2/26/1987	F	017349033
105	Matthew	Cobb	62000.000			5739
129	Philip	Chin	58930.000			8923
148	Julie	Jordan	51432.000			4733
184	Melissa	Espinoza	36490.000			1943
191	Jeannette	Bertrand	32780.000			8821
195	Marc	Dill	58930.000			6634
207	Jane	Francis	53870.000			8992
243	Natasha	Shishov	72995.000			6799
247	Kurt	Driscoll	48023.690			1768
249	Rodrigo	Guevara	42998.000			9990
266	Ram	Gowda	59840.000	05/30/91	M	017346122
278	Terry	Melkisetian	48500.000	06/05/89	F	087602311

5.5 Linkage Service

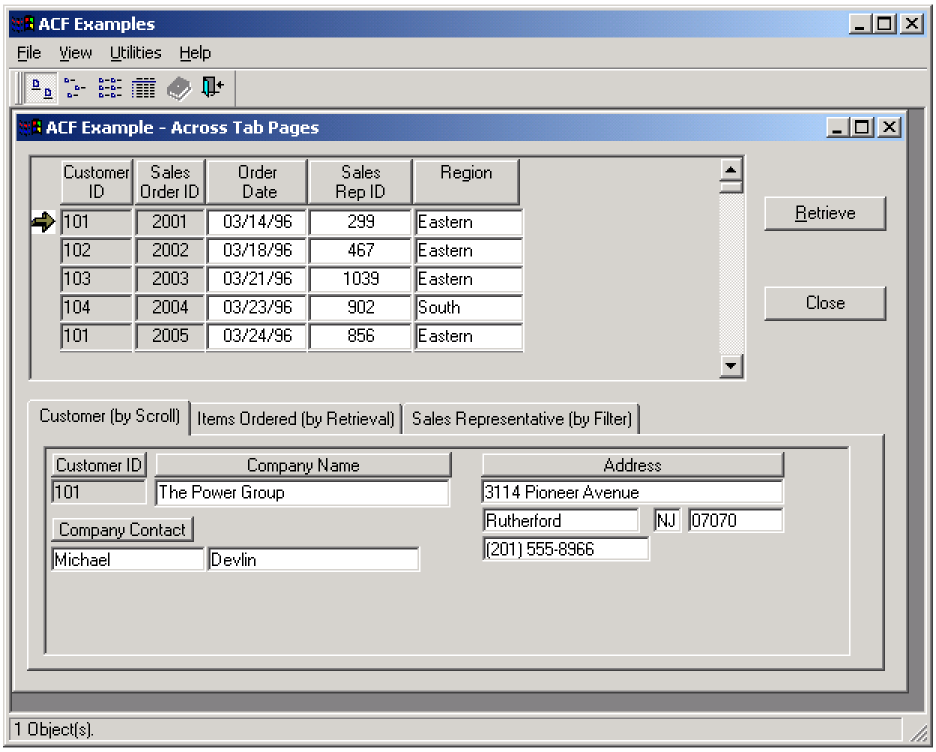
There are seven examples in the Linkage Service category. You can view all of them by expanding the Linkage Service item in the left panel. The examples in this category are designed to demonstrate how across-tab pages in one window are mutually linked, and how they cooperate with each other to implement functions. This section explains how to work with the “Across Tab Pages” example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

To run the “Across Tab Pages” example:

Step 1 – Expand the Linkage Services item and click “Across Tab Pages example”. An example icon is displayed in the right panel.

Step 2 – Double-click the example icon. The Across Tab Pages window is displayed. Refer to Figure 5-7.

Figure 5-7: The Across Tab Pages example


ACF Examples
File
View
Utilities
Help
ACF Example - Across Tab Pages
Retrieve
Close
Customer (by Scroll)
Items Ordered (by Retrieval)
Sales Representative (by Filter)
1 Object(s).

Customer ID	Sales Order ID	Order Date	Sales Rep ID	Region
101	2001	03/14/96	299	Eastern
102	2002	03/18/96	467	Eastern
103	2003	03/21/96	1039	Eastern
104	2004	03/23/96	902	South
101	2005	03/24/96	856	Eastern

Customer ID: 101
Company Name: The Power Group
Address: 3114 Pioneer Avenue
Rutherford NJ 07070
(201) 555-8966
Company Contact: Michael Devlin

Step 3 – Click the *Retrieve* button to retrieve data into the DataWindow (master DataWindow). There are several detailed DataWindows for the master DataWindow. Each detailed DataWindow is placed in one of the three tab pages.

5.6 Objects

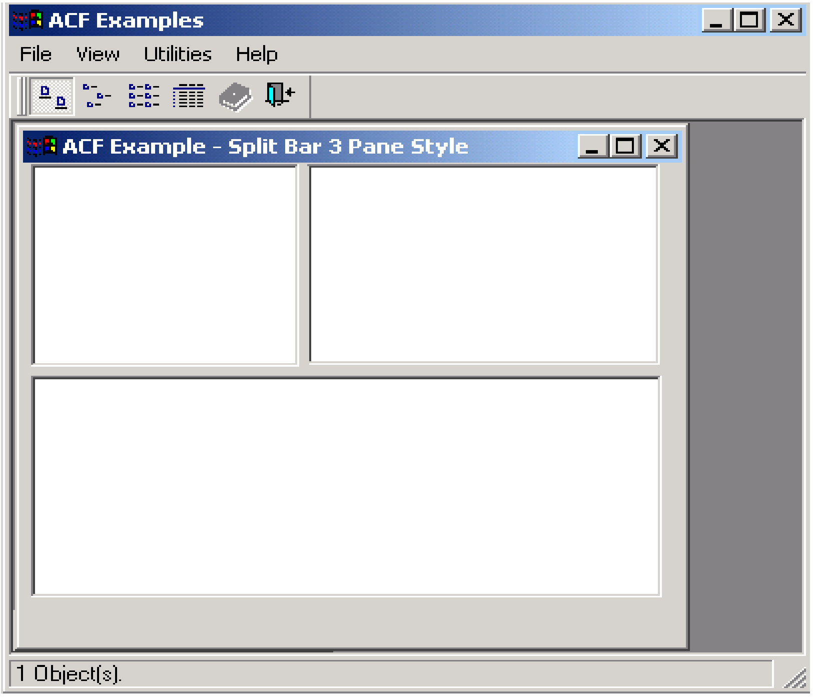
There are two examples in the Objects category. You can view both of them by expanding the Objects item in the left panel. The two examples in this category are designed to demonstrate the objects functionalities. This section explains how to work with the “Split Bar 3 Pane Style” example. Perform the following steps to test it. You can also run the other example by performing similar steps.

To run the “Split Bar 3 Pane Style" example:

Step 1 – Expand the *Objects* item and click the Split Bar 3 Pane Style example. An example icon is displayed in the right panel.

Step 2 – Double-click the example icon. The Split Bar 3 Pane Style window is displayed. Refer to Figure 5-8.

Figure 5-8: The Split Bar 3 Pane Style example



The window in the example is divided into three sections by two split bars. By dragging and dropping the bar, you can re-size the sections in the window.

5.7 TreeView and ListView

There are seven examples in the TreeView and ListView category. You can view all the examples by expanding the TreeView and ListView item in the left panel. The seven examples in this category are all provided to demonstrate how to the TreeView and ListView work.

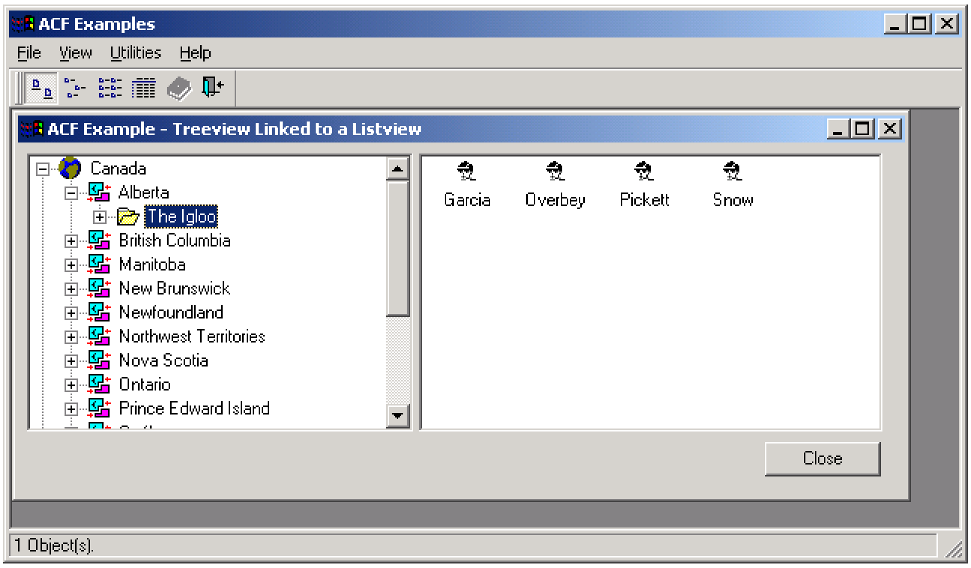
This section explains how to work with the “TreeView Linked to a ListView” example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

To run the “TreeView Linked to a ListView” example:

Step 1 – Expand the TreeView and ListView item and click the “TreeView Linked to a ListView” example. An example icon is displayed in the right panel.

Step 2 – Double-click the example icon. The TreeView Linked to a ListView window is displayed. Refer to Figure 5-9.

Figure 5-9: The TreeView linked to a ListView example



Step 3 – Double-click the Eastern item. Items under Eastern will be displayed in both the left panel and right panel.

5.8 Window Service

There are four examples in the Window Service category. You can view all the examples by expanding the Window Service item in the left panel. The four examples in this category are designed to demonstrate how a tab page or a textbox is re-sized with a mouse action.

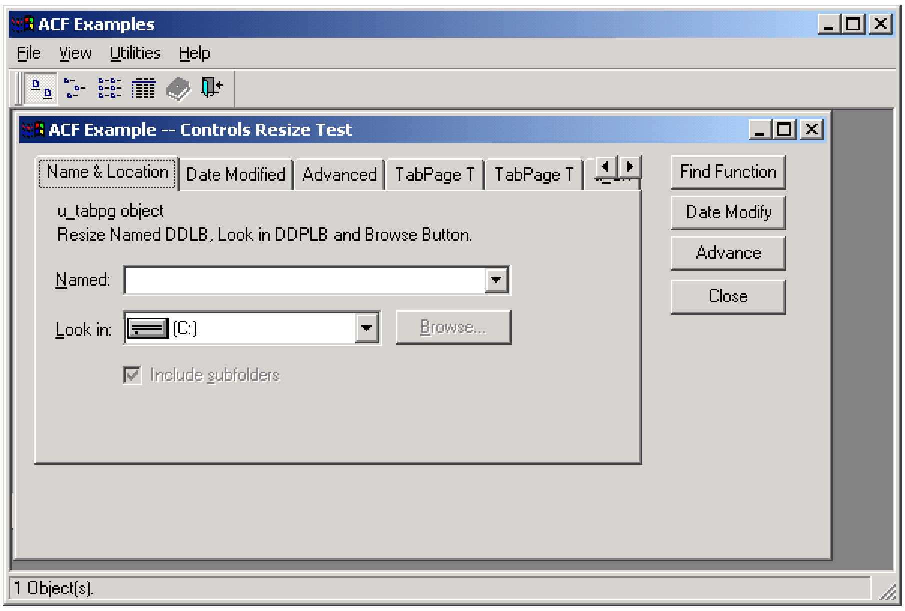
This section explains how to work with the “Resize Dynamic Tab Pages” example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

To run the “Resize Dynamic Tab Pages” example:

Step 1 – Expand the Window Services item and click the “Resize Dynamic Tab Pages” example. An example icon is displayed in the right panel.

Step 2 – Double-click the example icon. The Resize Dynamic Tab Pages window is displayed. Refer to Figure 6-8.

Figure 5-10: The Resize Dynamic Tab Pages example (Controls Resize Test)



u_tabpg object
Resize Named DDLB, Look in DDPLB and Browse Button.

Named:

Look in: (C:)

☑ Include subfolders

1 Object(s).

Step 3 – Move the cursor over the edge of the window until the pointer turns into a double-headed arrow.

Step 4 – When you drag and drop the mouse to resize the window, the DropDownPictureListBox will also be resized.

6 Running Appeon Pet World

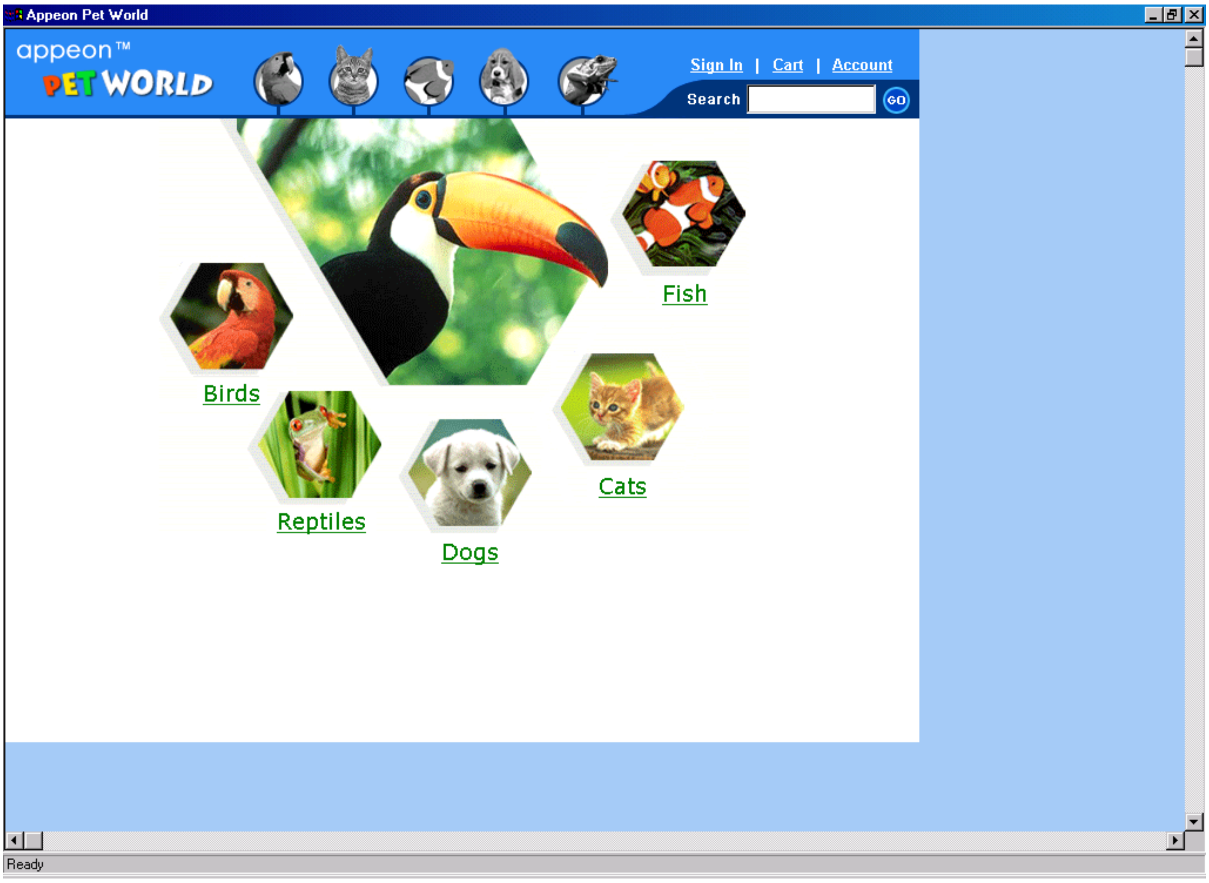
6.1 Run Appeon Pet World

To run the Appeon Pet World, perform the following steps.

Step 1 – Click the *Select and Run* button () in the PowerBar to open the *Select a target* window.

Step 2 – Select "pet_world". The Pet World demo displays as shown in Figure 6-1.

Figure 6-1: Appeon Pet World



The main page consists of the following links: the Appeon Pet World logo link, the pet icon links, Sign In, Cart, and Account, and a Search field, as shown in Figure 6-1.

Appeon Pet World logo – It links you back to the main page.

Pet icons and links – Each pet icon on the top pane or the pet link navigates to the detailed view where you can select different products of the same category and view the product description.

Sign In – It displays the login page.

Cart – It allows you to view products added to the shopping cart.

Account – It allows you to view the account information if you already signed in, otherwise, you will be linked to the login page first.

Search – It helps you quickly find out the product you want.

