Information Builders

WebFOCUS

WebFOCUS for PeopleSoft Getting Started Manual
Version 5 Release 2

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Preface

This documentation describes how to install and use WebFOCUS™ for PeopleSoft®, Version 5 Release 2. It is intended for the following users:

- PeopleSoft Database Administrators
- WebFOCUS Web Console Administrators

How This Manual Is Organized

This manual includes the following chapters:

Chapter/Appendix		Contents
1	Introducing WebFOCUS for PeopleSoft	Provides an overview of WebFOCUS for PeopleSoft.
2	WebFOCUS for PeopleSoft Installation	Describes the WebFOCUS for PeopleSoft software and system requirements and how to plan for installation.
3	Configuring the PeopleSoft Application Adapter	Describes how to configure the PeopleSoft Application Adapter.
4	Managing Connections to PeopleSoft Data Sources	Describes how to add, remove, and edit connections to one or more PeopleSoft data sources.
5	Using the PeopleSoft Metadata and Security Administrator	Describes how to use the WebFOCUS for PeopleSoft Administrator via the Web Console to manage metadata, security access, and to view server settings.
6	Using PeopleSoft for Managed Reporting User Administration	Describes mandatory configuration and integration requirements for those sites that wish to utilize PeopleSoft for user administration in place of WebFOCUS User Administration Services.
A	Advanced Topics	Describes using additional functionality and troubleshooting integration problems.

Chapter/Appendix		Contents
B	Configuration Information Worksheet	A worksheet to guide you when when configuring a PeopleSoft connection.

Documentation Conventions

The following conventions apply throughout this manual:

Convention	Description
`THIS TYPEFACE` or `this typeface`	Denotes syntax that you must enter exactly as shown.
`this typeface`	Represents a placeholder (or variable) in syntax for a value that you or the system must supply.
`underscore`	Indicates a default setting.
this typeface	Represents a placeholder (or variable) in a text paragraph, a cross-reference, or an important term.
this typeface	Highlights a file name or command in a text paragraph that must be lowercase.
this typeface	Indicates a button, menu item, or dialog box option you can click or select.
Key + Key	Indicates keys that you must press simultaneously.
`{ }`	Indicates two or three choices; type one of them, not the braces.
`[ ]`	Indicates a group of optional parameters. None are required, but you may select one of them. Type only the parameter in the brackets, not the brackets.
`|`	Separates mutually exclusive choices in syntax. Type one of them, not the symbol.
`...`	Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis points (…).
. . .	Indicates that there are (or could be) intervening or additional commands.

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Customer Support

Do you have questions about WebFOCUS for PeopleSoft?

Call Information Builders Customer Support Service (CSS) at (800) 736-6130 or (212) 736-6130. Customer Support Consultants are available Monday through Friday between 8:00 a.m. and 8:00 p.m. EST to address all your WebFOCUS for PeopleSoft questions. Information Builders consultants can also give you general guidance regarding product capabilities and documentation. Please be ready to provide your six-digit site code (*xxxx.xx*) when you call.

You can also access support services electronically, 24 hours a day, with InfoResponse Online. InfoResponse Online is accessible through our World Wide Web site, http://www.informationbuilders.com. It connects you to the tracking system and known-problem database at the Information Builders support center. Registered users can open, update, and view the status of cases in the tracking system and read descriptions of reported software issues. New users can register immediately for this service. The technical support section of www.informationbuilders.com also provides usage techniques, diagnostic tips, and answers to frequently asked questions

To learn about the full range of available support services, ask your Information Builders representative about InfoResponse Online, or call (800) 969-INFO.

Information You Should Have

To help our consultants answer your questions most effectively, please provide the following information when you call:

- Your six-digit site code (*xxxx.xx*).
- Your WebFOCUS configuration:
    - The front-end you are using, including vendor and release.
    - The communications protocol (for example, TCP/IP or HLLAPI), including vendor and release.
    - The software release.
    - The server you are accessing, including release (for example, 4.2.1).
- The stored procedure (preferably with line numbers) or FOCUS commands being used in server access.
- The name of the Master File and Access File.
- The exact nature of the problem:
    - Are the results or the format incorrect? Are the text or calculations missing or misplaced?
    - The error message and return code, if applicable.
    - Is this related to any other problem?
- Has the procedure or query ever worked in its present form? Has it been changed recently? How often does the problem occur?
- What release of the operating system are you using? Has it, WebFOCUS, your security system, communications protocol, or front-end software changed?
- Is this problem reproducible? If so, how?
- Have you tried to reproduce your problem in the simplest form possible? For example, if you are having problems joining two data sources, have you tried executing a query containing the code to access a single data source?
- Do you have a trace file?
- How is the problem affecting your business? Is it halting development or production? Do you just have questions about functionality or documentation?

User Feedback

In an effort to produce effective documentation, the Documentation Services staff welcomes your opinions regarding this manual. Please use the Reader Comments form at the end of this manual to relay suggestions for improving the publication or to alert us to corrections. You can also use the Documentation Feedback form on our Web site, http://www.informationbuilders.com.

Thank you, in advance, for your comments.

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Contents

CHAPTER 1

Introducing WebFOCUS for PeopleSoft

Topics:

- WebFOCUS for PeopleSoft Overview
- WebFOCUS for PeopleSoft Architecture
- WebFOCUS for PeopleSoft Components
- End-User Reporting Environments

With WebFOCUS for PeopleSoft, you can generate complex reports directly from your PeopleSoft data sources. WebFOCUS, the industry's most powerful reporting solution, allows Desktop and Web users to create reports with cross tabs, multiple subtotals, year-to-year comparisons, rankings, hypothetical scenarios, one-pass "if-then" calculations, conditional fields, and more.

In addition, WebFOCUS for PeopleSoft offers client/server reporting and Web-based reporting. In either case, WebFOCUS provides the ability to partition back-end processing to make the most efficient use of system resources and to avoid bottlenecks.

WebFOCUS for PeopleSoft Overview

WebFOCUS for PeopleSoft is an easy-to-use, highly scalable Web-based reporting solution that provides:

- Powerful, complex reporting capabilities that allow matrix reporting from a single pass of the data.
- Flexible, user-designed application partitioning to increase efficiency and reduce network load.
- Graphical HTML Report and Graph Assistants to help novice PeopleSoft users generate complex reports with ease.
- Table and field data filtering capabilities.
- Easy metadata management through the WebFOCUS Web Console.
- Full enforcement of the PeopleSoft Query Tree and row-level security.
- Data access for reporting from the following PeopleSoft Record Types: SQL Tables, SQL Views, and Query Views.

Optional components include:

- WebFOCUS Developer Studio for high productivity Windows-based development with rapid Web deployment.
- User Administration Services (UAS) and Business Intelligence Dashboard that provide user management and a secure personalized application deployment environment.
- Open Portal Services for certified integration and deployment of WebFOCUS functionality into a number of major enterprise portals, including PeopleSoft Enterprise Portal, IBM WebSphere, Microsoft Sharepoint, Plumtree, and more.
- ReportCaster and Report Library functionality for scheduling, distributing, and managing reports.
- Resource Governor and Resource Analyzer to monitor application usage and report-generated network activity intelligently and to avoid processing runaway requests.

WebFOCUS for PeopleSoft Architecture

A simplified PeopleSoft environment consists of the following major architectural components:

- A PeopleSoft RDBMS. This can be an Oracle, DB2 Universal Database, or Microsoft SQL Server residing in a Unix, Windows, or OS/390 environment.
- A PeopleSoft Application Server and Process Scheduler, residing in Windows- or Unix-based environments.
- A PeopleSoft File Server, always found in a Windows environment.
- A certified Web Application Server, either IBM WebSphere or BEA WebLogic, for PeopleSoft 8 and higher releases.

WebFOCUS for PeopleSoft supports both the client-server architecture of PeopleSoft 7.5 and earlier, as well as the newer PeopleSoft Pure Internet Architecture. The major architectural components in a typical WebFOCUS for PeopleSoft implementation are:

- WebFOCUS Reporting Server with an appropriate RDBMS adapter
- WebFOCUS Developer Studio (optional)
- A Java servlet engine.

  New Atlanta ServletExec is delivered.

  Other servlet engines are supported, such as Tomcat, WebSphere, and WebLogic.
- WebFOCUS client and Java servlets.

WebFOCUS for PeopleSoft Components

This manual describes the configuration of WebFOCUS for PeopleSoft, including setting up the application adapter, configuring connections to PeopleSoft data sources, administering metadata and data security, and configuring authentication services.

PeopleSoft Application Adapter

The PeopleSoft Application Adapter must be configured on an existing WebFOCUS Reporting Server that will be used for PeopleSoft reporting *prior* to creating any connections to PeopleSoft data sources.

The Application Adapter provides the following three classes of services:

- Authentication services
- PeopleSoft data source connection management services
- Metadata administration and data access security services

PeopleSoft-Specific User Administration Security Exit

WebFOCUS provides User Administration Services (UAS) that are used in conjunction with the data access and authentication rules read through the PeopleSoft Application Adapter integration. UAS provides a method of managing content as well managing as user access to that content at a report level. This includes managing the content users can see and how they are allowed to interact with it, such as whether a user may create and share reports or only view pre-defined reports.

A pre-defined security exit is provided that can be used to link UAS into PeopleSoft. Chapter 6, *Using PeopleSoft for Managed Reporting User Administration*, defines the requirement and architecture of this optional integrated approach to user management.

PeopleSoft SQL Scripts

Native database SQL scripts are made available to prepare two PeopleSoft data constructs for simplified reporting. These constructs are:

- Effective dated records
- PeopleSoft Trees

Both of these pose particular difficulty in reporting against PeopleSoft due to their complexity and, in query performance, due to their highly normalized data structures.

The SQL scripts do not solve the problem completely but offer one possible approach to creating data structures more efficient for reporting. Additional technical documentation is available to explain their purpose and implementation, but this issue is beyond the scope of this manual. To obtain more information, contact your Information Builders representative.

End-User Reporting Environments

Three main layers exist for the WebFOCUS for PeopleSoft solution that enable end-user reporting: the presentation, business logic, and data access layers.

End-users interact with reports and other forms of delivered information most often through a Web browser, email client, or other Internet-enabled tool. Power users also have the capability to have information delivered to a desktop application, commonly in WebFOCUS Developer Studio.

All that is required at the data access layer is the PeopleSoft database in whatever RDBMS it is implemented. All that is required for the presentation layer in the Web environment is a Web browser.

CHAPTER 2

WebFOCUS for PeopleSoft Installation

Topics:

- Software Requirements
- Server Environment Software Requirements
- Additional Pre-Installation Requirements
- Pre-Installation Planning
- Technical Planning

This section describes the WebFOCUS for PeopleSoft software and system requirements.

Software Requirements

The following table lists the Information Builders-supplied products that must be installed before you configure the PeopleSoft Application Adapter and add connections to PeopleSoft data sources:

Environment	Software Product
Server	• WebFOCUS Reporting Server Version 5 Release 2 • Data Adapter for PeopleSoft Database (Oracle®, DB2 Universal Database®, or SQL Server™)

Server Environment Software Requirements

The following is a list of the software required on the server to support WebFOCUS for PeopleSoft:

- Any PeopleSoft PeopleTools 7.x or 8.x based application or PeopleTools Enterprise.

  All PeopleSoft applications are built on the PeopleTools metadata platform, which is the framework for WebFOCUS integration.
- One of the following supported platforms:
  - HP-UX™ 11.0, 11.0 (64-bit) and higher.
  - Sun Solaris™ 2.6 and higher.
  - AIX® 4.2.1, 4.3.2, 4.3.3 and higher.
  - Compaq Tru64
  - Microsoft Windows NT® 4.0 or 2000.
- An RDBMS license for Oracle, SQL Server, or DB2 Universal Database as applicable.
- An appropriate RDBMS connectivity product on the machine where you plan to install the WebFOCUS for PeopleSoft Server Agent, for example, Oracle SQL*Net for Oracle database connectivity. This is to provide access to a PeopleSoft database server for operational data access.

Note: For information about using WebFOCUS for PeopleSoft with versions of software other than those listed in this section, contact your Information Builders representative.

Additional Pre-Installation Requirements

Before you install WebFOCUS for PeopleSoft software, the following accounts must be available:

- A WebFOCUS administrator's account on the machine where the WebFOCUS Reporting Server resides.
- A database administrator's account (Access ID) that has read access to tables owned by PeopleSoft (this account may be the same as the WebFOCUS administrator's account).

Pre-Installation Planning

Information Builders recommends that you plan how you will use WebFOCUS for PeopleSoft before you install PeopleSoft records and begin to create reports.

Business Plan

The following is a partial list of questions to consider in your plan:

- Who is going to use the system?

