IBM Cognos PowerPlay
Version 11.0

Administration Guide

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Product Information

This document applies to IBM Cognos Analytics version 11.0.0 and may also apply to subsequent releases.

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Contents

Introduction

This document is intended for use with IBM® Cognos® PowerPlay®.

Using This Document

This document contains step-by-step procedures and other information to help you administer PowerPlay in IBM Cognos Analytics.

Audience

To use this document effectively, you should be familiar with IBM Cognos PowerPlay administration, database and reporting concepts, and your information technology and security infrastructure.

Finding information

To find product documentation on the web, including all translated documentation, access IBM Knowledge Center (http://www.ibm.com/support/knowledgecenter).

Accessibility features

This product does not currently support accessibility features that help users with a physical disability, such as restricted mobility or limited vision, to use this product.

Forward-looking statements

This documentation describes the current functionality of the product. References to items that are not currently available may be included. No implication of any future availability should be inferred. Any such references are not a commitment, promise, or legal obligation to deliver any material, code, or functionality. The development, release, and timing of features or functionality remain at the sole discretion of IBM.

Samples disclaimer

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Chapter 1. Cognos PowerPlay version 11.0

IBM Cognos PowerPlay version 11.0 provides the data analysis and exploration capabilities that are familiar to report authors, analysts, and users of previous versions of IBM Cognos PowerPlay in the IBM Cognos Analytics environment.

By integrating with Cognos Analytics, PowerPlay can take advantage of the Cognos Analytics capabilities while preserving your existing PowerPlay applications and user experience. Cognos Analytics offers PowerPlay users additional features to maximize productivity in the new environment.

Previous versions of Cognos PowerPlay

IBM Cognos PowerPlay has a long history and some customers might still use its older versions.

Cognos PowerPlay version 11.0 includes a component named **Series 7 Migration Components** that is used to migrate IBM Cognos Series 7 PowerPlay to IBM Cognos Business Intelligence (currently IBM Cognos Analytics) version 10.2.x.

For information about the migration process and differences between Series 7 PowerPlay and Cognos PowerPlay version 10.2.x, see the *IBM Cognos PowerPlay Migration and Administration Guide* in the IBM Cognos Analytics Knowledge Center, version 10.2.2 (https://www.ibm.com/support/knowledgecenter/SSEP7J_10.2.2).

Chapter 2. Administering IBM Cognos PowerPlay

IBM Cognos PowerPlay is administered using IBM Cognos Administration, which is accessed through the IBM Cognos Analytics portal.

Start IBM Cognos PowerPlay Administration

All IBM Cognos Analytics runtime settings, including configuration options and studio options, are managed using IBM Cognos Administration. IBM Cognos Administration is a web-based tool that allows you to administer security, server settings, and deployment options.

Before you begin

To access IBM Cognos Administration, you must log in as a user that has administrator permissions.

Procedure

1. Connect to the IBM Cognos Analytics portal.
2. In the **Welcome** page, click **Manage** > **Administration console**.
3. Click the **PowerPlay** tab.

Considerations for distributed installations

You can use IBM Cognos Administration options to customize a distributed environment to improve performance.

Server groups

For environments that include multiple dispatchers, you can create server groups to take advantage of advanced dispatcher routing.

Tip: If you are setting up advanced dispatcher routing and are using PowerPlay, you must ensure that the server group includes at least one PowerPlay server to handle PowerPlay requests.

For more information, see the section about advanced dispatcher routing in the *IBM Cognos Analytics Administration and Security Guide*.

Configuring Advanced Settings for the PowerPlay Service

You can use advanced settings to customize your IBM Cognos PowerPlay environment.

Table 1. Advanced settings for the PowerPlay service

IBM Cognos Series 7 feature	**Cognos Analytics advanced setting (parameter and value)**
Maximum Restrict Client Connections Specifies the maximum number of connections available for remote clients.	SRV.Options. MaxRestrictClientConnections An example value is IN,50

Table 1. Advanced settings for the PowerPlay service (continued)

IBM Cognos Series 7 feature	**Cognos Analytics advanced setting (parameter and value)**
Restrict Connection Idle Timeout (min) Sets the number of minutes before an idle remote connection is ended.	SRV.Options.RestrictClientTimeout An example value is IN,60
PowerPlay Web Viewer - Temporary File deletion interval (days)	SRV.PWR.TempFileDeletionTime An example value is IN,30
PowerPlay Web Explorer - Temporary File deletion interval (sec)	SRV.PWQ.TempFileDeletionTime An example value is IN,900
Dynamic Style Sheets Compile Specifies whether to pre-compile the style sheets. To improve performance, you should always enable this setting. The setting should be disabled only if you are experimenting with style sheets.	SRV.Options. UseCompiledStylesheets The options are IN,1 for enabled, or IN,2 for disabled
PowerPlay PDF Accessibility	PowerPlayServer_Accessible_PDF The options are IN,1 for enabled, or IN,2 for disabled
Auditing Level Specifies the level of detail for audit logging. The options are None, Summary, and Detail.	SRV.Options.AuditLevel In Cognos Analytics, the settings are as follows. IN,0 sets audit logging to None. IN,1 sets it to Summary. IN,2 sets it to Detail.
Maximum size of each audit log file in KB	SRV.Audit.MaxFileSize An example value is IN,256
PowerPlay Server - PPSDSRemote Port In IBM Cognos Series 7, the PPDSRemote Port setting is in the cer*n*.ini file.	SRV.PPDSRM.ServerPort An example value is IN,8020 Use this parameter to restrict the port used for communication between PowerPlay Client and the PowerPlay server, such as when the environment includes a firewall.