6.2 Browsing products

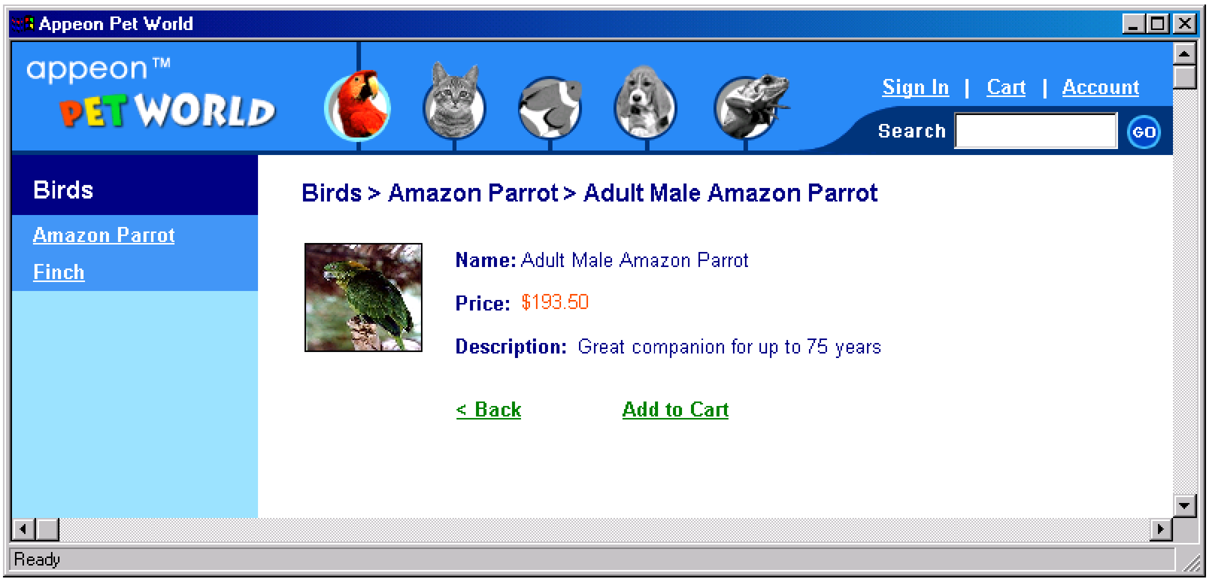
Step 1 – Click the text link or the image link (on the top pane) to view the products of that category.

There are five categories, each category has several product types associated to it.

Step 2 – Select a product on the left page. All variants of the product are displayed.

Each product variant (represented as items) will have a detailed view that displays the product description, a product image, price, and the description. Click each item to view these information.

Figure 6-2: Detailed information



Birds > Amazon Parrot > Adult Male Amazon Parrot

Name: Adult Male Amazon Parrot

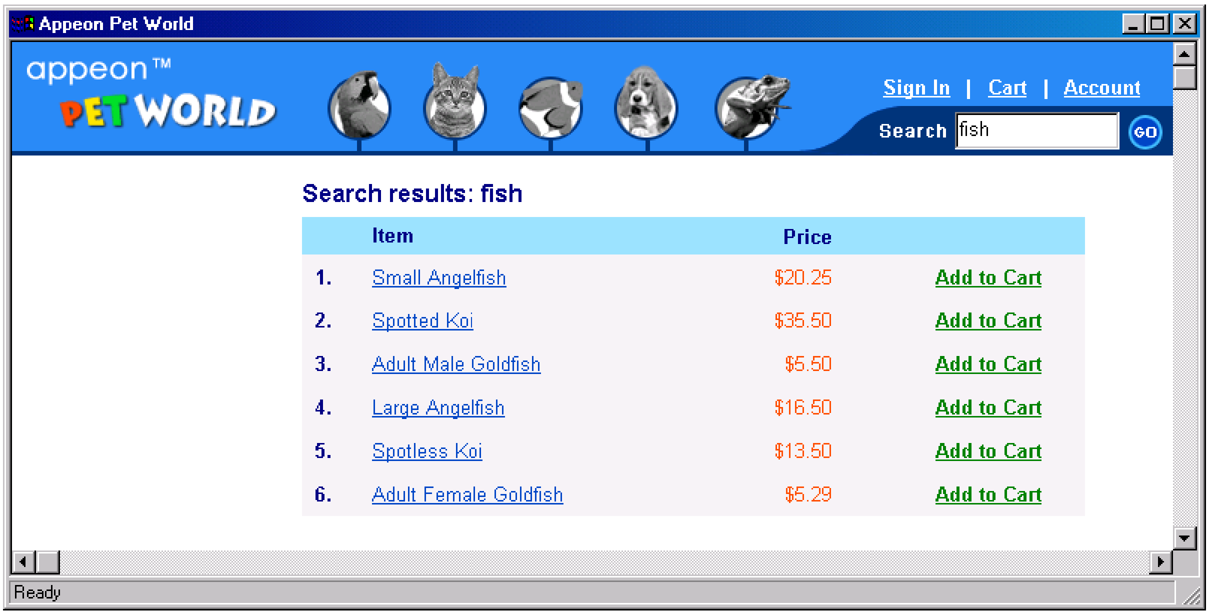
Price: $193.50

Description: Great companion for up to 75 years

6.3 Searching for products

Appeon Pet World provides a keyword search function. You can enter a keyword to obtain the search result displayed in the product list on the right side of the main screen.

Figure 6-3: Search results



Search fish

Search results: fish

	Item	Price	
1.	Small Angelfish	$20.25	Add to Cart
2.	Spotted Koi	$35.50	Add to Cart
3.	Adult Male Goldfish	$5.50	Add to Cart
4.	Large Angelfish	$16.50	Add to Cart
5.	Spotless Koi	$13.50	Add to Cart
6.	Adult Female Goldfish	$5.29	Add to Cart

6.4 Using shopping cart

Shopping Cart allows you to add, delete and modify the list of products or items for purchase.

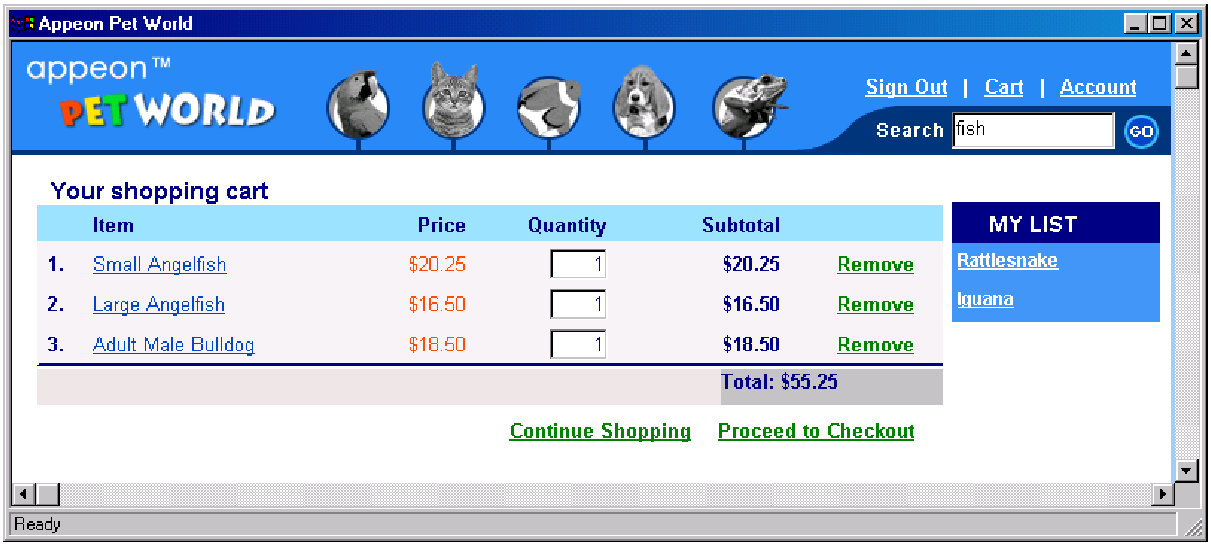
Step 1 – Click the Add to Cart link to add a product to the shopping cart.

Step 2 – Click the Cart link to view the list of items in the shopping cart.

You can modify the quantity of items desired and press the Enter key to update the new total price.

To continue shopping, click the Continue Shopping link to return to the product view page; to checkout, click the Proceed to Checkout link. If you try to proceed through the check-out without being logged in to Appeon Pet World, the system will "auto redirect" you to the login page, where existing customers can login and new customers can register.

Figure 6-4: Shopping cart



Your shopping cart

	Item	Price	Quantity	Subtotal	
1.	Small Angelfish	$20.25	1	$20.25	Remove
2.	Large Angelfish	$16.50	1	$16.50	Remove
3.	Adult Male Bulldog	$18.50	1	$18.50	Remove
				Total: $55.25	

6.5 Signing in/out

Click the Sign In/Out link to sign in/out the pet world system.

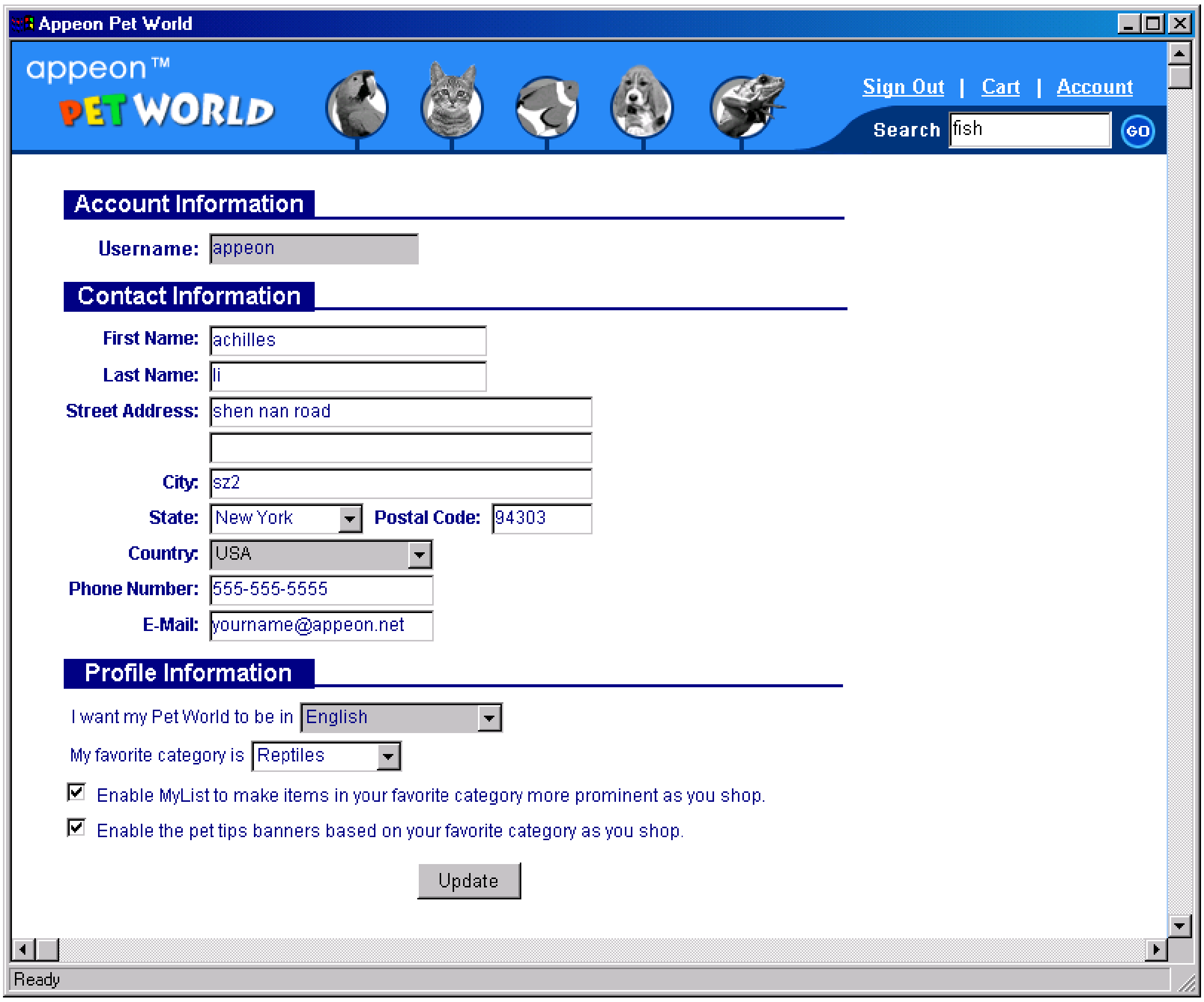
Or click the Create New Account to create a Pet World account for your quick and easy shopping.

After login, you can modify the account information, validate the billing and shipping information, and submit order.

6.6 Maintaining user accounts

After signed in, you can modify the account information, contact information, and profile information.

Figure 6-5: Account information



Search: fish

Account Information

Username: appeon

Contact Information

First Name: achilles

Last Name: li

Street Address: shen nan road

City: sz2

State: New York Postal Code: 94303

Country: USA

Phone Number: 555-555-5555

E-Mail: yourname@appeon.net

Profile Information

I want my Pet World to be in English

My favorite category is Reptiles

☑ Enable MyList to make items in your favorite category more prominent as you shop.

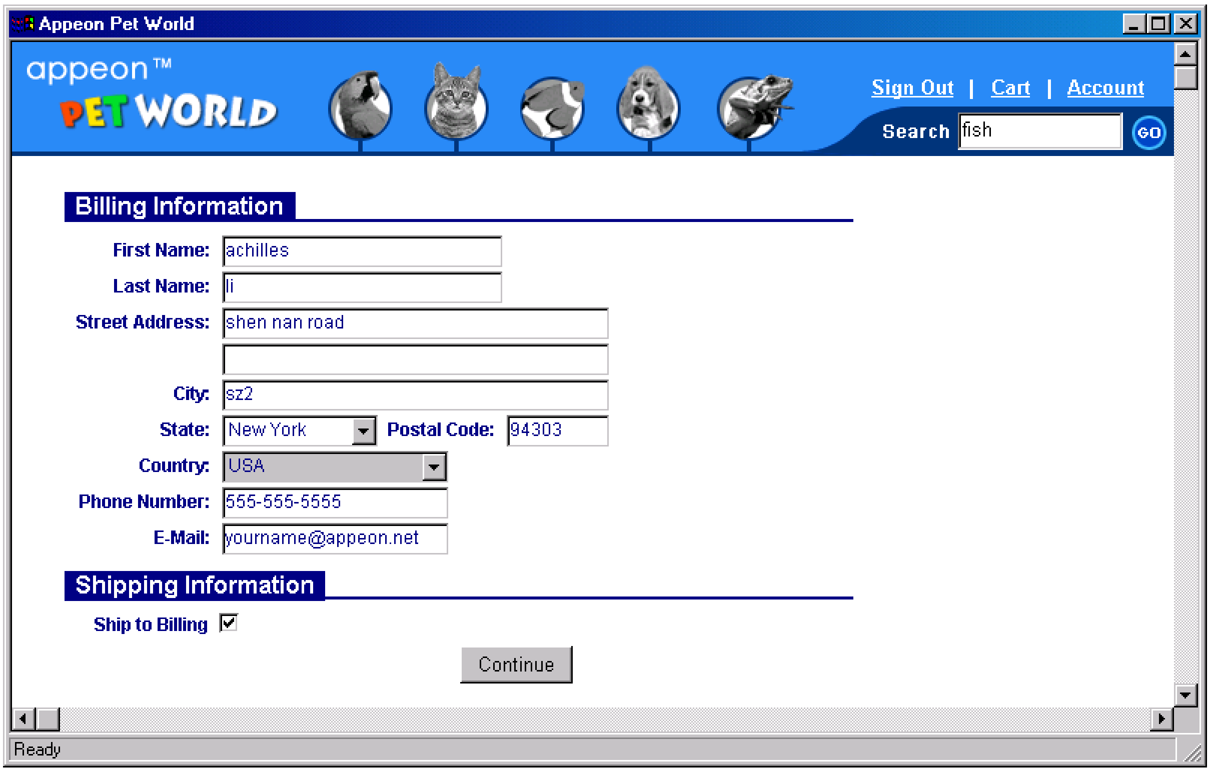
☑ Enable the pet tips banners based on your favorite category as you shop.

Update

6.7 Validating billing information

When trying to checkout, you must verify the billing and shipping information.

Figure 6-6: Billing and shipping information



Search: fish

Billing Information

First Name:	achilles
Last Name:	li
Street Address:	shen nan road
City:	sz2
State:	New York
Postal Code:	94303
Country:	USA
Phone Number:	555-555-5555
E-Mail:	yourname@appeon.net

Shipping Information

Ship to Billing ☑

6.8 Submitting order

This is the final step in the order-processing pipeline.