  How many users? Do you have 10 users or 1,000?

  Are your users technically savvy or are they novices?

- What information do the users require?

  Can you group your users by the type of information they need?

  What is the size of the underlying tables? Is the underlying data stored in 10 PeopleSoft records or 1,000?

  Do you need access to legacy data or data from outside your PeopleSoft system? What types of join structures are required?

  Is access to live data essential, or can the data be accurate as of the previous night or week?

- Do your users need ad hoc query access?

  Are your users running canned reports or do they need ad hoc reporting capabilities? The answer to this question influences your decision about whether to adopt a Managed Reporting Environment.

  Remember that pre-written reports can be highly parameterized to provide a simulated ad hoc environment.

- How are you going to deploy your reports?

  Are you going to deploy your reports over the Web (Intranet or Internet), in a client/server environment, or in a mixed environment?

- What are your security requirements?

  The WebFOCUS for PeopleSoft Administrator can enforce all of the security rules that PeopleSoft enforces in its PS/Query reporting tool. These include record access rules from the Query Security trees and row-level access rules that have been defined by your PeopleSoft Security Administrator.

  If your WebFOCUS for PeopleSoft reporting requirements are different from your existing PS/Query requirements, you must reflect the required changes in PeopleSoft. Typically, this only involves creating a separate Query Tree for the records you will use in WebFOCUS. It may also require the creation of a new Operator Class.

A full discussion of these issues is beyond the scope of this manual. If you have questions, please contact your Information Builders representative.

Technical Planning

After your business plan is in place, there are several technical decisions to make. These issues are discussed in the following topics.

Security

WebFOCUS for PeopleSoft offers the option of enforcing PeopleSoft security. You can keep security off during the initial phases of testing and then turn security on before going to production. Alternatively, you can turn security off to verify that report results are correct or for other business purposes. Remember that PeopleSoft row-level security can significantly slow down the run time of certain reports.

Access ID

WebFOCUS for PeopleSoft initially authenticates with PeopleSoft using the PeopleSoft User ID and password entered on the login screen. If successful, WebFOCUS for PeopleSoft attaches to the RDBMS using an access ID of your choice. Typically, this access ID is either the default PeopleSoft Access ID (often it is SYSADM), or it is an RDBMS ID dedicated to WebFOCUS for PeopleSoft. In either case, the access ID must have read access to the following PeopleSoft tables and views:

PSDBFIELD	PSRECDEFN	PS_SCRTY_ACC_GRP
PSOPTIONS	PSRECFIELD	PS_TREE_ACCESS_VW
PSOPRCLS	PSTREEDEFN	XLATTABLE
PSOPRDEFN	PSTREENODE	PSDBFLDLABL (release 8.x)
PS_FACT_CTRL_TBL	PS_FACT_MAP_TBL	PS_HIER_CTRL_TBL
PSPRCSRQST	PSPRCSQUE (release 8.x)	PSCLASSDEFN (release 8.x)

In addition, this ID must have read access to any PeopleSoft records that you wish to report against. If your PeopleSoft records have row-level security, then this ID must also have read access to the Security Search Records associated with them.

Note: PS_FACT_CTRL_TBL, PS_FACT_MAP_TBL, and PS_HIER_CTRL_TBL are only required if installing OLAP-enabled data marts. The PSPRCSRQST and PSPRCSQUE tables are only required for Process Scheduler integration. If you are using this integration, these two files require write privileges.

Impact on Online Transaction Processing

You must give careful consideration to the interaction between your online transaction processing (OLTP) and the reports you run. Running too many reports at one time or running certain *runaway* reports can slow down the response time of critical data entry screens. Many companies set up separate databases or even separate physical servers dedicated to analytical reporting. The disadvantage of this approach is that the data you are reporting against is only as current as the last time you updated the reporting database (typically, on a nightly or weekly basis).

Consider using Resource Analyzer and Resource Governor to optimize your business intelligence architecture.

Location of the Data

The WebFOCUS for PeopleSoft Server may be co-located with the PeopleSoft back-end data source. Alternatively, it may be on any platform that has appropriate RDBMS connectivity to the PeopleSoft data. For efficiency, Information Builders recommends a co-location data architecture whenever this is feasible.

Usually, you choose to co-locate *unless*:

- The platform with the RDBMS has limited resources (for example, hard disk capacity, memory, or processor power). In this case it is necessary to limit additional resource drain.
- The design of your system prohibits installing software on the RDBMS Server.

The installation details change to support the data architecture you choose. For more information, see Chapter 3, *Configuring the PeopleSoft Application Adapter*.

CHAPTER 3

Configuring the PeopleSoft Application Adapter

Topics:

- Starting the WebFOCUS Reporting Server
- Configuring the Server
- Adding the RDBMS Adapter
- Enabling PeopleSoft Authentication Through the WebFOCUS Client

This section provides instructions for configuring the PeopleSoft Application Adapter. Prior to accessing any PeopleSoft data, ensure you complete the steps to configure the adapter. After the adapter is configured, connections to PeopleSoft data sources may be made.

If a WebFOCUS Reporting Server is not installed on the appropriate platform, install the WebFOCUS Reporting Server before configuring the adapter. For installation instructions, see the documentation for your WebFOCUS Reporting Server platform.

Before performing the configuration steps, review the list of software requirements for the server environment in Chapter 2, *WebFOCUS for PeopleSoft Installation*.

Configuring the PeopleSoft Application Adapter consists of the following steps:

- Starting the WebFOCUS Reporting Server.
- Configuring the Server.
- Adding the RDBMS adapter.
- Modifying the WebFOCUS Client (optional).

Starting the WebFOCUS Reporting Server

The WebFOCUS Reporting Server can be started in a number of ways. In a Windows/NT environment, it can be started as a service or with an interactive console. In either Windows or UNIX environments, it can be started with or without turning on operating system security integration.

The WebFOCUS for PeopleSoft solution usually should be started with external security turned off (also known as Unsecured or Security OFF mode). This setting indicates that the WebFOCUS Reporting Server will not integrate with operating system based security for authentication and access control. For PeopleSoft implementations, it is uncommon to have provided all PeopleSoft users with operating system logins since the PeopleSoft Application is already managing them.

The procedures in the following topics describe examples for starting the server with security off. For additional information on starting the server server, see the *WebFOCUS and ReportCaster Installation and Configuration for UNIX* manual or the *WebFOCUS and ReportCaster Installation and Configuration for Windows NT/2000* manual.

Procedure How to Start the WebFOCUS Reporting Server on Windows With Security Off

Note: The following information is specific to starting a Windows NT/2000 Server.

To start the Windows NT/2000 WebFOCUS Reporting Server running unsecured as a service, you must perform the following steps.

1. Create a new user ID that excludes the following policy privileges:
   - Increase quota.
   - Replace process level token.
   - Act as part of the operating system.
2. Set up the WebFOCUS Reporting Server so that it is started as a service whenever Windows NT/2000 is started. Ensure that it is started under the new user ID, *not* the Administrator ID.

Procedure How to Start the WebFOCUS Reporting Server on UNIX With Security Off

To start the WebFOCUS Reporting Server running unsecured in a UNIX environment, you must perform the following steps.

1. Edit the server startup script

   ```
   edastart
   ```

   The startup script is found in the server configuration directory, under the bin subdirectory

   You add the environment variable (EDAEXTSEC=OFF).

2. Insert the following command anywhere before the exec line:

   ```
   export EDAEXTSEC = OFF
   ```

3. Start the server.

Configuring the Server

Before starting your WebFOCUS Reporting Server, you must modify your server configuration. This includes making changes to the edastart script (a shell script under UNIX, a .BAT file under Windows NT/2000) and the edasprof.prf program in the etc directory under EDACONF.

For more information about these configuration files or environment variables, see the *WebFOCUS and ReportCaster Installation and Configuration for UNIX* manual or the *WebFOCUS and ReportCaster Installation and Configuration for Windows NT/2000* manual.

Note: The WebFOCUS Reporting Servers may be located either on the same platform as the RDBMS or on any other platform that can communicate with the RDBMS. Connectivity software provided with the RDBMS is used to communicate between PeopleSoft and its database (for example, Oracle supplies SQL*Net).

If your PeopleSoft RDBMS is Oracle and it resides on the same physical server as your WebFOCUS Reporting Server, it is recommended that you apply the Oracle home and SID information using edastart (for UNIX servers) or the Windows Registry (for Windows NT/2000). Alternatively, and for all other configurations, supply connection string information using the PeopleSoft Adapter Connections manager, as described in Chapter 4, *Managing Connections to PeopleSoft Data Sources*.

Modification Summary:

1. Modify environment settings to point to RDBMS connectivity software at server startup, if required
2. Configure PeopleSoft 8 authentication
3. Modify the application search path (EDAPATH or APP PATH).
4. Edit additional server environment options.

Modify Environment Settings for RDBMS Connectivity

For databases to be accessible to the WebFOCUS Reporting Server, their client software must be initialized and any required environment variables must be available.

An example is the ORACLE_HOME environment variable that must be available to the reporting server.

Modifying Your UNIX Configuration

Before starting your WebFOCUS Reporting Server, you must modify your server configuration as follows:

1. Add path information in the server start-up script, edastart, that resides in the /bin directory under EDACONF. For local Oracle databases, also known as a BEQueath connection, add RDBMS instance information.
2. Modify the server profile, edasprof.prf, that resides in the /etc directory under EDACONF.
3. Change UNIX file permissions for the shell scripts in the snapinst directory under EDACONF.

Syntax Modifying the WebFOCUS Reporting Server Start-up Script in UNIX

You must add RDBMS instance and path information in the server start-up script, edastart, that resides in the /bin directory under EDACONF. You can perform this in one of the following ways:

- If the WebFOCUS Reporting Server is on the same physical server (co-located) and the RDBMS is Oracle, you can supply the Database Identifier in edastart. This is the recommended approach, as it improved performance in some environments.

  or

  You can use the WebFOCUS for PeopleSoft Configurator to supply the information at run time.

- For all other configurations, you *must* supply the Database Identifier to the WebFOCUS for PeopleSoft Configurator.

If you are using a WebFOCUS Reporting Server with an Oracle data adapter, use a text editor to add the following syntax to the edastart file immediately following the “export EDACONF” line:

```
export ORACLE_SID=your_Oracle_SID
export ORACLE_HOME=your_Oracle_Home
export PATH=$EDACONF/snapinst:$PATH
```

where:

your_Oracle_SID

Is the Oracle Server ID for the PeopleSoft data source you are accessing. If you are running your WebFOCUS Reporting Server on the same system as your PeopleSoft database, this is the required syntax for a local configuration. A local Oracle configuration is also known as a BEQueath connection. For more information about the benefits of this type of connection, see the Oracle or PeopleSoft documentation. If the database resides on a different system, remove this line from the edastart script.

your_Oracle_Home

Is the Oracle home directory for the PeopleSoft data source you are accessing. Whether your database is local or not, this is a required configuration setting. If this is not set, the environmental setting is used, if available, when the server is started.

or

If you are using a WebFOCUS Reporting Server with the DB2 Universal Database CLI adapter, use a text editor to add the following syntax to the edastart file immediately following the “export EDACONF” line:

```
export DB2INSTANCE=your_UDB_Instance
export INSTHOME=your_UDB_Instance_Home_Path
export DB2CLIINIPATH=your_CLI_INI_Path
export PATH=$EDACONF/snapinst:$PATH
```

where:

your_UDB_Instance

Is the instance name of the UDB data.

your_UDB_Instance_Home_Path

Is the location of the home directory where WebFOCUS can locate UDB connectivity files.

your_CLI_INI_Path

Is the location of the db2cli.ini file that contains your client connectivity settings.

For both edastart sections above, the PATH variable gets pre-pended with the /snapinst directory within the reporting server configuration path. This addition is required for the interface to locate and execute program scripts.

It is recommended that you also explicitly set security off in edastart (export EDAEXTSEC=OFF).

This sample EDASTART for UNIX start-up script resides in the /bin directory under EDACONF. Note the two lines that are required to support a WebFOCUS Reporting Server co-located with the back-end Oracle RDBMS:

```
#!/bin/ksh
#
parms=$*
#
export EDAHOME=/u1/ibi/srv52/home
export EDACONF=/u1/ibi/srv52/wfs
#
export ORACLE_SID=hr75dmo
export ORACLE_HOME=/rdbms/ora804/app/oracle/product/8.0.4
export PATH=$EDACONF/snapinst:$PATH
#
# Only EDAHOME and EDACONF are required, all other variables
# get default values from the EDA configuration file.
# However, they can be overriden here if needed as shown in the
# following examples.
#
#export IBICPG=$EDACONF/user
#export EDASYN=<path>
#export EDASYNR=<path>
#export EDATEMP=<path>
export EDAEXTSEC=OFF
#
exec /u1/ibi/srv52/home/bin/tscom300.out $parms
```

Configure PeopleSoft 8 Authentication

WebFOCUS for PeopleSoft requires additional configuration steps when accessing PeopleSoft 8 applications. These additional steps set the integrated authentication against the PeopleSoft Component Interface architecture. If configuring to use a release prior to PeopleSoft 8, skip this section.

