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Preface

This content describes how to install and configure WebFOCUS Enterprise Usage Monitor (EUM) in a Windows or Linux environment. It is intended for administrators or developers who typically configure and monitor usage throughout their WebFOCUS environment.

How This Manual Is Organized

This manual includes the following chapters:

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<td>Introduces WebFOCUS Enterprise Usage Monitor (EUM).</td>
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<tr>
<td>2 Installation and Configuration</td>
<td>This topic describes the installation, upgrade, and configuration steps for WebFOCUS Enterprise Usage Monitor (EUM) Release 8.2.04.</td>
</tr>
<tr>
<td>3 Navigating the Enterprise Usage Monitor Environment</td>
<td>Describes how to navigate the Enterprise Usage Monitor (EUM) environment.</td>
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<td>4 Understanding Resource Management Reports</td>
<td>Describes the Resource Management reports that are available in the Enterprise Usage Monitor (EUM).</td>
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<td>5 Working With Alerts</td>
<td>Describes the Alert function that you can use with the EUM. Explains how to view, schedule, and edit the default alerts.</td>
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Conventions

The following table describes the conventions that are used in this manual.

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THIS TYPEFACE</strong> or <strong>this typeface</strong></td>
<td>Denotes syntax that you must type exactly as shown.</td>
</tr>
<tr>
<td><strong>this typeface</strong></td>
<td>Represents a placeholder (or variable) in syntax for a value that you or the system must supply.</td>
</tr>
</tbody>
</table>
## Convention

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>underscore</em></td>
<td>Indicates a default setting.</td>
</tr>
<tr>
<td><em>this typeface</em></td>
<td>Represents a placeholder (or variable), a cross-reference, or an important term. It may also indicate a button, menu item, or dialog box option that you can click or select.</td>
</tr>
<tr>
<td>Key + Key</td>
<td>Indicates keys that you must press simultaneously.</td>
</tr>
<tr>
<td>{  }</td>
<td>Indicates two or three choices. Type one of them, not the braces.</td>
</tr>
<tr>
<td>[  ]</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>Separates mutually exclusive choices in syntax. Type one of them, not the symbol.</td>
</tr>
<tr>
<td>...</td>
<td>Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis (...).</td>
</tr>
<tr>
<td>.</td>
<td>Indicates that there are (or could be) intervening or additional commands.</td>
</tr>
</tbody>
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## Related Publications

Visit our Technical Content Library at [http://documentation.informationbuilders.com](http://documentation.informationbuilders.com). You can also contact the Publications Order Department at (800) 969-4636.

## Customer Support

Do you have questions about this product?

Join the Focal Point community. Focal Point is our online developer center and more than a message board. It is an interactive network of more than 3,000 developers from almost every profession and industry, collaborating on solutions and sharing tips and techniques. Access Focal Point at [http://forums.informationbuilders.com/eve/forums](http://forums.informationbuilders.com/eve/forums).
You can also access support services electronically, 24 hours a day, with InfoResponse Online. InfoResponse Online is accessible through our website, 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.

Call Information Builders Customer Support Services (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 questions. Information Builders consultants can also give you general guidance regarding product capabilities. Please be ready to provide your six-digit site code number (xxxx.xx) when you call.

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 effectively, be prepared to provide the following information when you call:

- Your six-digit site code (xxxx.xx).
- Your WebFOCUS configuration:
  - The front-end software that you are using, including vendor and release.
  - The communications protocol (for example, TCP/IP or HLLAPI), including vendor and release.
  - The software release.
  - Your server version and release. You can find this information using the Version option in the Web Console.
  - The stored procedure (preferably with line numbers) or SQL statements being used in server access.
- 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?
User Feedback

- Provide 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, 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 just the code to access the 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 Technical Content Management staff welcomes your opinions regarding this document. You can contact us through our website, http://documentation.informationbuilders.com/connections.asp.

Thank you, in advance, for your comments.

Information Builders Consulting and Training

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For information on course descriptions, locations, and dates, or to register for classes, visit our website (http://education.informationbuilders.com) or call (800) 969-INFO to speak to an Education Representative.
This topic introduces the WebFOCUS Enterprise Usage Monitor and its main features.

**In this chapter:**

- **Enterprise Usage Monitor Overview**

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**Enterprise Usage Monitor Overview**

WebFOCUS Enterprise Usage Monitor (EUM) is a tool that provides a real-time, 360-degree view of your WebFOCUS deployment and all associated enterprise information assets, including the reporting server, database server, and mid-tier application, as well as your users. The EUM application is based on WebFOCUS Business User Edition and requires Resource Analyzer to be configured. It extends and enhances resource tracking and management capabilities by allowing you to analyze and visualize vital resource management metrics across multiple WebFOCUS instances, such as frequently run reports, response times, and the number of reports generated by time of day. With this wealth of information, EUM allows you to achieve a deep understanding of user behaviors, resource consumption, and other factors that impact performance.

With EUM you can do the following:

- Visualize vital resource management metrics.
- Access detailed data about asset utilization and performance issues.
- Instantly notify stakeholders when metrics exceed thresholds.
- Analyze all aspects of consumption activity and query traffic.
The EUM portal, which is shown in the following image, is a browser-based application that displays important resource management metrics in interactive dashboards, visualizations, charts, and graphs that you can use to view key metrics and drill down to more detailed data.

The EUM portal is based on a standard Business User Edition (BUE) portal and allows you to perform the same tasks that you can perform with BUE. However, in addition to the BUE functionality, you also gain access to pre-developed resource management reports, dashboards, and visualizations that are included in your EUM package. You can use InfoAssist, a powerful thin-client analytics authoring tool, to create and share new resource management content and to generate customized versions of the default content that is available to you.

Another important EUM feature is the Alert Wizard. You can use the Alert Wizard to create alerts to recognize when key metrics, such as average response time, fall below a certain threshold and instantly notify those who can rectify the problem.

Other EUM features include:

- New metadata definitions that let users analyze and drill down to detailed resource management data, to rapidly identify performance and usage issues at the lowest level.
- The ability to offload CPU cycles from production systems to the EUM environment, conserving valuable resources.
- A consolidated enterprise resource management console that enables you to run server-based Resource Analyzer reports from EUM.
This content describes the installation, upgrade, and configuration steps for WebFOCUS Enterprise Usage Monitor (EUM) Release 8.2.04.

WebFOCUS Enterprise Usage Monitor (EUM) requires the following steps:

- Installing WebFOCUS Business User Edition (BUE) Release 8.2.04 GA.
- Importing the EUM content into the repository, using Change Management.
- Configuring EUM Client and Reporting Server settings.

**Notes:**

- You must have an existing installation of Resource Management to configure EUM.
- If you are upgrading from a previous release, you can proceed directly to the upgrading EUM topic for your platform.

**In this chapter:**

- Installing WebFOCUS Business User Edition
- Installing and Configuring EUM on a Windows Environment
- Enabling Logging on a Windows Environment
- Upgrading EUM from Release 8.2.01 to Release 8.2.04 on a Windows Environment
- Installing and Configuring EUM on a Linux Environment
- Enabling Logging on a Linux Environment
- Upgrading EUM from Release 8.2.01 to Release 8.2.04 on a Linux Environment
- Working With the Resource Management Shadow Log

**Installing WebFOCUS Business User Edition**

Procedure: How to Install WebFOCUS Business User Edition

1. Download the WebFOCUS Business User Edition (BUE) Release 8.2.04 GA software for your platform (Windows or Linux) from the download site.

2. Install the BUE Release 8.2.04 GA for your platform (Windows or Linux) as described in the Installation topic, under WebFOCUS Business User Edition 8.2.04, in the WebFOCUS BUE Technical Library, Release 8.2.04. You will have to configure an email server for ReportCaster, as it is required for the Enterprise Usage Monitor Alerts feature.

3. Type a WebFOCUS Enterprise Usage Monitor license key, which is a 10-user WebFOCUS BUE license.

4. When the installation completes, the Sign In dialog box displays.

5. Confirm you can sign in to BUE using the manager user ID.

6. Depending on your platform, proceed to Importing the Change Management Package for Windows on page 14 or Importing the Change Management Package for Linux on page 31.

Installing and Configuring EUM on a Windows Environment

The following section provides the step-by-step instructions that you need to install and configure EUM on a Windows environment.

Importing the Change Management Package for Windows

Using Change Management, you can import EUM content into the repository.

Procedure: How to Import the Change Management Package

1. Sign in to the machine where BUE is installed, with the same user ID used for the installation.

2. Copy the CM package, \WEUM_8204_Rev2_20190624_140536_manager.zip, from the download site to the BUE Change Management import directory:

   drive:\ibi\WebFOCUS_BUE82\WebFOCUS\cm\import

   where:

   drive

   Is the drive where WebFOCUS BUE is installed.

3. From the Command prompt, change your current directory to the following path by issuing the following command:

   cd /d drive:\ibi\WebFOCUS_BUE82\WebFOCUS\utilities\cm
where:

**drive**

Is the drive where WebFOCUS BUE is installed.

4. Run the Change Management cm_import script using the following command.

**Note:** Do not use the Change Management utility available from the BUE Resource tree to import this change management, as it will not support the necessary rules.

If you copy and paste the command below, make sure that the command is on a single line. You can do this by first pasting the command in a text editor and removing the new line characters before copying and pasting it into the Command prompt.

```
cm_import.bat USERNAME=manager PASSWORD=manager_password
IMPORTFROM=drive:\ibi\WebFOCUS_BUE82\WebFOCUS\cm\import
\WEUM_8204_Rev2_20190624_140536_manager.zip
resOverwrite=TRUE importRoles=0 importGroups=2 importUsers=0
importRules=TRUE
```

where:

**manager_password**

Is the manager user ID password set during the BUE installation procedure.

**drive**

Is the drive where WebFOCUS BUE is installed.

5. Navigate back to the browser where you signed in to BUE and click the browser refresh button to see the updated EUM portal and repository content.

**Note:** If the browser is closed, type the following to return to the browser:

```
hhttp://machinename:26000/ibi_apps
```

where:

**machinename**

Is the name of the machine where BUE is running.

---

**Configuring EUM on the Client for Windows**

This section covers the steps to configure EUM on the Client.
Configuring Resource Management Reports

The Resource Management (RM) reports are accessible through the EUM portal. This section covers the steps to configure this feature.

Procedure: How to Configure Resource Management Reports

1. On the BUE machine, copy the file:
   \(drive:\ibi\WebFOCUS_BUE82\data\apps\weum\ibi_html.xml\)
   to:
   \(drive:\ibi\WebFOCUS_BUE82\tomcat\conf\Catalina\localhost\)
   where:
   \(drive\)
   Is the drive where WebFOCUS BUE is installed.

2. Edit the ibi_html.xml file, as appropriate, as follows:
   \(<\text{Context} \text{docBase}="drive:\ibi\WebFOCUS_BUE82\WebFOCUS\ibi_html" \text{path}="/ibi_html">\)
   where:
   \(drive\)
   Is the drive where WebFOCUS BUE is installed.

3. From the Start menu, navigate to the WebFOCUS Business User Edition shortcut, under the Information Builders program group, right-click \(\text{Stop WebFOCUS\_BUE Services}\), and click \(\text{Run as Administrator}\) to stop the WEBFOCUS BUE application server.

4. From the Start menu, navigate to the WebFOCUS Business User Edition shortcut, under the Information Builders program group, right-click \(\text{Start WebFOCUS\_BUE Services}\), and click \(\text{Run as Administrator}\) to start the WebFOCUS BUE application server.

Autoprompt Parameter Prompting

In order to support the Resource Management reports, the Autoprompt Parameter Prompting setting must be Off.

Procedure: How to Set Autoprompt Parameter Prompting

1. Sign in to BUE using the manager user ID or navigate back to the browser where you signed in to BUE.

2. On the menu bar, click \(\text{Administration}\), and then select \(\text{Administration Console}\).
3. On the Configuration panel, click Parameter Prompting.