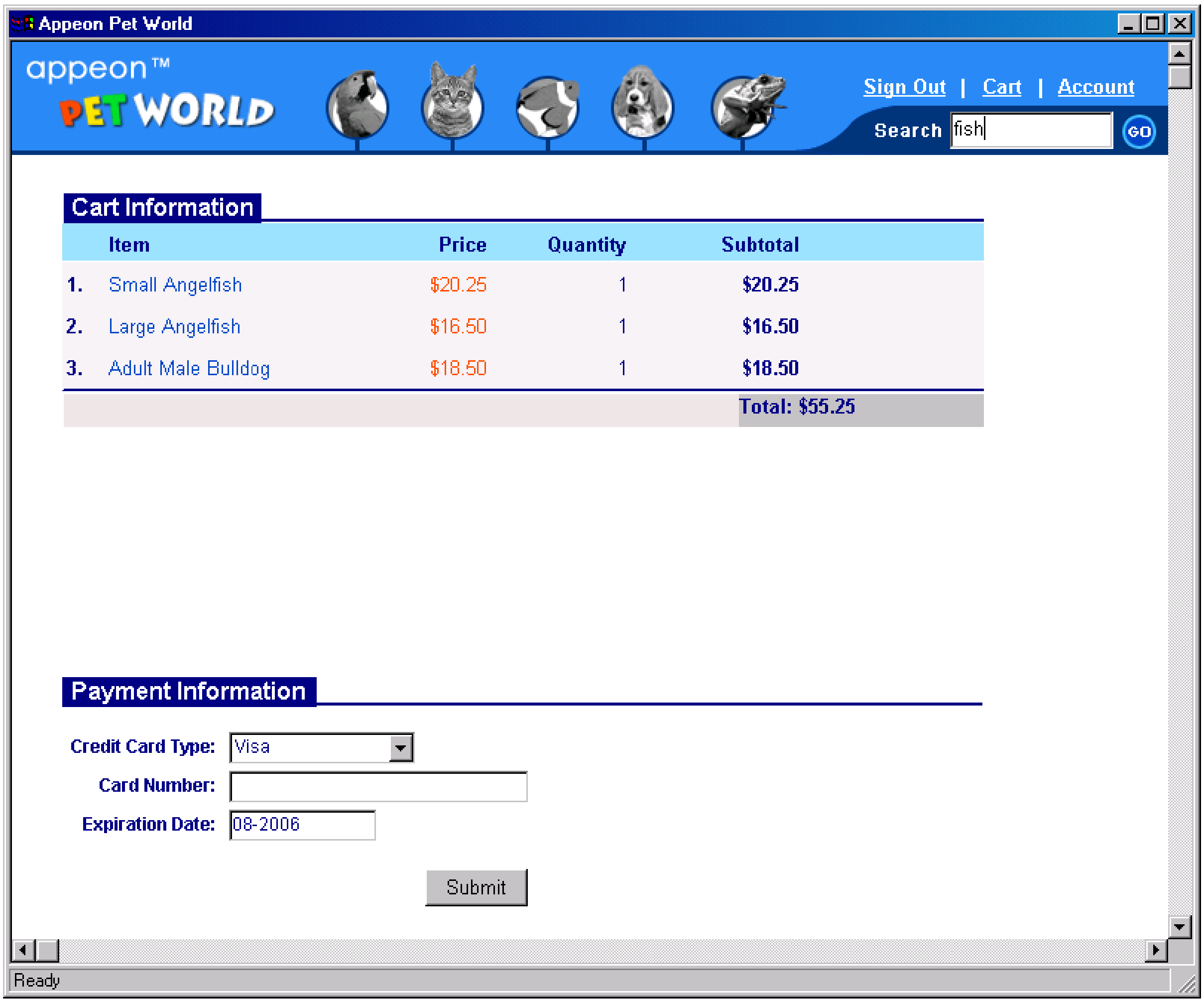
Step 1 – Click Proceed to Checkout in the shopping cart.

Step 2 – Validate the billing and shipping information and click Continue.

Step 3 – Confirm the cart and payment information and click Submit.

Appeon Pet World will generate the order by obtaining product information, billing address and shipping address and store the information in the database.

Figure 6-7: Submit order



Search: fish

Cart Information

	Item	Price	Quantity	Subtotal
1.	Small Angelfish	$20.25	1	$20.25
2.	Large Angelfish	$16.50	1	$16.50
3.	Adult Male Bulldog	$18.50	1	$18.50
				Total: $55.25

Payment Information

Credit Card Type: Visa
Card Number:
Expiration Date: 08-2006

There are four examples in the Window Service category. You can view all the examples by expanding the Window Service item in the left panel. The four examples in this category are designed to demonstrate how a tab page or a textbox is re-sized with a mouse action.

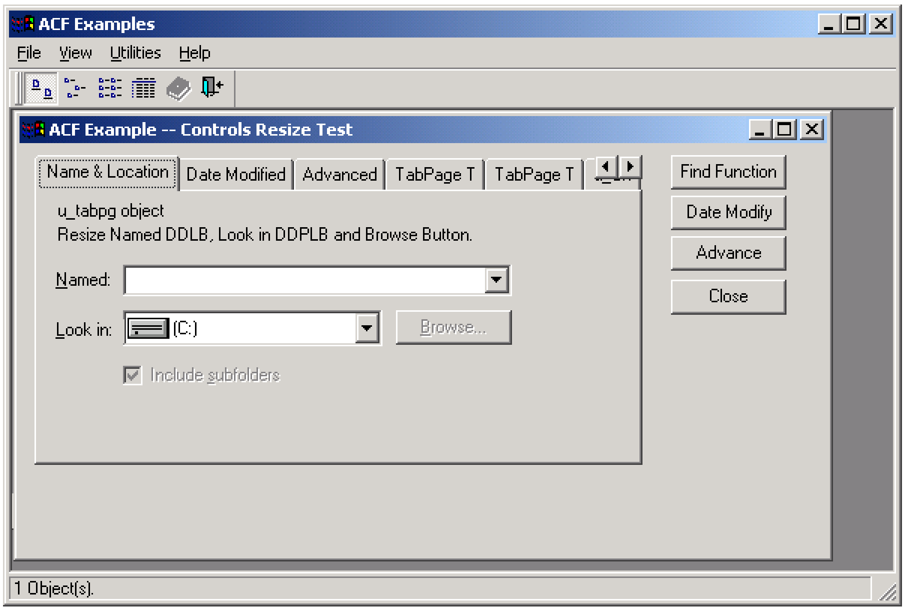
This section explains how to work with the "Resize Dynamic Tab Pages" example. Perform the following steps to test it. You can also run the other examples by performing similar steps.

To run the "Resize Dynamic Tab Pages" example:

Step 1 – Expand the Window Services item and click the "Resize Dynamic Tab Pages" example. An example icon is displayed in the right panel.

Step 2 – Double-click the example icon. The Resize Dynamic Tab Pages window is displayed. Refer to Figure 6-8.

Figure 6-8: The Resize Dynamic Tab Pages example (Controls Resize Test)



u_tabpg object
Resize Named DDLB, Look in DDPLB and Browse Button.

Step 3 – Move the cursor over the edge of the window until the pointer turns into a double-headed arrow.

Step 4 – When you drag and drop the mouse to resize the window, the DropDownPictureListBox will also be resized.

7 Deploying the PowerBuilder Demos to Web

7.1 Overview

It is unnecessary to go through the steps in this chapter to view the converted Web applications since the Web versions of these applications are already installed (if the complete installation mode was selected). If you did not choose to install the Web applications during the installation of Appeon Server, or if you want to get a quick and high-level introduction to Appeon Developer and how to deploy applications, proceed with this chapter. With the following specifications: P4 2.4 GHz with 1024 MB RAM, it takes approximately 2-3 minutes to complete all the outlined deployment tasks for Appeon Code Examples, 1-2 minutes for the Sales Application Demo, and 3-7 minutes for the Appeon ACF Example.

This chapter uses the Sales Application Demo as an example, demonstrating how to deploy a PowerBuilder demo to Web. You can also deploy the other Appeon demos by performing similar steps.

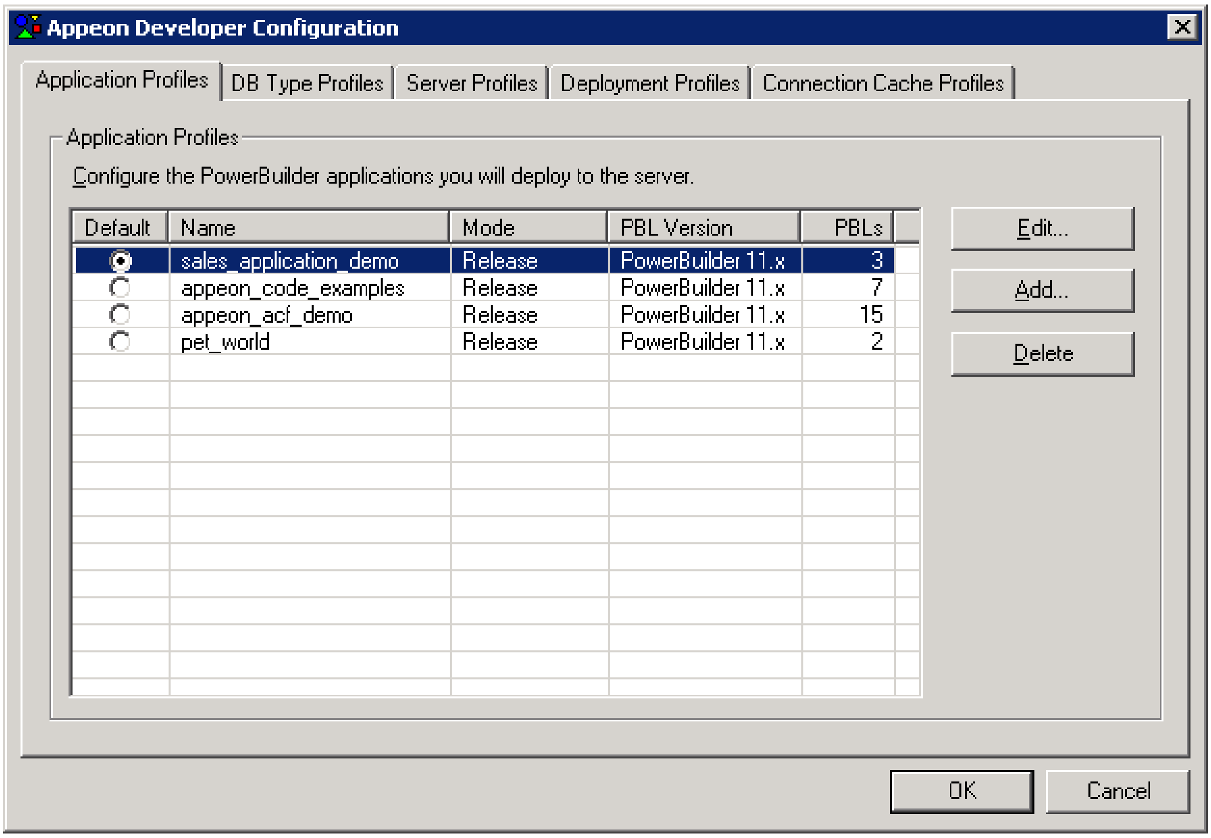
7.2 Verify the configuration in Appeon Developer

Every Appeon demo has a pre-configured application profile. The pre-configured profiles can work well with the demos. We do not recommend modifying any of the profile settings. However, it is helpful to examine the configuration profiles so as to gain an understanding of how the settings are configured and how to verify that these settings are correct and compatible with your system. Any inappropriate changes in the profile configuration may result in problems with the demos and with the application deployment.

The following example explains how to verify settings for the Sales Application demo.

Step 1 – Click the *Configure* button () on the Appeon Developer toolbar. This button will open the “Appeon Developer Configuration” window as shown in Figure 7-1.

Figure 7-1: Appeon Developer Configuration



Application Profiles

Configure the PowerBuilder applications you will deploy to the server.

Default	Name	Mode	PBL Version	PBLs
●	sales_application_demo	Release	PowerBuilder 11.x	3
○	appeon_code_examples	Release	PowerBuilder 11.x	7
○	appeon_acf_demo	Release	PowerBuilder 11.x	15
○	pet_world	Release	PowerBuilder 11.x	2

The *Application Profiles* tab page contains configurations for applications or components that will be deployed to the Appeon Server.

The *DB Type Profiles* tab page manages the database types that Appeon Deployment Wizard supports for application deployments.

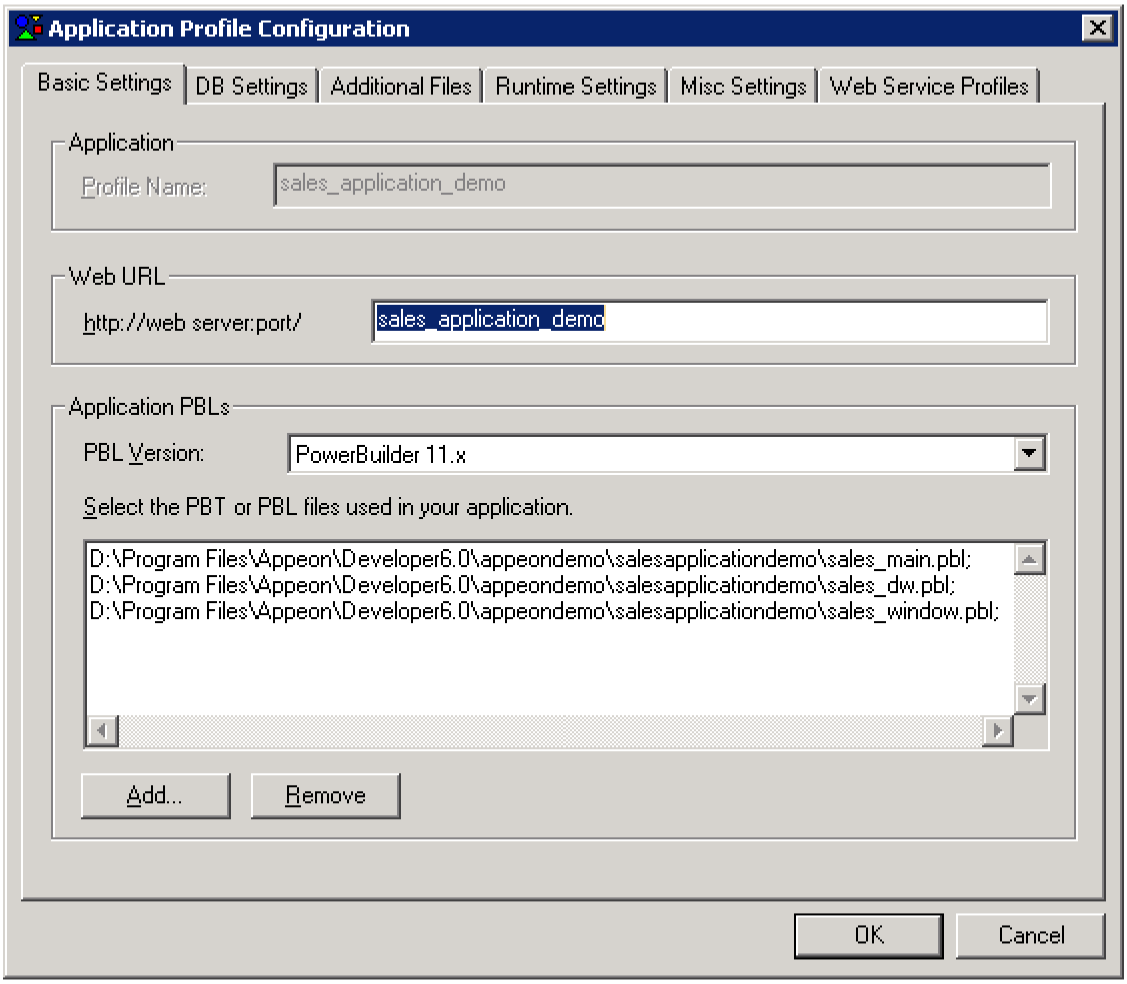
The *Server Profiles* tab page contains the settings for the Web Servers and the Appeon Servers used for hosting the Web applications.

The *Deployment Profiles* tab page associates specified Web Server(s) and Appeon Server(s) as a group for Web deployment.

The *Connection Cache Profiles* tab manages the JDBC connection caches used by the deployed Web application.

Step 2 – In the *Application profiles* tab page, select "*sales_application_demo*" and click the *Edit* button to view the configured profile settings. Refer to Figure 7-2.

Figure 7-2: Web URL



Application Profile Configuration

Application

Profile Name: sales_application_demo

Web URL

http://web server:port/ sales_application_demo

Application PBLs

PBL Version: PowerBuilder 11.x

Select the PBT or PBL files used in your application.

```
D:\Program Files\Appeon\Developer6.0\appeondemo\salesapplicationdemo\sales_main.pbl;
D:\Program Files\Appeon\Developer6.0\appeondemo\salesapplicationdemo\sales_dw.pbl;
D:\Program Files\Appeon\Developer6.0\appeondemo\salesapplicationdemo\sales_window.pbl;
```

Basic Settings

Web URL – specifies the Web URL where the Web application's files will be placed.