Table 1. Advanced settings for the PowerPlay service (continued)

IBM Cognos Series 7 feature	Cognos Analytics advanced setting (parameter and value)
Delimiter used for export to CSV In IBM Cognos Series 7, CSV files are created in the native encoding of the PowerPlay Enterprise Server computer. The delimiter for CSV files was dependent on the list separator for the current locale, most commonly a comma).	SRV.Options.CSVDelimeter By default, IBM Cognos PowerPlay uses tab delimited output for export to CSV file. To change the delimeter to a comma (,) use SRV.Options.CSVDelimeter TX,, To change the delimeter to a semi-colon (;) use SRV.Options.CSVDelimeter TX,;

Configure Advanced Settings

You configure advanced settings for the IBM Cognos PowerPlay service in IBM Cognos Administration.

Procedure

1. In IBM Cognos Analytics portal, click **Manage** > **Administration console** to open IBM Cognos Administration.
2. On the **Status** tab, click **System**.
3. Click the arrow beside **All Servers**, click **Services**, and then click **PowerPlay**.
4. Click the arrow beside **PowerPlay Service**, and click **Set properties**.
5. Click the **Settings** tab.
6. In the **Value** column, click **Edit** for **Advanced Settings**.
7. Select **Override the settings acquired from the parent entry**.
8. In the **Parameter** column, enter the parameter name, and in the **Value** column, enter the value for the setting.

   For numeric values, the format for the **Value** column is "IN,#" where # is the number associated with the setting you want. For example, to set the maximum size of audit log files in IBM Cognos Analytics to 256 kilobytes, you must enter the **Parameter** as **SRV.Audit.MaxFileSize** and the **Value** as **IN,256**. For text values, such as the delimiter to use for export to CSV file, the format for the **Value** column is "TX,#" , where # is the text symbol.

Customize PowerPlay Cube and Report Settings in Team Content Folders

There are many options available to allow you to customize the appearance, performance, and functionality of the IBM Cognos PowerPlay application.

To accommodate different user groups, you can customize settings for content in **Team content** by folder, package, cube, and report. You can also customize settings for content in the **My content** location for a specific user.

By default, an object acquires its configuration settings from the parent. For example, a package acquires the cube and reports settings from the parent folder. You can change the settings for an individual cube or report to have different settings from the parent.

Common changes include

- changing the appearance of PowerPlay Studio by selecting a different interface option.
- enabling drill through to allow users to view information related to the current report.
- customizing the toolbar to limit the options available to users or to create a new toolbar option.

Some cube and report settings have related security considerations.

- **PDF Rendering Viewer**

  If you change this setting from **Cognos Viewer** to **PowerPlay Studio Report Viewer**, PDF output is saved in unencrypted format to a location outside of the IBM Cognos Analytics content store. This behavior is consistent with IBM Cognos Series 7 and may require additional administration to ensure that the appropriate level of security is applied to the content.
- **HTML Encode User Specified Title**

  If you change this setting from **Enabled** to **Disabled**, a report title could include a malicious script that would execute when the report is rendered.

Procedure

1. In PowerPlay administration, select an item in the **Configurable Objects** list.
2. Modify a property and then use one of the following actions to change cube or report settings.
   - To apply the changes only to the entry you selected in the **Configurable Objects** list, click **Save**.
   - To apply the changes to the descendants of the entry you selected in the **Configurable Objects** list, click **Reset Descendants** and then click **Save**.
   - To restore the default settings for an entry, select an individual property and click **Reset**, or click **Reset All** to restore the default settings for all properties. You can use the **Reset Descendants** option to apply the same change to descendants. To apply the changes, click **Save**.

Results

The changes are applied to the selected folder, cube, or report.

Customize PowerPlay Cube and Report Settings in My content folder

To accommodate different user groups, you can customize settings for content in the **My content** location for a specific user.

There are many options available to allow you to customize the appearance, performance, and functionality of the IBM Cognos PowerPlay application. You can also customize settings for content in **Team content** by folder, package, cube, and report.

By default, an object acquires its configuration settings from the parent. For example, a package acquires the cube and reports settings from the parent folder. You can change the settings for an individual cube or report to have different settings from the parent.

Common changes include

- changing the appearance of PowerPlay Studio by selecting a different interface option.
- enabling drill through to allow users to view information related to the current report.
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- **PDF Rendering Viewer**

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- **HTML Encode User Specified Title**

  If you change this setting from **Enabled** to **Disabled**, a report title could include a malicious script that would execute when the report is rendered.

Procedure

1. Obtain the search path for the user that owns the **My content** location you want to customize.

   The search path is available in the user's properties in the **Security** tab of IBM Cognos Administration. The following is an example of a search path for a user:

   CAMID("series7:u:authid=3212592089")

   For more information, see the *Cognos Analytics Administration and Security Guide*.
2. In PowerPlay administration, enter the search path into the search box and then click **Search**.

   The user's name and **My content** content appears on the **Search Results** tab.
3. Select an item in the **Configurable Objects** list.
4. Modify a property and then use one of the following actions to change cube or report settings.
   - To apply the changes only to the entry you selected in the **Configurable Objects** list, click **Save**.
   - To apply the changes to the descendants of the entry you selected in the **Configurable Objects** list, click **Reset Descendants** and then click **Save**.
   - To restore the default settings for an entry, select an individual property and click **Reset**, or click **Reset All** to restore the default settings for all properties. You can use the **Reset Descendants** option to apply the same change to descendants. To apply the changes, click **Save**.