4. From the Managed Reporting drop-down list, select Off, as shown in the following image.

```
Parameter Prompting

Managed Reporting
Managed Reporting when Prompt Parameters Property Unset
Self Service
Default Autoprompt Template
Null Behavior

Always Prompt
Off
Run with Default Values
Always Prompt
Responsive

Save  Cancel
```

5. Click Save, and then click OK.

6. Click Close to close the Administration Console.

**Configuring EUM on the Reporting Server for Windows**

This section covers the EUM configuration steps required on the Reporting Server.

**Copying Resource Management Configuration Files to EUM**

It is necessary to copy the Resource Management configuration files from the WebFOCUS environment where Resource Management is configured to the EUM environment.

**Note:** You must have an existing installation of Resource Management already configured to perform this procedure. For more information on Resource Analyzer configuration, see the Resource Analyzer Administrator's and User's Manual for your release.

**Procedure: How to Copy the RMLDB.FEX and RMLDATA.FEX Files**

On the machine where Resource Management is configured, copy the following files.

**For Release 7.7 Version 08, Release 7.7 Version 07, and Release 7.7 Version 06:**

```
drive1:\ibi\srvxx\server\catalog\rm\rmldb.fex
drive1:\ibi\srvxx\server\catalog\rm\rmldata.fex
to:
drive2:\ibi\WebFOCUS_BUE82\srv\wfs\catalog\rm\rmldb.fex
drive2:\ibi\WebFOCUS_BUE82\srv\wfs\catalog\rm\rmldata.fex
```

**For Release 7.7 Version 05M:**

Using WebFOCUS Enterprise Usage Monitor (EUM)
drive1:ibi\srvxx\server\catalog\rmldb.fex
to:
drive2:ibi\WebFOCUS_BUE82\srv\wfs\catalog\rm\rmldb.fex

where:
drive1
  Is the drive where Resource Management is configured.
xx
  Is the Reporting Server release.

Note: The type of server you install determines the default names for the program folder and product directory. If you install the WebFOCUS Reporting Server Release 8.2, then the default names will indicate 82. For example:

C:\ibi\srv82

If you install DataMigrator Server Release 7.7 Version 07, then the default names will indicate 77. For example:

C:\ibi\srv77

server
  Depends on the license key. Possible values are:
  
  For a 100 Full Function Server license key, the value is ffs.
  For a 200 WebFOCUS Server license key, the value is wfs.
  For a 300 DataMigrator Server license key, the value is dm.

drive2
  Is the drive where WebFOCUS BUE is installed.

Procedure: How to Copy the RMPROF.FEX File (Release 8.2 or 7.7.07 Reporting Servers or Release 8.2.04 or 7.7.08 Reporting Servers)

On the machine where Resource Management is configured, copy the following file:

drive1:ibi\srvxx\server\catalog\rm\rmpprof.fex
to:

drive2:ibi\WebFOCUS_BUE82\srv\wfs\catalog\rm\rmpprof.fex
where:

**drive1**

Is the drive where Resource Management is configured.

**xx**

Is the Reporting Server release.

**Note:** The type of server you install determines the default names for the program folder and product directory. If you install the WebFOCUS Reporting Server Release 8.2, then the default names will indicate 82. For example:

C:\ibi\srv82

If you install DataMigrator Server Release 7.7 Version 07, then the default names will indicate 77. For example:

C:\ibi\srv77

**server**

Depends on the license key. Possible values are:

- For a 100 Full Function Server license key, the value is ffs.
- For a 200 WebFOCUS Server license key, the value is wfs.
- For a 300 DataMigrator Server license key, the value is dm.

**drive2**

Is the drive where WebFOCUS BUE is installed.

**Procedure:**  **How to Copy RMPROF.PRF (Release 8.0 or 7.7.05 and 8.1 or 7.7.06 Reporting Servers)**

On the machine where Resource Management is configured, copy the following file:

**drive1:**\ibi\srvxx\server\etc\rmpof.prf

to:

**drive2:**\ibi\WebFOCUS_BUE82\srv\wfs\catalog\rm\rmpof.fex

where:

**drive1**

Is the drive where Resource Management is configured.

**xx**

Is the Reporting Server release.
Note: The type of server you install determines the default names for the program folder and product directory. If you install the WebFOCUS Reporting Server Release 8.2, then the default names will indicate 82. For example:

C:\ibi\srv82

If you install DataMigrator Server Release 7.7 Version 07, then the default names will indicate 77. For example:

C:\ibi\srv77

server

Depends on the license key. Possible values are:

- For a 100 Full Function Server license key, the value is ffs.
- For a 200 WebFOCUS Server license key, the value is wfs.
- For a 300 DataMigrator Server license key, the value is dm.

drive2

Is the drive where WebFOCUS BUE is installed.

Configuring EUM to Use the Resource Management Metadata Files

EUM is based on Release 8.2.04. However, it can support Resource Management files from any 8.x release. This section describes how to use the correct version of the metadata files.

Note: You must have an existing installation of Resource Management already configured to perform this procedure. For more information on Resource Analyzer configuration, see the Resource Analyzer Administrator’s and User’s Manual for your release.

Procedure: How to Use the Correct Resource Management Files

On the machine where WebFOCUS Business User Edition and Enterprise Usage Monitor are configured, copy the correct version of the files into the baseapp application directory.

Note: For Release 8206, use the same files used by Release 8205, as noted in step 3.

1. Copy the files:

   drive:\ibi\WebFOCUS_BUE82\data\apps\baseapp\weum\rmldataNN.mas
   drive:\ibi\WebFOCUS_BUE82\data\apps\baseapp\weum\rmldataNN.acx
   drive:\ibi\WebFOCUS_BUE82\data\apps\baseapp\weum\rmldbNN.mas
   drive:\ibi\WebFOCUS_BUE82\data\apps\baseapp\weum\rmldbNN.acx

   to each of the following directories:
Drive:\\ibi\WebFOCUS_BUE82\data\apps\baseapp\  
Drive:\\\ibi\WebFOCUS_BUE82\srv\wfs\catalog\rm\  

Where:

Drive

Is the drive where WebFOCUS BUE is installed.

NN

Is the Reporting Server version where Resource Management is configured.

2. Depending on your server release, rename the corresponding rmldataNN files to rmldata.mas and rmldata.acx in both locations. For example, if you install the WebFOCUS Reporting Server Release 8.2, rename rmldata82.mas to rmldata.mas, rmldata82.acx to rmldata.acx, rmldb82.mas to rmldb.mas, and rmldb82.acx to rmldb.acx.

3. Additionally, for releases 8205 and 8206, copy all of the files from:

Drive:\\\ibi\WebFOCUS_BUE82\data\apps\baseapp\weum\rmldb_8205_8206

to the following directory:

Drive:\\\ibi\WebFOCUS_BUE82\srv\wfs\catalog\rm\  

There is no renaming necessary for these files.

Configuring Access to the Resource Management Log File (RMLDATA.LOG)

Access to the Resource Management log files is defined through a FILEDEF command that is defined in the Reporting Server profile, edasprof.prf.

Procedure: How to Define a FILEDEF to Access the RMLDATA.LOG File

1. Sign in to BUE as manager or navigate back to the browser where you signed in to BUE.

2. On the menu bar, click Administration, and then select Reporting Server Console.

3. Click the Workspace button on the sidebar.
4. Navigate to the Configuration Files folder, right-click Server Profile - edasprof.prf, and select Edit, as shown in the following image.

5. Add both FILEDEF commands at the end of the server profile, for example:

   FILEDEF baseapp/rmldata DISK drive:\srvxx\wfs\rmldata.log
   FILEDEF rmldata DISK drive:\srvxx\wfs\rmldata.log

   **Note:**

   - If you are using a network drive, use the following FILEDEF commands:

     FILEDEF baseapp\rmldata DISK \machinename\directory\rmldata.log
     FILEDEF rmldata DISK \machinename\directory\rmldata.log

     **Note:** Make sure the directory located on your network drive is shared so that it is accessible from the computer where BUE/EUM is installed.

   - If you have multiple rmldata files, use the CONCAT command. For example:

     FILEDEF baseapp\rmldata DISK \machinename\directory\rmldata.log
     FILEDEF baseapp\rmldata1 DISK \machinename\directory1\rmldata.log
     FILEDEF baseapp\rmldataN DISK \machinename\directoryN\rmldata.log
     FILEDEF baseapp\rmldata CONCAT baseapp\rmldatal baseapp\rmldataN

   where:

   _drive_

   Is the location of your rmldata.log file.
Is the Reporting Server release.

**Note:** The type of server you install determines the default names for the program folder and product directory. If you install the WebFOCUS Reporting Server Release 8.2, then the default names will indicate 82. For example:

C:\ibi\srv82

If you install DataMigrator Server Release 7.7 Version 07, then the default names will indicate 77. For example:

C:\ibi\srv77

*machinename*

Is the name of the network machine.

*directory1...directoryN*

Are the names of the network directories.

*rmldatal*

Is the first WebFOCUS Resource Management file.

*rmldatan*

Is the Nth WebFOCUS Resource Management file.

6. Click Save.

**Configuring Access to RMLDB**

Resource Management historical data is stored in the RMLDB database. This section describes how to configure EUM to access the RMLDB. This configuration may need assistance from your Resource Management administrator.

The Adapter configuration on the WebFOCUS environment where Resource Management is configured needs to be replicated on the EUM environment.

Configure the Adapter to the Resource Management repository. If you have more than one Resource Management repository, each will require a separate installation of EUM.

**Procedure:** **How to Configure the RMLDB Adapter**

Gather connection information from the Resource Management server environment.
**Note:** If you configured the adapter as Trusted, the database administrator must set up a Read Only user ID on the Resource Management repository database. The Resource Management repository database credentials for the Read Only user ID will be used in step 9.

1. From the Resource Management Web Console, click the **Adapters** tab or, if you are running Release 8.2.03 and higher, click the **Connect to Data** button on the sidebar.

2. Expand the **Configured** folder, or view the Configured Adapters panel, to see the list of configured adapters.

3. Right-click the adapter used for the Resource Management repository database and select **Properties**.

4. Use this information to replicate this adapter on the EUM server.

   **Note:** It is critical the connection name is identical.

5. Sign in to BUE using the manager user ID.

6. From the menu bar, click **Administration**, and then select **Reporting Server Console**.

7. Click the **Connect to Data** button.

8. In the Adapter panel, find the same adapter being used for the RMLDB database, as shown in the following image.

![Adapter Panel](image)

9. Once you locate the correct adapter, right-click it and select **Configure**. Type the same properties as you have on your Resource Management Reporting Server.

   **Note:** If the RMLDB adapter is Trusted, select **Explicit** from the Security drop-down list and type the user credentials of the Read Only user ID.

10. Click **Test** to verify the connection.

11. Click **Configure** to finish configuring your adapter.
Granting Access to Server Roles to Read Data Outside of Installation Directories

The rmldata.log file to be monitored is typically located outside of the EUM machine. In order for developers and basic users to access the file, it will be necessary to change their file privileges on the EUM Reporting Server.

**Procedure:** How to Grant Access to Server Roles to Read Data Outside of Installation Directories

1. Sign in to BUE using the manager user ID.
2. From the menu bar, click *Administration*, and then select *Reporting Server Console*.
3. On the Reporting Server Console, click the *Access Control* button on the sidebar.
4. On the Access Control panel, navigate to *Roles*, and expand the *Application Administrator* folder.
5. Right-click *modelgrp/Developers (Customized)*, and then select *Directory/File Privileges*, as shown in the following image.

The Directory/File Privileges pane opens.
6. Select the Read option on the first row (*). This will automatically enable developers to have read access to files outside the EUM environment, as shown in the following image.