The two scripts to be used for configuring the PeopleSoft 8 authentication are delivered with WebFOCUS for PeopleSoft in the EDACONF/bin directory. They are:

- **psauth81p.[bat/sh]**

  This interactive script is used for testing configuration settings.

- **psauth81.[bat/sh]**

  This non-interactive script is used in production applications.

Before either script can be used, three conditions must be met.

1. Ensure that the Publish and Subscribe services are running on the PeopleSoft Application Server.

   By turning these on, the jolt listener becomes active.

   Usually, these services are used for application messaging integration requirements, but WebFOCUS for PeopleSoft uses the same technology for authentication. No particular Component Interface must be accessible for the user to authenticate.

2. The API files delivered with PeopleSoft must be copied into the WebFOCUS Reporting Server's configuration bin directory. These are located in the PeopleSoft file libraries server in the following locations:

   [PeopleSoft file server]\web\PSJOA\psjoa.jar

   [PeopleSoft file server]\web\jmac\pstools.properties

   Note: With PeopleSoft 8.4 and higher, the pstools.properties file is no longer required.

3. Verify that a Java Runtime Environment (JRE) Version 1.2 or higher is accessible on the WebFOCUS Reporting Server. The JRE is used by WebFOCUS to communicate with the PeopleSoft API.

   Type the following command at a command prompt in the Windows or UNIX environment:

   ```
   > java -version
   ```

   The JRE version displays:

   ```
   java version "1.3.1"
   Java(TM) 2 Runtime Environment, Standard Edition (build 1.3.1-b24)
   Java HotSpot(TM) Client VM (build 1.3.1-b24, mixed mode)
   ```

Note: When upgrading the PeopleSoft Application Server after having performed these configuration steps, you must update the PeopleSoft files (psjoa.jar and pstools.properties). These files are dependant on the minor release level.

Procedure How to Configure the Interactive Authentication Test Script

The psauth81p script is used to validate your configuration settings and that the required software is installed on your server. If you are using UNIX, the file is named psauth81p.sh. If you are using Windows NT/2000, the file is named psauth81p.bat.

1. Locate the psauth81p script that is delivered in the WebFOCUS Reporting Server's EDACONF/bin directory.
2. Using a text editor, modify the script on two lines.

   The two items set run-time environment variables required for authentication to take place. Placeholders exist to make identification easier.

   - EDACONF

     Enter the reporting server's configuration directory.

   - JAVAHOMEBIN

     The directory location of the Java Runtime binary directory.

3. For AIX only, uncomment the script lines that export the LIBPATH variable.
4. At the command prompt, execute the newly edited script.
5. Respond to the prompts with appropriate information.

   A successful configuration results in a 'Connected to Application Server…' message.

   You are prompted for the following data:

   - PeopleSoft Application Server Name
   - PeopleSoft Application Server Port
   - PeopleSoft User ID and Password

Example Viewing the Interactive Authentication Script (psauth81p)

The following example illustrates the edited batch file. In UNIX environments, the operating system commands differ slightly.

```
@echo off
rem  This bat file runs psauth81p from a WINNT command prompt.
rem  This is used for testing the PS login authorization java routine.
rem  It sends a message to the terminal saying whether the parms were correct.

rem  It is (or should be) the same as psauth81.bat, with the exceptions that:
rem    1) It calls psauth81p at the end.
rem    2) It requires that EDACONF be explicitly set (so that CLASSPATH can
rem       properly pick up %EDACONF%).

rem  To run psauth81p.bat, you must explicitly SET EDACONF.
set EDACONF=c:\ibi\srv52\wfs

rem  You must SET the proper Java Runtime bin directory.
rem  For PS 8.12->8.14, this must be at 1.2.2 or higher.
set JAVAHOMEBIN=c:\jdk1.3.1\jre\bin

rem  Add Java RT to the path.
rem  This way, we are not affected by the OS environment.
set PATH=%JAVAHOMEBIN%;%PATH%

rem  Add EDACONF\bin to CLASSPATH so that we can pick up psauth81.class; add
psjoa.jar to CLASSPATH to pick up PS Java Classes
set CLASSPATH=%EDACONF%\bin;%EDACONF%\bin\psjoa.jar

rem  Display the Java release
java -version

rem  This will prompt you for the App Server, Port#, ID, and Password
rem  It will display a msg indicating success/failure to connect
java psauth81p -s %1 -o %2 -p %3
```

Example Executing the Interactive Authentication Script (psauth81p)

To execute the interactive authentication script, start a Command window and navigate to the EDACONF\bin directory.

```
C:\IBI\srv52\wfs\bin>psauth81p
java version "1.3.1"

Java(TM) 2 Runtime Environment, Standard Edition (build 1.3.1-b24)

Java HotSpot(TM) Client VM (build 1.3.1-b24, mixed mode)


Application Server Connect Information...
Enter The Application Server Name: psfindev
Enter The Application Server Port Number [9000]: 15240
Enter PeopleSoft UserID [PTDMO]: VP1
Enter PeopleSoft UserID Password: [PTDMO]: VP1

Connected to Appserver...
```

Note: Depending on the PeopleTools release and on your operating system, several additional java messages may appear before the "Connected to Appserver" message. When the "Connected to Appserver" message appears, you can disregard other messages.

Procedure How to Configure the Non-Interactive Script for UNIX

1. Locate the psauth81 script in the following directory:

   ```
   EDACONF/bin/psauth81.sh
   ```

   where:

   EDACONF

   Is the server configuration directory.

2. Open the file with a text editor (for example, VI).

3. Modify the line that sets the path information for the Java Runtime Environment (JRE) to be used by the authentication routine.

   Your system may have multiple runtime environments.

   Choose the JRE that has the minimum release level, currently Java™ 2 Runtime 1.2.2.

   ```
   JAVAHOMEBIN=my-Java-RTE/bin
   ```

   where:

   my-Java-RTE

   Is the UNIX directory path, such as /usr/prog/JavaSoft/JRE/1.2.2_01.

4. For AIX only, uncomment the script lines that export the LIBPATH variable.

Procedure How to Configure the Non-Interactive Script for Windows NT/2000

1. Locate the psauth81 script in the following directory:

   ```
   EDACONF/bin/psauth81.bat
   ```

   where:

   EDACONF

   Is the server configuration directory.

2. Open the file with a text editor (for example, Notepad).

3. Modify the line that sets the path information for the Java Runtime Environment (JRE) to be used by the authentication routine.

   Your system may have multiple runtime environments.

   Choose the JRE that meets the minimum release level, currently Java™ 2 Runtime 1.2.2.

   ```
   set JAVAHOMEBIN=my-Java-RTE\bin
   ```

   where:

   My-Java-RTE

   Is the Windows directory path such as C:\Program Files\JavaSoft\JRE\1.2.2_01.

Modify Reporting Server Profile

The WebFOCUS Reporting Server profile, edasprof.prf, resides in the /etc directory under EDACONF. You can edit this file using any text editor.

Example Modifying the WebFOCUS Reporting Server Profile in UNIX

The following is a sample server profile. The characters -* in the first two print positions denote a comment. The corresponding comment lines in your file might be slightly different.

This is a sample UNIX edasprof.prf that resides in the /etc directory under EDACONF:

```
-**********************************************************
-* Profile generated on 1 January 2003 at 13:15:06
-**********************************************************
-*
APP ENABLE
-*
-*
APP MAP snapinst /u1/ibi/srv52/wfs/snapinst
APP MAP snapcat /u1/ibi/srv52/wfs/snapcat
APP PATH snapinst snapcat
-*
-*
SET FIELDNAME=NOTRUNC
SET SYNONYM=BASIC
```

Note: You must remove any database statements that were added to edasprof.prf during installation of the WebFOCUS Reporting Server.

For example:

```
ENGINE SQLORA SET CONNECTION_ATTRIBUTES H84DEV/sysadm,FE23E82KSF
```

For more information about configuration files or environment variables, see the *WebFOCUS and ReportCaster Installation and Configuration for UNIX* manual.

Modifying Your Windows NT/2000 Configuration

Before starting your WebFOCUS Reporting Server, you must modify your server configuration as follows:

- Set the database home as a Windows environment variable, for databases other than SQL server.

  This usually occurs automatically during the installation of your database client access software, such as Oracle Net8 and DB2 Connect.

  Note: In Windows NT/2000, the WebFOCUS Reporting Server can also pick up the database home from the registry when using Oracle as the RDBMS.

- Modify the server profile, edasprof.prf, that resides in the \etc directory under EDACONF.

Example Modifying the WebFOCUS Reporting Server Profile in Windows NT/2000

The WebFOCUS Reporting Server profile, edasprof.prf, resides in the etc directory under EDACONF. You can edit this file using any text editor.

The following is a sample server profile. The characters -* in the first two print positions denote a comment. The corresponding comment lines in your file might be slightly different.

This is a sample Windows NT/2000 edasprof.prf that resides in the \etc directory under EDACONF:

```
-*********************************************************
-* Profile generated on 1 January 2003 at 13:15:06
-*********************************************************
-*
APP ENABLE

-*

-*

APP MAP snapinst c:\ibi\srv52\wfs\snapinst

APP MAP snapcat c:\ibi\srv52\wfs\snapcat

APP PATH snapinst snapcat

-*
-*
SET FIELDNAME=NOTRUNC
SET SYNONYM=BASIC
```

Note: You must remove any database connect strings that point to the PeopleSoft database, as these conflict with application layer security integration. For example:

```
ENGINE SQLORA SET CONNECTION_ATTRIBUTES H84DEV/sysadm,FE23E82KSF
```

For more information about configuration files or environment variables, see the *WebFOCUS and ReportCaster Installation and Configuration for Windows NT/2000* manual.

Adding the RDBMS Adapter

The PeopleSoft Application Adapter is an enhanced version of the underlying database adapter. The database adapter must be added into the server configuration. For a thorough explanation of this process see your WebFOCUS Reporting Server manual.

The example in the next topic describes how to add an Oracle data adapter.

Example Adding an Oracle 8.1 Data Adapter

The WebFOCUS Web Console provides graphical point and click tools to add and test the data adapter.

1. Open the WebFOCUS Web Console.
   - Click the Windows Start menu, select *Programs*, then select *WebFOCUS 52* and then *Web Console* from the cascading menu.

   or

   - Open a Web browser to the TCP Listener port on the WebFOCUS Reporting Server (the default is http://servername:8121/).
2. Click the Data Adapters link. A new browser window opens.
3. From the Adapters tree, select *Add*, then *Oracle*, and select *version 8.1.x*.
4. Without supplying Oracle configuration parameters, click the *Configure* button. The Oracle 8.1 adapter is added to your WebFOCUS Reporting Server configuration.

Reference Why Not Add Configuration Parameters?

In the example in the previous topic, configuration parameters were not provided for the Oracle data adapter. This is because those connection parameters are stored in the Server Profile which is accessible to any user or application connecting to the server at all times.

For most applications, the data access is then secured through procedure logic and operating system security. With PeopleSoft, this is not possible, as there may be very large numbers of users who do not have operating system login IDs. Instead, these configuration parameters are supplied later when configuring connections to PeopleSoft data sources.

As a recommended practice, when adding the new data adapter as in the previous topic, you may initially supply the configuration parameters, test database connectivity, and then delete the connection. This process may save significant time later on, when attempting to create a connection to the PeopleSoft database, but it not required.

Enabling PeopleSoft Authentication Through the WebFOCUS Client

For both Windows NT/2000 and UNIX environments, PeopleSoft authentication must be enabled within the WebFOCUS Client in order to provide data access. To do this, a configuration script is used to capture information from the user's session cookie, which is passed to the authentication mechanism within the WebFOCUS for PeopleSoft server.

Procedure How to Enable WebFOCUS Login Authentication Against PeopleSoft

The following configuration steps are for the WebFOCUS Client, which may not be the same system as the WebFOCUS Reporting Server itself.