Results

The changes are applied to the selected folder, cube, or report in the My content location.

Change the Appearance of PowerPlay Studio

You can choose from three different interface options for IBM Cognos PowerPlay Studio.

You set the interface option in the cube settings. This allows you to choose a different interface for user groups that use different cubes. For example, to accommodate users who are most familiar with Series 7, you may decide to use the **Enhanced - Series 7** option.

- **Enhanced - IBM Cognos PowerPlay Studio**

  The **Enhanced - IBM Cognos PowerPlay Studio** is the default interface and is consistent with other IBM Cognos Analytics studios.
- **Enhanced - Series 7**

  The **Enhanced - Series 7** interface preserves the Series 7 look and feel.
- **Generic**

  The **Generic** interface is based on a generic HTML style.

Procedure

1. In IBM Cognos Analytics portal, click **Manage** > **Administration console** to open IBM Cognos Administration.
2. Click a folder or package in the **Configurable Objects** list.

   If you select the root folder, the property is inherited by all the descendants, but can also be overridden by properties for a descendant.
3. On the **Cube Settings** tab, under the **Display (Web)** group, next to the **Type** property, click the arrow and select an interface option.
4. Click **Save**.

Results

When users open a report or package in PowerPlay Studio, the selected interface is used.

Enable Drill Through

You can control the drill through options to both IBM Cognos Analytics and IBM Cognos Series 7 content.

By default all drill through options are disabled. If you migrated IBM Cognos PowerPlay content from IBM Cognos Series 7 to Cognos Analytics using the Migration Assistant, some drill-through settings were included in the migration.

To ensure that drill-through access between content located on different computers works properly, you must specify valid domains and hosts in **IBM Cognos Application Firewall - Component Properties** in IBM Cognos Configuration.

Cognos Analytics provides drill through functionality that is different than IBM Cognos Series 7 drill through.

Procedure

1. In IBM Cognos Analytics portal, click **Manage** > **Administration console** to open IBM Cognos Administration.
2. Click the **PowerPlay** tab.
3. In the **Configurable Objects** list, select a folder or package.
4. Click the **Cube Settings** tab, enable the drill through options, and specify connection information.
5. Click the **Report Settings** tab and enable the drill through options you want.

The following table describes the drill through settings. Some settings, such as connection information, apply to only the **Cube Settings** tab.

Requirement: Gateway settings used to support drill through, such as **PowerPlay Web Target**, must match the gateway URL settings in IBM Cognos Series 7 Configuration Manager.

Table 2. Drill through settings

Drill Through setting	Description
PowerPlay cubes	Allows users to drill through to details in another cube. Use it to enable or disable drill-through access in the client application. Both PowerCubes created with PowerPlay Transformer and other OLAP sources modified with PowerPlay Connect can allow drill through.
PowerPlay Web target	Specifies the URL to the PowerPlay Web gateway program, such as http://*host_name*/ibmcognos/cgi-bin/ppdscgi.exe Depending on how your network is configured, you may also need to include the domain name, for example, http://*host_name*.*yourorg*.com/ibmcognos/cgi-bin/ppdscgi.exe To specify a port number other than the default web server port 80, append the number to the server name, for example, http://*host_name*:*port_number*/ibmcognos/cgi-bin/ppdscgi.exe If your Web server is using Secure Sockets Layer (SSL), specify the HTTPS protocol with the server name, for example, https://*host_name*/ibmcognos/cgi-bin/ppdscgi.exe
PowerPlay Web Drill Through Newsbox	Specifies that users can drill through from PowerPlay to targets that are not in the root server folder. Cube definitions can reference drill-through targets contained in an Upfront NewsBox hierarchy.
PowerPlay Web Drill Through Server Group	This is the same value as your **Upfront Server Group**, as specified in IBM Cognos Series 7 Configuration Manager.
PowerPlay Web Drill Through CRN Folder	Specifies the folder where your drill-through targets are in IBM Cognos ReportNet or Cognos Analytics.
IBM Cognos Query	Allows users to drill through to details in IBM Cognos Query. Use to enable or disable drill-through access in the client application.

Table 2. Drill through settings (continued)

Drill Through setting	Description
IBM Cognos Query server	Specifies the URL to the IBM Cognos Query gateway program, such as http://*host_name*/ibmcognos/cgi-bin/cqcgi.exe Depending on how your network is configured, you may also need to include the domain name, for example, http://*host_name.yourorg*.com/ibmcognos/cgi-bin/cqcgi.exe To specify a port number other than the default port 80, append the number to the server name, for example, http://*host_name:port_number*/ibmcognos/cgi-bin/cqcgi.exe If your web server is using Secure Sockets Layer (SSL), specify the HTTPS protocol with the server name, for example, https://*host_name*/ibmcognos/cgi-bin/cqcgi.exe
Impromptu Web Reports	Allows users to drill through to details in an Impromptu report. Use this setting to enable or disable drill-through access in the client application.
Impromptu Web Reports Drill Through NewsBox	Specifies the Upfront Newsbox of the published report set that contains the target drill-through report. For example, if the drill-through report go.imr is located in the Great Outdoors folder, type Great Outdoors in this box. The imr file name must also be written in the cube if it was built using the cube/measure drill-through properties in Transformer and was therefore included at build time.
Impromptu Web Reports server	Specifies the URL to the Impromptu Web Reports gateway program on Microsoft Windows operating system and UNIX operating system, such as http://*host_name*/ibmcognos/cgi-bin/imrap.cgi Depending on how your network is configured, you may also need to include the domain name, for example, http://*host_name.yourorg*.com/ibmcognos/cgi-bin/imrap.cgi To specify a port number other than the default port 80, append the number to the server name, for example, http://*host_name:port_number*/ibmcognos/cgi-bin/imrap.cgi If your web server is using Secure Sockets Layer (SSL), specify the HTTPS protocol with the server name, for example, https://*host_name*/ibmcognos/cgi-bin/imrap.cgi
IBM Cognos ReportNet/IBM Cognos Connection	Allows users to drill through to details in IBM Cognos ReportNet or Cognos Analytics. Use this setting to enable or disable drill-through access in the client application.