<table>
<thead>
<tr>
<th>Group</th>
<th>Modelgrp/Developers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customized</td>
<td>(Not Saved)</td>
</tr>
<tr>
<td>Directory/File</td>
<td>Read</td>
</tr>
<tr>
<td>- C:</td>
<td></td>
</tr>
<tr>
<td>- ibi</td>
<td></td>
</tr>
<tr>
<td>- ibi</td>
<td></td>
</tr>
<tr>
<td>- WebFOCUS_BUE2/Mail</td>
<td></td>
</tr>
<tr>
<td>- WebFOCUS_BUE2</td>
<td></td>
</tr>
<tr>
<td>- apps</td>
<td></td>
</tr>
<tr>
<td>Baseapp</td>
<td></td>
</tr>
<tr>
<td>Modellapp</td>
<td></td>
</tr>
<tr>
<td>- cry</td>
<td></td>
</tr>
<tr>
<td>- home</td>
<td></td>
</tr>
<tr>
<td>- home</td>
<td></td>
</tr>
<tr>
<td>- bin</td>
<td></td>
</tr>
<tr>
<td>- catalog</td>
<td></td>
</tr>
<tr>
<td>Geo_services.mbr.xml</td>
<td></td>
</tr>
<tr>
<td>Geo_services.xmlxml</td>
<td></td>
</tr>
<tr>
<td>etc</td>
<td></td>
</tr>
<tr>
<td>edaconf</td>
<td></td>
</tr>
</tbody>
</table>

7. Click Save and then click OK.
8. On the Access Control panel, navigate to Roles, and then expand the Basic User folder.
9. Right-click modelgrp (Customized), and then select Directory/File Privileges.

The Directory/File Privileges pane opens.
10. Select the Read option on the first row (*). This will automatically enable basic users to have read access to files outside the EUM environment.
11. Click Save and then click OK.

Configuring Access to the Mid-Tier Log File

This section describes the remaining steps to configure EUM to access the mid-tier log file. It may be necessary to share or redirect the mid-tier log files to a drive that is accessible from the EUM machine.

**Procedure:** How to Configure Access to the Mid-Tier Log File

1. Sign in as the manager user ID.
2. On the menu bar, click Administration, and then select Reporting Server Console.
3. Click the Applications button on the sidebar.
4. Expand the baseapp application folder and click weum.
5. Right-click the `requestsprof.fex` file and select *Copy*.

6. Right-click the `baseapp` folder and select *Paste*.

7. In the `baseapp` folder, right-click the `requestsprof.fex` file and select *Open*.

   **Note:** If the file is not visible, click *Preferences* in the toolbar and select the Show Files on Application Tree check box. Click *Update* to save your changes.

8. Edit the file so the following line contains the location of the WebFOCUS environment requests.*.log files, as follows:

   ```
   -SET &&DSN = drive:\ibi\WebFOCUSnn\logs\' | 'requests.' | &DT | '.log';
   ```

   where:

   ```drive```

   Is the drive where the WebFOCUS Client application server is installed.

   ```nn```

   Is the WebFOCUS release.

9. Click *Save*.

At this point, EUM is fully installed and configured. The dashboard pages in the EUM portal should be populated with real time (RMLDATA.LOG), historical (RMLDB), and performance data, as shown in the following image.
Enabling Logging on a Windows Environment

Enabling Logging on a Windows Environment

This section describes how to enable logging on the WebFOCUS Client application server that you wish to monitor. This is not the WebFOCUS Client associated with the BUE/EUM install.

**Note:** These steps are not performed on the BUE/EUM environment.

**Procedure:** How to Enable Logging on the WebFOCUS Client Application Server

1. Navigate to the Tomcat directory for your WebFOCUS release. For example:
   
   C:\ibi\tomcat\bin

2. Depending on the WebFOCUS release, run the Tomcat program, for example, tomcat8WFw.exe, as administrator.

   The Apache Tomcat for WebFOCUS Properties dialog box opens.

3. Click the **Java** tab.

4. Type the following two lines in the Java Options section, as shown in the following image. To enter the blank line, hit the Enter key to move the cursor to the next line.
5. Click OK.

Upgrading EUM from Release 8.201 to Release 8.2.04 on a Windows Environment

The following section provides the step-by-step instructions that you need to upgrade your current EUM 8.2.01 installation to 8.2.04 for a Windows environment.

**Note:** Before you begin your upgrade, note if any domain or personal portal pages that have been added to the EUM environment. These will have to be recreated after the upgrade.
Procedure: How to Upgrade Your Previous EUM Installation to Release 8.2.04

To upgrade EUM to Release 8.2 Version 04, you must perform the following steps:

1. Upgrade your BUE environment from Release 8.2.01 to Release 8.2.04 by downloading the latest BUE software for Windows, as described in the Installation topic, under WebFOCUS Business User Edition 8.2.04 in the WebFOCUS BUE Technical Library, Release 8.2.04.

2. Copy the CM package, WEUM_8204_20181211_225939_manager.zip, from the download site to the BUE Change Management import directory:

   drive:\ib\WebFOCUS_BUE82\WebFOCUS\cm\import

   where:

   drive

   Is the drive where WebFOCUS BUE is installed.

3. From the Command prompt, change your current directory to the following path by issuing the following command:

   cd /d drive:\ib\WebFOCUS_BUE82\WebFOCUS\utilities\cm

   where:

   drive

   Is the drive where WebFOCUS BUE is installed.

4. Run the Change Management cm_import script using the following command.

   Note: Do not use the Change Management utility available from the BUE Resource tree to import this change management, as it will not support the necessary rules.

   If you copy and paste the command below, make sure that the command is on a single line. You can do this by first pasting the command in a text editor and removing the new line characters before copying and pasting it into the Command prompt.

   cm_import.bat USERNAME=manager PASSWORD=manager_password
   IMPORTFROM=drive:\ib\WebFOCUS_BUE82\WebFOCUS\cm\import\WEUM_8204_20181211_225939_manager.zip
   resOverwrite=TRUE importRoles=0 importGroups=2 importUsers=0 importRules=TRUE

   where:

   manager_password

   Is the manager user ID password set during the BUE installation procedure.
drive

Is the drive where WebFOCUS BUE is installed.

5. Sign in to BUE to see the updated EUM portal and repository content.

Note: The BUE sign on URL is:

http://machinename:26000/ibi_apps

where:

machinename

Is the name of the machine where BUE is running.

Your EUM environment is now successfully upgraded to Release 8.2.04.

Installing and Configuring EUM on a Linux Environment

The following section provides the step-by-step instructions that you need to install and configure EUM on a Linux environment.

Importing the Change Management Package for Linux

Using Change Management, you can import EUM content into the repository.

Procedure: How to Import the Change Management Package for Linux

1. Sign in to the machine where BUE is installed, with the same user ID used for the installation.

2. Copy the CM package, WEUM_8204_20181211_225939_manager.zip, from the download site to the BUE Change Management import directory:

/install_directory/ibi/WebFOCUS_BUE82/WebFOCUS/cm/import

where:

install_directory

Is the directory where WebFOCUS BUE is installed.

3. From the Command prompt, change your current directory to the following path:

/install_directory/ibi/WebFOCUS_BUE82/WebFOCUS/utilities/cm

where:

install_directory

Is the directory where WebFOCUS BUE is installed.
4. Run the Change Management cm_import script using the following command.

   **Note:** Do not use the Change Management utility available from the BUE Resource tree to import this change management, as it will not support the necessary rules.

   If you copy and paste the command below, make sure that the command is on a single line. You can do this by first pasting the command in a text editor and removing the new line characters before copying and pasting it into the Command prompt.

   ```
   ./cm_import.sh USERNAME=manager PASSWORD=manager_password
   IMPORTFROM=/install_directory/ibi/WebFOCUS_BUE82/WebFOCUS/cm/import
   /WEBUM_B204_20181211_225939_manager.zip
   resOverwrite=TRUE importRoles=0 importGroups=2 importUsers=0
   importRules=TRUE
   ```

   where:
   - `manager_password` is the manager user ID password set during the BUE installation procedure.
   - `install_directory` is the directory where WebFOCUS BUE is installed.

5. Sign in to BUE to see the updated EUM portal and repository content.

   **Note:** The BUE sign on URL is:

   ```
   http://machinename:26000/ibi_apps
   ```

   where:
   - `machinename` is the name of the machine where BUE is running.

---

**Configuring EUM on the Client for Linux**

This section covers the steps to configure EUM on the Client.

**Configuring Resource Management Reports**

The Resource Management reports are accessible through the EUM portal. This section covers the steps to configure this feature.

**Procedure:** How to Configure Resource Management Reports for Linux

1. On the BUE machine, copy the file:

   ```
   /install_directory/ibi/WebFOCUS_BUE82/data/apps/weum/ibi_html.xml
   ```

   to:
/install_directory/ibi/WebFOCUS_BUE82/tomcat/conf/Catalina/localhost

where:

/install_directory

Is the directory where WebFOCUS BUE is installed.

2. Edit the ibi_html.xml file, as appropriate, as follows:

   <Context docBase="/install_directory/ibi/WebFOCUS_BUE82/WebFOCUS/ibi_html" path="/ibi_html"/>

   where:

   /install_directory

   Is the directory where WebFOCUS BUE is installed.

3. Stop the WebFOCUS BUE Application Server, using the following command:

   /install_directory/ibi/WebFOCUS_BUE82/tomcat/bin/shutdown.sh

   where:

   /install_directory

   Is the directory where WebFOCUS BUE is installed.

4. Start the WebFOCUS BUE Application Server, using the following command:

   /install_directory/ibi/WebFOCUS_BUE82/tomcat/bin/startup.sh

   where:

   /install_directory

   Is the directory where WebFOCUS BUE is installed.

**Autoprompt Parameter Prompting**

In order to support the Resource Management reports, the Autoprompt Parameter Prompting setting must be Off.

**Procedure: How to Set Autoprompt Parameter Prompting**

1. Sign in to BUE using the manager user ID or navigate back to the browser where you signed in to BUE.
2. On the menu bar, click **Administration**, and then select **Administration Console**.
3. On the Configuration panel, click **Parameter Prompting**.
4. From the Managed Reporting drop-down list, select Off, as shown in the following image.

5. Click Save, and then click OK.

6. Click Close to close the Administration Console.

Configuring EUM on the Reporting Server for Linux

This section covers the EUM configuration steps required on the Reporting Server.

Copying Resource Management Configuration Files to EUM

It is necessary to copy the Resource Management configuration files from the WebFOCUS environment where Resource Management is configured to the EUM environment.

Procedure: How to Copy the RMLDB.FEX and RMLDATA.FEX Files

On the machine where Resource Management is configured, copy the following files:

/install_directory1/ibi/srvxx/server/catalog/rm/rmldb.fex
/install_directory1/ibi/srvxx/server/catalog/rm/rmldata.fex

to:

/install_directory2/ibi/WebFOCUS_BUE82/srv/wfs/catalog/rm/rmldb.fex
/install_directory2/ibi/WebFOCUS_BUE82/srv/wfs/catalog/rm/rmldata.fex

where:

install_directory1

Is the directory where Resource Management is installed.

xx

Is the Reporting Server release.
Note: The type of server you install determines the default names for the program folder and product directory. If you install the WebFOCUS Reporting Server Release 8.2, then the default names will indicate 82. For example:

/install_directory/ibi/srv82

If you install DataMigrator Server Release 7.7 Version 07, then the default names will indicate 77. For example:

/install_directory/ibi/srv77

server

Depends on the license key. Possible values are:

For a 100 Full Function Server license key, the value is ffs.

For a 200 WebFOCUS Server license key, the value is wfs.

For a 300 DataMigrator Server license key, the value is dm.

install_directory2

Is the directory where WebFOCUS BUE is installed.

Procedure: How to Copy the RMPROF.FEX File (Release 8.2 or 7.7.07 Reporting Servers or Release 8.2.04 or 7.7.08 Reporting Servers)

On the machine where Resource Management is configured, copy the following file:

/install_directory1/ibi/srvxx/server/catalog/rm/rmprof.fex

to:

/install_directory2/ibi/WebFOCUS_BUE82/srv/wfs/catalog/rm/rmprof.fex

where:

install_directory1

Is the directory where Resource Management is installed.

xx

Is the Reporting Server release.

Note: The type of server you install determines the default names for the program folder and product directory. If you install the WebFOCUS Reporting Server Release 8.2, then the default names will indicate 82. For example:

/install_directory/ibi/srv82
If you install DataMigrator Server Release 7.7 Version 07, then the default names will indicate 77. For example:

/install_directory2/ibi/srv77

_server_

Depends on the license key. Possible values are:

- For a 100 Full Function Server license key, the value is ffs.
- For a 200 WebFOCUS Server license key, the value is wfs.
- For a 300 DataMigrator Server license key, the value is dm.

/install_directory2

Is the directory where WebFOCUS BUE is installed.