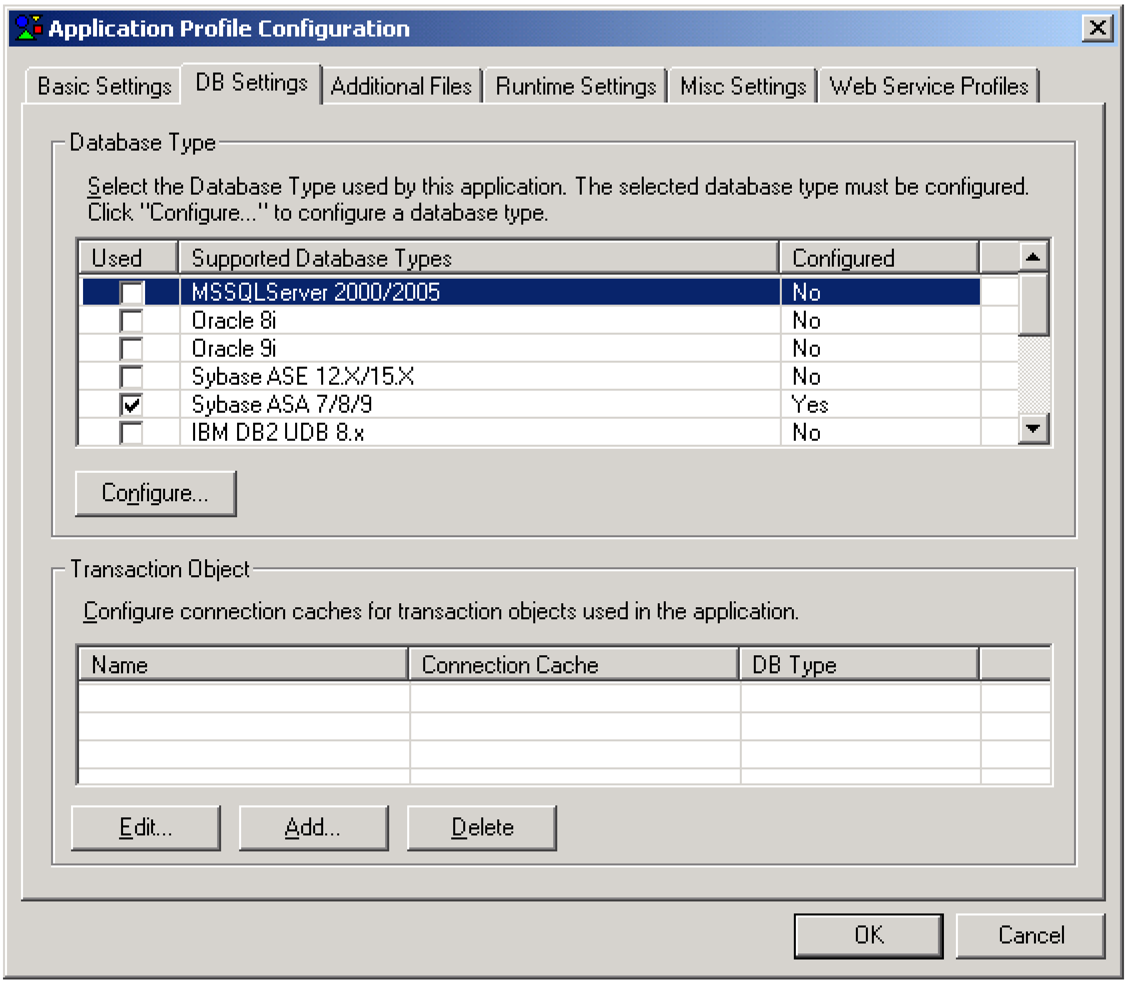
PBL Version – lists the Appeon supported versions for PBLs.

Application PBLs – lists the PBLs for the selected application to be moved onto the Web. It is recommended that all the PBLs in the application be moved.

DB Settings

You can view the database type specified for the demo in the DB Settings tab page, as shown in Figure 7-3.

Figure 7-3: DB Type



Application Profile Configuration

Database Type

Select the Database Type used by this application. The selected database type must be configured. Click "Configure..." to configure a database type.

Used	Supported Database Types	Configured
□	MSSQLServer 2000/2005	No
□	Oracle 8i	No
□	Oracle 9i	No
□	Sybase ASE 12.X/15.X	No
☑	Sybase ASA 7/8/9	Yes
□	IBM DB2 UDB 8.x	No

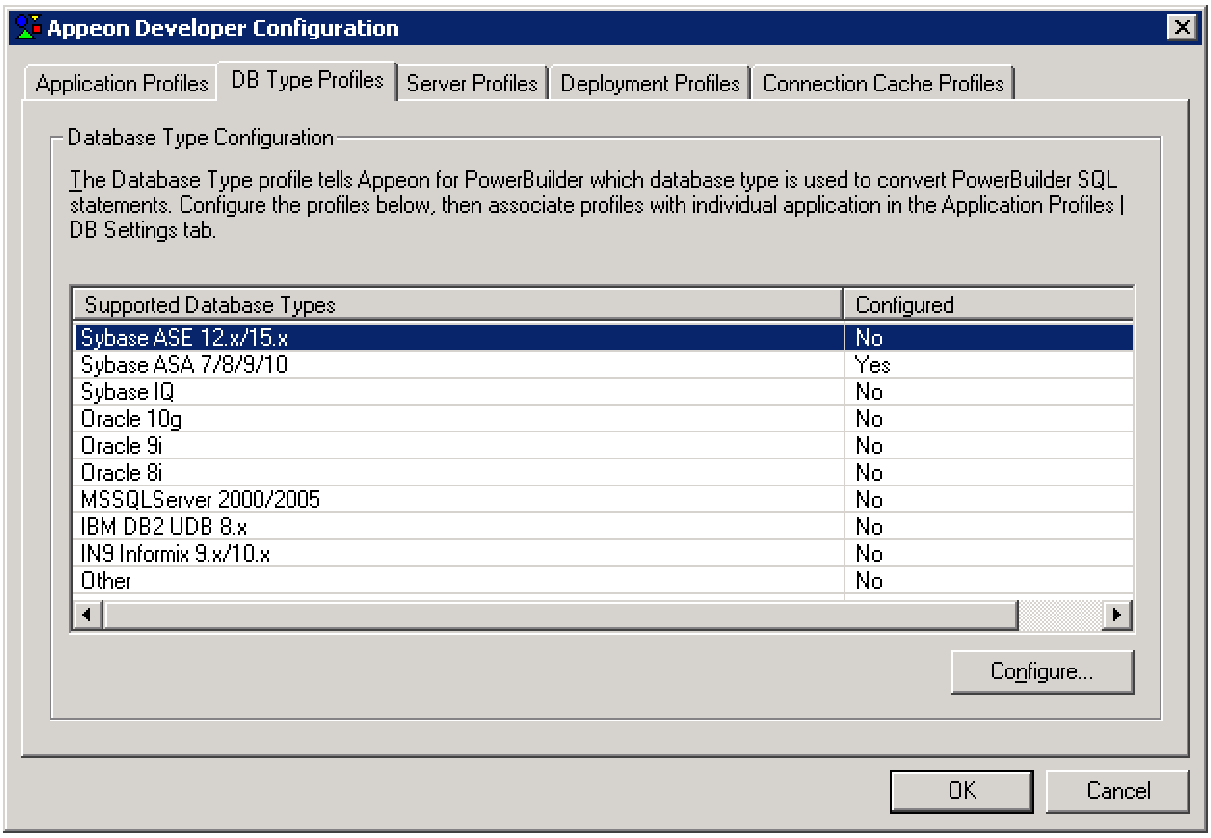
Transaction Object

Configure connection caches for transaction objects used in the application.

Name	Connection Cache	DB Type

Step 3 – View the database type profiles in the *DB Type Profiles* tab page. Refer to Figure 7-4.

Figure 7-4: DB Type Profiles



Appeon Developer Configuration

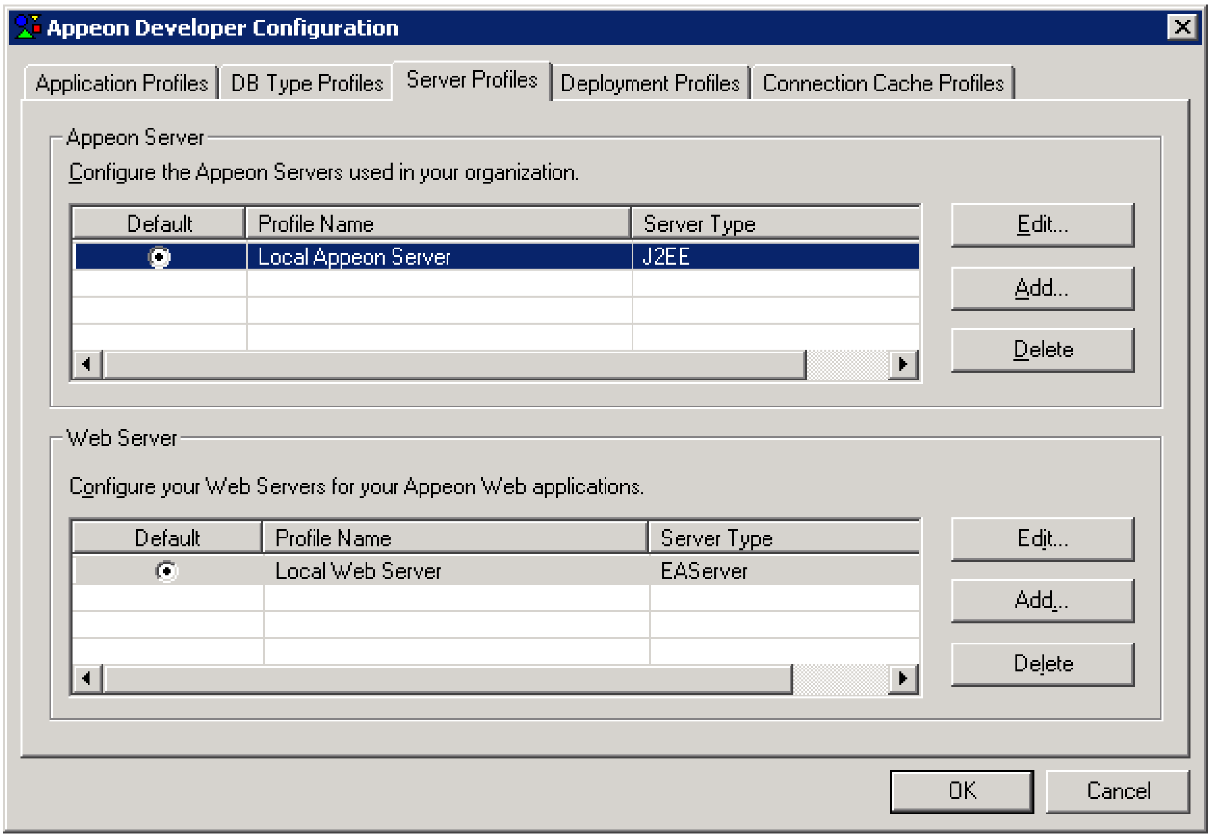
Database Type Configuration

The Database Type profile tells Appeon for PowerBuilder which database type is used to convert PowerBuilder SQL statements. Configure the profiles below, then associate profiles with individual application in the Application Profiles | DB Settings tab.

Supported Database Types	Configured
Sybase ASE 12.x/15.x	No
Sybase ASA 7/8/9/10	Yes
Sybase IQ	No
Oracle 10g	No
Oracle 9i	No
Oracle 8i	No
MSSQLServer 2000/2005	No
IBM DB2 UDB 8.x	No
IN9 Informix 9.x/10.x	No
Other	No

Step 4 – View the server profiles in the *Server Profiles* tab page. Refer to Figure 7-5.

Figure 7-5: Server Profiles



Appeon Developer Configuration

Appeon Server

Configure the Appeon Servers used in your organization.

Default	Profile Name	Server Type
●	Local Appeon Server	J2EE

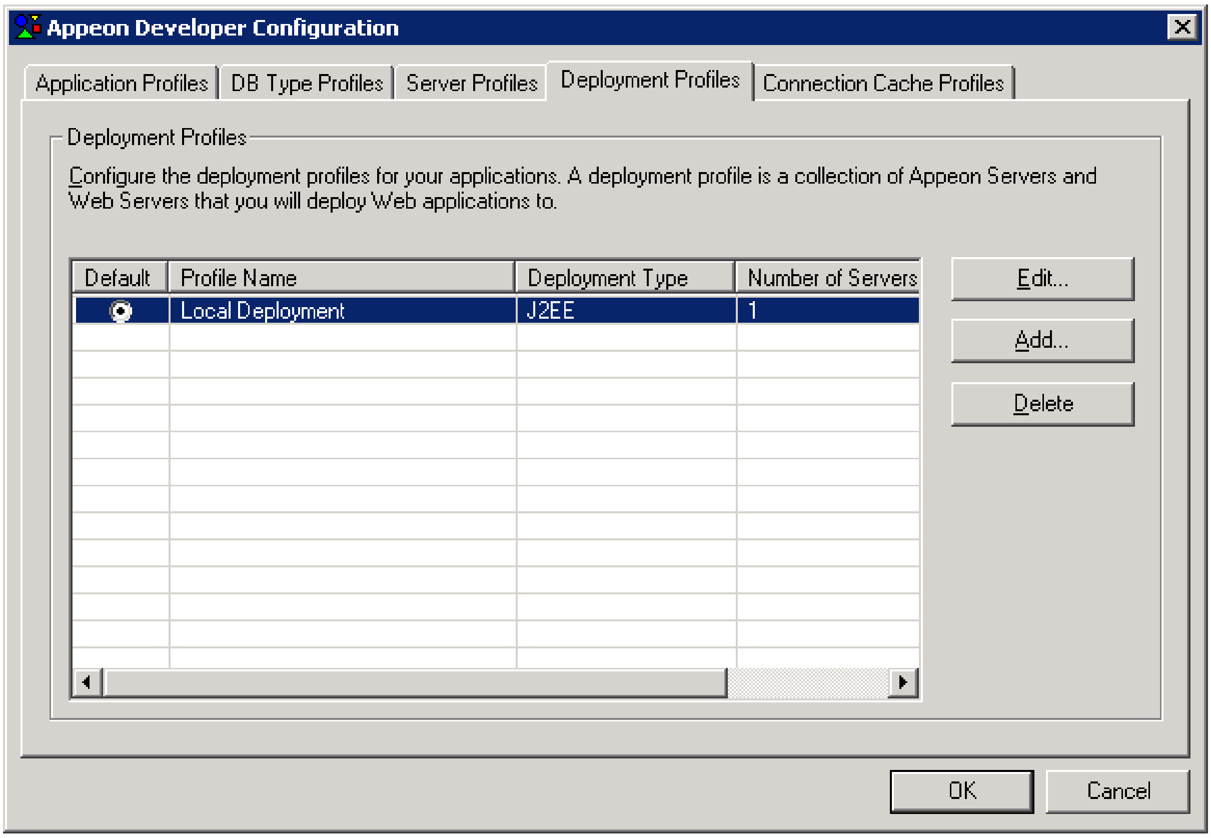
Web Server

Configure your Web Servers for your Appeon Web applications.

Default	Profile Name	Server Type
●	Local Web Server	EAServer

Step 5 – View the deployment profiles in the Deployment Profiles tab page. The deployment profile “Local Deployment” is configured for the Appeon Server and Web server residing on the same machine. Refer to Figure 7-6.

Figure 7-6: Deployment profile



Deployment Profiles

Configure the deployment profiles for your applications. A deployment profile is a collection of Appeon Servers and Web Servers that you will deploy Web applications to.

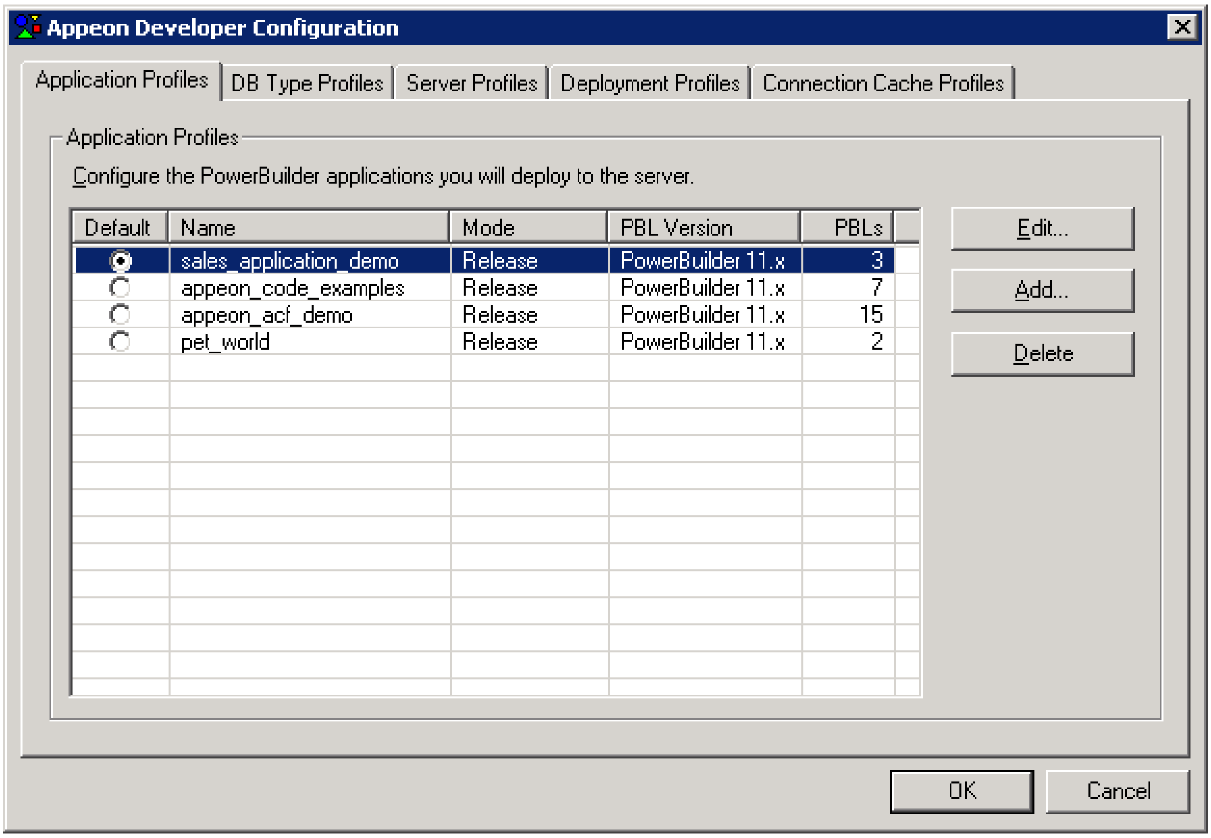
Default	Profile Name	Deployment Type	Number of Servers
●	Local Deployment	J2EE	1

For more information on Appeon Developer configuration, refer to the *Appeon Developer User Guide*.