Table 2. Drill through settings (continued)

Drill Through setting	Description
IBM Cognos ReportNet/IBM Cognos Gateway URI	Specifies the URL to the IBM Cognos ReportNet or Cognos Analytics gateway program on Windows and UNIX, such as http://*host_name*/ibmcognos/bi/v1/disp Depending on how your network is configured, you may also need to include the domain name, such as http://*host_name*.*yourorg*.com/ibmcognos/bi/v1/disp To specify a port number other than the default port 80, append the number to the server name, such as http://*host_name*:*port_number*/ibmcognos/bi/v1/disp If your web server is using Secure Sockets Layer (SSL), specify the HTTPS protocol with the server name., such as https://*host_name*/ibmcognos/bi/v1/disp
IBM Cognos ReportNet/IBM Cognos Connection Folder	Specifies the IBM Cognos ReportNet or Cognos Analytics folder that contains the target drill-through report.
IBM Cognos ReportNet/IBM Cognos Assistance	Specifies that when users click **Drill Through** on a cube, the **Assist Drill Through** page opens. Use this page to identify the parameters that are defined for the drill-through report.
PowerPlay Studio packages	Allows users to drill through to details in another PowerCube or IBM Cognos PowerPlay report.
PowerPlay Studio package folder	Specifies the Cognos Analytics folder that contains the drill-through PowerCubes or IBM Cognos PowerPlay reports.
IBM Cognos Drill Through Definitions	Allows users to select from a list of existing Cognos Analytics drill through definitions or create a new definition.

6. Do one of the following
   - To apply the changes to the selected configurable object and it's descendants, click **Reset Descendants** and then click **Save**.
   - To apply the change to only the selected configurable object, click **Save**.

Customize the Toolbar

You can control the functionality availability in IBM Cognos PowerPlay Studio by enabling or disabling toolbar buttons. Most toolbar buttons are enabled by default, including the toolbar options available in IBM Cognos Series 7 PowerPlay Web.

Also, there are options unique to IBM Cognos Analytics. In addition to controlling functionality you can customize the appearance of the toolbar area.

Procedure

1. Select a folder or package in the **Configurable Objects** list.
2. In the **Cube Settings**, modify the toolbar settings.

Table 3. Toolbar settings

Toolbar property	Description
Image	Enables or disables the image specified in the **Background image file** setting
Background Image File	Specifies the file name of .gif or .jpg image to be used as the background of the toolbar area. You must copy images to the *install_location*\webcontent\ppwb\images folder. Do not include the path when you specify the file name. You must enable the transparency property to use a background image.
Background Color	Specifies the background color of the toolbar area.
Transparency	Specifies whether the background color is transparent or not.
Predefined buttons	Lists the available toolbar buttons.
Custom buttons	Allows you to enable the custom toolbar functions that you added to the ppwbcustom.js file

3. Save the changes.

Create a Custom Toolbar Button

You can add up to eight custom buttons to the IBM Cognos PowerPlay Studio toolbar to enable users to accomplish common tasks. For example, you can add buttons to let users link to a departmental table of contents or email the cube URL to a colleague. You can attach any JavaScript code to a custom button.

Procedure

1. From the *installation_location*\webcontent\ppwb folder, open the ppwbcustom.js file in a text editor.
2. In one of the custom functions, create a JavaScript for the custom command and then save the ppwbcustom.js file.
3. In the **Configurable Objects** list in PowerPlay administration, select a folder or package.
4. In the **Cube Settings**, **Toolbar** group, enable the appropriate custom entry for the function you modified in the ppwbcustom.js file., and then click **Save**.
5. Choose whether you want to apply the change to all descendants and then click **Save**.

Cube Settings

You can use the cube settings to customize your IBM Cognos PowerPlay application.

The information in the following table describes the **Options** properties.

Table 4. Cube settings: Options properties

Options property	Description
Title	Specifies a title. You can also add variables to the title.

Table 4. Cube settings: Options properties (continued)

Options property	Description
HTML Encode User Specified Title	If enabled, only a limited set of HTML tags that are allowed in the titles of reports that may be published to the web. If disabled, any HTML tag is allowed in the title.
Save as PowerCube	Specifies that PowerPlay Client users can save the cube as a subcube. If this option is enabled, users can connect to the remote cube and save portions of it as a subcube, that is, a local PowerCube (.mdc file) on their local drives. This allows users to disconnect from the server and access the subcube on their computer. Later, they can re-synchronize to the remote server cube. Only PowerCubes created with PowerPlay Transformer can be saved as subcubes.
Get Data	Allows users to explore a report without showing data in a crosstab display. When this is enabled, the user will be able to select **Get Data Later** from the **Options** menu and **Get Data** from within the display.
Auditing Level	Specifies the level of auditing for the cube. If you enable auditing, information is recorded that may help you analyze and troubleshoot problems. The following auditing options are available. **None** records no information. **Summary** records requests made to cubes. **Detail** records statistics on the measures, dimensions, and levels of a cube that are accessed by PowerPlay Studio. This allows you to determine which areas of a cube are used more or less frequently, and may help you to develop a strategy for creating more efficient cubes.
Queued Request Timeout(s)	Sets the length of time, in seconds, that cube or report requests will remain queued. If these requests are not processed within the set time, users will receive a message asking them to try again.
Dimension Line in CSV Export	Specifies whether the dimension line information is included when a user exports a Comma Separated Value file (.csv) from PowerPlay Studio.
PDF Rendering Layout	Specifies how PDFs are rendered. **Automatic** is based on the authoring tool. **Web Layout** uses the PowerPlay Studio style PDF. **Client Layout** uses the PowerPlay Client style PDF.