**Procedure:** How to Copy RMPROF.PRF (Release 8.0 or 7.05 and 8.1 or 7.06 Reporting Servers)

On the machine where Resource Management is configured, copy the following file:

/install_directory1/ibi/srvxx/server/etc/rmprof.prf
to:

/install_directory2/ibi/WebFOCUS_BUE82/srv/wfs/catalog/rm/rmprof.fex

where:

/install_directory1

Is the directory where Resource Management is installed.

**xx**

Is the Reporting Server release.

**Note:** The type of server you install determines the default names for the program folder and product directory. If you install the WebFOCUS Reporting Server Release 8.2, then the default names will indicate 82. For example:

/install_directory/ibi/srv82

If you install DataMigrator Server Release 7.7 Version 07, then the default names will indicate 77. For example:

/install_directory/ibi/srv77

_server_

Depends on the license key. Possible values are:
For a 100 Full Function Server license key, the value is ffs.
For a 200 WebFOCUS Server license key, the value is wfs.
For a 300 DataMigrator Server license key, the value is dm.

install_directory

Is the directory where WebFOCUS BUE is installed.

Configuring EUM to Use the Resource Management Metadata Files

EUM is based on Release 8.2.04. However, it can support Resource Management files from any 8.x release. This section describes how to use the correct version of the metadata files.

Procedure: How to Use the Correct Resource Management Files

On the machine where WebFOCUS Business User Edition and Enterprise Usage Monitor are configured, copy the correct version of the files into the baseapp application directory.

**Note:** For Release 8206, use the same files used by Release 8205, as noted in step 3.

1. Copy the files:

   `/install_directory/ibi/WebFOCUS_BUE82/data/apps/baseapp/weum/rmldataNN.mas`
   `/install_directory/ibi/WebFOCUS_BUE82/data/apps/baseapp/weum/rmldataNN.acx`
   `/install_directory/ibi/WebFOCUS_BUE82/data/apps/baseapp/weum/rmldbNN.mas`
   `/install_directory/ibi/WebFOCUS_BUE82/data/apps/baseapp/weum/rmldbNN.acx`

   to each of the following directories:

   `/install_directory/ibi/WebFOCUS_BUE82/data/apps/baseapp/`
   `/install_directory/ibi/WebFOCUS_BUE82/srv/wfs/catalog/rm/`

   where:

   `install_directory`

   Is the directory where WebFOCUS BUE is installed.

   `NN`

   Is the Reporting Server version where Resource Management is configured.

2. Depending on your server release, rename the corresponding rmldataNN files to rmldata.mas and rmldata82.acx in both locations. For example, if you install the WebFOCUS Reporting Server Release 8.2, rename rmldata82.mas to rmldata.mas, rmldata82.acx to rmldata.acx, rmldb82.mas to rmldb.mas, and rmldb82.acx to rmldb.acx.
3. Additionally, for releases 8205 and 8206, copy all of the files from:
   
   \(/install\_directory/ibi/WebFOCUS\_BUE82/data/apps/baseapp/weum/rmldb\_8205\_8206\)
   
   to the following directory:

   \(/install\_directory/ibi/WebFOCUS\_BUE82/srv/wfs/catalog/rm/\)
   
   There is no renaming necessary for these files.

**Configuring Access to the Resource Management Log File (RMLDATA.LOG)**

Access to the Resource Management log files is defined through a FILEDEF command that is defined in the Reporting Server profile, edasprof.prf.

**Procedure:** How to Define a FILEDEF to Access the RMLDATA.LOG File

1. Sign in to BUE as manager or navigate back to the browser where you signed in to BUE.
2. On the menu bar, click *Administration*, and then select *Reporting Server Console*.
3. Click the *Workspace* button on the sidebar.
4. Navigate to the Configuration Files folder, right-click *Server Profile - edasprof.prf*, and select *Edit*, as shown in the following image.

   ![Workspace Image](image)

5. Add both FILEDEF commands at the end of the server profile, for example:

   ```
   FILEDEF baseapp/rmldata DISK /srvxx/wfs/rmldata.log
   FILEDEF rmldata DISK /srvxx/wfs/rmldata.log
   ```
Note:

- If you are using a network drive, use the following FILEDEF command:

  FILEDEF baseapp/rmldata DISK //machinename/directory/rmldata.log
  FILEDEF rmdatadir DISK //machinename/directory/rmldata.log

  **Note:** Make sure the directory located on your network drive is shared so that it is accessible from the computer where BUE/EUM is installed.

- If you have multiple rmdatadir files, use the CONCAT command. For example:

  FILEDEF baseapp/rmldata DISK //machinename/directory/rmldata.log
  FILEDEF baseapp/rmldata1 DISK //machinename/directory1/rmldata.log
  FILEDEF baseapp/rmldataN DISK //machinename/directoryN/rmldata.log
  FILEDEF baseapp/rmldata CONCAT baseapp/rmldata1 baseapp/rmldataN

where:

  - **xx**
    - Is the Reporting Server release.

  **Note:** The type of server you install determines the default names for the program folder and product directory. If you install the WebFOCUS Reporting Server Release 8.2, then the default names will indicate 82. For example:

    /install_directory/ibi/srv82

    If you install DataMigrator Server Release 7.7 Version 07, then the default names will indicate 77. For example:

    /install_directory/ibi/srv77

  - **machinename**
    - Is the name of the network machine.

  - **directory1...directoryN**
    - Are the names of the network directories.

  - **rmdatadir**

  - **rmdatadirN**
    - Is the N\textsuperscript{th} WebFOCUS Resource Management file.

6. Click Save.

7. Navigate to the Miscellaneous Files folder, right-click \textit{Environment - edaenv.cfg}, and select \textit{Edit}.
8. Add the following command:

   computername=hostname

where:

   hostname

   Is the host name of the machine where EUM is installed.

9. Click Save.

10. Click Restart on the ribbon for the change to take effect.

### Configuring Access to RMLDB

Resource Management historical data is stored in the RMLDB database. This section describes how to configure EUM to access the RMLDB. This configuration may need assistance from your Resource Management administrator.

The Adapter configuration on the WebFOCUS environment where Resource Management is configured needs to be replicated on the EUM environment.

Configure the Adapter to the Resource Management repository. If you have more than one Resource Management repository, each will require a separate installation of EUM.

#### Procedure: How to Configure the RMLDB Adapter

Gather connection information from the Resource Management server environment.

**Note:** If you configured the adapter as Trusted, the database administrator must set up a Read Only user ID on the Resource Management repository database. The Resource Management repository database credentials for the Read Only user ID will be used in step 9.

1. From the Resource Management Web Console, click the Adapters tab or, if you are running Release 8.2.03 or higher, click the Connect to Data button on the sidebar.

2. Expand the Configured folder, or view the Configured Adapters panel, to see the list of configured adapters.

3. Right-click the adapter used for the Resource Management repository database and select Properties.

4. Use this information to replicate this adapter on the EUM server.

   **Note:** It is critical the connection name is identical.

5. Sign in to BUE using the manager user ID.

6. From the menu bar, click Administration, and then select Reporting Server Console.
7. Click the Connect to Data button.

8. In the Adapter panel, find the same adapter being used for the RMLDB database, as shown in the following image.

![Available Adapters](image)

9. Once you locate the correct adapter, right-click it and select Configure. Type the same properties as you have on your Resource Management Reporting Server.

   **Note:** If the RMLDB adapter is Trusted, select Explicit from the Security drop-down list and type the user credentials of the Read Only user ID.

10. Click Test to verify the connection.

11. Click Configure to finish configuring your adapter.

**Granting Access to Server Roles to Read Data Outside of Installation Directories**

The rmldata.log file to be monitored is typically located outside of the EUM machine. In order for developers and basic users to access the file, it will be necessary to change their file privileges on the EUM Reporting Server.

**Procedure: How to Grant Access to Server Roles to Read Data Outside of Installation Directories**

1. Sign in to BUE using the manager user ID.

2. From the menu bar, click Administration, and then select Reporting Server Console.

3. On the Reporting Server Console, click the Access Control button on the sidebar.

4. On the Access Control panel, navigate to Roles, and expand the Application Administrator folder.
5. Right-click `modelgrp/Developers (Customized)`, and then select `Directory/File Privileges`, as shown in the following image.

The Directory/File Privileges pane opens.

6. Select the `Read` option on the first row (*). This will automatically enable developers to have read access to files outside the EUM environment, as shown in the following image.
7. Click Save and then click OK.

8. On the Access Control panel, navigate to Roles, and then expand the Basic User folder.

9. Right-click modelgrp (Customized), and then select Directory/File Privileges.

   The Directory/File Privileges pane opens.

10. Select the Read option on the first row (*). This will automatically enable basic users to have read access to files outside the EUM environment.

11. Click Save and then click OK.

### Configuring Access to the Mid-Tier Log File

This section describes the remaining steps to configure EUM to access the mid-tier log file. It may be necessary to share or redirect the mid-tier log files to a drive that is accessible from the EUM machine.

**Procedure:** How to Configure Access to the Mid-Tier Log File

1. Sign in as the manager user ID.

2. On the menu bar, click Administration, and then select Reporting Server Console.

3. Click the Applications button on the sidebar.

4. Navigate to the baseapp/weum application folder.

5. Right-click the requestsprof.fex file and select Copy.

6. Right-click the baseapp folder and select Paste.

7. In the baseapp folder, right-click the requestsprof.fex file and select Open.

   **Note:** If the file is not visible, click Preferences in the toolbar and select the Show Files on Application Tree checkbox. Click Update to save your changes.

8. Edit the file so the following line contains the location of the WebFOCUS environment requests.*.log files, as follows:

   ```
   -SET &&DSN = '/install_directory/ibi/WebFOCUSnn/logs/' | 'requests.' | &DT | '.log';
   ```

   where:

   * install_directory

     Is the directory where the WebFOCUS Client application server is installed.

   * nn

     Is the WebFOCUS release.
Enabling Logging on a Linux Environment

This section describes how to enable logging on the WebFOCUS Client application server that you wish to monitor. This is not the WebFOCUS Client associated with the BUE/EUM install.

**Note:** These steps are not performed on the BUE/EUM environment.

**Procedure:** How to Enable Logging on the WebFOCUS Client Application Server

1. Navigate to the Tomcat directory for your WebFOCUS release. For example:
   `/ibi/tomcat/bin`

2. Edit catalina.sh by adding the `-DIBI_Request_Logging=ON` argument to the JAVA_OPTS definition, as follows:
   ```
   JAVA_OPTS="-Xms256m -Xmx512m -Djava.awt.headless=true -DIBI_Request_Logging=ON"
   ```

3. Save the file.
Upgrading EUM from Release 8.2.01 to Release 8.2.04 on a Linux Environment

The following section provides the step-by-step instructions that you need to upgrade your current EUM 8.2.01 installation to 8.2.04 for a Linux environment.

**Note:** Before you begin your upgrade, note if any domain or personal portal pages that have been added to the EUM environment. These will have to be recreated after the upgrade.

**Procedure:** How to Upgrade Your Previous EUM Installation to Release 8.2.04

To upgrade EUM to Release 8.2 Version 04, you must perform the following steps:

1. Upgrade your BUE environment from Release 8.2.01 to Release 8.2.04 by downloading the latest BUE software for your Linux platform, as described in the Installation topic, under WebFOCUS Business User Edition 8.2.04 in the WebFOCUS BUE Technical Library, Release 8.2.04.

2. Copy the CM package, `WEUM_8204_20181211_225939_manager.zip`, from the download site to the BUE Change Management import directory:

   ```
   /install_directory/ibi/WebFOCUS_BUE82/WebFOCUS/cm/import
   ```

   where:

   `install_directory`
   
   Is the drive where WebFOCUS BUE is installed.

3. From the Command prompt, change your current directory to the following path by issuing the following command:

   ```
   /install_directory/ibi/WebFOCUS_BUE82/WebFOCUS/utilities/cm
   ```

   where:

   `install_directory`
   
   Is the drive where WebFOCUS BUE is installed.

4. Run the Change Management cm_import script using the following command.

   **Note:** Do not use the Change Management utility available from the BUE Resource tree to import this change management, as it will not support the necessary rules.