1. Locate the site.wfs file in the etc subdirectory of the WebFOCUS Client configuration.
2. Using a text editor, edit the file:

```
<VER 1>
# place any variables here from ibidir.wfs that you wish to override.
_HTML_COMMENT_VAR=CGI gened on &_cgi_gen_var\n

_ibi_fex_start=&_ibi_fex_start\nEX PSLOGIN USERID=&IBIC_user,
_ibi_fex_start=&_ibi_fex_start\nPASSWD=&IBIC_pass, SYSWEB=Y
```

CHAPTER 4

Managing Connections to PeopleSoft Data Sources

Topics:

- Overview of PeopleSoft Data Source Connections
- Adding the First PeopleSoft Connection
- Adding Additional PeopleSoft Connections
- Removing a PeopleSoft Connection
- Editing a PeopleSoft Connection

You create connections to PeopleSoft data sources in the WebFOCUS Web Console. After the PeopleSoft Application Adapter has been initially configured, you can add, remove, or edit connections to one or more PeopleSoft data sources.

A PeopleSoft configuration worksheet is supplied in Appendix B to assist you in gathering the required information to complete the steps described in this section.

Overview of PeopleSoft Data Source Connections

The WebFOCUS Web Console is used as the central management tool for adding, removing, and editing existing connections to PeopleSoft data sources. A connection is defined as the named set of configuration parameters required to connect, or gain data access to, a single PeopleSoft database. The connection parameters define where to locate the database, the version of the PeopleSoft system, how the metadata is managed, and which PeopleSoft users have reporting access.

Multiple connections to PeopleSoft data sources are possible from within one WebFOCUS Reporting Server configuration. However, depending on your reporting requirements, it may be optimal to create separate configurations for each data source.

Creating separate configurations is a good option under the following circumstances:

- The site has two or more PeopleSoft application suites and must perform significant combined reporting. A typical example is a site that has both PeopleSoft HRMS and PeopleSoft Financials applications where you must display data from both systems in a single report.
- Two or more PeopleSoft databases that must be accessed physically reside on the same system. If the databases must be accessed for display in a single report output and if the WebFOCUS Reporting Server is located on the same computer system, this architecture can provide optimal performance.
- Two or more PeopleSoft databases reside in different locations with requirements for moderate to significant consolidated reporting. This architecture provides optimal effectiveness in report development, system maintenance, and performance.

The management of two or more instances is not ideal in most situations.

Do not use this methodology where:

- Only a single PeopleSoft production database must be supported. Each development and test instance should have a separate configuration.
- Multiple PeopleSoft databases exist with only a limited requirement for combining data in reports.
- Multiple PeopleSoft databases must be accessed for combined reporting and drill-across reports, and they reside in different locations. In this situation, the optimal approach would be to configure multiple WebFOCUS Reporting Servers, one at the location of each PeopleSoft database. WebFOCUS then provides multiple methods of integrating the report output.
- Multiple PeopleSoft databases exist, but they are from the same application suite. For example, if a company has two PeopleSoft HRMS applications, it would not be ideal to use a single WebFOCUS Reporting Server configuration to manage their metadata. The reason is that this can have an adverse effect on report application portability.

Each PeopleSoft Record must be assigned a unique synonym. In the HRMS example, the systems would have records of the same name. As the synonyms must be unique, reports that reference them can only query one name or the other. Report logic can decide which synonym to report against, but this method does not provide optimum portability of the reports.

The remaining instructions in this chapter discuss using a single configuration directory structure for one or more data source connections.

Adding the First PeopleSoft Connection

Although multiple PeopleSoft connections can be created, the first connection requires slightly different management steps. The reason for this is that before any connections to PeopleSoft data sources can occur, a base layer of application metadata is created and configured. This occurs transparently for the administrator, but is a slightly different connection management process than when adding additional connections.

To create the first connection:

- Select and enter a WebFOCUS DBA User.

  The WebFOCUS DBA User is the 8-character alphanumeric value that is used as a metadata access key. Subsequent access to the Web Console automatically sets this value. Users outside of the Web Console do not have metadata access without first logging in to PeopleSoft through this integration.

- Add a PeopleSoft Connection.

  A parameter page provides the required inputs to initially setup a PeopleSoft Connection. Most of the parameters can be changed in the future, but the connection cannot be created without initially supplying correct database connectivity information . This is because reading PeopleSoft metadata creates the base connection metadata.

Procedure How to Add the First PeopleSoft Connection

1. Open the WebFOCUS Web Console.

You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Add the PeopleSoft Adapter.

- **a.** Select *Data Adapters* to open the Configuring Data Adapters page.
- **b.** Select *PeopleSoft* under the Add folder.
- **c.** Click *Configure* to add the adapter.

3. Open *Adapter Properties* to add the first connection.

- **a.** Select *PeopleSoft* under the Configured Adapters folder.
- **b.** Select *Properties* from the pop-up menu to open the initial configuration page.

4. Enter an 8-character WebFOCUS DBA.

5. When prompted, enter the DBA again.

6. Click *Submit* to view the connection information page.
7. Supply the connection information.
8. Click *Submit*.

   Processing may take several minutes to complete. When completed you may begin to manage your new PeopleSoft Connection by adding synonyms and administering security access.

The following table describes the values you must enter for each field in the Server Configuration page.

Field Name	Description
Description	Enter a description that identifies the current server configuration. For example: HR – Production Application Financials 8.15 Unit Test System
PeopleTools Release	This field represents the major PeopleSoft PeopleTools release number to access. For example, PeopleSoft 7.56 is 7.x, PeopleSoft 8.16 is 8.1, and PeopleSoft 8.8 is PeopleTools 8.4.
PeopleSoft Security	Select Enabled or Disabled to enforce or not enforce PeopleSoft data access security. The default is Enabled.
Authentication	There are two authentication options: Trusted and Password. Use *Trusted* authentication in trusted applications where the user has been previously authenticated and resides in a secure environment. This kind of authentication requires that a valid PeopleSoft User ID be passed to WebFOCUS to enable data access. *Password* authentication is the default and is recommended for most environments. Users will not be allowed to view data unless a valid PeopleSoft User ID and password are entered.
Specify Access By	This field provides two ways for the WebFOCUS for PeopleSoft Administrator to enable PeopleSoft users for WebFOCUS reporting. To manage users in Operator Class (Permission List) grouping, select the CLASS mode (the default). Fine-grained control at the user-by-user level can be set by selecting OPERATOR to indicate Oprid (User ID) based administration.

Field Name	**Description**
Database Type	Select the Database Type: Oracle, Microsoft SQL Server, or DB2 Universal Database.
Database Identifier	If the WebFOCUS Reporting Server is co-located with the data residing in Oracle, do not enter anything in the Database Identifier field. For more information, see Chapter 2, *WebFOCUS for PeopleSoft Installation*. For all other configurations, enter the Database Identifier or System Data Source Name in this field (for example, hr75). For more information, see Chapter 3, *Configuring the PeopleSoft Application Adapter*.
PeopleSoft Database Owner	Enter the database owner identifier or the schema owner depending on your database. Typical defaults are SYSADM on Oracle and dbo on Microsoft SQL Server. The owner ID is used to fully qualify SQL requests passed to the database. This allows multiple database instances or schemas to exist in a single database. **Note:** For multiple connections, the database owners must be consistent across PeopleSoft data sources.
PeopleSoft Access ID	This RDBMS login ID is for database connectivity. Typically, it is the same login ID PeopleSoft uses to access the database. There are minimum data access requirements that the ID must have. For more information, see Chapter 2, *WebFOCUS for PeopleSoft Installation*.
PeopleSoft Access Password	Enter a password associated with the PeopleSoft Access ID.
Verify Password	Retype the password you just entered.
Enforce Mixed Case IDs	Select *Yes* to enforce PeopleSoft 8's use of mixed case user IDs or select *No* to revert to PeopleSoft 7.x case insensitivity.
PeopleSoft Application Server	The PeopleSoft application server name or IP address to be used for authentication.
JOLT Listener #	The active Jolt listener port number to be used for authentication. The default in most environments is 9000.

Field Name	Description
Default Synonym	The type of synonym to default to when creating new metadata. Record Name Record Name with Prefix Record Name with Suffix Table Name Table Name with Prefix Table Name with Suffix
Prefix, Suffix Value	Enter a default prefix or suffix value if the default synonym setting requires it. This value is ignored if you use Record Name or Table Name as the default synonym.
Allow Default Override	Choose *Yes* to allow the administrator to modify the default-generated synonym. Choose *No* if the synonym's names are not to be modified. The default is *Yes*.

Adding Additional PeopleSoft Connections

After you add your first connection, adding additional PeopleSoft connections is slightly different. The difference is that prior to managing metadata and connection information, are not prompted for the WebFOCUS DBA.

Note: All additional PeopleSoft data sources must utilize the same database owner in order for base metadata to function properly.

Procedure How to Add a New PeopleSoft Database Instance

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

3. Select *Add Connection* from the index. An Add New Connection page opens.

4. Enter valid connection information for the new data source.

5. Click *Next*. Processing may take several minutes. When processing finishes, you can manage your synonyms and security for this connection.

Removing a PeopleSoft Connection

The integration to PeopleSoft depends on valid connection information. If a previously created connection is no longer required, it is a good practice to remove that connection.

Procedure How to Remove a PeopleSoft Connection

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

3. Select an available connection from the drop-down list.

4. Click *Remove*.

   You are prompted to confirm. After confirmation, the system removes the selected PeopleSoft Connection and all of its associated metadata.

Editing a PeopleSoft Connection

To edit an existing PeopleSoft Connection, you can use the Connection Editor utility. Use this utility to:

- Change the Administrator ID.
- Turn on or off PeopleSoft Data Access Security Enforcement.
- Toggle between Trusted and Password Web-based access.
- Manage the User Access Specification Type.
- Manage all database identification Information
- Define default synonym behavior.

Procedure How to Edit a PeopleSoft Connection

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

3. Select a PeopleSoft Connection from the drop-down box.

4. Click *Edit Connection*. The connection parameters page opens with all of the previously entered settings.

5. Make the modifications you wish.

6. Click *Submit*. Processing may take several minutes.

Reference Editing Connections

- When changing the Specify Access By setting, security must be resynchronized before changes will take place. It is recommended that all currently configured users be removed and added again after security settings have been modified.
- When changing authentication settings, ensure to consider the logical process order. For example, to gain access to the Configuration Update utility, you must first log in. The authentication information can be modified through the PeopleSoft Adapter and stored. After that is accomplished, the actual PeopleSoft API settings can be modified.
- As when modifying the authentication information, care must be taken to manage changes to database connectivity correctly. Always modify your settings in the PeopleSoft Connection first. Then, change them at the database. Where possible, keep both access options in place during a configuration conversion process until tests have proven a successful switch.

CHAPTER 5

Using the PeopleSoft Metadata and Security Administrator

Topics:

The PeopleSoft Metadata and Security Administrator is a graphical interface used to perform administrative functions through the WebFOCUS Web Console.

The Administrator enables you to:

- Manage PeopleSoft Record metadata.
- Manage security access.
- View server settings.
- This section describes how to use the PeopleSoft Metadata and Security Administrator.

Accessing the PeopleSoft Metadata and Security Administrator

To access the environment for administration, you must have access to the WebFOCUS Web Console and knowledge of the WebFOCUS DBA.

Procedure How to Access the PeopleSoft Metadata and Security Administrator

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

   Note: If the Web Console is set to Protected mode, you must supply a Web Console Administrator ID and Password to gain access.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

3. You are now ready to administer the PeopleSoft metadata and security access in a selected connection.

Security Access Administration

Before a PeopleSoft User can run reports against the WebFOCUS for PeopleSoft integration, security access rights must be granted. The PeopleSoft Connection does not automatically enable reporting for every user. Instead an administrator must decide which users have reporting access.

An administrator can manage security access either according to individual users or according to a permission list. The decision for how to manage access is made as a connection option, and the two methods are mutually exclusive.

Regardless of the method for granting access rights to users, the process for managing security access is roughly identical. The following procedures describe:

- Adding security access
- Removing security access
- Resynchronizing security access

Procedure How to Add Security Access

For users to run reports against PeopleSoft Records, you must specifically add those users or groups of users to the WebFOCUS internal repository. To add users:

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

   A list of currently available PeopleSoft data source connections appears at the top of the index.

   c. Select a Connection to manage.

3. Under the Security group, click *Add Security Access*. A selection page opens where you can add additional security access.

4. Optionally, select a filter key value or description.

   - If your connection is set up to manage security by User ID, then provide User ID filtering criteria.
   - If your connection is set up to manage security by Permission List, then provide relevant Permission List criteria.

5. Click *Submit* to retrieve a filtered selection list.

   Note: If you do not use a filter, or your filtered results are very large, the results may be truncated. Use a different filter to reduce the returned results.

6. Select the checkboxes to the left of the appropriate User IDs or Permission Lists you would like to add.

7. Click *Submit* to process.

Procedure How to Remove Users

To remove users or groups of users from the WebFOCUS internal repository:

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

   A list of currently available PeopleSoft data source connections appears at the top of the index.

   c. Select a Connection to manage.