7.3 Select the default application

An application is set as the default application in Appeon Developer. You can set and change the default application in the “Appeon Developer Configuration” window. Before using any tools in Appeon Developer, verify that you have specified the desired application demo as the default application. Take the Sales Application Demo for example. Select the associated radio button next to “*sales_application_demo*” in the Application Profiles tab page. Refer to Figure 7-7.

Figure 7-7: Select default application



Configure the PowerBuilder applications you will deploy to the server.

Default	Name	Mode	PBL Version	PBLs
●	sales_application_demo	Release	PowerBuilder 11.x	3
○	appeon_code_examples	Release	PowerBuilder 11.x	7
○	appeon_acf_demo	Release	PowerBuilder 11.x	15
○	pet_world	Release	PowerBuilder 11.x	2

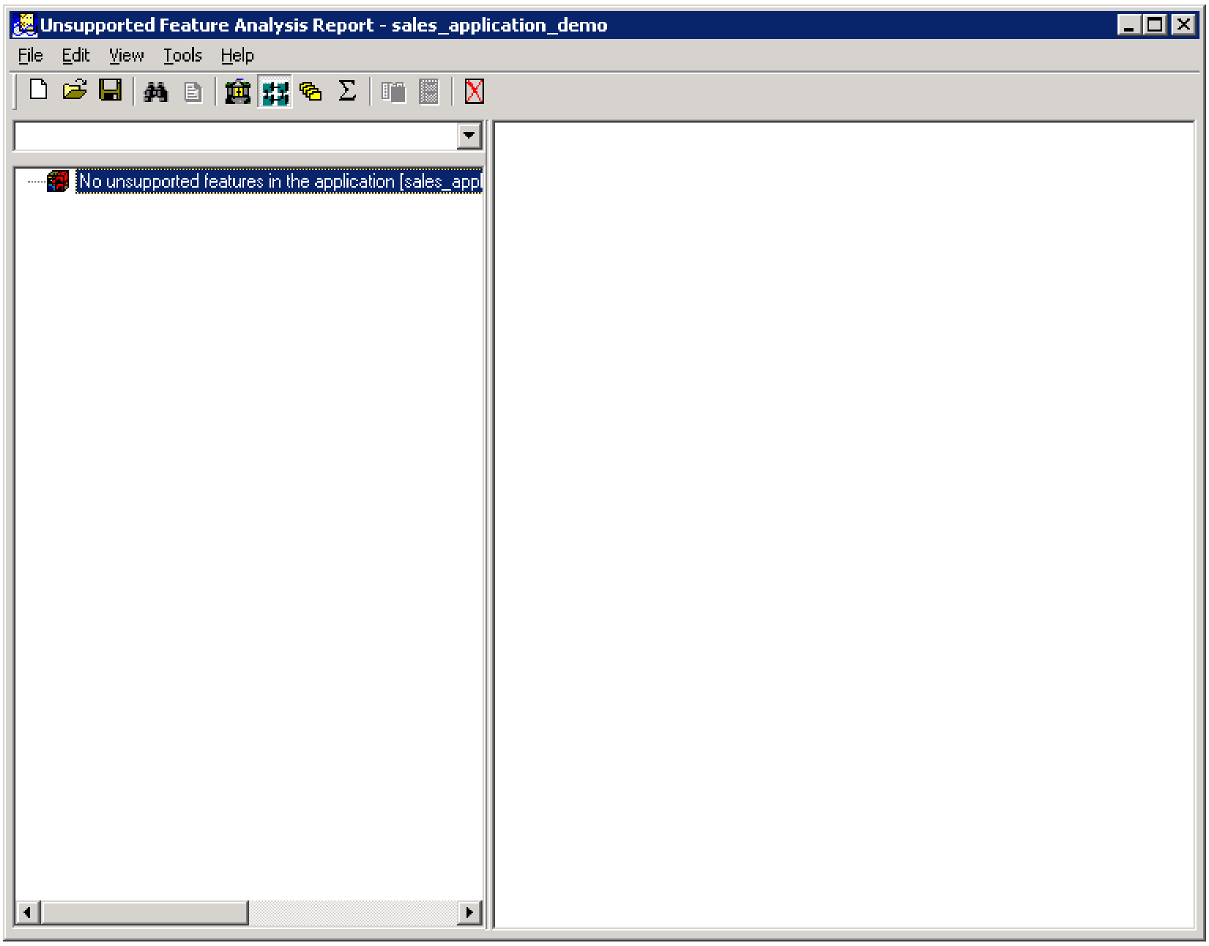
7.4 Analyze unsupported PowerBuilder features

Features Analysis analyzes a specified object or an entire application for unsupported features and generates an unsupported features report. This section focuses on how to analyze unsupported PowerBuilder features for the Sales Application Demo using the Feature Analysis tool. For more details on how to take advantage of the Features Analysis, refer to the *Appeon Developer User Guide*.

To start Features Analysis for Sales Application Demo:

Step 1 – Click the *Analyze* button ( ) on the Appeon Developer toolbar. The Unsupported Features Analysis Report is displayed. Refer to Figure 7-8.

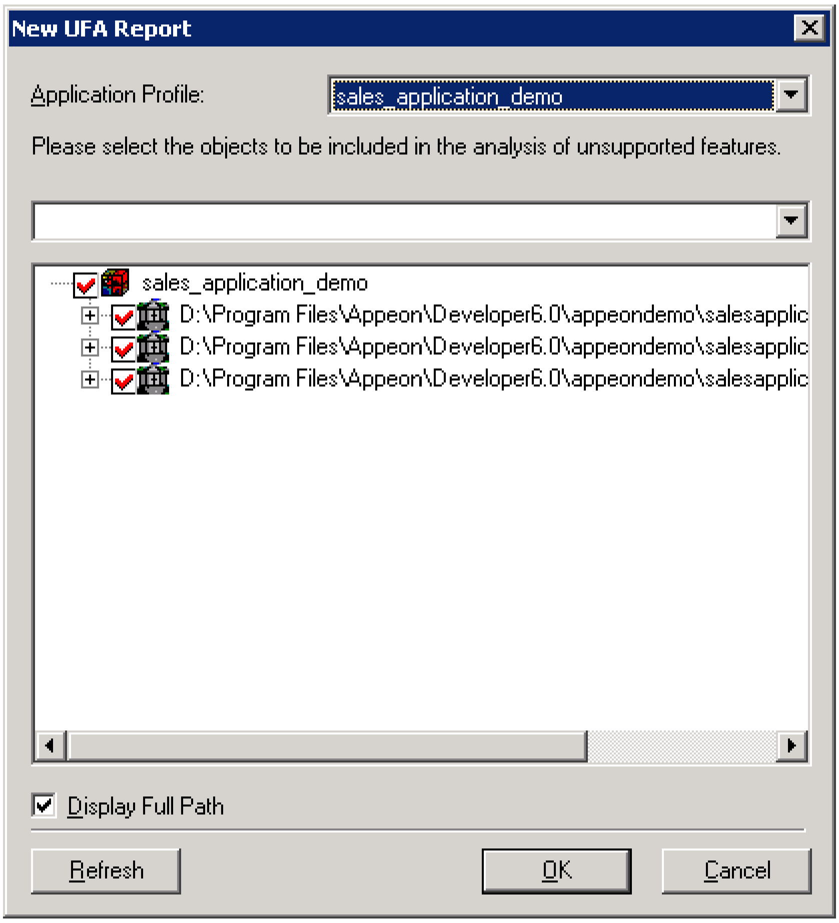
Figure 7-8: Select Objects to Analyze


Unsupported Feature Analysis Report - sales_application_demo
File
Edit
View
Tools
Help
No unsupported features in the application [sales_appl

Step 2 – Select New Report from the File menu.

The “New UFA Report” window displays for you to select the application, PBL(s), or object(s) that you want to analyze.

Figure 7-9: New UFA Report window



New UFA Report

Application Profile: sales_application_demo

Please select the objects to be included in the analysis of unsupported features.

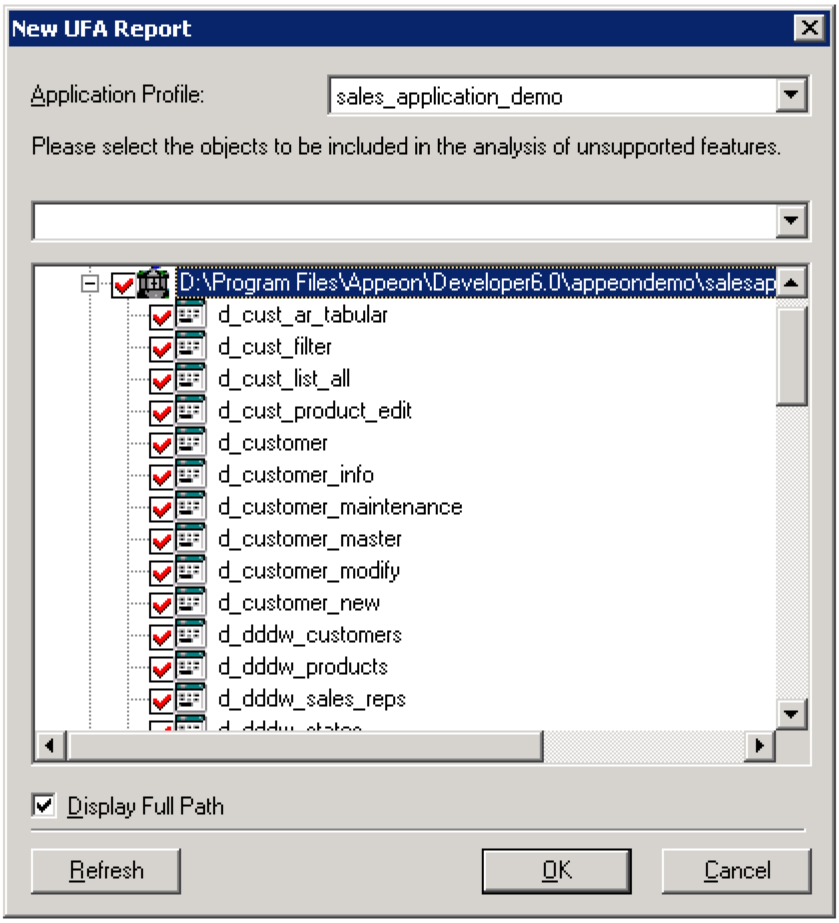
☑ sales_application_demo
- ☑ D:\Program Files\Appeon\Developer6.0\appeondemo\salesapplic
- ☑ D:\Program Files\Appeon\Developer6.0\appeondemo\salesapplic
- ☑ D:\Program Files\Appeon\Developer6.0\appeondemo\salesapplic

☑ Display Full Path

Step 3 – Verify that “*sales_application_demo*” is selected in the Application dropdown list box.

Step 4 – Choose the PBLs and objects you want to analyze (by default, all existing PBLs and objects are selected.), and deselect those you do not want. Refer to Figure 7-10.

Figure 7-10: Select PBLs and objects to analyze



New UFA Report

Application Profile: sales_application_demo

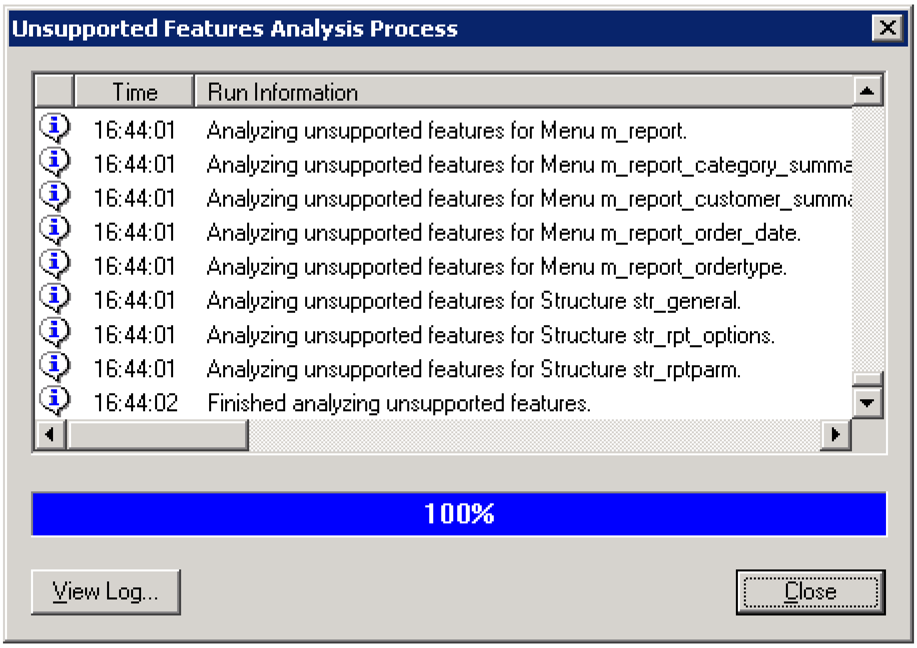
Please select the objects to be included in the analysis of unsupported features.

☑ D:\Program Files\Appeon\Developer6.0\appeondemo\salesap
- ☑ d_cust_ar_tabular
- ☑ d_cust_filter
- ☑ d_cust_list_all
- ☑ d_cust_product_edit
- ☑ d_customer
- ☑ d_customer_info
- ☑ d_customer_maintenance
- ☑ d_customer_master
- ☑ d_customer_modify
- ☑ d_customer_new
- ☑ d_dddw_customers
- ☑ d_dddw_products
- ☑ d_dddw_sales_reps
- ☑ d_dddw_status

☑ Display Full Path

Step 5 – Click the *OK* button. The feature analysis of the demo begins as shown in Figure 7-11.