   If you copy and paste the command below, make sure that the command is on a single line. You can do this by first pasting the command in a text editor and removing the new line characters before copying and pasting it into the Command prompt.

   ```bash
   ./cm_import.sh USERNAME=manager PASSWORD=manager_password IMPORTFROM=/install_directory/ibi/WebFOCUS_BUE82/WebFOCUS/cm/import /WEUM_8204_20181211_225939_manager.zip resOverwrite=TRUE importRoles=0 importGroups=2 importUsers=0 importRules=TRUE
   ```
where:

manager_password

Is the manager user ID password set during the BUE installation procedure.

drive

Is the drive where WebFOCUS BUE is installed.

5. Sign in to BUE to see the updated EUM portal and repository content.

Note: The BUE sign on URL is:

http://machinename:26000/ibi_apps

where:

machinename

Is the name of the machine where BUE is running.

Your EUM environment is now successfully upgraded to Release 8.2.04.

Working With the Resource Management Shadow Log

The Resource Management shadow file is a mirror image log file of the RMLDATA log file. Resource Management creates the mirror image so that EUM can read multiple files from a single path. The RMLDATAT shadow log file is written out at the same time the Resource Management archive is run. There are several reason why you may want to configure the Shadow log feature:

- To allow your production WebFOCUS Resource Management application to write a shadow log to a location outside of the production environment that is accessible to the EUM machine.
- If you have multiple WebFOCUS Resource Management environments you can consolidate them to a single location that is accessible to the EUM machine.
- To provide a way for Information Builders to analyze your historical Resource Management data if required.

If you are running Resource Management Release 7.7 Version 08, or higher, you have access to a shadow file capability.

You can enable this feature by editing the edaenv.cfg file with the following line:

RMLOG_SHADOW = fullpath
where:

`fullpath`

Is the location of the Resource Management server.

On a **Windows** machine:

If you have a single Resource Management server configured, the path is:

```
drive:shadow_log_folder
```

where:

`drive`

Is the drive where Resource Management is installed.

`shadow_log_folder`

Is the location of the shadow drive.

If you have multiple Resource Management servers configured, the path is:

```
drive:shadow_log_folder\servern
```

where:

`drive`

Is the drive where Resource Management is installed.

`shadow_log_folder`

Is the location of the shadow drive.

`servern`

Is one of the multiple WebFOCUS Resource Management environments.

**Note:**

- If you have more than one folder, you need to create these folders before enabling this feature.
- Make sure the directory located on your network drive is shared so that it is accessible from the computer where BUE/EUM is installed.

On a **Linux** machine:

If you have a single Resource Management server configured, the path is:

```
../shadow_log_folder
```

where:

`shadow_log_folder`

Is the location of the shadow drive.
If you have multiple Resource Management servers configured, the path is:

```
../shadow_log_folder/servern
```

where:

- **shadow_log_folder**
  - Is the location of the shadow drive.

- **servern**
  - Is one of the multiple WebFOCUS Resource Management environments.

**Note:**

- If you have more than one folder, you need to create these folders before enabling this feature.

- Make sure the directory located on your network drive is shared so that it is accessible from the computer where BUE/EUM is installed.
Chapter 3

Navigating the Enterprise Usage Monitor Environment

This topic describes how to navigate the Enterprise Usage Monitor (EUM) portal and gives an overview of the content items you can access here.

In this chapter:

- Navigating the Enterprise Usage Monitor Environment
- Real Time RMLDATA Static and Dynamic Pages
- Performance Dashboards

Navigating the Enterprise Usage Monitor Environment

It is also important to understand that Manager users, Developers, Advanced users, and Basic users have different access to environment options. That access is determined by the group of users to which you are assigned.

Navigating the Enterprise Usage Monitor Portal

When you access the Enterprise Usage Monitor environment, using the Sign-in page or browser URL, you are presented with the EUM Portal. From the portal, depending on your user role, you can create and edit content, view content that other users published or shared, create and edit personal pages, manage users, configure the system, upload files to the repository, connect to data and edit data, and access interactive help and instructional materials.

The main components of the EUM Portal include a Getting Started Domain, Home Page, Real Time RMLDATA Static Page, Real Time RMLDATA Dynamic Page, Performance Dashboards Page, Resources tree, and Menu bar.
Home Page

The Home Page is the first page that you see when you sign in. The Getting Started domain, shown in the following image, automatically launches when you sign in to WebFOCUS EUM with the username and password that you created during the installation.

The Home Page has three sections with which you can interact:

- **Menu bar**
- **Resources tree**
- **Actions Bar**

The content in these sections varies, depending on your user type.

**Menu Bar**

The Menu bar is located in the upper-right section of the screen, inside the top banner. The following image shows the Menu bar that appears when you are signed in as a Manager.

The Menu bar gives you access to the following options:

- Change your password (click your username).
3. Navigating the Enterprise Usage Monitor Environment

- **Tools:**
  - View the status of deferred reports, and manage them.
  - Stop your outstanding interactive requests that are running.
  - Access Session Viewer, where you can visualize the attributes of the current web session.
  - Access the ReportCaster Status, where you view the status of your scheduled jobs and log reports.

- **Administration:**
  - Access the Security Center, where you define users and groups and grant access permissions.
  - Access the Administration Console, where you configure, administer, and monitor the components of the WebFOCUS application.
  - Access the Reporting Server Console, where you can view and manage the server environment.
  - View and administer the private resources for groups and users.
  - Switch between Normal mode (seeing your own content) and Manager mode (managing other user content).
  - Open the Resources tree on the right side of the window, so you can manage content on Personal Pages.
  - Access the online Help, Information Center, a library of Help topics, self-service videos, Community, Information Builders Home page, as well as information about the WebFOCUS Enterprise Usage Monitor application, version, and available licenses.

- **Sign out.**
Resources Tree

The Resources tree, located on the left side of the Home Page, contains your available resources, such as domains, folders, and content. The following image shows the Resources tree that appears when you are signed in to WebFOCUS Enterprise User Monitor.

The resources are secured using the security model, that is domain-based, similar to that of desktop operating systems. The resources differ for every user. For example, the Basic User sees only public content.

You can expand or collapse folders by clicking the plus (+) or minus (-) sign. When you click a folder, its contents display in the content area. You can also right-click a folder to access a shortcut menu of available options. From the shortcut menu, you can perform the following actions:

- Expand or collapse a folder
- Duplicate a folder
- Cut or copy a folder
- Paste content or another folder inside a folder
- Delete a folder
Allow or suppress access to a folder
Show or hide a folder
Configure security rules for a folder
View and edit properties for a folder

The Resources tree contains the Domains node, which lists the domains and folders that you have created. The Enterprise Usage Monitor comes with the following three default domains:

Enterprise Usage Monitor
Getting Started
Retail Samples

The purpose and contents of each domain are described in the sections below.

Enterprise Usage Monitor Domain

The Enterprise Usage Monitor domain is a read-only domain that contains content for analyzing resource management data. If you want to modify this content, you can save updated versions of it in a new domain or My Content folder. The Enterprise Usage Monitor domain is comprised of the following folders:

My Content
A folder intended for reports, output, and schedules created by a user.

Alerts
Contains Alert templates for Average Response Time, Average Response Time by User, and DBMS Time.

MIDTIER
Contains a visualization that is used in the Midtier dashboard inside the Real Time RMLDATA Static and Real Time RMLDATA dynamic pages.

Resource Management
Provides access to the Resource Analyzer HTML document where you can run a series of Resource Management reports.

RMLDATA
Contains content items built using the RMLDATA data file, which shows your current real-time data. This folder also contains the following dashboards:

Designer Dashboards. Contains all of the content that can be seen in the Performance Dashboards.
Executive KPI IDA. Shows the usage KPIs in an In Document Analytic (IDA) dashboard. There is one filter available for Data that is applied to all content on the dashboard.

Infographics. Contains two runtime Infographics that visually highlight performance for your environment.

RMLDB
Contains content items built using the RMLDB data source, which shows your historical data.

Getting Started Domain
Using the Getting Started domain you can build your own content and test various report procedures. This domain is included with the standard Business User Edition product.

Retail Samples Domain
The Retail Samples domain is a read-only domain that contains sample of content that was created using InfoAssist and App Studio, such as reports, charts, documents, visualizations. It also provide a URL to the demo videos that explain how you can create these items. This domain is included with the standard the Business User Edition product.

Actions Bar
You can use the actions bar to create analytical content, upload files and spreadsheets, connect to data, build portals and pages, schedule procedures, and generate sample content using the options available to you for a domain or folder. The following image shows an example of the actions bar a user has when accessing the Getting Started domain.

The default view of the actions bar displays the most common options available to you. You can access additional options by clicking More.

The actions bar only displays the items that you can create for the domain or folder that is currently selected. If you click the Domains node, the actions bar only displays the Domain and Folder options. The items that display on the actions bar are also a subject to permissions. You can only see the items that are available to you based on your role.
Real Time RMLDATA Static and Dynamic Pages

The Real Time RMLDATA Static and Real Time RMLDATA Dynamic pages show the same content, but use different intervals in which the data is refreshed. The static page refreshes every time you load the page, so you can use it for analysis. The dynamic page automatically refreshes every 30 seconds. You can use it to view the resource management data in real time. All of the reports shown on these pages can be sorted in ascending or descending order. Each page contains the following dashboards:

- **Metrics by User**

  The Metrics by User dashboard is shown in the following image.

  The Metrics by User dashboard contains a visualization comprised of content along the top row that shows core metrics (DBMS, CPU, Elapsed, and Server Time) utilization by User. The charts in the middle of the dashboard show performance by both data and hour, and are color coded by DBMS, CPU, elapsed and server time, and the total number of users. The bottom report shows information on core metrics by user ID. You can use the filter panels on the right to narrow your results to a specific date and time, user ID, server name, and agent service name.

- **Response Times by Datetime**
The Response Times by Datetime dashboard is shown in the following image.

The charts on the Response Time by Datetime dashboard show how many reports are being run by user ID, core metrics by hour, and core metrics by user ID. The reports on the bottom of the dashboard show four types of response times (Average, Mean, Min, and Max) by date and by reporting server. You can use the filter panels on the right to narrow your results to a specific user ID, start date, start hours, server name, and agent service name.

Metrics and Average Response Times

The Metrics and Average Response Times dashboard is shown in the following image.
The series of horizontal charts across the top of the Metrics and Average Response Times dashboard show core metrics (DBMS, CPU, Elapsed, and Server time) by time and hour. The report and charts in the left middle show core metrics and average user response time by user ID and server. The line chart on the bottom shows user average response time by date and time. This chart is intended give a summary of how well the system is performing at a given time. You can also use the filter panels on the right to narrow your results to a specific start date, start hour, user ID, server name, and agent service name.

### Mid-tier

The Mid-tier dashboard is shown in the following image.

The Mid-tier dashboard represents activity on the WebFOCUS mid-tier. The line chart on top shows the mid-tier CPU utilization by time. The horizontal bar charts show core metrics (CPU, DBMS and Web Tier time) by user and time. The report on the bottom-right shows the domains and procedures users run, and the time they run them. You can use the filter panels on the right to narrow your results to a specific user ID, hour and minute range.
Performance Dashboards

The Performance dashboards tab contains pages with dashboards that represent the activity occurring in your environment. The available dashboards show metrics by user ID, server, time, or web application server. You can use the filter drop-down menus, shown in the following image, to narrow down your results to a specific user ID, server, data, hour, agent, and request name.

These filters are applied globally and affect all dashboards on the Performance Dashboard portal page.

When viewing charts on these pages, note that any chart that measures metrics by user ID are auto link enabled drill-down reports. This allows you to drill down to a User Detail report that shows the procedure name and procedure for each metric. To access this report, right-click the metric and click User Details.

There are also active reports available on the Time Focus and Web Browser Focus pages, respectively. When working with an active report, you can:

- Sort data within any column in ascending or descending order.
- Make a comment on a specific data field. A comment will be indicated by an asterisk (*) next to the field.
- Highlight a data field or row.
- Remove the highlight from all fields or rows.
- Filter the data.

The Performance Dashboard page contains the following dashboards:

- User Focus
The User Focus dashboard is shown in the following image.