Table 4. Cube settings: Options properties (continued)

Options property	Description
PDF Rendering Viewer	Specifies PDF options for the report viewer. **IBM Cognos Viewer** uses the IBM Cognos Business Intelligence style viewer. **PowerPlay Studio Report Viewer** uses the IBM Cognos Series 7 style viewer.

The information in the following table describes the **Process Control** properties.

Table 5. Cube settings: Process Control properties

Process Control property	Description
Connection Timeout (min)	Sets the number of minutes a user's connection to cubes remains active for PowerPlay Studio users. When the connection times out, the user may be prompted for the cube password again, but not the authentication information. Connection timeout does not apply to connections to the server from PowerPlay Client.
Minimum Processes	Sets the minimum number of processes that remain running once they are executed.
Maximum Processes	Sets the maximum number of processes that can be executed at the same time.
Request Timeout (s)	Sets the maximum length of time in seconds that the server spends processing requests. If the requests are not processed within the set time, users receive a message asking them to try again.
Idle Process Timeout (min)	Sets the number of minutes a process remains active between requests. When a process times out, the memory it used becomes available to the server. The number of processes specified in **Minimum Processes** remain active even if requests are not being processed.
Recycle Time (min)	Specifies the maximum amount of time in minutes a process is allowed to run before being retired. You can reduce the default value if these processes consume too many resources. The default value is 1440 minutes (24 hours). To disable the recycle time setting, set the value to 0 (zero).

The information in the following tables describes the **Display (Web)** properties.

Table 6. Cube settings: Display (Web) properties

Display (Web) property	Description
Screen Resolution	Optimizes the appearance of buttons and displays. Use to select the most common resolution for user workstations. If the resolution does not match the web browser, the buttons and displays appear at a different scale from the text. If you aren't sure which resolution to use, 800 x 600 is recommended.
Type	Specifies one of the available user interfaces. **Generic** restricts the generation of HTML pages to code supported by older web browsers. If you enable this setting, users do not get DHTML rendering regardless of the browser used. If you have large cubes, DHTML can reduce performance of the server. If you enable **Generic**, you can improve performance. The **Enhanced - IBM Cognos PowerPlay Studio** interface uses the look and feel of other IBM Cognos studios. The **Enhanced - Series 7** interface uses the look and feel of IBM Cognos Series 7.

The information in the following table describes the **Page Size** properties.

Table 7. Cube settings: Page Size properties

Page Size property	Description
Row Limit **Column Limit**	Limits the number of rows and columns that appear on a page. Use to improve the performance and readability of large reports. Report pages include navigation buttons that allow users to move forward and backward. For example, after opening a report, users can page forward to the next 20 columns or 50 rows. Buttons are also available for going directly to the first or last page of columns or rows. The page limits that you set are defaults only. Users can redefine the limits after they open paginated reports.

The information in the following table describes the **Menu Size** properties.

Table 8. Cube settings: Menu Size properties

Menu Size property	Description
Character Limit	Limits the number of characters shown for category names in drop down menus in the generic interface and dimension viewer and flyouts in the enhanced interface. The box width is determined by the longest category name, up to the maximum set. Any category longer than the maximum limit is truncated. You may need to increase this limit if more characters are necessary to distinguish categories. You can also decrease the limit if categories are easily distinguishable with fewer characters.
Item Limit	Limits the number of categories shown per level. Use to prevent web browser problems associated with displaying a large number of list items in drop down menus in the generic interface and dimension viewer and flyouts in the enhanced interface. If you can't redesign cubes so that dimensions contain fewer categories, you can limit the number of categories included in each level. For example, you limit dimension box categories to 50. Any level that exceeds 50 categories is truncated to show only the first 50 categories. An option is shown at the end of the list so users can view the next categories. The option name depends on the version of the user's web browser.

The information in the following table describes the **Dimension Area** properties.

Table 9. Cube settings: Dimension Area properties

Dimension Area property	Description
Report Banner	Shows the PowerPlay Studio banner containing the name of the currently connected cube.
Image	Enables or disables the image specified in the **Background Image File** setting.
Background Image File	Specifies the file name of .gif or .jpg image to be used as the background of the area where the dimension lists appear. You must copy images to the *install_location*\webcontent\ppwb\images folder. Do not include the path when you specify the file name. You must enable the transparency property to use a background image.
Background Color	Specifies the background color of the area where the dimension lists appear.

Table 9. Cube settings: Dimension Area properties (continued)

Dimension Area property	Description
Transparency	Specifies whether the background color is transparent or not.

The information in the following table describes the **Crosstab Frame** properties.