3. Under the Security group, click the *Remove Security Access* link. A selection page opens where you can remove additional security access. On the page a list of existing security access rights appears.

4. Select the checkboxes for those User IDs or Permission Lists that should be removed.

5. Click *Submit* to process.

   The PeopleSoft Connection removes all references to these Users or Permission Lists. After they are removed, the Users or Classes cannot access PeopleSoft data through WebFOCUS for PeopleSoft.

Resynchronizing Security

The third option in the Security area of the Main Menu provides for re-synchronizing WebFOCUS for PeopleSoft security metadata with changes in the PeopleSoft environment. The following changes in PeopleSoft require the resynchronization option so the changes can take effect:

- A Permission List has had Query Access Group privileges modified.
- A Record has been added or removed from a Query Tree.
- A User has been added to or removed from a Permission List with security access enabled. This can occur directly, as in PeopleSoft 7.x or indirectly through Role assignment changes.
- Row Level Security Class or Permission Lists are changed.

You need not run the the security resynchronization routine if row-level security access has changed, based on the security table being updated. This type of security change will be enforced automatically and immediately. If the Security Search Record within a Record definition has been changed, the Record metadata resynchronization routine must be run.

Note: A batch mechanism is also available that may be scheduled through a command line execution. For more information, see Appendix A, *Advanced Topics*.

Procedure How to Resynchronize Security Rules

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

   A list of currently available PeopleSoft data source connections appears at the top of the index.

   c. Select a Connection to manage.

3. Under the Security group, click *Re-synch Security*. Security rules are resynchronized based upon security access settings. Processing may take several minutes.

PeopleSoft Metadata Administration

The PeopleSoft Metadata and Security Administrator enables management of PeopleSoft metadata with following functions:

- Create synonyms for PeopleSoft Records
- Remove synonyms for PeopleSoft Records
- Resynchronize synonyms

These three processes manage the accessibility of PeopleSoft Records by maintaining the WebFOCUS metadata catalog on the reporting server. Before reports can be created or run, this metadata catalog must contain information about the PeopleSoft Record Definitions.

Creating PeopleSoft Synonyms

The process of creating synonyms for PeopleSoft is one of the core functions of the PeopleSoft Administrator. WebFOCUS for PeopleSoft enables the administrator to choose which PeopleSoft Records are defined in the metadata catalog.

There are two methods provided for creating PeopleSoft synonyms.

- Create Synonyms by Record Definition Search Template

  A Search Template option is provided to speed the process of searching for specific PeopleSoft Records. This is a useful method of locating Record Definitions when either the Query Tree location is not known or specific definitions that meet a filter can be more readily accessed.

- Create Synonyms Query Tree Search

  The Query Tree is a hierarchical logical grouping of the PeopleSoft Record Definitions. This method provides Administrators familiar with this organizational structure a way to quickly locate related Record Definitions. Many sites create a combination Query Tree and Access Group definition specifically to group their records for use in WebFOCUS reporting.

Procedure How to Create Synonyms by Record Definition Search

To install records by Record Definition:

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

   A list of currently available PeopleSoft data source connections appears at the top of the index.

   c. Select a Connection to manage.

3. Under the Metadata group, click *Create Synonym*. A selection page opens for creating metadata.

4. On the Create Synonym page, select a filter on the Record Definition name or description.

5. Click *Submit*. A filtered list opens.

   Note: If you do not use a filter, or your filtered results are very large, the results may be truncated. Use a different filter to reduce the returned results.

6. Select the checkboxes to the left of the appropriate Record Definitions you would like to add.

7. Modify the Default Synonyms, if desired (and available).

8. Click *Submit* to process. Processing may take a few minutes per selected Record Definition.

Procedure How to Create Synonyms by Query Tree Search

To install records by Query Tree:

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

   A list of currently available PeopleSoft data source connections appears at the top of the index.

   c. Select a Connection to manage.

3. Under the Metadata group, click *Create Synonym*. A selection page opens for creating metadata.

4. On the Create Synonym page, click *Query Tree Search*. A list of available Query Tree Definitions appears.

5. Select a Query Tree to drill-down on. A list of Access Groups available within the selected Query Tree appears.

6. Select an Access Group to drill-down on. A list of Record Definitions contained within the selected Query Tree/Access Group appears.

7. Select the checkboxes to the left of the appropriate Record Definitions you would like to add.

8. Modify the Default Synonyms, if desired (and available).

9. Click *Submit* to process. Processing may take a few minutes per selected Record Definition.

Removing PeopleSoft Synonyms

Previously created PeopleSoft synonyms can be removed from the metadata catalog with the Remove Synonyms option.

Procedure How to Remove PeopleSoft Records

To remove PeopleSoft records from the WebFOCUS internal repository:

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

   A list of currently available PeopleSoft data source connections appears at the top of the index.

   c. Select a Connection to manage.

3. Under the Metadata group, click *Remove Synonym* . A selection page opens for removing metadata with a list of all existing PeopleSoft synonyms found in the catalog.

4. Select the checkboxes for the synonyms that are no longer required.

5. Click *Submit* to process.

Resynchronizing PeopleSoft Synonyms

The third option in the Metadata group is to resynchronize metadata. This option:

- Queries the internal repository to determine which records were installed for the selected PeopleSoft Connection.
- Compares the version number in those records with the version number in the PeopleSoft database. If none of the records have changed, a message displays.

  If there are any records that have changed, they appears in the Select Record(s) to Synchronize page.

Procedure How to Resynchronize Metadata

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

   A list of currently available PeopleSoft data source connections appears at the top of the index.

   c. Select a Connection to manage.

3. Under the Metadata group, click *Re-synch Synonym* . A selection page opens for displaying all synonyms in the metadata catalog determined out of synch with PeopleSoft metadata version information.

4. Select the checkboxes for those synonyms to be re-synchronized with PeopleSoft metadata definitions.

5. Click *Submit* to process.

Administration Reports

The Administrator provides reports to make administration easier. These reports are accessible from the index.

The following reports are available:

- Connections report
- Metadata report
- User security access report

Procedure How to Run Administration Reports

1. Open the WebFOCUS Web Console.

   You can access the Web Console through a Web browser by opening the URL to the server's HTTP listener port. The default location on a local server is http://localhost:8121/.

2. Open the PeopleSoft Adapter index to manage the connections.

   a. Select *PeopleSoft* under the Configured Adapters folder.

   b. Select *Properties* from the pop-up menu to open the index page.

   A list of currently available PeopleSoft data source connections appears at the top of the index.

   c. Select a Connection to manage.

3. Select the PeopleSoft Connection (if necessary) and the desired report.

4. Click *Run* to produce the report.

CHAPTER 6

Using PeopleSoft for Managed Reporting User Administration

Topics:

- Feature Overview
- Functional Alternatives
- Managed Reporting Security Integration Architecture
- PeopleSoft Records and Data Requirements
- PeopleSoft Panels and Pages
- Configuring for Use
- Troubleshooting

Many implementations of WebFOCUS for PeopleSoft include WebFOCUS Managed Reporting. Managed Reporting provides an easy to manage application development and deployment environment. In particular, Managed Reporting manages reporting components (such as domains, folders, Standard Reports, and Reporting Objects) and Managed Reporting user information.

For those sites that wish to administer Managed Reporting user information in their PeopleSoft application, instead of within Managed Reporting, the following topics describe configuration and integration requirements.

Feature Overview

WebFOCUS Managed Reporting includes capabilities that manage and develop reporting components and user information. WebFOCUS for PeopleSoft is delivered with the capability to move the management of user information into a PeopleSoft database.

The following functionality can be managed within PeopleSoft by utilizing Managed Reporting integration extension:

- Adding/removing user access to Managed Reporting.

  PeopleSoft users may have access privileges granted or revoked. The users that are granted access to WebFOCUS Managed Reporting are a subset of PeopleSoft Operators (users). By flagging PeopleSoft users as Managed Reporting users, they can be granted access. If the users do not already exist within PeopleSoft, they must be added in order to gain Managed Reporting access with authentication and data security enforcement.

- Assigning Managed Reporting domain access to a user.

  WebFOCUS Managed Reporting is organized at a high level by reporting domains. Each domain contains various reporting components, complete reports, and reporting objects organized into folders. Users granted access gain access to an entire domain.

  The relationships between Managed Reporting domains and users that have access to them are maintained within PeopleSoft.

- Setting user properties.

  User properties for Managed Reporting are set within the PeopleSoft environment. Two sets of user properties are managed: User Type and User Type Privilege Options. The User Type defines the overall functional view of the user (for example, Java User or HTML User). The User Type Privileges available depend on the Managed Reporting features that are deployed. These features include enabling the capabilities to create shared reports, to schedule reports, and to synchronize via a supported PDA device.

The Managed Reporting integration extension does not provide the capability of managing the domain, folders, report components, reports, or reporting objects. This functionality must be managed within WebFOCUS Managed Reporting.

Functional Alternatives

The integration described in this section is only one method of maintaining Managed Reporting user information. Before selecting a method of managing the reporting users for Managed Reporting, the three main methods of user management should be considered. Each option has advantages and disadvantages.

User Administration Within the Managed Reporting Environment

WebFOCUS Managed Reporting is delivered with complete User Administration facilities. These facilities provide user management functionality and require no additional programming or configuration that is specific to user management.

Only WebFOCUS Managed Reporting Administrators have access to the User Administration facilities. It is the responsibility of the Managed Reporting Administrator to add/remove users, set user types, specify access privileges, and manage domain access relationships with each user. To simplify the job of granting domain access to users, you can arrange groups. By placing users into functional groups, the groups can be granted or denied access to reporting domains. The advantages of managing users within Managed Reporting are:

- Managed Reporting is a pre-packaged complete user management solution.
- Creating user groups provides an efficient method of assigning user privileges.
- Managed Reporting represents a single location for user and domain management.
- Management is simple when accessing multiple data sources.

For more information, see the *WebFOCUS Managed Reporting Administrator's Guide*.

User Administration Within PeopleSoft

WebFOCUS for PeopleSoft delivers an option to manage users within PeopleSoft instead of through Managed Reporting User Administration facilities. This functionality is best suited for managing a pure PeopleSoft reporting environment since all reporting users must be managed within a single PeopleSoft instance. The advantages of managing users within PeopleSoft are:

- Integration for complete configuration is available.
- You can leverage user information already managed in PeopleSoft.
- You can establish user types and privileges in PeopleSoft.
- Management is simple for large numbers of PeopleSoft users.

WebFOCUS for PeopleSoft Getting Started provides all the necessary integration and configuration information necessary to use this functionality.

Custom User Administration

WebFOCUS provides several security exits for custom programming to take advantage of features or processes specific to a customer environment. The security exits provide varying levels of functionality. These must be carefully studied prior to implementation. Managed Reporting customers may wish to take advantage of the MRCEXT specifications that enable various levels of user management in external data sources. The advantages of custom user management are:

- Maximum control over functionality is provided.
- Management is specific to a customer environment.

For more information, see the *WebFOCUS Security and Administration* manual. You can also contact your local Information Builders representative for more information.

Managed Reporting Security Integration Architecture

The WebFOCUS Managed Reporting user security integration feature is pre-built and delivered as an extension to the standard user security mechanism. To use the feature, additional steps must be taken within the WebFOCUS Managed Reporting configuration to enable the use of a PeopleSoft data source. After the extension is enabled, it acts exclusively as the source for Managed Reporting user administration.

In addition to enabling the function within Managed Reporting, the appropriate data structures must be created and populated within PeopleSoft. Finally, a server-side FOCUS procedure must be executed to create the necessary metadata (Master File Descriptions) that will enable the newly configured WebFOCUS Managed Reporting to query the PeopleSoft data sources.

The process flow consists of capturing the PeopleSoft user id and password combination from the signon Web page. The integration logic then passes those values to PeopleSoft for authentication. After the values are authenticated, the security credentials are read from the PeopleSoft repository and returned to the User Administration Services. The information enables WebFOCUS Managed Reporting to render the proper application environment, with suitable access restrictions, for the specified user.

When using the shared reports functionality in Managed Reporting, an additional configuration file is dynamically read. This provides a user with the list of currently available reports shared by users in a particular domain.

PeopleSoft Records and Data Requirements

To take advantage of the integration with PeopleSoft, three new records must be created and populated with data. Additionally, a new translate field must be added to the XLATTABLE. It is the responsibility of each customer to create and build the new records. This topic describes the new record requirements and the additional data to be stored within XLATTABLE. In addition, recommendations are made for maintaining the data that is stored within the new records.