![User Focus Dashboard Image]

The User Focus dashboard contains a visualization comprised of content along the top row that shows core metrics (DBMS, server time, CPU time, and requests) by user ID. The remaining charts in the dashboard show performance metrics by session date, user, and session hour.

**Note:** The selected filter values are propagated to the drill-down report.

- **Server Focus**
The charts on the Server Focus dashboard show core metrics by server. The top row shows the number of requests made by a specific user, core server metrics (duration, CPU time, DBMS, and server time) by hour, and core server metrics by user. The bottom row shows the number of requests made by the hour, along with an active report that shows the performance statistics of the server as a whole.

- **Time Focus**
The Time Focus dashboard is shown in the following image.

The Time Focus dashboard represents metrics by time.

- **Web Browser Focus**

The Web Browser Focus dashboard is shown in the following image.

The Web Browser Focus dashboard represents metrics used on the web or server application, and focuses on the client CPU, as well as the web tier by time.
Resource Analyzer monitors data usage activity by collecting the attributes of requests and storing them in a set of Usage Monitoring tables. It automatically keeps track of each request, which data sources and columns it accessed, when it was run, how long it took, which resources it consumed, and more. Resource Analyzer allows you to report on, graph, and analyze end-user request traffic.

**In this chapter:**
- Running Resource Analyzer Reports
- Available Resource Analyzer Reports

**Running Resource Analyzer Reports**

After you have enabled Usage Monitoring for a period of time and Resource Analyzer has collected a reasonable amount of data, you can display several reports and graphs about the monitored data. The Resource Analyzer reports are available from the Enterprise Usage Monitor (EUM) portal.

**Procedure:** How to Run Resource Analyzer Reports

To run a Resource Analyzer report:

1. Sign in to Enterprise Usage Monitor.
2. On the Home page, expand the *Enterprise Usage Monitor* folder in the Resources Tree.
3. Click *Resource Management* and right-click the *ResourceAnalyzer* HTML document in the content area. Click *View*, as shown in the following image.

4. The Resource Analyzer Reports filter window opens.

5. Select the report you want to run from the Select Report drop-down menu, as shown in the following image.

Here, you can specify general information that applies to all Resource Analyzer reports. This information includes setting date ranges for report selection criteria, drilling down on reports for more details, and displaying reports in graphical format.

**Note:** All of the Report filter options shown are only available for the following reports:

- Monitored Sessions
- Monitored Commands

All other reports will only have the first three options available.
The following options are available:

**Select server**
The server, or servers, you want to report on. Multiple server support is only available if the server you are connected to is part of a many-to-one configured repository.

**Report format**
Allows you to select the output format of the report. The available options are HTML, active report, PDF, Excel, and PowerPoint. The default value is HTML.

**Report period**
The time range that the report will be run on.

**Start Date**
Allows you to select the first date of the reporting range.

**End Date**
Allows you to select the first date of the reporting range. The default end date is the current date.

**Visualize Data**
Allows you to add visualization to numeric resource values, such as CPU and duration times. This option is enabled, by default.

**Top Number**
Allows you to set the top number of users, procedures, or data sources selected for Top n reports. The available options are 5, 10, 15, 20, and 25. The default value is 10.

**Note:** This option is only available when running a Users Top n report.

**Location of names file**
Allows you to decode the sign-in ID to a user name to use in the Top n Users report. The format for the file is `userid,'name'`. The default file searched for is names.txt in the baseapp folder.

**Note:** This option is only available when running a Top n report.

The information you supply here will apply to any report you run. To change this information, return to this screen by running another report and changing the filters.

6. Click **View Report**.

**Available Resource Analyzer Reports**

Resource Analyzer offers tabular and graphical reports that show content planning requirements, user activity profiles, usage profiles over time, typical request structures, and columns used.
Initially, when you execute reports, you will usually see a general summary report for the category. Most of the column headings of the reports are hyperlinked. You can click the column heading links to re-sort the report by different columns. In addition, other hyperlinks in the report let you drill down to more detailed information. These hyperlinked drill-down options are described in more detail throughout this chapter.

The following sections describe the individual reports, as well as the hyperlinked drill-down options for each report.

**Monitored Sessions**

The Monitored Sessions report provides an overview of the procedures and commands that are being monitored, including the number of records processed, and the rows returned.

The following image shows the Monitored Sessions report.

![Monitored Sessions Report](image)

This report has one hyperlink that allows you to drill down to other reports, as described in the following table.

<table>
<thead>
<tr>
<th>Click a hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date column</td>
<td>Session Summary Report by Hour</td>
<td>Lists the procedures and commands that are being monitored by hour. Allows you to drill down to see this report by quarter, and then by detail.</td>
</tr>
</tbody>
</table>

**Monitored Commands**

The Monitored Commands report provides an overview of the resources being used by each command, including the execution, CPU, and wait time.
The following image shows the Monitored Commands report.

![Monitored Commands Report](image)

### Data Sources Never Used

The Data Sources Never Used report provides an overview of unused data sources, including the application directory they are found in, and the last modification date and time.

The following image shows the Data Sources Never Used report.

![Data Sources Never Used Report](image)

### Procedures Never Used

The Procedures Never Used report lists those procedures in the application path of the server that have never been executed.
The following image shows the Procedures Never Used report.

**Unused Procedures**

Server Name: FUENT-PC:8121

<table>
<thead>
<tr>
<th>Application</th>
<th>Procedure</th>
<th>Last Modification Date</th>
<th>Last Modification Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>baseapp</td>
<td>flow01</td>
<td>2012/01/04</td>
<td>11:40:41</td>
</tr>
<tr>
<td></td>
<td>flow01_dmhr_t</td>
<td>2012/01/04</td>
<td>11:40:41</td>
</tr>
<tr>
<td></td>
<td>opt_test1</td>
<td>2014/03/25</td>
<td>11:57:34</td>
</tr>
<tr>
<td></td>
<td>profile</td>
<td>2010/08/11</td>
<td>11:21:53</td>
</tr>
<tr>
<td>dimensions</td>
<td>ed_subtype_lookup</td>
<td>2016/05/23</td>
<td>15:45:50</td>
</tr>
<tr>
<td></td>
<td>ed_subtype_lookup</td>
<td>2016/06/28</td>
<td>15:57:55</td>
</tr>
<tr>
<td>ibisamp</td>
<td>cargraph</td>
<td>2012/02/06</td>
<td>22:05:52</td>
</tr>
<tr>
<td></td>
<td>carinst</td>
<td>2012/02/06</td>
<td>22:05:52</td>
</tr>
<tr>
<td></td>
<td>carinst2</td>
<td>2012/02/06</td>
<td>22:05:52</td>
</tr>
</tbody>
</table>

**Users Report by Frequency of Use**

The following image shows the Users Report by Frequency of Use, which provides a summary of user activity. This report lists users on the left, followed by columns with hyperlinked headings that indicate the number of requests the users submitted, their percentage of total requests and resource usage, and their first and last access dates. Click any of the hyperlinked column headings to sort the report by that column.

**Users - Frequency of Use Summary**

Server Name: FUENT-PC:8121
Date Range: 08/12/2015 - 09/12/2016

<table>
<thead>
<tr>
<th>User</th>
<th>Number of Commands Executed</th>
<th>Number of Distinct Procedures</th>
<th>% Total Commands</th>
<th>% Total Procedures</th>
<th>% Total Resources</th>
<th>First Command Executed</th>
<th>Last Command Executed</th>
</tr>
</thead>
<tbody>
<tr>
<td>iBRG12026</td>
<td>53</td>
<td>4</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>08/12/2015</td>
<td>09/12/2016</td>
</tr>
</tbody>
</table>

This report has several hyperlinks that allow you to drill down to additional reports. The following table lists and describes these hyperlinks.
### Hyperlink in the: Report Generated Description

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Total Commands</td>
<td>Procedure Use by User</td>
<td>Lists the procedures executed by the user with information about how often and when the executions have occurred. Also allows you to drill down to see detailed request information for each procedure as well as the actual request syntax.</td>
</tr>
<tr>
<td>% Total Procedures</td>
<td>Procedure Summary for User</td>
<td>Lists the procedures used for requests by the specified user, along with request and resource information and dates of access. Also allows you to drill down to see detailed request information for each procedure as well as the actual request syntax.</td>
</tr>
<tr>
<td>% Total Resources</td>
<td>Resources used by User</td>
<td>Summarizes the resource usage of the specified user, including number of requests, elapsed time, CPU seconds, I/Os, rows returned, and access dates.</td>
</tr>
</tbody>
</table>

### Users Report by Resources Used

The following image shows the Users Report by Resources Used, which provides information on resource utilization by user. This report lists users along with the number of requests they submitted, total and average elapsed time, CPU seconds, I/Os, rows, and their first and last access dates. Click any of the hyperlinked column headings to sort the report by that column.

![Users - Resources Used](image)

This report has one hyperlink that allows you to drill down to another report, as described in the following table.
### Users Report by Historical Use

The following image shows the Users Report by Historical Use, which provides information on historical activity by user. This report lists users along with the number of requests they submitted in a particular year and the percentages of their requests and resource usage out of the totals of that year. Click any of the hyperlinked column headings to sort the report by that column.

![Users - Historical Use](image)

This report has several hyperlinks that allow you to drill down to additional reports, summarized in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>User column.</td>
<td>Data Source Use by User</td>
<td>Lists the data sources accessed by the specified user, information about the requests, and dates of access. Also allows you to drill down to see column and data type information, as well as procedures used in requests by the specified user.</td>
</tr>
</tbody>
</table>
4. Understanding Resource Management Reports

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year column.</td>
<td>Access per Month for User during Year</td>
<td>Summarizes by month the number of requests made by the specified user, along with the percentage of the user requests and resource usage out of the particular date totals.</td>
</tr>
<tr>
<td>% Total Procedures column.</td>
<td>Procedures used by User</td>
<td>Summarizes the procedure access of the specified user, including number of executions and % of resources used.</td>
</tr>
</tbody>
</table>

**Users Report by Top N**

The following image shows the Users Report by Top n Users, which shows the usage data for the top number of users specified. The number of users is specified in the Top number drop-down menu of the Report Filter. The available options for top number are 5, 10, 15, 20, and 25. The default value is 10. The Name column in this report can use a file that decodes the User ID shown in the User column. The format for the file is `userid,name`. The default file searched for is `names.txt` in the baseapp folder.

![Top 10 Users](image-url)
Procedures Report by Frequency of Use

The following image shows the Procedures Report by Frequency of Use, which provides a summary of procedures being executed. This report lists procedures executed at your site by type, along with statistics about each execution.

This report has one hyperlink that allows you to drill down to another report, as described in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure Type</td>
<td>Request from Procedure Ad hoc or</td>
<td>Lists the date and time, user, resource, and execution information for all procedures of the specified type. Also allows you to drill down further to see the actual request syntax.</td>
</tr>
<tr>
<td>column.</td>
<td>Procedure Summary (depending on procedure type selected)</td>
<td></td>
</tr>
</tbody>
</table>
Procedures Report by Resources Used

The following image shows the Procedures Report by Resources Used, which provides a summary of resource utilization by procedure. This report summarizes the resource usage for the procedures executed at your site, including their percentage of total procedures and resources used, as well as total CPU seconds, elapsed time, I/Os, rows, and first and last execution.

This report has one hyperlink that allows you to drill down to another report, as described in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure Type</td>
<td>Procedure Resource Utilization</td>
<td>Summarizes the executions, users, total and average resource usage, and execution dates for procedures of all types. Also lets you drill down on procedure names to see more detailed usage information as well as the actual request syntax.</td>
</tr>
</tbody>
</table>

Using WebFOCUS Enterprise Usage Monitor (EUM)

4. Understanding Resource Management Reports
Procedures Report by Historical Use

The following image shows the Procedures Report by Historical Use, which provides information on historical activity by procedures. This report summarizes by year the number of executions, users, and percentage of executions and resources used by the types of procedures at your site. Click any of the hyperlinked column headings to sort the report by that column.