Table 10. Cube settings: Crosstab Frame properties

Crosstab Frame property	Description
Link Color	Specifies the color of hyperlinked text such as category labels.
Text Color	Specifies the color of non-hyperlinked text such as data values.
Image	Enables or disables the image specified in the **Background Image File** setting.
Background Image File	Specifies the file name of .gif or .jpg image to be used as the background of the crosstab frame. You must copy images to the *installation_location*\webcontent\ppwb\images folder. Do not include the path when you specify the file name. You must enable the transparency property to use a background image.
Background Color	Specifies the background color of the area where the dimension lists appear.
Transparency	Specifies whether the background color is transparent or not.

The information in the following table describes the **Crosstab** properties.

Table 11. Cube settings: Crosstab properties

Crosstab property	Description
Image	Enables or disables the image specified in the **Background Image File** setting. This setting applies only to the **Generic** interface.
Background Image File	Specifies the file name of .gif or .jpg image to be used as the background for crosstab displays. You must copy images to the *installation_location*\webcontent\ppwb\images folder. Do not include the path when you specify the file name. You must enable the transparency property to use a background image.

Table 11. Cube settings: Crosstab properties (continued)

Crosstab property	Description
Background Color	Specifies the background color of the area where the dimension lists appear.
Transparency	Specifies whether the background color is transparent or not.

The information in the following table describes the **Chart Frame** properties.

Table 12. Cube settings: Chart Frame properties

Chart Frame property	Description
Link Color	Specifies the color of hyperlinked text such as category labels.
Text Color	Specifies the color of non-hyperlinked text such as data values.
Image	Enables or disables the image specified in the **Background Image File** setting.
Background Image File	Specifies the file name of .gif or .jpg image to be used as the background for chart displays. You must copy images to the *installation_location*\webcontent\ppwb\images folder. Do not include the path when you specify the file name. You must enable the transparency property to use a background image.
Background Color	Specifies the background color of the area where the dimension lists appear.
Transparency	Specifies whether the background color is transparent or not.

Report Settings

You can use the report settings to customize your IBM Cognos PowerPlay application.

The information in the following table describes the **Options** properties.

Table 13. Report settings: Options properties

Options property	Description
Explore in Interactive HTML Format	Specifies whether users can explore PDF reports in interactive HTML format. This option also affects whether users can open reports in interactive HTML if the report is published to the portal.

Table 13. Report settings: Options properties (continued)

Options property	Description
Auditing Level	Specifies the level of auditing for the report. If you enable auditing, information is recorded that may help you analyze and troubleshoot problems. The following auditing options are available. **None** records no information. **Summary** records requests made to reports. **Detail** records statistics on the measures, dimensions, and levels of a cube that are accessed by PowerPlay Studio. This allows you to determine which areas of a cube are used more or less frequently, and may help you to develop a strategy for creating more efficient cubes.
Queued Request Timeout	Sets the length of time, in seconds, that cube or report requests will remain queued. If these requests are not processed within the set time, users will receive a message asking them to try again.
Page Size	Specifies the page size for printing PDF reports.
Page Orientation	Specifies the default orientation for printing PDF reports.
Display frame(s) border	Specifies whether the **Display Frame Borders** check box is available, allowing users to add a border to their reports.
Explain Drill Links	Specifies whether reports displayed in PDF contain **Explain** drill links on the row or column labels.
Status Line	Specifies whether the status line is shown.
Word Wrap	Specifies that PDF labels can be wrapped.
Include Layers	If enabled, PDFs will be layered similar to how they are in PowerPlay Client.
PDF Rendering Layout	Specifies how PDFs are rendered. **Automatic** is based on the authoring tool. **Client Layout** uses the PowerPlay Client style PDF. **Web Layout** uses the PowerPlay Studio style PDF.
PDF Rendering Viewer	Specifies PDF options for the report viewer. **Cognos Viewer** uses the IBM Cognos Business Intelligence style viewer. **PowerPlay Studio Report Viewer** uses the IBM Cognos Series 7 style viewer.

Table 13. Report settings: Options properties (continued)

Options property	Description
Pagination	Allows you to define options for how PDFs are paginated.

The information in the following table describes the **Process Control** properties.

Table 14. Report settings: Process Control properties

Process Control property	Description
Connection Timeout (min)	Sets the number of minutes a user's connection to reports remains active for PowerPlay Studio users. When the connection times out, the user may be prompted for the cube password again, but not the authentication information. Connection timeout does not apply to connections to the server from PowerPlay Client.
Minimum Processes	Sets the minimum number of processes that remain running once they open.
Maximum Processes	Sets the maximum number of processes that can be open at the same time.
Idle Process Timeout (min)	Sets the number of minutes a process remains active between requests. When a process times out, the memory it used becomes available to the server. The number of processes specified in **Minimum Processes** remain active even if requests are not being processed.
Recycle Time (min)	Specifies the maximum amount of time a process is allowed to run before being retired. You can reduce the default value if these processes consume too many resources. The default value is 1440 minutes (24 hours). To disable the recycle time setting, set the value to 0 (zero).

The information in the following table describes the **Display** properties.

Table 15. Report settings: Display properties

Display property	Description
Screen resolution	Optimizes the appearance of buttons and displays. Use to select the most common resolution for user workstations. If the resolution does not match the web browser, the buttons and displays appear at a different scale from the text. If you aren't sure which resolution to use, the default, 800 x 600 is recommended.

The information in the following table describes the **Report** properties.