Figure 7-11: Analysis Status window



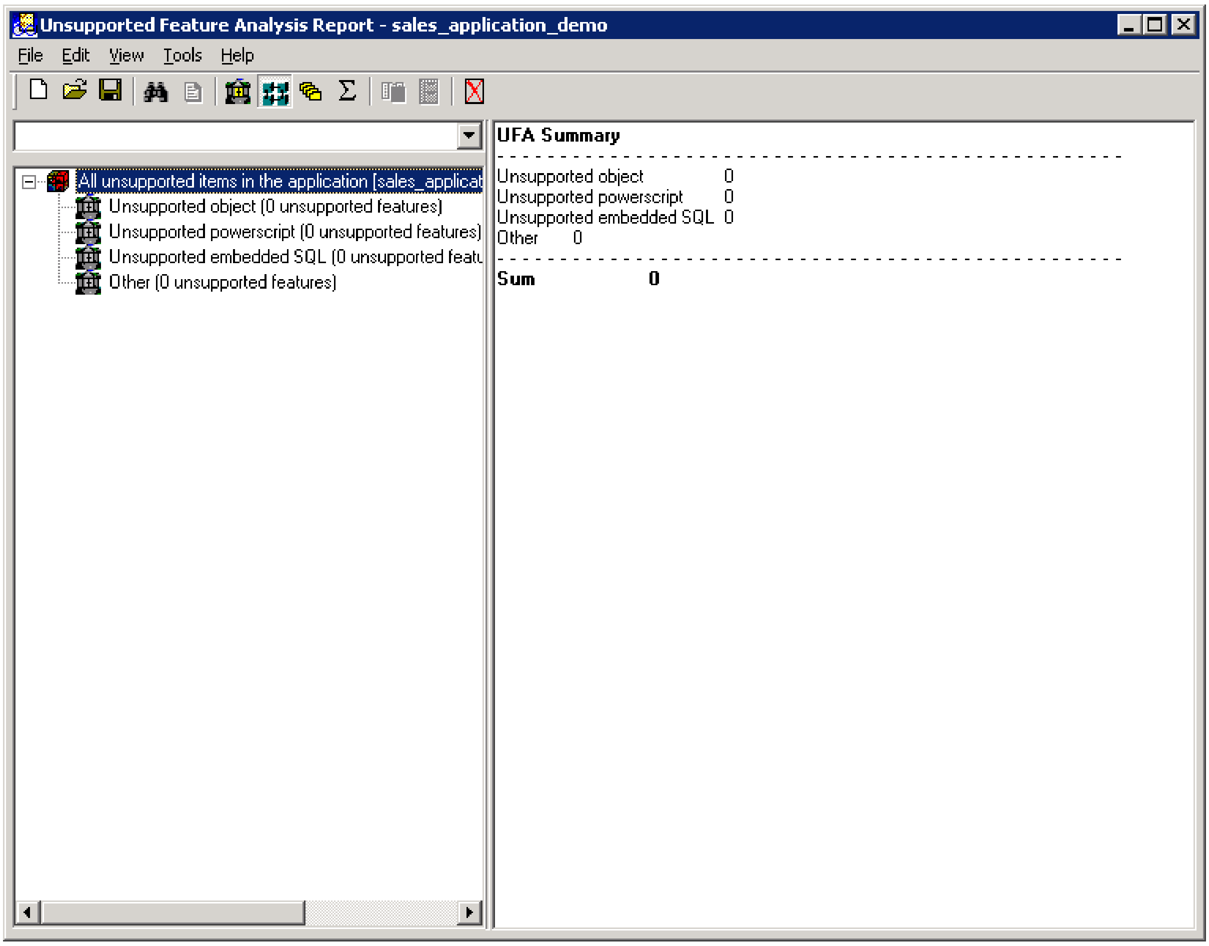
Unsupported Features Analysis Process

```
Time      Run Information
16:44:01  Analyzing unsupported features for Menu m_report.
16:44:01  Analyzing unsupported features for Menu m_report_category_summa
16:44:01  Analyzing unsupported features for Menu m_report_customer_summa
16:44:01  Analyzing unsupported features for Menu m_report_order_date.
16:44:01  Analyzing unsupported features for Menu m_report_ordertype.
16:44:01  Analyzing unsupported features for Structure str_general.
16:44:01  Analyzing unsupported features for Structure str_rpt_options.
16:44:01  Analyzing unsupported features for Structure str_rptparm.
16:44:02  Finished analyzing unsupported features.
```

100%

Step 6 – When analysis is complete, click the Close button. The analysis result will be displayed in the Unsupported Feature Analysis Report window, as shown in Figure 7-12.

Figure 7-12: Unsupported Feature Analysis Report window


Unsupported Feature Analysis Report - sales_application_demo
File Edit View Tools Help

- All unsupported items in the application (sales_applicat
  - Unsupported object (0 unsupported features)
  - Unsupported powerscript (0 unsupported features)
  - Unsupported embedded SQL (0 unsupported featu
  - Other (0 unsupported features)

```
UFA Summary
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Unsupported object          0
Unsupported powerscript     0
Unsupported embedded SQL  0
Other       0
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
Sum                 0
```

Expand the tree view items to view the generated UFA report for the unsupported objects. There are no unsupported features in the Sales Application Demo. For more details on the UFA Report Window, refer to the *Using UFA Tool* chapter in the *Appeon Developer User Guide*.

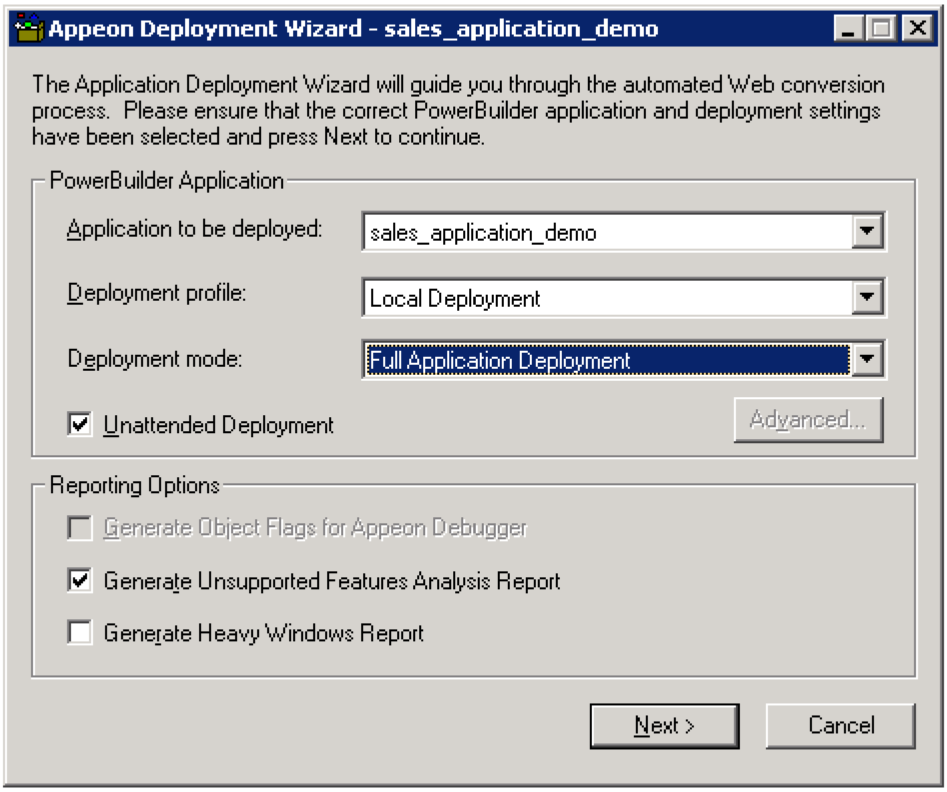
7.5 Deploy demos to the Web

Using the *Deploy* button (), you can specify a PowerBuilder application to be converted to a Web application.

To deploy the Sales Application Demo to Web:

Step 1 – Click the *Deploy* button () on the Appeon Developer toolbar. The Appeon Deployment Wizard window displays as shown in Figure 7-13.

Figure 7-13: Appeon deployment wizard



Appeon Deployment Wizard - sales_application_demo

The Application Deployment Wizard will guide you through the automated Web conversion process. Please ensure that the correct PowerBuilder application and deployment settings have been selected and press Next to continue.

PowerBuilder Application

Application to be deployed: sales_application_demo

Deployment profile: Local Deployment

Deployment mode: Full Application Deployment

☑ Unattended Deployment

Reporting Options

□ Generate Object Flags for Appeon Debugger

☑ Generate Unsupported Features Analysis Report

□ Generate Heavy Windows Report

Step 2 – Verify that “*sales_application_demo*” is selected in the “Application to be deployed ” list box, “*Local Deployment*” is selected in the “Deployment profile” list box, and that “*Full Application Deployment*” is selected in the “Deployment mode” list box. For more information on Deployment Settings, refer to the *Appeon Developer User Guide*.

Step 3 – Click the *Next* button.

Step 4 – Wait until the wizard completes the following three tasks.

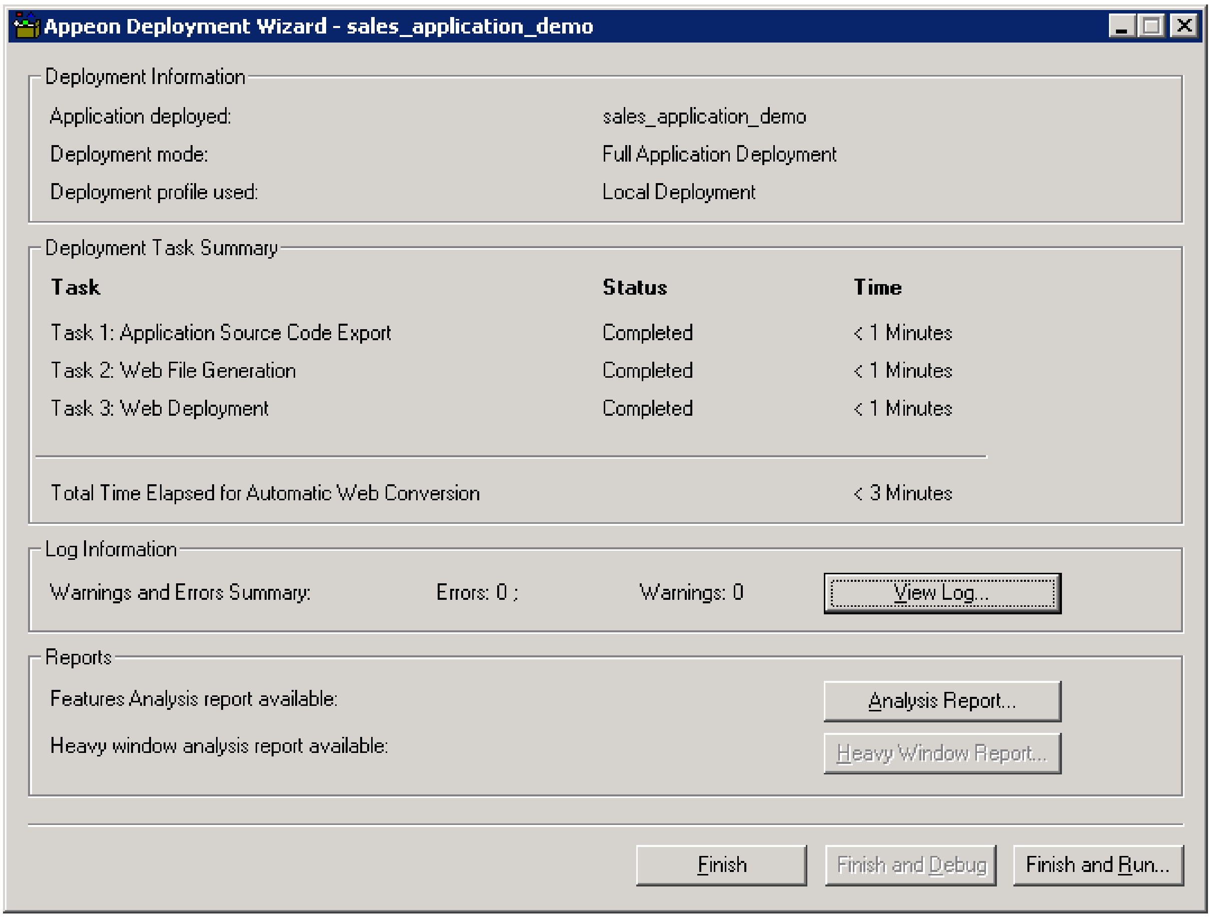
Task 1: Application Source Code Export

Task 2: Web File Generation

Task 3: Web Deployment

When Task 3 is complete, the Web deployment report page is displayed. Refer to Figure 7-14.

Figure 7-14: Web deployment report



Appeon Deployment Wizard - sales_application_demo

Deployment Information

Application deployed:	sales_application_demo
Deployment mode:	Full Application Deployment
Deployment profile used:	Local Deployment

Deployment Task Summary

Task	Status	Time
Task 1: Application Source Code Export	Completed	< 1 Minutes
Task 2: Web File Generation	Completed	< 1 Minutes
Task 3: Web Deployment	Completed	< 1 Minutes
Total Time Elapsed for Automatic Web Conversion		< 3 Minutes

Log Information

Warnings and Errors Summary: Errors: 0 ; Warnings: 0

Reports

Features Analysis report available:

Heavy window analysis report available:

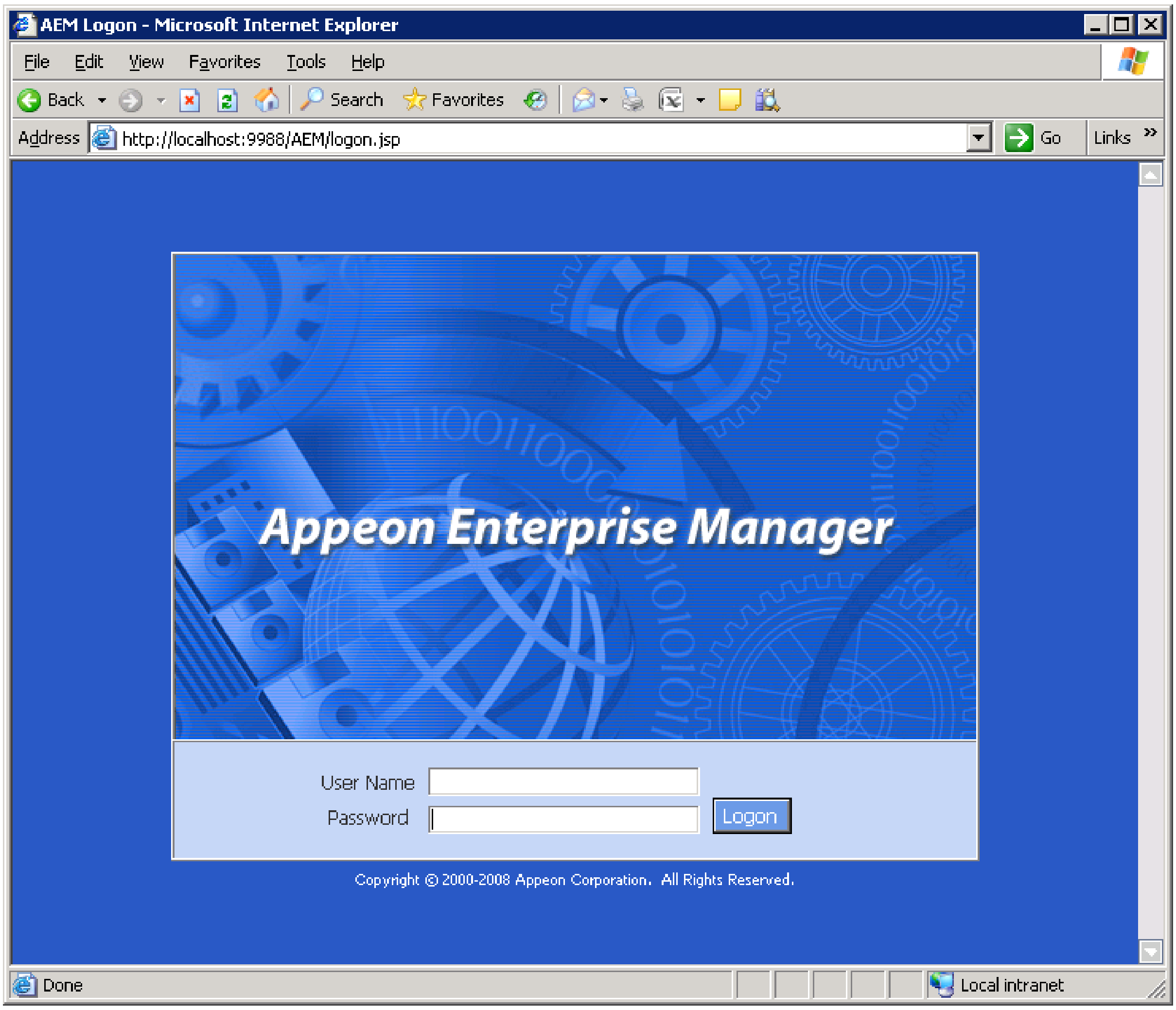
Step 5 – Click *Finish* to exit or *Finish and Run* to run the deployed application.

7.6 Verify configuration of transaction objects in AEM

7.6.1 Launch AEM and look into Application Properties

The *AEM* button launches the Web-based application Appeon Enterprise Manager (AEM). Click the *AEM* button () on the Appeon Developer toolbar. The AEM login screen automatically displays in Internet Explorer. Refer to Figure 7-15.

Figure 7-15: AEM login screen


AEM Logon - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://localhost:9988/AEM/logon.jsp
Go Links
Appeon Enterprise Manager
User Name
Password
Logon
Copyright © 2000-2008 Appeon Corporation. All Rights Reserved.
Done
Local intranet

Once the Appeon Enterprise Manager login screen is loaded successfully, enter a valid username and password (The username and password are those you specified when installing Appeon Server. If you did not specify the username and password during the installation, you can use the default "admin" as the username and password to log into AEM.). Click the *Logon* button. The AEM start page will display when the login is successful.

Click on the *Application Properties* link in the left navigation bar or in the introduction frame.