This report has one hyperlink that allows you to drill down to another report, described in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year column.</td>
<td>Procedure Access by Year by Month</td>
<td>Lists the month for all executed procedures of the specified procedure type and year. Also lists their number and percentage of executions, their number of users, and their resource usage percentage.</td>
</tr>
</tbody>
</table>
Procedures Report by Top N

The following image shows the Procedures Report by Top n Users, which shows the top number of procedures executed by the user. The number of procedures is specified in the Top number drop-down menu of the Report Filter. The available options for top number are 5, 10, 15, 20, and 25. The default value is 10.

This report has one hyperlink that allows you to drill down to another report, described in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure/Report</td>
<td>Procedure execution count by User</td>
<td>Shows how many times the selected procedure was executed by the user.</td>
</tr>
</tbody>
</table>
Data Sources Report by Frequency of Use

The following image shows the Data Sources Report by Frequency of Use, which provides a summary of data sources being used. This report lists all accessed data sources along with the number and percentage of requests to each data source, the number of users, the percentage of resources consumed, and access dates. Click any of the hyperlinked column headings to sort the report by that column.

This report has several hyperlinks that allow you to drill down to additional reports, summarized in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Source column.</td>
<td>Column Level for Data Source <strong>Data Source</strong></td>
<td>Shows usage for the columns for the specified data source, including whether they were used with functions, relations, selects, sorts, and groups, and how many days the column has been unused. Also allows you to drill down to see more information about when the columns were used.</td>
</tr>
<tr>
<td>Data Type column.</td>
<td>Data Sources of type <strong>Data Type</strong></td>
<td>Lists all the data sources of the specified data type (the engine used in your enterprise) along with the dates of first and last access for each data source.</td>
</tr>
</tbody>
</table>
### Hyperlink in the: Report Generated Description

<table>
<thead>
<tr>
<th>Number of Times Used column.</th>
<th>Request Activity for Data Source: Data Source</th>
<th>Shows request activity for all users of the specified data source, including I/Os, rows returned, and elapsed time. Also allows you to drill down further to see the actual request syntax.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Distinct Users column.</td>
<td>Users of Data Source</td>
<td>Lists all users of the specified data source along with a summary of the resources they have used.</td>
</tr>
<tr>
<td>% Total Requests column.</td>
<td>Procedures Using Data Source</td>
<td>Lists the procedures used to access the specified data source, along with their resource usage and dates of access. Also allows you to drill down on a procedure name to see request information for that procedure and the actual request syntax.</td>
</tr>
</tbody>
</table>

#### Data Sources Report by Resources Used

Understanding the patterns of resource usage at your site, including CPU and elapsed time, I/Os, and rows returned, can be helpful in several ways. This information can help you determine which data sources might be good candidates for pre-joining, pre-aggregation, or denormalization, and help you decide which data to index. In addition, you can monitor users and inform them of their resource usage to encourage them to plan their requests more efficiently. Accessing the Data Sources report category by the Resource Utilization mode of analysis can help you with all of these issues.
The following image shows the Data Sources Report by Resources Used, which provides a summary of resource utilization by data source. This report summarizes the resources used by all data sources at your site, including both total and average elapsed time, CPU seconds, I/Os, and returned rows. Click any of the hyperlinked column headings to sort the report by that column.

This report has several hyperlinks that allow you to drill down to additional reports, summarized in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Source column.</td>
<td>Column Level for Data Source <strong>Data Source</strong></td>
<td>Shows usage for the columns for the specified data source, including whether they were used with functions, relations, selects, sorts, and groups, and how many days the column has been unused. Also allows you to drill down to see more information about when the columns were used.</td>
</tr>
<tr>
<td>Number of Times Used column.</td>
<td>Procedures Using <strong>Data Source</strong></td>
<td>Lists the procedures used to access the specified data source, along with their resource usage and dates of access. Also allows you to drill down on a procedure name to see request information for that procedure and the actual request syntax.</td>
</tr>
</tbody>
</table>
Data Sources Report by Historical Use

The accessibility of a web environment makes rapid growth of your user base inevitable. As more users are accessing more data, monitoring site activity becomes more important, offering you information about the following areas:

- How much data is being requested.
- What the busiest times of the day, week, and month are.
- Which users are most active against which data sources.
- What standard response times have been.

Accessing the Data Sources report category by historical analysis lets you analyze user activity to determine the peaks and valleys in system usage, supplying you with a solid basis for deciding how to schedule requests, educate users, and so on.

The following image shows the Data Sources Report by Historical Use, which provides information on historical activity by data source. This report summarizes request activity by year and month for all accessed data sources at your site. Click any of the hyperlinked column headings to sort the report by that column.

This report has several hyperlinks that allow you to drill down to additional reports, summarized in the following table.
<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Source column.</td>
<td>Column Level for Data Source Data Source</td>
<td>Shows usage for the columns for the specified data source, including whether they were used with functions, relations, selects, sorts, and groups, and how many days the column has been unused. Also allows you to drill down to see more information about when the columns were used.</td>
</tr>
<tr>
<td>Year column.</td>
<td>Data Access for Data Source during Year</td>
<td>Shows data access information for the specified data source and year, including number of requests, elapsed processing time, CPU seconds, I/Os, and rows returned. Also allows you to drill down on a specific date (month, day, and year) to see request information for that date as well as the actual request syntax.</td>
</tr>
</tbody>
</table>
Data Sources Report by Top N

The following image shows the Data Sources Report by Top n, which shows the top number of data sources used by the user. The number of data sources is specified in the Top number drop-down menu of the Report Filter. The available options for top number are 5, 10, 15, 20, and 25. The default value is 10.

![Top 10 Data Sources](image)

Errors and Messages

The Errors and Messages report provides an overview of error messages that Resource Management has monitored.

The following image shows the Errors and Messages report.

![Issued Errors and Messages](image)
This report has one hyperlink that allows you to drill down to other reports, as described in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Errors and Messages column.</td>
<td>Errors and Messages</td>
<td>Shows the procedure and command count by user for the specified error message. You can drill down into procedures that issued the messages or to the command that issues the message, and then to all of the messages issued for the selected procedure.</td>
</tr>
</tbody>
</table>

If you click the hyperlink in that report, you generate a final report which shows the error message in red. Click the red hyperlink to open the All Messages report, which shows all of the messages generated by the selected procedure.

**Procedure with Errors**

The Procedure with Errors report provides information on error situations by Procedure Name.

The following image shows the Procedure with Errors report.

![Procedure with Errors Image]

This report has one hyperlink that allows you to drill down to another report, as described in the following table.
If you click the hyperlink in the Requests Executed with Errors report, the Error Message report opens. This report shows all of the error messages generated.

**Domain Usage Report**

The summary version of the report displays the domain name, the number of reports from the domain that have been monitored, the number of users that have run domain reports that have been monitored, the average execution time of all of the monitored reports in the domain, and the average CPU time used by all of the monitored reports in the domain. The following image shows the Domain Usage report.

![Domain Summary Table](image)

This report has two hyperlinks that allow you to drill down to additional reports summarized in the following table.
<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain column.</td>
<td>Domain by Report Summary report</td>
<td>Provides the high level name of the reports that have been monitored, the number of times the report has been run, the average execution time the report used, the average CPU time used, the total number of rows returned by all of the executions, and the number of database records processed by all executions of the report. Also allows you to drill down further to view the report names that have executed.</td>
</tr>
</tbody>
</table>

**Change Impact for Column Report**

It is very useful to determine in advance which users and applications will be most affected by impending data source schema changes. The Change Impact for Column reports determine how data-source modifications affect users and their applications.

Once you select the report, select the column for which you want to examine information under the Column name drop-down menu and click View Report. Any use of a column with that name in any monitored table is reported.
The report window opens, as shown in the following image. This report summarizes the procedures used to access the specified column.

![Change Impact](image)

<table>
<thead>
<tr>
<th>Application</th>
<th>Procedure Name</th>
<th>Data Source</th>
<th>First Access</th>
<th>Last Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>wfdemo/test</td>
<td>wf_retail_validateload</td>
<td>wfrhold1</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold10</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold11</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold12</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold13</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold14</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold15</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold16</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold17</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold18</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold19</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold2</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold20</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold3</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold4</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold5</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold6</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold7</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold8</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wfrhold9</td>
<td>09/13/2016</td>
<td>09/13/2016</td>
</tr>
</tbody>
</table>

This report has two hyperlinks that allow you to drill down to additional reports summarized in the following table.
Procedure Name column.

- **Requests from Procedure: Procedure Name**
  - Shows a variety of information, including date and time, user, CPU seconds, elapsed execution time, I/Os, and rows returned, about the requests made with the specified procedure. Also allows you to drill down further to see the actual request syntax.

Data Source column.

- **Column Level for Data Source: Data Source**
  - Shows usage for the columns for the specified data source, including whether they were used with functions, relations, selects, sorts, or groups, or if they were never used. Also allows you to drill down to see more information about when the columns were used.

### Procedure Benchmarks Report

Benchmarking is a process by which you determine whether your site’s service level agreements (SLAs) are being met. Use the Procedure Benchmarks reports to identify response times for requests and other information for analyzing site performance.

From the Procedure Name drop-down menu, select the name of the procedure for which you want to examine information and click **View Report**.

The following image shows the Procedure Benchmarks report appears, as shown in the following image. This report shows information about executions of the specified procedure, including execution date and time, user, CPU and elapsed time, usage type, and client type. Click any of the hyperlinked column headings to sort the report by that column.
**Excessive Resources Report**

Some of the most helpful information Resource Analyzer can provide is about which requests are using the most resources. This kind of information helps you identify causes of network and machine-use bottlenecks and enables you to decide what data needs to be indexed, what requests need to be scheduled, or which users need to be educated. The Excessive Resources reports help you with this investigation.

For a request to be included in the report, it need only exceed one of the resource values specified, not all. Specify criteria to limit your report to information on requests that consume resource usage values above a certain average, and click View Report.

The following image shows the Excessive Resources report. This report lists the most resource-intensive procedures: those whose average resource usage values, including CPU seconds, elapsed time, I/Os, and rows returned, exceed at least one of the limits you specified. The report also lists the average resource usage values for each procedure. Click any of the hyperlinked column headings to sort the report by that column.

This report has one hyperlink that allows you to drill down to another report, as described in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure Name column.</td>
<td>Requests from Procedure Procedure</td>
<td>Lists the date and time, user, and resource information for each request of the specified procedure. Also allows you to drill down further to see the actual request syntax.</td>
</tr>
</tbody>
</table>
Long-running Requests Report

Procedures with long running requests use excessive resources, a particular problem when dealing with operational systems. These procedures should be targeted for optimization.

The following image shows the Long-running Requests report. By default, the report is sorted by Average Elapsed Seconds and Average CPU Seconds.

This report has one hyperlink that allows you to drill down to another report, as described in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure Name</td>
<td>Requests from</td>
<td>Shows the requests that were executed from the selected procedure. Also allows you to drill down further to see the actual request syntax.</td>
</tr>
<tr>
<td>column.</td>
<td>Procedure: <em>Procedure Name</em></td>
<td></td>
</tr>
</tbody>
</table>

Large Volume Requests Report

Large volume requests are requests that return more data than might be necessary. These requests can be targeted for optimization. You can identify these reports with the Large Volume Requests report.

The following image shows the Large Volume Requests report. By default the report is sorted by the highest Average Rows.

This report has one hyperlink that allows you to drill down to another report, as described in the following table.
Hyperlink in the: | Report Generated | Description
--- | --- | ---
Procedure Name column. | Requests from Procedure Name | Shows the requests that were executed from the selected procedure. Also allows you to drill down further to see the actual request syntax.

**Dormant Data Report**

Dormant data, or data that is very infrequently accessed, can slow response times on your site. Use the Dormant Data reports to identify which data sources and columns have been less recently or never queried and can be deleted or archived to improve performance.

The following image shows the Dormant Data report. This report shows a variety of information about each data source, such as number of requests, users, resource usage, and access dates. The Days Since Used column indicates the number of days that have passed since the data source was last accessed. By default, the report is sorted by access dates, with those data sources that have no access dates (and are therefore dormant) listed first, and includes all data sources in the application path, including those that aren’t being monitored.