The new PeopleSoft records must be defined with the exact characteristics as indicated in order for WebFOCUS to correctly access the data. The three new records to defined are:

- IB_MRE_CLASS
- IB_MRE_DOMA_TBL
- IB_MRE_CLASSDOM

IB_MRE_CLASS: Managed Reporting Class Properties

The IB_MRE_CLASS is the PeopleSoft Record that contains all of the information regarding the User Type properties. User Type properties are associated with PeopleSoft Operator Classes.

Note: PeopleSoft 8 refers to the Operator Classes as Permission Lists.

Field Name	Type	Len	Format	Key	Dir	Edit
OPRCLASS	Char	8	Upper	Key	Asc	
IB_MRE_USER_TYPE	Char	2	Upper			Xlat
IB_MRE_USER_SHARED	Char	1	Upper			Y/N
IB_MRE_USER_ROBOT	Char	1	Upper			Y/N
IB_MRE_USER_FML	Char	1	Upper			Y/N
IB_MRE_USER_SYNC	Char	1	Upper			Y/N

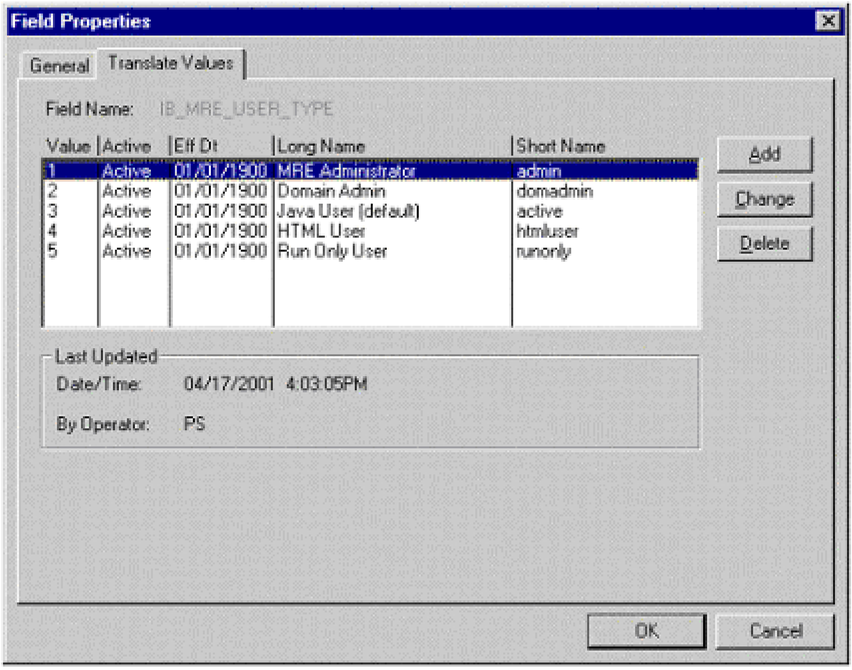
OPRCLASS

PeopleSoft Operator Class.

IB_MRE_USER_TYPE

Managed Reporting User Type.

The User Type can be one of five and must be in the exact order that Managed Reporting expects. Managed Reporting reads the field value, however, the short name as shown in the following graphic should be used to effectively troubleshoot configuration problems. For more information on each User Type, see the *WebFOCUS Managed Reporting Administrator's Manual*.



IB_MRE_USER_SHARED

The Shared field indicates whether or not users can share their reports. All users have access to shared reports from other users, but only those users marked with reporting sharing privileges are given the authority to share their reports.

IB_MRE_USER_ROBOT

The Robot field indicates whether or not a user can schedule and distribute reports, including alerts. Scheduling functionality requires WebFOCUS ReportCaster to be installed.

IB_MRE_USER_FML

The FML (Financial Modeling Language) field indicates whether a user has the ability to access the Managed Reporting Environment with WebFOCUS (Windows version) and use the Report Painter tool for financial report development with FML. In the Managed Reporting User Administration tool, this option is currently labeled ‘FML (Desktop Only).’ Previous releases used the label ‘FML (Mobile only).’

IB_MRE_USER_SYNC

This option indicates that the user has the capability of setting up PDA synchronization.

IB_MRE_DOMA_TBL: Managed Reporting Domains

The IB_MRE_DOMA_TBL is the PeopleSoft Record that contains the list of available Managed Reporting domains and their descriptions.

Field Name	Type	Len	Format	Key	Dir	Edit
IB_MRE_DOMAIN	Char	8	Mixed	Key	Asc	
EFFDT	Date	10		Key	Desc	
EFF_STATUS	Char	1	Upper			Xlat
DESCR	Char	30	Mixed			

IB_MRE_DOMAIN

The Managed Reporting Domain field is the unique identifier of an individual Managed Reporting domain. These domains are stored as eight character fields within WebFOCUS Managed Reporting and must match those domains exactly. One domain is delivered with Managed Reporting and is named ‘untitled’.

EFFDT

The effective date of the domain description.

EFF_STATUS

The effective status of the domain description.

DESCR

DESCR is the thirty-character description associated with the domain. The descriptions provided here need not match those found in Managed Reporting. However, the description can prove useful for the PeopleSoft Panels used to manage the information.

IB_MRE_CLASSDOM: Class to Domain Relationship Table

The IB_MRE_CLASS_DOM is the PeopleSoft Record that contains the relationships between the PeopleSoft Operator Classes (called Permission Lists in PeopleSoft 8) and the Managed Reporting domains. By design, the record allows multiple Operator Classes to access a single domain and a single Operator Class to access multiple domains.

Field Name	Type	Len	Format	Key	Dir	Edit	Prompt Table
OPRCLASS	Char	8	Upper	Key	Asc		
IB_MRE_DOMAIN	Char	8	Mixed	Key	Asc	Prompt	IB_MRE_DOMA_TBL

OPRCLASS

OPRCLASS is the PeopleSoft Operator Class (called Permission List in PeopleSoft 8).

IB_MRE_DOMAIN

The Domain field contains all of the domains that are accessible to a given Operator Class. The IB_MRE_DOMA_TBL should be used as a prompt table to ensure validation and data consistency.

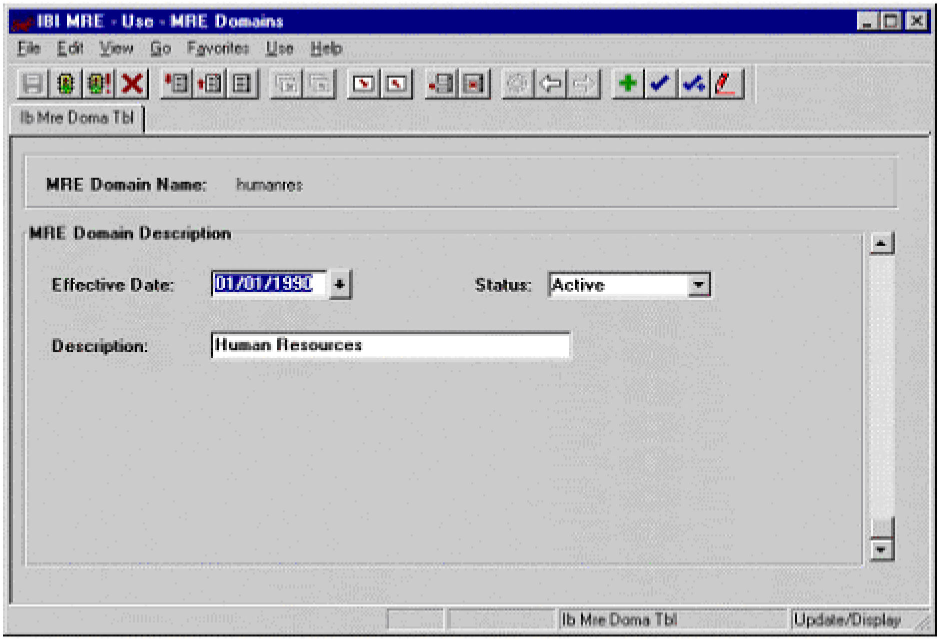
PeopleSoft Panels and Pages

The defined PeopleSoft Records must contain the data for WebFOCUS to correctly interpret the intended security and user type rules. However, the PeopleSoft Panel definitions are not dictated. In fact, each site may choose to manage the IB_MRE Records in its own manner.

As a generic option, consider the following panel design suggestions.

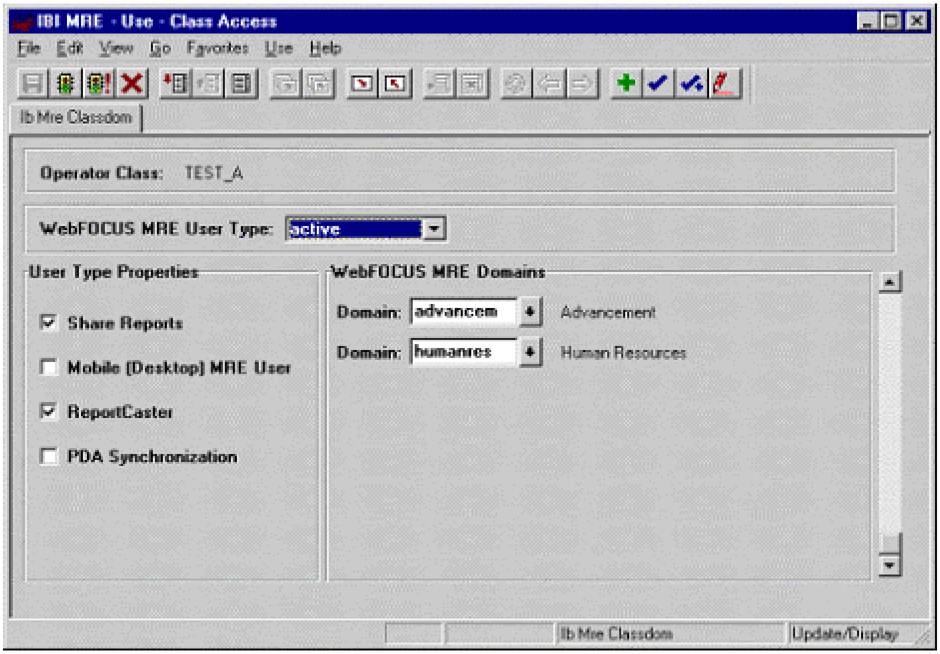
Example **Adding/Updating Managed Reporting Domains**

The following example is used to define the domains. Domains are added and manually kept in synchronization with the domains managed within WebFOCUS Managed Reporting. Prior to adding a domain into PeopleSoft, you must first add it to WebFOCUS. Then, the you can view the properties of the domain and add the appropriate eight-character name as a new domain to PeopleSoft.



Example Managing Class Domain Access and User Type Properties

The following example shows the screen that is used to assign properties and domain access to each individual class within PeopleSoft. After the domains are defined, this is the only function that must be managed on an ongoing basis. You will want to design a similar interface that takes into account your own business rules and implementation. For example, if PDA Synchronization is not a part of your implementation, you need not display that option on the panel.



Configuring for Use

After the required PeopleSoft Records have been built and the appropriate panels (called pages in PeopleSoft 8) built for updating them, the following procedure must be completed to implement the Managed Reporting User Integration. These steps must be completed in order.

Procedure How to Configure for Managed Reporting User Integration

Configuring Managed Reporting to utilize the user information within PeopleSoft is a multiple step process. First WebFOCUS Managed Reporting is configured to use an external source for user administration, in this case PeopleSoft. Next the logon screen must be modified to pass necessary information to Managed Reporting. Finally, data must be set up within PeopleSoft. When the data is available, User Administration Services logs on and grants user access and privileges based on PeopleSoft managed data.

To configure the integration:

1. Modify the ibidir.wfs file to send the EDACS3 variable to the EDA/API. The ibidir.wfs file is located in the EDA Client\conf\etc directory. The default directory is c:\ibi\client52\wfc\etc.

   After the following line,

   ```
   _eda_config=&EDACONF/etc/odin.cfg
   ```

   insert the following syntax:

   ```
   <! Added for EDA/API - needed to find EDACS3 >
   <ifndef> EDACS3
   EDACS3=&_eda_config
   <endif>
   <SHELLVAR>
   EDACS3
   <ENDSHELLVAR>
   ```

2. Modify the site.wfs file. The site.wfs file is located in the EDA client\conf\etc directory. The default directory is c:\ibi\client52\wfc\etc.

   Add the following line to the end of the file:

   ```
   MR_USER_ADMIN=MR_USER_ADMIN_MODE1
   ```

3. Enable the security exit by modifying the ibiweb.cfg file. The ibiweb.cfg file is located in the EDA client\conf\web\cgi directory. The default directory is c:\ibi\client52\wfc\web\cgi.

   Edit the file and add the following line, being careful to correctly count the dashes ('-'). The Y must be in the eighth position out of ten:

   ```
   MR_PGM_FLAGS =-------Y--
   ```

4. Modify the logons.htm Managed Reporting signon form. The logons.htm form can be located in the WebFOCUS ibi_html published documents directory. The default directory is c:\ibi\WebFOCUS52\ibi_html\workbnch\.