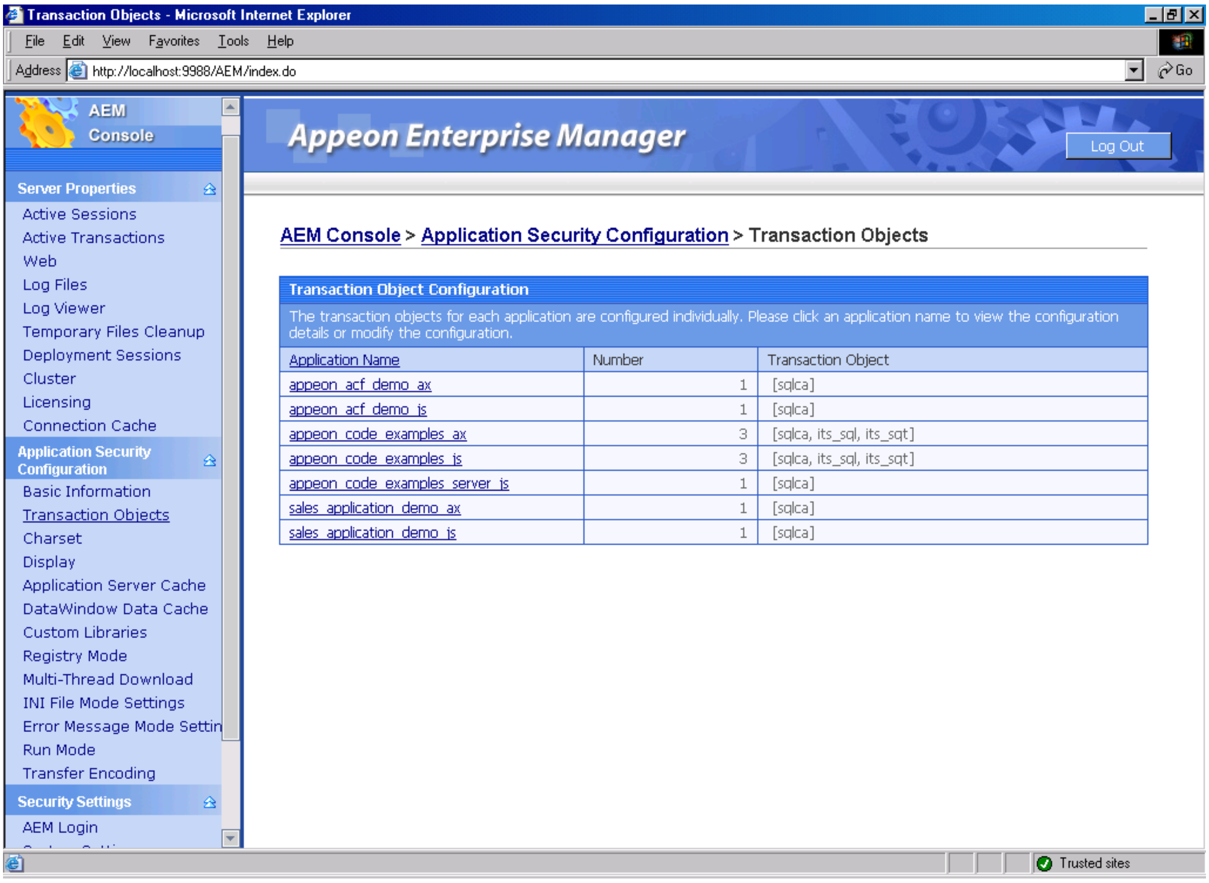
Application Properties is a set of tools for viewing and modifying all configurable Appeon Server settings. A brief introduction to each tool is located on the Application Properties start page. For more information on the tools, refer to the *Appeon Server Configuration Guide*.

7.6.2 Check transaction objects mapping

A transaction object is used for connecting PowerBuilder applications to a database. When the PowerBuilder application is moved onto the Web, Appeon Server (EAServer extended with Appeon Server) establishes a connection to the database using connection caches. Each transaction object in the application must be mapped to a connection cache that is configured to connect to the database used by the PowerBuilder application.

You can view the configuration of transaction objects in Transaction Objects of Application Properties in AEM. Do not change this setting for the demo Web applications or they will not work. Refer to Figure 7-16.

Figure 7-16: Transaction object settings in AEM



AEM Console > Application Security Configuration > Transaction Objects

Transaction Object Configuration

The transaction objects for each application are configured individually. Please click an application name to view the configuration details or modify the configuration.

Application Name	Number	Transaction Object
appeon_acf_demo_ax	1	[sqlca]
appeon_acf_demo_js	1	[sqlca]
appeon_code_examples_ax	3	[sqlca, its_sql, its_sqt]
appeon_code_examples_js	3	[sqlca, its_sql, its_sqt]
appeon_code_examples_server_js	1	[sqlca]
sales_application_demo_ax	1	[sqlca]
sales_application_demo_js	1	[sqlca]

8 Viewing Web Demo Applications

You can only run a demo Web application that has been deployed to the Web server by the Appeon Deployment Wizard. Before running the Web demos, make sure that EAServer has been started (For details on starting EAServer, refer to Section 2.5: *Start Appeon Server*).

8.1 Run Appeon Sales Application on Web

Appeon Sales Application Demo is a Web application that was converted from a complex PowerBuilder application described in Chapter 3: *Running Sales Application Demo*.

This section describes how to run Appeon Sales Application Demo on the Web and does not provide a detailed description of the Web application since the functionality of the Web application is almost identical to the PowerBuilder application.

8.1.1.a Launch the Web application

Step 1 – Access the Web application using one of the following methods.

If both Appeon Server and Appeon Developer are running on the same machine using Windows, you can use either of the following methods:

Method 1: From the computer where Appeon Developer is installed, choose Windows Start | Programs | Appeon 6.0 for PowerBuilder | Appeon Developer | Appeon Demos | Appeon Sales App Demo. The demo is automatically loaded in Internet Explorer.

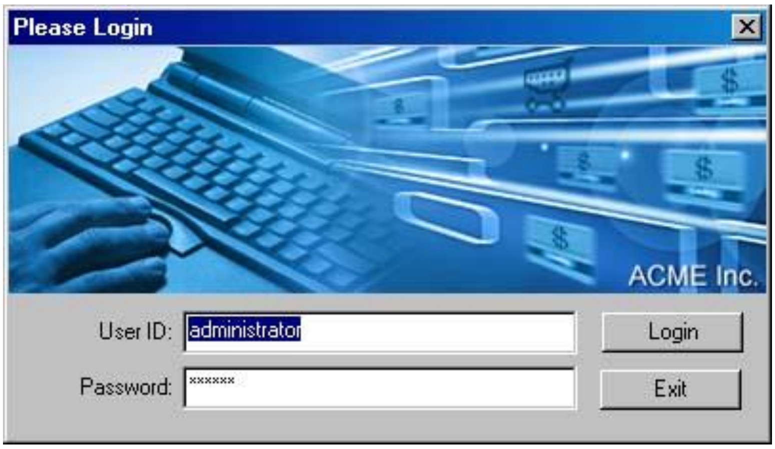
Method 2: Click the *Run Web App* (⚡) button in the Developer toolbar and select "*sales_application_demo*".

If Appeon Server and Appeon Developer are running on different machines using different platforms (for example, Appeon Developer runs on Windows, while Appeon Server runs on UNIX), you can directly access the following URL via Internet Explorer:

Input "http://*hostname*:*port*/sales_application_demo/" in the address bar of the Internet Explorer, where *hostname* stands for the machine name or IP address of Appeon Server, and *port* stands for the HTTP port of Appeon Server (for example, http://192.0.0.61:8080/sales_application_demo/").

Step 2 – Login to the Web application using the default User ID and password. If you changed the password in the PowerBuilder Sales Application Demo, use the same User ID and Password you used for the PowerBuilder application. Refer to Figure 8-1 and Figure 8-2.

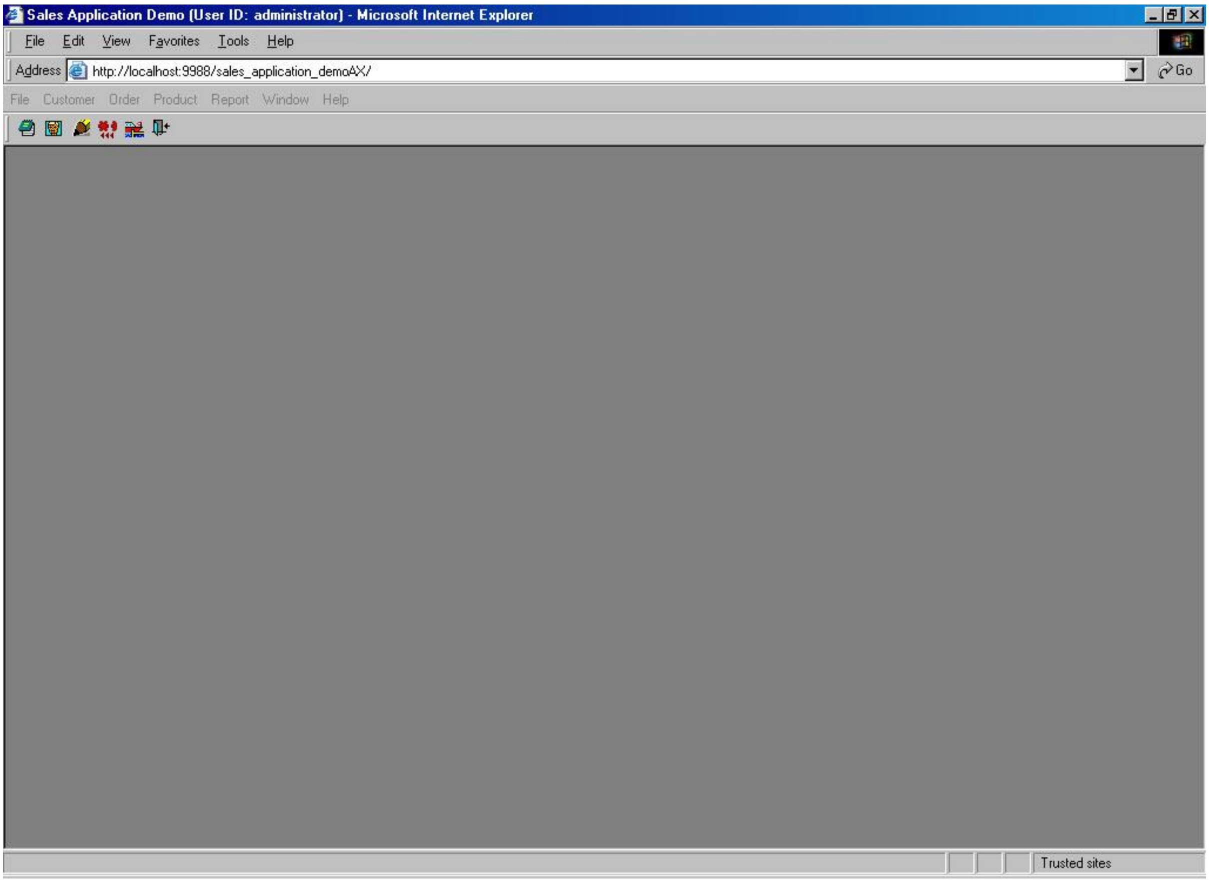
Figure 8-1: Sales Application Demo Web login window



User ID: administrator

Password: ******

Figure 8-2: Sales Application Demo on Web

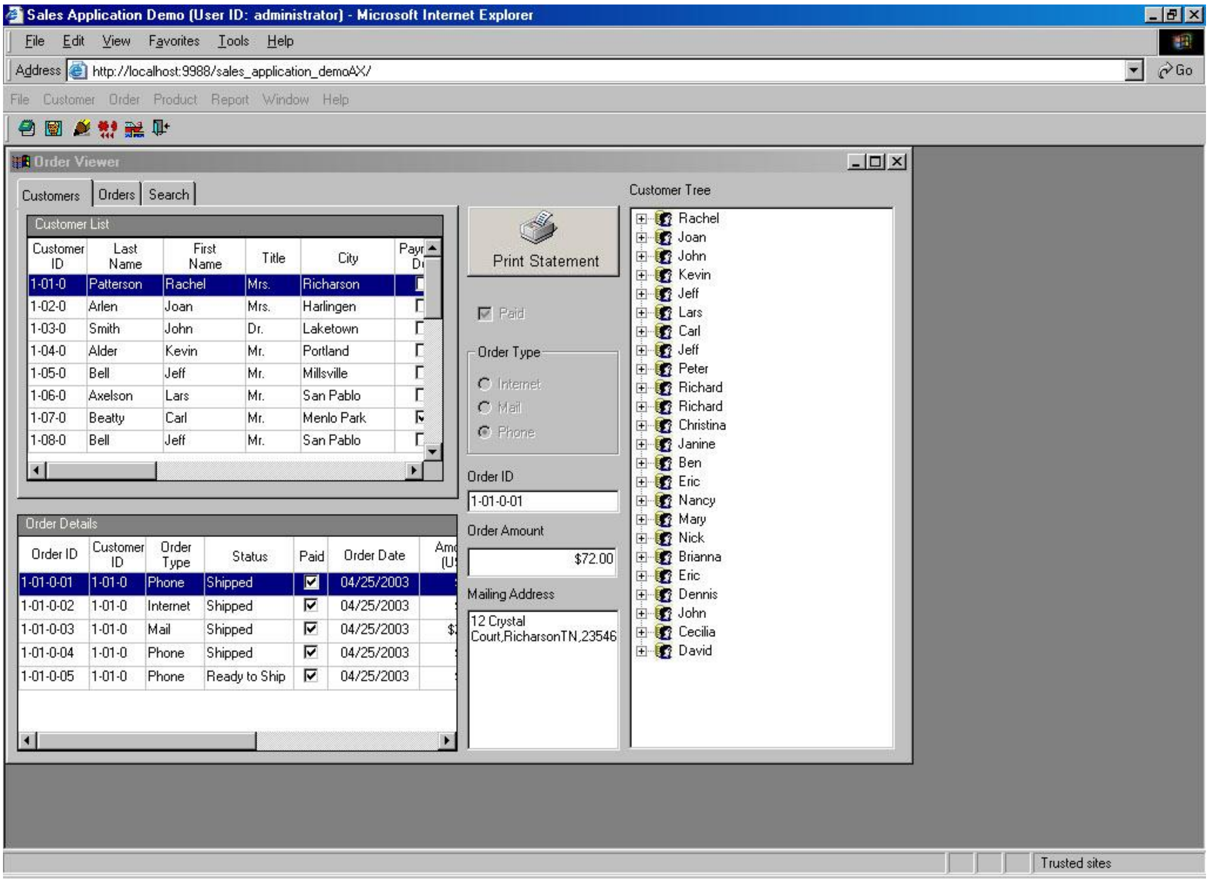

Sales Application Demo (User ID: administrator) - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address
Go
File Customer Order Product Report Window Help
Trusted sites

Address: http://localhost:9988/sales_application_demoAX/

Note: The menu below the Internet Explorer address bar is the demo menu, **NOT** the Internet Explorer menu.

Step 3 – Explore the Web application. For example, clicking the Order Viewer icon on toolbar displays the Order Viewer window as shown in Figure 8-3. The Order Viewer window contains almost everything that Appeon 6.0 for PowerBuilder supports, from various DataWindow styles to advanced controls such as Tab, TreeView, and ListView.

Figure 8-3: Order Viewer window in the Web Sales Application Demo


Sales Application Demo (User ID: administrator) - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address
Go
File Customer Order Product Report Window Help
Order Viewer
Customers Orders Search
Print Statement
Customer Tree
Trusted sites

Address: http://localhost:9988/sales_application_demoAX/

Customer List

Customer ID	Last Name	First Name	Title	City	Payr Di
1-01-0	Patterson	Rachel	Mrs.	Richarson	□
1-02-0	Arlen	Joan	Mrs.	Harlingen	□
1-03-0	Smith	John	Dr.	Laketown	□
1-04-0	Alder	Kevin	Mr.	Portland	□
1-05-0	Bell	Jeff	Mr.	Millsville	□
1-06-0	Axelson	Lars	Mr.	San Pablo	□
1-07-0	Beatty	Carl	Mr.	Menlo Park	☑
1-08-0	Bell	Jeff	Mr.	San Pablo	□

☑ Paid

Order Type

○ Internet
○ Mail
● Phone

Order ID: 1-01-0-01

Order Amount: $72.00

Mailing Address: 12 Crystal Court,RicharsonTN,23546

Order Details

Order ID	Customer ID	Order Type	Status	Paid	Order Date	Amo (U
1-01-0-01	1-01-0	Phone	Shipped	☑	04/25/2003	
1-01-0-02	1-01-0	Internet	Shipped	☑	04/25/2003	
1-01-0-03	1-01-0	Mail	Shipped	☑	04/25/2003	$
1-01-0-04	1-01-0	Phone	Shipped	☑	04/25/2003	
1-01-0-05	1-01-0	Phone	Ready to Ship	☑	04/25/2003	

Customer Tree

- Rachel
- Joan
- John
- Kevin
- Jeff
- Lars
- Carl
- Jeff
- Peter
- Richard
- Richard
- Christina
- Janine
- Ben
- Eric
- Nancy
- Mary
- Nick
- Brianna
- Eric
- Dennis
- John
- Cecilia
- David

8.2 Run Appeon Code Examples on Web

Appeon Code Examples is a Web application that was converted from a complex PowerBuilder application described in Chapter 4: *Running Appeon Code Examples*.

This section describes how to run Appeon Code Examples on the Web and does not provide a detailed description of the Web application since the functionality of the Web application is nearly identical to the PowerBuilder application.