![Dormant Data - Data Source Summary](image)

This report has one hyperlink that allows you to drill down to another report, as described in the following table.
Excessive Joins Report

Joining too many tables can be slow and costly. Denormalization can be an effective method for cutting CPU time and improving response times. The Excessive Joins reports help you determine which data is most frequently joined by user requests and help you decide how to plan your de-normalizing strategies.
The following image shows the Excessive Joins report. This report lists the most frequently joined data sources along with the procedures used to join them.

<table>
<thead>
<tr>
<th>Frequency of use</th>
<th>Application Name</th>
<th>Procedure Name</th>
<th>Data Sources Joined</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>unknown</td>
<td>Ad-Hoc</td>
<td>ws$hold, wm$hold</td>
</tr>
</tbody>
</table>

This report has one hyperlink that allows you to drill down to another report, as described in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedure Name column.</td>
<td>Requests from Procedure Joining Data source1, Data source2, Data source n</td>
<td>Shows a variety of information, including date and time, user, CPU seconds, elapsed execution time, I/Os, and rows returned, about the requests making the specified join. Also allows you to drill down further to see the actual request syntax.</td>
</tr>
</tbody>
</table>
Efficiencies can be created by calculating column values once and storing the results in summary tables for repeated use. This saves the cost of calculating these values every time a report is run.

The following image shows the Repeated Aggregations report. This report shows how many requests used different functions on certain columns of data sources, along with the dates of access. Click any of the hyperlinked column headings to sort the report by that column.
This report has one hyperlink that allows you to drill down to another report, as described in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function column.</td>
<td>Procedure Summary - Frequency of Use Using Function on Data Source.Column Name</td>
<td>Summarizes the procedure types (Application and Ad_Hoc) that have executed the specified function for the specified data source and column, along with statistics about each execution. Also allows you to drill down further to see a list of the cataloged procedures and information about them.</td>
</tr>
</tbody>
</table>

### Optimization

For WebFOCUS language reports, for example, TABLE FILE, that are run against a relational data source, the drill-down options in this report lead users to a report that will show the original code, which is translated SQL with a drill-down link to any aggregation messages.

![Optimization Messages](image)
This report has one hyperlink that allows you to drill down to another report, as described in the following table.

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimization Messages column.</td>
<td>All Optimization Messages</td>
<td>Shows the procedure and command count by user for the selected message.</td>
</tr>
</tbody>
</table>

If you drill down on the Command Count hyperlink, a report opens that lists the Command Names. If that column has an active drilldown, you can click that link and open the Original/Translated/Messages report, as shown in the following image.

The following columns are available:

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Original Request</td>
<td>Shows the original request contents.</td>
</tr>
<tr>
<td>Translated Request</td>
<td>Shows the SQL that was sent to the RDBMS, if the original request was for a relational table.</td>
</tr>
<tr>
<td>Messages</td>
<td>Indicates if any messages were issued for this request.</td>
</tr>
</tbody>
</table>
If you click the drilldown in the Messages column, the report shows that the reason the request was not optimized is because optimization was disabled by the user, as shown in the following image.

**All Optimization Messages**

**Procedure:** wfdemo/test/prc03  
**Server Name:** FUENT-PC:8121  
**Date Range:** 08/12/2016 - 10/21/2016

<table>
<thead>
<tr>
<th>Message Number</th>
<th>Adapter</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOC2510</td>
<td>FOCUS-MANAGED JOIN SELECTED FOR FOLLOWING REASON(S):</td>
<td></td>
</tr>
<tr>
<td>FOC2511</td>
<td>DISABLED BY USER</td>
<td></td>
</tr>
<tr>
<td>FOC2590</td>
<td>AGGREGATION NOT DONE FOR THE FOLLOWING REASON:</td>
<td></td>
</tr>
<tr>
<td>FOC2592</td>
<td>RDBMS-MANAGED JOIN HAS BEEN DISABLED</td>
<td></td>
</tr>
</tbody>
</table>

**Candidates for Column Index Report**

Indexing columns that are frequently used in selection criteria for reports can improve efficiency. This report identifies columns that should be indexed.

This report shows how often columns were used as selection criteria in requests, as shown in the following image. Click any of the hyperlinked column headings to sort the report by that column.

**Bandwidth by Procedure Report**

The Bandwidth by Procedure report shows the number of bytes retrieved to the web server for requests. The report analyzes the bandwidth by database type for each year/month combination.
The following image shows the Bandwidth by Procedure report.

![Bandwidth by Procedure Report](image)

**Resources by Connection**

Resources by Connection report shows the resources consumed by the different IP connections.

The following image shows the Resources by Connection report.

![Resources by Connection Report](image)

This report has one hyperlink that allows you to drill down to another report, described in the following table.
### Hyperlink in the: Report Generated Description

<table>
<thead>
<tr>
<th>Hyperlink in the:</th>
<th>Report Generated</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection column.</td>
<td>Resources by Connection in Network Node</td>
<td>Shows the resources for each connection address.</td>
</tr>
</tbody>
</table>

### Cumulative Hourly Use and Peak Transaction/Resource Periods Reports

These graph reports allow you to determine transaction-bottleneck periods of request activity or resource usage by different time periods.

You can filter a report by data source name and/or user name by selecting a valid data source name and/or user name from the drop-down menu, or by selecting **ALL**, to indicate all data sources and all users. The default is **ALL**. After you select your data sources or accept the default, click **View Report**.

### Query Volume vs. Resource Utilization Report

Un-tuned queries frequently return more data than necessary. Identify the procedures running these requests and target them for optimization.

This report compares the number of requests to one of four factors of resource usage: CPU seconds, elapsed execution time in seconds, rows returned, and I/Os (all mapped on the vertical axis). This information is shown for each hour of the day, with the hours mapped along the horizontal axis. The values on the vertical axis are cumulative for the time period of the dates you select for Usage Monitoring data for reports. For more information on setting report date ranges, see Set Selection Criteria Dates for Reports.

By default, the first graph that appears shows requests graphed against CPU Time.
The following image shows the Query Volume vs. Resource Utilization Report.
Chapter 5

Working With Alerts

Alerts convey important information related to the state of your EUM environment. By creating an alert or scheduling one of the default alerts that come with your EUM environment, you automate reporting when a certain condition is met. An Alert report can be run interactively or by authorized users. Burst capability can send targeted information to the people who need it, so that there is less information for each person to analyze.

Alerts work with all email clients. They are supported on the following mobile devices: iPhone®, iPad®, and email enabled mobile phones. Alerts can also be sent to any PC or laptop computer with email capability.

Alerts provide the following:

- **Alert tools.** Using Alert Assist, you can quickly set up test conditions (rules) that determine if an Alert condition should be triggered (true). This is called the Alert test. When the Alert test is triggered (true), the Alert result is run. An Alert result can be an existing report procedure or you can create the Alert result using InfoAssist.

- **Scheduling flexibility.** Optionally, you can schedule an Alert to run as often as every minute to evaluate the Alert test conditions.

In this chapter:

- Components of an Alert
- Edit an Existing Alert
- Schedule an Alert

## Components of an Alert

An Alert consists of the following:

- **Alert test.** A procedure that tests whether a specific condition is met. For example, an alert test can measure is a metric goes above or beyond a certain value.

- **Alert result.** A report that is distributed when the alert test triggers a response.
In the Enterprise Usage Monitor domain of your EUM environment, inside the Alerts folder, there are three default alerts that you can view, edit, and schedule. To view an alert, right-click it and click *Edit*. An Alert Assist window opens, displaying the test and result for this alert, as shown in the following image.

![Alert Assist window](image)

If you right-click a report in Alert Assist and click *Open*, you can view it in InfoAssist and analyze the logic behind the test conditions. For example, the alert test for the Average Responsive Time alert includes two conditions:

1. The average response time is greater than 30 seconds.
2. The time interval is less than or equal to 5 seconds.
These conditions are created with filters, as shown in the following image.

The result for the Average Responsive Time alert is a simple report that is distributed to the users of your choice at the scheduled times.

**Edit an Existing Alert**

1. Log on to the EUM environment as a manager or developer.

2. In the Resources tree, expand the Enterprise Usage Monitor domain, click the Alerts folder, right-click an alert, and then click *Edit*.

   In this example, you are editing the Average Responsive Time alert.

   The Alert Assist window opens.

3. Expand the Test node, right-click the test report, and then click *Open*.

   The report opens in InfoAssist.
4. Right-click a filter, and click **Edit** to edit filter parameters. For example, click the average response time constant value and type a value of your choice, as shown in the following image.

You can also change the number of conditions, add or remove fields, and further customize existing filters.

5. When you are finished applying edits to the test report, click **Save** and close InfoAssist.

6. Expand the Result node, right-click the result report, and then click **Open**.

InfoAssist opens.

7. Edit the result report to fit your criteria. For example, edit filter conditions to match the test report.

   It is customary to expand the result report and make it more detailed, since it is the only report that the users will see. With this in mind, you can add more fields by dragging them from the Data pane to the Query pane. Your edits are visible in the Live Preview section.

8. When you are finished applying edits to the result report, click **Save** and close InfoAssist.

9. Click the Main Menu button in the Alert Assist window, and then click **Save As**.

   The Save As dialog box opens with the My Content folder selected by default.
Note: You can either use the My Content folder for saving the modified content, or you can save it to a new domain.

10. Click Save.

Your updated version of the alert is saved and can be scheduled.

Schedule an Alert

1. From the Alerts folder in the Enterprise Usage Monitor domain, right-click the Alert, point to Schedule, and select how the Alert report will be distributed when the Alert test is triggered (true). In this example, you are creating an email distribution.

2. Click Email.

The ReportCaster Basic Scheduling tool opens in a new browser window, as shown in the following image.

For more information on the Basic Scheduling tool and distribution options, see the Creating Schedules topic of the Business User Edition Help.
3. Specify the destination information for where you want the report to be distributed.

For more information on specifying schedule distribution information, see the Creating Schedules topic of the Business User Edition Help.

4. Click Task, and then click Alert.

The Alert Options dialog box opens, as shown in the following image.

5. Select one of the following Alert Options:

- **Automatically Reset.** This option continues to run the schedule at the specified time and checks to confirm that the Alert test is no longer true before the Alert test is evaluated again. It is best to use this option when you do not want to receive the Alert result until after the exception condition has been addressed and occurs again. For example, when the average response time is greater than 60 seconds, the Alert is triggered. You do not want to receive the report until after the average response time is less than or equal to 60 seconds and then goes beyond 60 seconds again.

- **Continue After Alert.** This option continues to run the schedule at the specified time and distribute the report each time that the Alert test is true. It is best to use this option when you want to be notified at the interval specified in the schedule that the Alert test is true.

- **Deactivate Schedule After Alert.** This option deactivates the schedule after the Alert is triggered. The schedule has to be activated again for the Alert test to run after the Alert is triggered. It is best to use this option for one-time Alert tests. This is the default value.

- **Delay.** This option is best used when you want to allow a specific period of time to address the Alert test, but want to be notified again if the Alert test has not been met. You can restart the Alert after a maximum of 99 hours, days, weeks, months, or years.
As you complete the creation of the schedule, remember to consider the burst option to distribute specific report values, instead of the entire report. When a report is burst, the distribution information must be provided in a distribution list, distribution file, or dynamic list for email distribution, and an access list for library distribution. The email and library distribution options are the most effective for Alert reports because of the push versus pull notification through email. For more information on using the burst option in ReportCaster, see the *Creating Schedules* topic of the Business User Edition Help.

6. Select the *Properties* tab and type a title and summary for the scheduled report.

7. Click *Recurrence* and specify when and how often to run the schedule.

   For more information on Recurrence options, see the *Creating Schedules* topic of the Business User Edition Help.

8. If you wish to receive notifications of the Alert distribution, click *Notification* and specify the destination information for where you want the notification to be sent.

9. If your Alert uses parameters, select the *Parameters* check box to review and specify parameter values. Ensure that you have the correct Path, Procedure, and Server Name. For more information on specifying parameter values when scheduling a report procedure (FEX), see the *Creating Schedules* topic of the Business User Edition Help.

10. Click *Save and Close*.

    The Save As dialog box opens with the My Content folder selected by default.

11. Click Save.
The new schedule appears in the My Content folder, as shown in the following message.
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