Table 16. Report settings: Report properties

Report property	Description
Lightweight PDF Generation	Allows system fonts on the server to be embedded in the report PDF. When disabled, all fonts on the server are embedded. When enabled, only the fonts specified in the **Font Settings** section of IBM Cognos Configuration are used. If you do not allow system fonts to be embedded in reports, text in reports may not render correctly.
Pattern Simulation	Specifies whether the server simulates patterns used in the report or substitutes a filled rectangle for the pattern in PowerPlay Client reports. When enabled, patterns are reproduced as bitmaps in the report PDF. When disabled, a filled rectangle appears in the report PDF. Using pattern simulation assures accurate reproduction of patterns used in the original report, but it also uses more resources and increases the size of the PDF file.

Chapter 3. Setting up the Cognos PowerPlay samples

The PowerPlay samples are included with the IBM Cognos Analytics supplementary samples.

The supplementary samples are located in the IBM Cognos Analytics Community, with the Supplementary (Legacy) Cognos Analytics 11 Samples (www.ibm.com/communities/analytics/cognos-analytics-blog/supplementary-ibm-cognos-analytics-11-samples).

The PowerPlay samples are provided in the `IBM_Cognos_PowerPlay.zip` and `IBM_Cognos_DrillThroughSamples.zip` deployments archives. The samples are based on data from the `great_outdoors_sales_en.mdc` and `sales_and_marketing.mdc` sample PowerCubes.

Downloading the supplementary samples

The supplementary samples are available in the IBM Cognos Analytics community. You need to download the samples before you can configure them.

About this task

You download the supplementary samples from the supplementary samples website (www.ibm.com/communities/analytics/cognos-analytics-blog/supplementary-ibm-cognos-analytics-11-samples). The samples are packaged as `LegacySamples.zip`. This file includes six deployments, including the deployments that are used with IBM Cognos PowerPlay.

Procedure

1. Go to the supplementary samples website (www.ibm.com/communities/analytics/cognos-analytics-blog/supplementary-ibm-cognos-analytics-11-samples).
2. Download the `LegacySamples.zip` file, and extract its contents to any location that you can access.

   The `LegacySamples.zip` file contains the `Samples` folder that has a number of sub-folders.

   The `content` sub-folder includes the PowerPlay deployments: IBM_Cognos_PowerPlay.zip and IBM_Cognos_DrillThroughSamples.zip.

   The `datasources\cubes\PowerCubes\EN` sub-folder includes the PowerCubes `great_outdoors_sales_en` and `sales_and_marketing` that are used as data sources for the PowerPlay reports.
3. Copy the PowerPlay deployment archives to the Cognos Analytics **Deployment files location** that is specified in IBM Cognos Configuration. The default location is *`cognos_analytics_installation_location`*`/deployment`.

Creating data source connections to the sample PowerCubes

The sample reports are based on sample PowerCubes. You must create data source connections to these PowerCubes to be able to use the samples.

The sample PowerCubes are great_outdoors_sales_en.mdc and sales_and_marketing.mdc. These PowerCubes are located in the Samples\datasources\cubes\PowerCubes\EN folder in the supplementary LegacySamples.zip that you downloaded.

You must repeat the following procedure for each PowerCube.

Procedure

1. Connect to the IBM Cognos Analytics portal.
2. In the **Welcome** page, click **Manage** > **Administration console**.
3. In IBM Cognos Administration, click the **Configuration** tab.
4. Click the **New Data Source** button  .
5. In the **Name** box, type the following names:

   For great_outdoors_sales_en.mdc type great_outdoors_sales_en

   For sales_and_marketing.mdc type sales_and_marketing

   The names must be all lowercase and include the underscore characters rather than spaces.

   Click **Next**.
6. In the **Type** box, select **IBM Cognos PowerCube**, and click **Next**.
7. In the **Windows location** box, type the location and file name for each PowerCube.

   For great_outdoors_sales_en.mdc, the location can be C:\LegacySamples\Samples\datasources\cubes\PowerCubes\EN\great_outdoors_sales_en.mdc

   For sales_and_marketing.mdc, the location can be C:\LegacySamples\Samples\datasources\cubes\PowerCubes\EN\sales_and_marketing.mdc
8. To confirm that you entered all parameters correctly, click **Test the Connection**.

   After you test the connection, click **Close** on both the **View the Results** and **Test the Connection** pages to return to the connection string page.
9. Click **Finish**.
10. On the **Finish** page click **OK**. Do not select **Create a Package**.

Results

After you finish creating the connections, the great_outdoors_sales_en and sales_and_marketing entries appear in the list of data sources in **Data Source Connections**. Next, you need to import the sample deployments to your IBM Cognos Analytics environment.

Importing the sample deployments

To make the sample reports available for use in Cognos Viewer or IBM Cognos PowerPlay Studio, you must import the PowerPlay deployment archives that you downloaded from the supplementary samples website.

The deployment archives that you can use with PowerPlay Studio are IBM_Cognos_PowerPlay.zip and BM_Cognos_DrillThroughSamples.zip.

Repeat the following procedure for each deployment.

Procedure

1. Copy the sample deployments `IBM_Cognos_PowerPlay.zip` and `BM_Cognos_DrillThroughSamples.zip` from your supplementary samples download location to the Cognos Analytics **Deployment files location** specified in Cognos Configuration. The default location is *cognos_analytics_server_installation_location*`/deployment`.
2. Connect to the IBM Cognos Analytics portal.
3. In the **Welcome** page, click **Manage** > **Administration console**.
4. On the **Configuration** tab, click **Content Administration**.
5. Click the **New Import** button  .
6. Select the deployment, **IBM_Cognos_PowerPlay** or `BM_Cognos_DrillThroughSamples.zip` , and click **Next**.
7. In the **Select the public folders, directory and library content** page, select the check box next to the sample folder name: `Samples_PowerPlay` for `IBM_Cognos_PowerPlay.zip` and `Samples_Drillthrough` for `IBM_Cognos_DrillThroughSamples.zip`.