   Insert the IBIMR_adminmode line into the file next to the existing lines as illustrated by the following:

```
<INPUT TYPE="RESET" NAME="reset" VALUE="Reset">

<INPUT TYPE="HIDDEN"  NAME="IBIMR_action" VALUE="MR_SIGNON">

<INPUT TYPE="HIDDEN" NAME="IBIMR_adminmode"

      VALUE="MR_USER_ADMIN_MODE1">

<INPUT TYPE="HIDDEN"  NAME="IBIMR_random" VALUE="">

<INPUT TYPE="HIDDEN"  NAME="IBIWF_action" VALUE="WF_SIGNON">
```

5. Create Master Filed Descriptions (MFDs) to read PeopleSoft Managed Reporting data. A stored FOCUS procedure is provided to automate the creation of the required Master Files. Prior to performing this step it is necessary to have already created the PeopleSoft Records and performed a build of the records (that creates the SQL Table in the database).

   A second requirement is that WebFOCUS for PeopleSoft was successfully configured previously. This is required to enable the MFD creation to occur as it depends upon logging in to PeopleSoft through WebFOCUS.

6. When the requirements are met, start an interactive FOCUS session at the command prompt. Then enter the following:

```
>> EX PSLOGIN USERID=PS_oprid, PASSWD=PS_password

>> EX PSCFGMR1

>>
```

   where:

   PS_oprid

   Is a PeopleSoft user ID that has been defined to WebFOCUS for PeopleSoft.

   PS_password

   Is the password associated with the above Operator ID.

7. Use CRON on UNIX, AT on Windows NT, or a similar scheduling mechanism to set a schedule for the batch routine and for the subsequent FTP or copy job. The output file to be transferred is named mrcext.cfg and is located on the WebFOCUS Reporting Server in the ibi/srv52/wfs/bin directory. The target location is \ibi\client52\wfc\web\cgi on the WebFOCUS CGI.

   The UNIX batch procedure command line syntax is:

   ```
   ./ibi/srv52/wfs/bin/edastart -f /ibi/srv52/home/bin/psmrext2.t3i
   ```

   where:

   /ibi/srv52/wfs

   Is the EDA configuration directory.

8. Copy the security exit extension program into the client cgi directory. The security exit is named mrcext.dll and can be located on the WebFOCUS for PeopleSoft CD in the Application\MRCEXT5 directory. Copy this file to the EDA client\conf\web\cgi directory. The default directory is c:\ibi\client52\wfc\web\cgi.

9. Add the default domain to PeopleSoft. Using the PeopleSoft panels described in *PeopleSoft Panels and Pages* on page 6-9, add the default domain. The default domain is the standard domain that exists in all WebFOCUS Managed Reporting installations. The eight-character domain name to be added is “untitled”. The associated description should be “default domain”.

10. Associate the default domain with one or more Operator Classes. Now that the domain exists within PeopleSoft, assign users access to it. Assignment of domain access and user type privileges is managed on an Operator Class basis. Using the appropriate panel (or page) created for managing the domain access, open an Operator Class (called Permission List in PeopleSoft 8) and assign the default domain “untitled” to it.

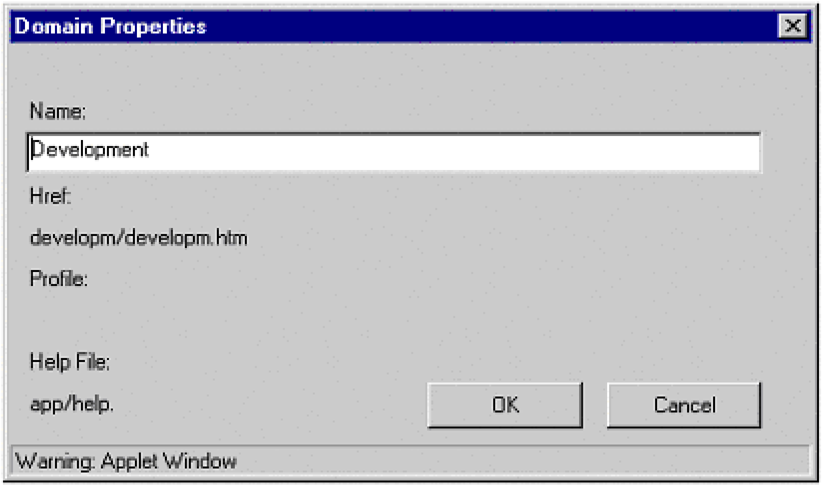
11. Set User Type and Properties for the Class.

12. Log on to WebFOCUS Managed Reporting with a PeopleSoft Operator (User) that is in the Operator Class with the default domain assigned to it.

Procedure How to Add New Domains

To add new domains:

1. Create the domain in Managed Reporting.
2. View the Domain Properties to locate the eight-character name. All domains receive an eight-character unique name. The following shows the properties window for a domain named "Development." In the window we can locate the HREF that contains the eight-character name of "developm."



3. Add the eight-character name with a description to PeopleSoft. In the example above, the domain name to enter into PeopleSoft would be "developm" with a description of "Development."
4. Associate the new domain with Operator Classes.

Troubleshooting

Managed Reporting User Security Integration with PeopleSoft provides a tracing facility to determine the source of configuration problems. To enable tracing, modify the ibiweb.cfg file found in the EDA Client\conf\web\cgi directory and add the following setting:

```
trace_location = c:\temp
trace = on
```

With this setting in place, every time there is an attempted signon to Managed Reporting, the data flowing from PeopleSoft is written to a trace file in the current temp directory of the operating system. This summary information trace file begins with an 'se' and has a '.trc' suffix. An example name is se990639190526.trc. The numbers represent a unique identifier so that subsequent traces do not overwrite the current file.

A second type of trace file is also generated that contains very detailed WebFOCUS CGI information. Multiple trace files of this type are written to the disk for every summary ("se") trace file that is produced. The summary traces should be sufficient to debug configuration problems.

Note: Do not to leave tracing enabled during production as the trace file can consume large amounts of disk space.

Example Generating a Trace File for a Successful Connection

The following example shows a trace file that is generated when a successful connection is established:

```
APP 1 : Initializing EDA/API SQL, Version 5, Release 2
nb_servers: [1] status: [1230792]
[EDASERVE]
Connecting....Successful
Sending request, waiting for response....
with OPRID=TEST01
 domain: 'advancem'
 domain: 'humanres'
End of set
Sending request, waiting for response....
with OPRID=TEST01
 priviledge: '3 ' shared: [Y] robot: [Y] fml: [N] sync: [N]
End of set
mrcext5:user=test01 userfile=test01.htm usertype=[active,shared,robot]
(domains=5 use=2)
advancem/advancem.htm
humanres/humanres.htm
```

APPENDIX A

Advanced Topics

Topics:

- Standalone Server Usage
- Batch Mode Security Resynchronization
- Using WebFOCUS ReportCaster Against PeopleSoft
- Troubleshooting Tips

This section discusses advanced usage techniques in the WebFOCUS for PeopleSoft environment. These topics describe configuring, using additional functionality, and debugging integration problems.

Standalone Server Usage

The WebFOCUS Reporting Server can be accessed locally without the use of client software, such as the WebFOCUS Developer Studio or the WebFOCUS Client. This functionality can be started in the following two modes:

- **Interactive Agent** is useful for:
  - Debugging application errors
  - Troubleshooting connectivity and configuration
  - Testing performance
- **Batch Mode** is useful for:
  - Executing batch scripts

An administrative user with access to the WebFOCUS Reporting Server can use the server in standalone mode to perform any of these functions. If PeopleSoft data must be accessed in any of these processes, you must execute the WebFOCUS for PeopleSoft authentication routine. As a result of the processing within the authentication routine, modifications to the delivered edastart script must be done prior to successful use.

The two purposes for the modifications are:

- To enable successful execution of the PSLOGIN remote procedure call.
- To ensure that when executing, a separate and temporary workspace is used. This prevents errors due to concurrent processing, including data access errors.

Due to the functionality in the start-up scripts, they are operating system-specific. Sample start-up scripts are provided with WebFOCUS for PeopleSoft. One set is used for UNIX environments and the other is for Windows environments. You can use these as provided with minor modifications, or you can customize them to satisfy individual environmental requirements.

The following table lists and describes the sample start-up scripts that are provided with WebFOCUS for PeopleSoft:

Start-up Script	Description
pslocal	Sample start-up script for use with UNIX environments. This script can be used to enter WebFOCUS commands interactively at a command line of the server or to initiate batch processes.
pslocal.bat	Sample start-up script for use with Windows environments. This script can be used to enter WebFOCUS commands interactively at the command line of the server or to initiate batch processes.
psstartps	Sample UNIX start-up script to be used when configuring PeopleSoft Process Scheduler for use with WebFOCUS reports stored on the server. This script should only be used for batch processing initiated through the Process Scheduler.

Procedure How to Customize the Standalone Server Start-up Scripts

Each of the sample scripts requires modification to run in a given environment. The modification is to a delivered setting for the EDACONF directory path.

1. Navigate to the WebFOCUS Reporting Server configuration directory; then to the bin subdirectory.
2. Using a text editor, open the target sample (for example `pslocal`). Scroll down to the line that sets the EDACONF system variable to the default value of MY-EDACONF.

   In UNIX environments, it reads:

   ```
   export EDACONF=MY-EDACONF
   ```

   In Windows environments, it reads:

   ```
   set EDACONF=MY-EDACONF
   ```

3. Replace the default of MY-EDACONF with the appropriate path to the EDACONF directory. In Windows this defaults to c:\ibi\srv52\wfs. In UNIX the default is /ibi/srv52/wfs.
4. Save your changes and close the text editor.

   The start-up script is now ready for use.

   In UNIX environments, ensure that the script has appropriate execution privileges set.

Procedure How to Use the WebFOCUS for PeopleSoft Interactive Agent

1. Navigate to the WebFOCUS Reporting Server configuration directory; then to the bin subdirectory.

2. Execute the Interactive Agent start-up script with the –t option. This is the same for UNIX and Windows platforms:

   ```
   /ibi/srv52/wfs/bin/pslocal -t
   ```

   where:

   /ibi/srv52/wfs/bin

   Is the bin directory under the server configuration.

   When you run

   ```
   pslocal -t
   ```

   you see information similar to:

   ```
   RELEASE = R729520B
   GEN_NUM = 001.123456
   SOURCE_DATE = 01/01/2003 19:36:53
   BUILD_DATE = 01/01/2003 02:01:09
   INSTALLATION_DATE= 01/01/2003 02:46:42
   >>
   ```

   At the prompt, you can enter WebFOCUS commands.

3. To perform any WebFOCUS commands that access PeopleSoft data, first you must run the interactive authentication routine. If this procedure is not run, you receive data access errors. To execute the procedure, type:

   ```
   >>EX PSLOGIN USERID=PS_Userid, PASSWD=PS_Password
   ```

   where:

   PS_Userid and ***PS_Password***

   Is a valid PeopleSoft User ID and Password

You see processing information followed by a FOCUS command prompt. After control returns to the FOCUS command prompt, PeopleSoft data may be accessed with the FOCUS language.

Note: If your configuration has been set up with “Trusted” authentication, then you are not required to supply the PeopleSoft password. Only a valid user id is required.

Procedure How to Use WebFOCUS for PeopleSoft in Batch Mode

1. Execute WebFOCUS for PeopleSoft in batch mode using the pslocal script with the –f option:

```
c:\ibi\srv52\wfs\bin\pslocal -f c:|ibi|srv52|wfs|catalog|sampbat.t3i
```

where:

`c:\ibi\srv52\wfs\bin\pslocal -f`

Is the site-specific *pslocal* start-up script.

To execute this script, you must specify the full system path when issuing the command and the EDACONF/bin is not the current working directory.

c:|ibi|srv52|wfs|catalog|

Is the directory location of the t3i file in Windows.

In UNIX, the path looks similar to the the following example: /ibi/srv52/wfs/catalog/sampbat.t3i

sampbat.t3i

Represents a batch mode input script, which must have a .t3i extension. The input script may contain any WebFOCUS commands within the required start-up and stopping control commands. For example:

```
%connect
%begin

TABLE FILE CAR
PRINT MODEL BY COUNTRY
ON TABLE PCHOLD
END

%end
%disconnect
%stop_server
```

Note: If the batch script is intended to access any PeopleSoft data, it must issue a call to the PSLOGIN authentication routine with appropriate parameters. For an example, see the batch mode security resynchronization input file pssecsnk.t3i.

After execution completes, control returns to the command prompt.