8.2.1 Launch the Web application

Launch the Web Appeon Code Examples demo using one of the following methods.

If both Appeon Server and Appeon Developer are running on the same machine using Windows, you can use either of the following methods:

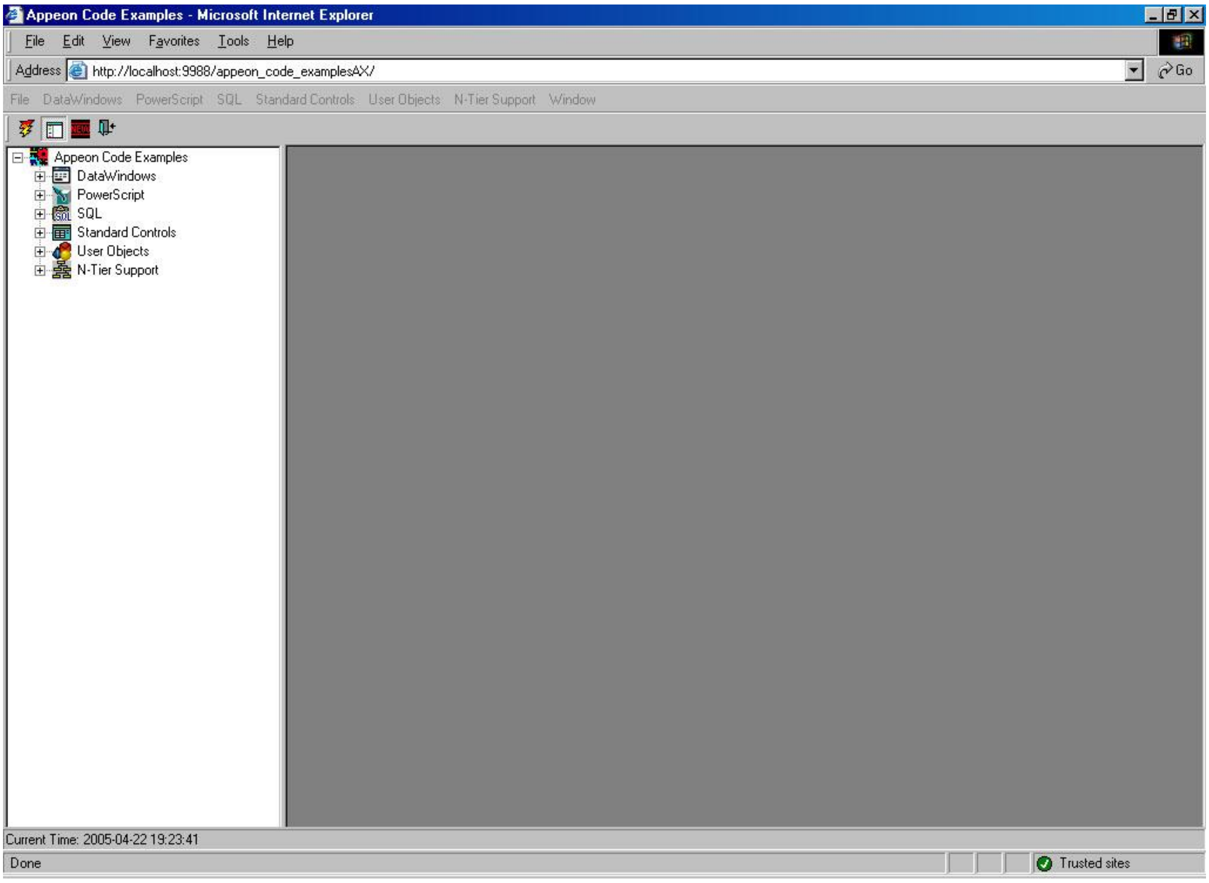
Method 1: From the computer where Appeon Developer is installed, choose Windows Start | Programs | Appeon 6.0 for PowerBuilder | Appeon Developer | Appeon Demos | Appeon Code Examples (AX). The demo is automatically loaded in Internet Explorer.

Method 2: Click the *Run Web App* (⚡) button in the Developer toolbar and select "*appeon_code_examples*" and the intended deployment option. Refer to Figure 8-4.

If Appeon Server and Appeon Developer are running on different machines using different platforms (for example, Appeon Developer runs on Windows, while Appeon Server runs on UNIX), you can access the following URL via Internet Explorer:

Input “http://*hostname*:*port*/appeon_code_examplesAX/” in the address bar of the Internet Explorer, where *hostname* stands for the machine name or IP address of Appeon Server, and *port* stands for the HTTP port of Appeon Server (for example, http://192.0.0.61:8080/appeon_code_examplesAX/”).

Figure 8-4: Appeon Code Examples on Web



Appeon Code Examples - Microsoft Internet Explorer

Address: http://localhost:9988/appeon_code_examplesAX/

Current Time: 2005-04-22 19:23:41

Done

File Edit View Favorites Tools Help
Go
File DataWindows PowerScript SQL Standard Controls User Objects N-Tier Support Window
Appeon Code Examples
DataWindows
PowerScript
SQL
Standard Controls
User Objects
N-Tier Support
Trusted sites

8.3 Run ACF Examples on the Web

Appeon ACF Examples is a Web application that was converted from a complex PowerBuilder application. This section will not provide a detailed description of the Web application since the functionality of the Web application is nearly identical to the PowerBuilder application. Refer to Chapter 5: *Running ACF Examples*, to see how the Appeon ACF Example operates.

Appeon Code Examples is a Web application that was converted from a complex PowerBuilder application described in Chapter 4: *Running Appeon Code Examples*.

This section describes how to run Appeon Code Examples on the Web and does not provide a detailed description of the Web application since the functionality of the Web application is nearly identical to the PowerBuilder application (refer to Chapter 4: *Running Appeon Code Examples*, for instructions about running the Appeon Code Examples application on the Web).

8.3.1 Launch the Web application

Access the Web application using one of the following methods.

If both Appeon Server and Appeon Developer are running on the same machine using Windows, you can use either of the following methods:

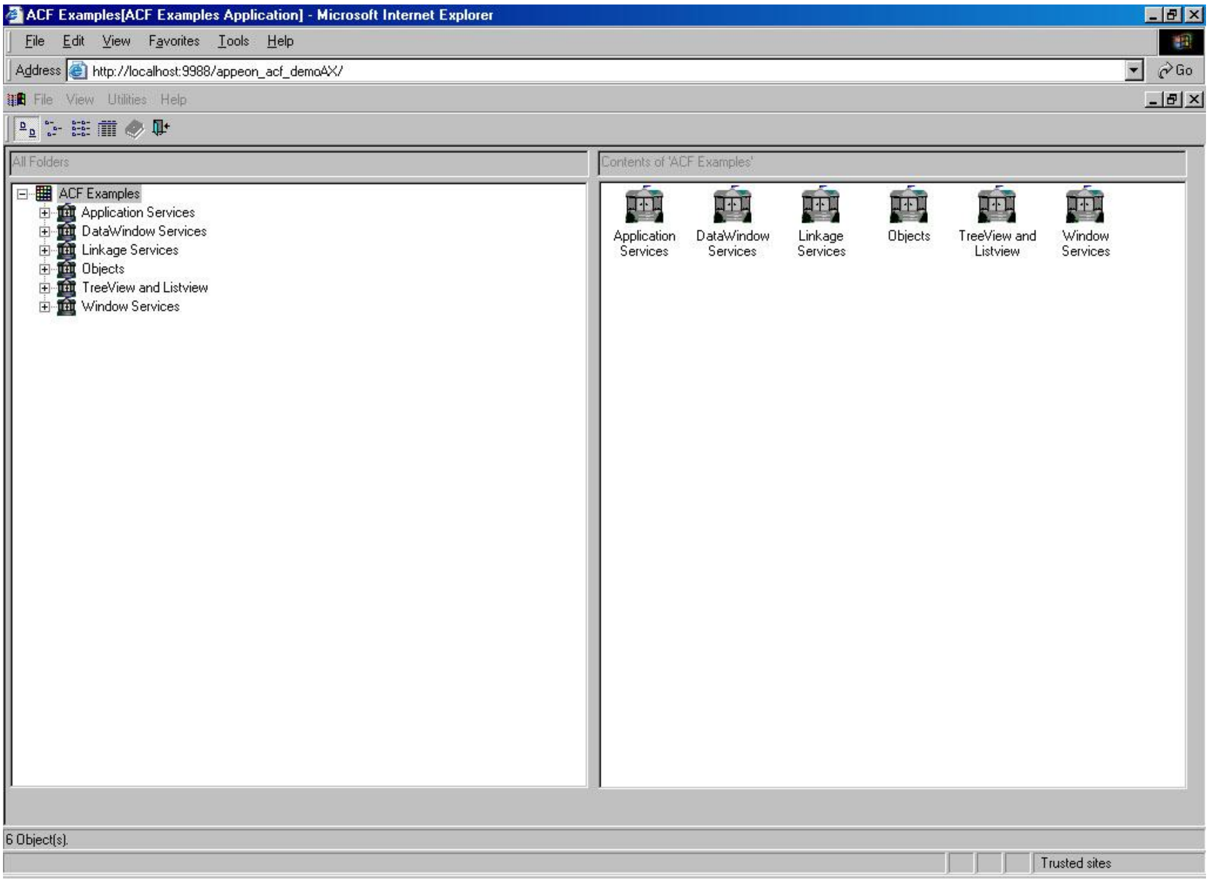
Method 1: From the computer where Appeon Developer is installed, choose Windows Start | Programs | Appeon 6.0 for PowerBuilder | Appeon Developer | Appeon Demos | Appeon ACF Example (AX). The demo will be automatically loaded in Internet Explorer.

Method 2: Click the *Run Web App* (⚡) button in the Developer toolbar and select "*appeon_acf_demo*" with the intended deployment option. Refer to Figure 8-5.

If Appeon Server and Appeon Developer are running on different machines using different platforms (for example, Appeon Developer runs on Windows, while Appeon Server runs on UNIX), you can directly access the following URL via Internet Explorer:

Input "http://*hostname*:*port*/appeon_acf_demoAX/" in the address bar of the Internet Explorer, where *hostname* stands for the machine name or IP address of Appeon Server, and *port* stands for the HTTP port of Appeon Server (for example, http://192.0.0.61:8080/appeon_acf_demoAX/").

Figure 8-5: Appeon ACF Demo on Web



http://localhost:9988/appeon_acf_demoAX/

6 Object(s).

8.4 Web Enhancements

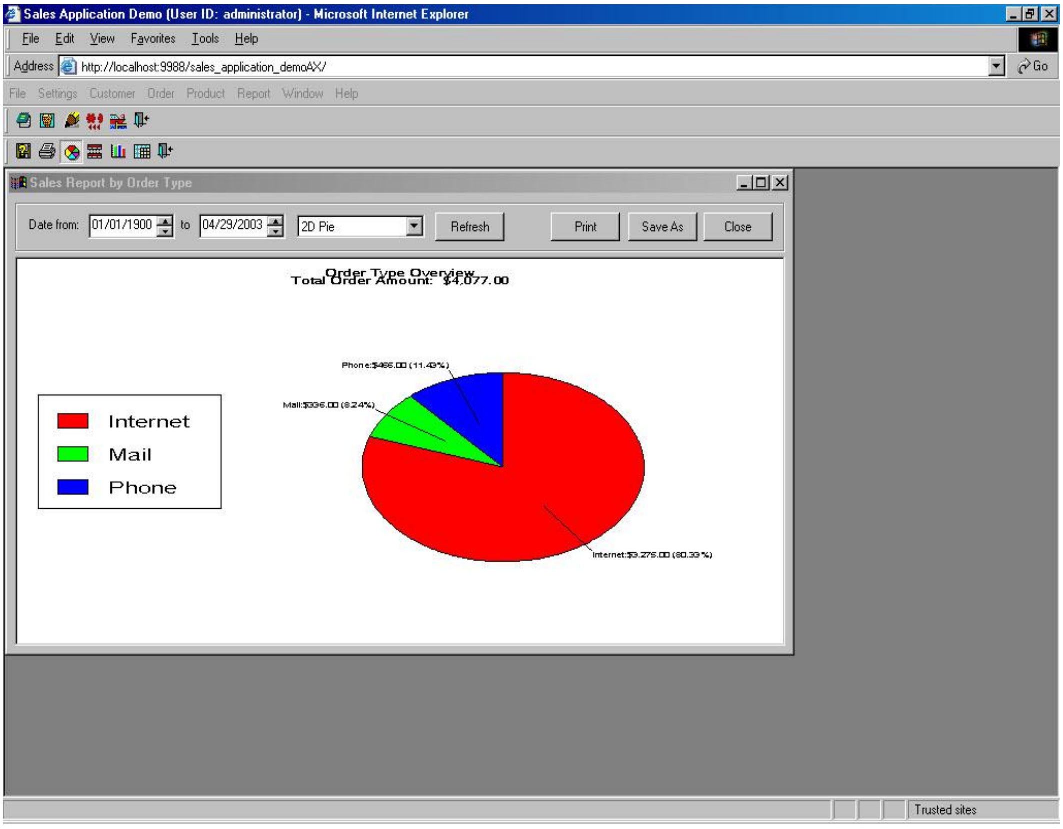
8.4.1 Appeon DataWindow Menu (EAServer Windows only)

Refer to the *Appeon Enhanced Web Features* section in the *Appeon Developer User Guide* for detailed information.

8.4.2 Refresh Web Applications

By clicking the *Refresh* button in the Internet Explorer toolbar to refresh the current page of a Web application, the application will be reloaded into the browser. By clicking the *Refresh* button, the Web application will be reloaded into Internet Explorer. Refer to Figure 8-6 and Figure 8-7.

Figure 8-6: Refresh on the web (Before clicking the Refresh button)

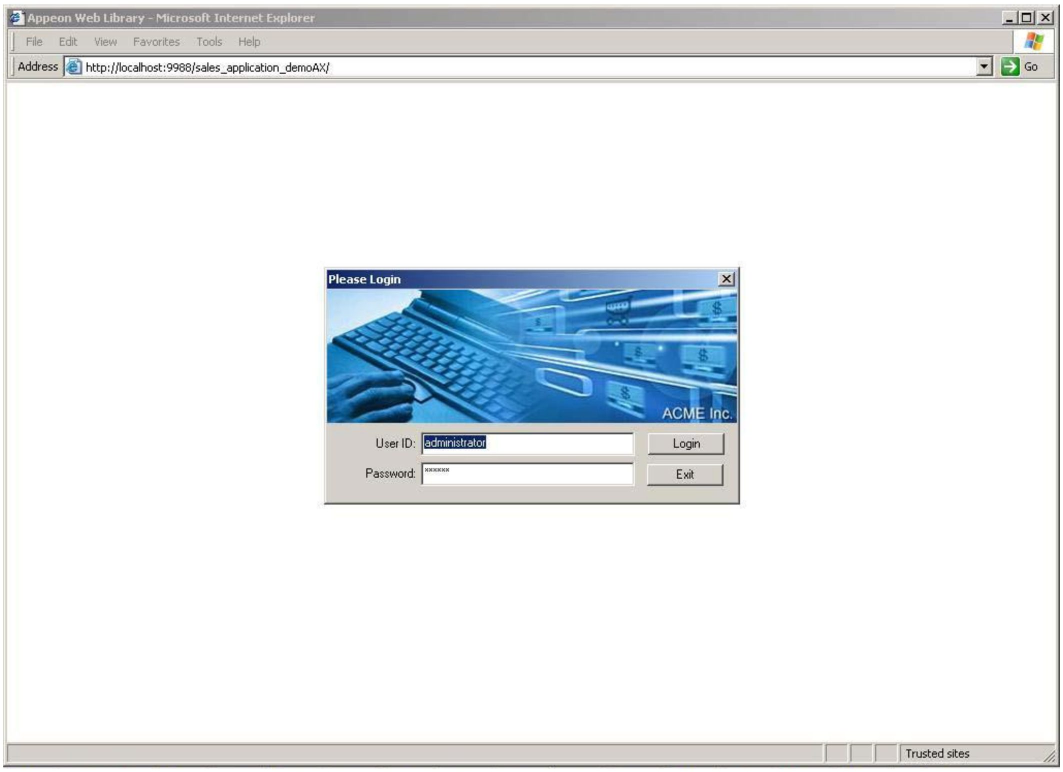


Sales Application Demo (User ID: administrator) - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Go
File Settings Customer Order Product Report Window Help
Sales Report by Order Type
Refresh
Print
Save As
Close
Order Type Overview
Total Order Amount: $4,077.00
Phone:$466.00 (11.43%)
Mail:$336.00 (8.24%)
Internet:$3,275.00 (80.33%)
🟥 Internet
🟩 Mail
🟦 Phone
Trusted sites

Address http://localhost:9988/sales_application_demoAX/

Date from: 01/01/1900 to 04/29/2003 2D Pie

Figure 8-7: Refresh on the web (After clicking the Refresh button)



http://localhost:9988/sales_application_demoAX/

User ID: administrator

Password: ******

Index