Batch Mode Security Resynchronization

Security resynchronization is one of the functions of the WebFOCUS for PeopleSoft Administrator. When administering PeopleSoft connections through the Web console, you simply select the Re-Synch Security link, and all of the PeopleSoft data security rules that are used in WebFOCUS are resynchronized.

The batch resynchronization utility enables administrators to schedule, through an operating system command, the execution of this functionality without having to manually open the Administrator tool. By scheduling this process nightly (or otherwise; based on business requirements), administrators are not required to perform this function manually, and they can be assured that the data security rules are current as of the last scheduled run.

The utility is comprised of two files. These files are a focexec (pssecsnk.fex) used in executing the resynchronization routine and a t3i script (pssecsnk.t3i), which is the command line input file. By starting the WebFOCUS Reporting Server with the t3i script as an input, the server performs the required security resynchronization without user intervention.

Procedure How to Run Batch Mode Security Resynchronization From the Command Line

1. Copy the pssecsnk.t3i script from the EDAHOME\catalog directory into a work directory, such as the EDACONF\catalog.

2. Using WebFOCUS for PeopleSoft Batch-Mode, execute with the security synchronization input script. To execute input scripts with the *pslocal* script, use the –f option:

   ```
   c:\ibi\srv52\wfs\bin\pslocal -f c:\ibi\srv52\wfs\catalog\pssecsnk.t3i
   ```

   where:

   c:\ibi\srv52\wfs\catalog

   Is the directory location of the t3i file.

   Copy it here from the installation location under c:\ibi\srv52\home\catalog.

   After execution completes, control returns to the command prompt.

Password Security

The t3i script is an ASCII text file that must be edited for your particular environment. Inside are two FOCUS execute command lines that:

- Log into PeopleSoft.
- Perform the security resynchronization.

The following is the exact code:

```
< Filename: pssecsnk.t3i >
%CONNECT
%BEGIN
EX PSLOGIN USERID=PS, PASSWD=PS
EX PSSECBAT
%END
%DISCONNECT
%STOP_SERVER
```

You must modify the user id and password in accordance with one that is appropriate for your environment. The user id must be granted access in WebFOCUS for PeopleSoft.

Since the file is in human readable text, the administrator must prevent read/write access for anyone not authorized to access the t3i. The best way to prevent unauthorized access is to use operating system security. Windows NT and UNIX provide ways to prevent unauthorized access to individual files and entire directories. Contact your operating system administrator for assistance in performing this security step.

Execution Results

Usually, after execution all temporary work files are deleted immediately. If you must verify work files or see the batch process output file, you can temporarily modify the execution script.

To temporarily prevent the deletion of these processing files, edit the pslocal script found in the EDACONF/bin directory. Insert the appropriate comment character for your environment where the final file deletion step exists.

In UNIX environments:

```
# rm -r $EDATEMP
```

In Windows environments:

```
rem rd /S /Q %EDATEMP%
```

After the script has been executed, the WebFOCUS Administrator can review the execution results. A batch process output file (pssecsnk.t3o) is automatically created in the `EDACONF/edalocal` directory, with a unique subdirectory for each execution. The following is an example of a completed execution that was successful:

```
< Filename: pssecsnk.t3o >
%connect
%begin
ex pslogin userid=ps, passwd=ps
ex pssecbat
%end
SYSPRINT.SCR
0 NUMBER OF RECORDS IN TABLE=       1  LINES=      1
File doesn't exist
 DBNUM: 1 has been re-synchronized, DBA security is: ON
CLOSEALL.ALL
%disconnect
%stop_server
```

Note: As the user id and password appear in this output file, the file must be protected by the operating system security.

Additional Options

The following advanced options are available to simplify resynchronizing security in batch mode:

- Process Scheduling

  Because the t3i script is run from an operating system command line, you can execute this procedure with any scheduling software on the server that accepts operating system syntax. For more information, see your operating system or process scheduling software documentation.

- Scheduling with ReportCaster

  An alternative approach to using the t3i script for resynchronizing security is to use ReportCaster (if available at your site) to schedule the execution. The focexec that must be scheduled is PSSECBAT.FEX. It runs under the user id used to schedule the execution.

  The major benefit to using ReportCaster is that all administrators are not required to use operating system security to prevent unauthorized access to the t3i script. Additionally, it is easy to add pre-processing and post-processing steps. An example of a post-processing step is to run a focexec that sends an e-mail message to the administrator every time the resynchronizing occurs with a completion status.

Using WebFOCUS ReportCaster Against PeopleSoft

Implementing WebFOCUS ReportCaster in a WebFOCUS for PeopleSoft environment requires special consideration regarding data security. By default, reports using PeopleSoft data fail due to data access errors. These errors can be viewed in the ReportCaster log and resemble the following:

```
(BTP1010)  (FOC047) THE USER DOES NOT HAVE SUFFICIENT ACCESS RIGHTS TO
           THE FILE: XXXXX

(BTP1010)  There was no report for ReportCaster to distribute.
```

To provide data access security when scheduling reports, there are two authentication options:

- Trusted authentication
- Password secured authentication

In both cases, security rules are applied based on the access privileges of the user who defines the job.

For example, when PSGUEST1 schedules a job, the report is distributed with PSGUEST1 data access privileges without regard to where or to whom the report is distributed. The implication is that if you require specific data to go to different individuals, the rules must be coded into the report. One method is to use a BY field to burst the report according to data access rights. An alternative option is to provide the Standard Report and allow each individual user to schedule it as required.

For a discussion on Trusted versus Password authentication, see Chapter 4, *Managing Connections to PeopleSoft Data Sources*.

Trusted Authentication With ReportCaster

Using the Trusted authentication mode within ReportCaster requires that the WebFOCUS for PeopleSoft instance is configured for Trusted mode. After an instance is configured for Trusted mode, a ReportCaster control focexec must be customized to support the call to the PeopleSoft authentication routine.

Procedure How to Implement Trusted PeopleSoft Authentication on ReportCaster

1. Locate the following directory:

   c:\ibi\srv52\home\catalog\dstprerp.fex

   where:

   c:\ibi\srv52\home\catalog\dstprerp.fex

   Is your WebFOCUS Reporting Server HOME directory.

2. Backup the original dstprerp.fex procedure.

3. Add the Trusted call to the PeopleSoft authentication routine into the focexec just prior to the comments for the execution of RPC 1.

```
-*******************************************************
-* This file runs preexecution FOCEXECs               *
-*******************************************************
EX PSLOGIN USERID=&DSTEDAUSER
-*------------------------------------------------------
-* Execute pre-execution RPC 1.
-*------------------------------------------------------
```

   The variable &DSTEDAUSER automatically is populated by ReportCaster processes. It will be the ID of the WebFOCUS Server user who scheduled the job (&IBIC_user).

4. Schedule a job against secured PeopleSoft data to test.

Password Secured Authentication With ReportCaster

Using Password authentication through ReportCaster is as simple as Trusted authentication. However, since the WebFOCUS password is not stored with the job for security reasons it becomes necessary to pass additional information and secure the modified focexec.

Procedure How to Implement Password PeopleSoft Authentication on ReportCaster

1. Locate the following directory:

   c:\ibi\srv52\home\catalog\dstprerp.fex

   where:

   c:\ibi\srv52\home\catalog\dstprerp.fex

   Is your WebFOCUS Reporting Server HOME directory.

2. Backup the original dstprerp.fex procedure.

3. Add the Password call to the PeopleSoft authentication routine into the focexec just prior to the comments for the execution of RPC 1. Since the WebFOCUS for PeopleSoft password is not available for authentication, you must use a modified secure authentication procedure call.

   ```
   -*************************************************************
   -* This file runs preexecution FOCEXECs                     *
   -*************************************************************
   EX PSLOGIN USERID=&DSTEDAUSER,
              PSACCID=PS_Access_ID,
              PSACCPASS=PS_Access_Password
   -*------------------------------------------------------------
   -* Execute pre-execution RPC 1

   -*------------------------------------------------------------
   ```

   The variable &DSTEDAUSER automatically is populated by ReportCaster processes. It is the id of the WebFOCUS Server user who scheduled the job (&IBIC_user).

   The PS_Access_ID and PS_Access_Password must be replaced with the valid PeopleSoft Access ID/Password combination used when configuring the WebFOCUS for PeopleSoft instance.

4. Using various techniques, you can optionally secure the procedure. This includes operating system privileges and using FOCUS encryption.

5. Schedule a job against secured PeopleSoft data to test.

Troubleshooting Tips

These troubleshooting tips help if you are getting FOCUS error messages, such as a FOC1302, or if you are seeing SQL errors when you run reports.

Procedure How to Connect to the PeopleSoft Data Sources

The most likely source of difficulty in connecting to your PeopleSoft data source is the database connectivity. If you are experiencing difficulty connecting to the database:

1. Verify that the database instance is up and running.
2. Run a client query tool on the server, using the WebFOCUS for PeopleSoft Access ID.

- If you cannot log in to the database, there is a problem with the access id.

  Verify the id and check to see if the password has changed.

  If the password has changed, then it must also be changed in the WebFOCUS for PeopleSoft configuration. For more information on modifying the configuration, see Chapter 4, *Managing Connections to PeopleSoft Data Sources*.

- If you can log in, proceed to Step 3.

3. Run a few simple queries against the PeopleSoft records that are returning errors.

   If you are not getting any rows back, check to see if the WebFOCUS for PeopleSoft Access ID has read authority on the PeopleSoft records you are accessing.

Procedure How to Verify Security

WebFOCUS for PeopleSoft enforces all the security mechanisms used by the PeopleSoft Query tool. As of PeopleSoft Release 7.5, this includes Query Tree security and row-level security. If you are getting unexpected results, it is possible that your PeopleSoft security has not been configured properly.

To verify that security is being properly enforced:

1. Verify that the synonym(s) being queried through WebFOCUS are correct.

   The Administrator can run a report of installed records to verify. If row-level security is the issue, the server-side ACX file should be reviewed and compared to the Record Definition in PeopleSoft, including the Security Search Record.

2. Create a similar query in PS/Query. The SQL code can be viewed and compared to SQL tracing on the WebFOCUS Reporting Server.

3. Examine the SQL.

   Does it appear to match the business logic behind the original request? If not, check the syntax behind the original FOCUS code. Perhaps you are using a WRITE instead of a PRINT, or perhaps a WHERE clause has been coded incorrectly.

4. Run this SQL directly against the RDBMS using a database query tool.

   If you are getting the expected results, then there may be a problem with the program logic after the data is returned to FOCUS from the RDBMS. Examine COMPUTE/DEFINE statements for logic errors; or if you are using ON TABLE HOLD, there may be a problem in your code.

   If you are getting the same unexpected results, then examine the underlying data. Perhaps some cross-referenced fields are missing, or perhaps row-level security is eliminating essential rows.

APPENDIX B

Configuration Information Worksheet

Topic:

- Using the Configuration Information Worksheet

This section provides a configuration information worksheet to guide you when configuring a PeopleSoft connection.

Using the Configuration Information Worksheet

Gather the configuration information required to configure the server before starting the process. Use the following worksheet to record the configuration information and keep it for future reference.

Field Name	Response	Description
WebFOCUS DBA		8-character identifier for linking metadata to PeopleSoft security rules. Must be consistent across multiple connections.
PeopleTools Release		Major release of PeopleTools (7.x, 8.1x, or 8.4x)
Security Enabled?		Specifies whether PeopleSoft data security (row-level and access group) is enforced.
Specify Security Access By		Define how to specify security access; by User (OPRID) or Permission List (OPRCLASS).
Database Type		WebFOCUS designation for RDBMS. The options are Oracle, MS SQL Server, or DB2 Universal Database.
Database Identifier		Database System Identifier (SID) or Source Name used by the appropriate DBMS client software on the WebFOCUS server.
Database Owner		Database Owner ID for the PeopleSoft database.
Access ID		ID used by PeopleSoft to connect to the RDBMS.
Access Password		Password associated with the Access ID.
Authentication		Select *Password* to always verify the Userid/Password. Select *Trusted* to accept only user id. Trusted authentication is useful when deploying in previously authenticated environments, such as a Portal.

Field Name	Response	Description
Enforce Mixed Case IDs		Provides backwards compatibility for sites that previously used case-insensitive version of PeopleSoft. (Yes or No)
PeopleSoft Application Server		PeopleSoft Application Server name or IP address.
Jolt Listener Port		Tuxedo Jolt Listener Port (Default: 9000)
Default Synonym		The type of synonym to default to when creating new metadata. Record Name Record Name with Prefix Record Name with Suffix Table Name Table Name with Prefix Table Name with Suffix
Prefix/Suffix Default Value		Provide a default prefix/suffix value if the default synonym option requires one.
Allow Overrides		Should the Administrator be able to override the automated default synonym? (Y or N)

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