   Keep the default target folder name and location, and then click **Next**.
8. In the next few pages, keep the default options, and click **Next**.
9. Select **Save and run once**, and click **Finish**.
10. Select **Now**, click **Run**, and then **OK**.

Results

The entries `IBM_Cognos_PowerPlay` and `IBM_Cognos_DrillThroughSamples` appear in **Content Administration**.

The folders `Samples_PowerPlay` and `Samples_Drillthrough` appear in **Team content** in the Cognos Analytics portal. These folders contain the sample PowerPlay packages and reports.

Testing a sample report

The sample reports can be viewed in IBM Cognos Viewer and in PowerPlay Studio.

Procedure

1. To test a report in Cognos Viewer, do the following:
   a. Connect to the IBM Cognos Analytics portal.
   b. In **Team content**, open the `Samples_PowerPlay` folder .
   c. Click **great_outdoors_sales_en**.
   d. Click any report in the list. The report opens in IBM Cognos Viewer.
2. To test a report in PowerPlay Studio, do the following:
   a. Connect to the IBM Cognos Analytics portal.
   b. In **Team content**, open the `Samples_PowerPlay` folder .
   c. Click **great_outdoors_sales_en**, and from the right-click menu of any report, click **Edit**. The report opens in PowerPlay Studio.

Chapter 4. Setting up logging

IBM Cognos Analytics log messages provide information about the status of components, including PowerPlay, and a high-level view of important events.

Log messages can provide information about attempts to start and stop services, completion of processing requests, and indicators for fatal errors. Audit logs, which are available from a logging database, provide information about user and report activity.

For more information about Cognos Analytics logging, including a description of logging levels and setting up audit reports, see the *Cognos Analytics Administration and Security Guide*.

Set Up IBM Cognos Analytics Logging

You set logging levels in Cognos Administration to specify the events and messages to record in the log file or in the log database.

An event is an occurrence in your Cognos Analytics environment that is significant enough to be tracked, such as starting or stopping a service.

For information about setting up logging for other components, such as tracking user and session information with Content Manager logging, see the *Cognos Analytics Administration and Security Guide*.

Specify the Destination for IBM Cognos Analytics Log Messages

The destination for log messages was configured during the IBM Cognos PowerPlay installation. The default destination is a file on the local computer. Cognos Analytics can also be configured to send log message to a database.

For more information about destination options for log messages or changing the destination, see the IBM Cognos PowerPlay *Installation and Configuration Guide*.

Enable Logging for the PowerPlay Service

You set logging levels to specify the events and messages to record for the PowerPlay service in the log file or in the log database, such as starting or stopping a service.

The following table shows the information recorded for each logging level.

Table 17. Information recorded for each logging level

Details	Minimal	Basic	Request	Trace	Full
System and service startup and shutdown, runtime errors	X	X	X	X	X

Table 17. Information recorded for each logging level (continued)

Details	Minimal	Basic	Request	Trace	Full
User account management and runtime usage of IBM Cognos Analytics		X	X	X	X
Use requests		X	X	X	X
Service requests and responses			X		X
All requests to all components with their parameter values				X	X
Other queries to Cognos Analytics components (native query)				X	X

You can maintain system performance by managing the amount of logging performed by the server. Since extensive logging affects server performance, increasing the logging level may negatively affect the performance of Cognos Analytics.

The default logging level is Minimal. If the default setting does not provide the information you require, gradually increase the logging level. For example, moving to the request logging level will provide information about dimension, level, and measure activity. Use Full logging level only for detailed troubleshooting purposes because it may significantly degrade server performance.

Procedure

1. Start Cognos Administration.
2. On the **Status** tab, click **System**.
3. In the upper left corner of the **Scorecard** pane, select **Services** and then click **PowerPlay**.
4. Click the arrow next to **PowerPlay Service** to view the Actions menu, and then click **Set properties**.
5. Click the **Settings** tab.
6. From the **Category** menu, click **Logging**.
7. From the **Value** menu, select the logging level you want for the service.

   Unless you are troubleshooting problems, **Request** is an appropriate logging level for most installations.
8. Click **OK**.

Enable Logging for PowerPlay Cube and Report Activity

By default logging is not enabled for cubes and reports. To track cube and report activity you must enable audit logging for cubes and reports in IBM Cognos PowerPlay administration.

You can audit at the summary or detail level. Summary logging logs all server requests made to cubes and reports from all PowerPlay users. Detail logging logs the measures and dimensions accessed from PowerPlay Studio.

Procedure

1. In IBM Cognos Analytics portal, click **Manage** > **Administration console** to open IBM Cognos Administration.
2. Click the **PowerPlay** tab.
3. In the **Configurable Objects** list, select a folder or package.

   The settings will be applied to all objects contained in the selected folder or package. You can change the auditing level for individual items later to be different from the parent.
4. Click the **Cube Settings** or **Report Settings** tab.
5. For **Auditing Level**, select **Summary** or **Detail**.
6. Click **OK**.

Sample Audit Model and Audit Reports

IBM Cognos PowerPlay includes a sample model and sample audit reports that you can use with IBM Cognos Analytics logging.

Sample Audit Model

Cognos Analytics includes a sample audit model in Framework Manager. The default location is *install_location*/webcontent/samples/Models/Audit/Audit.cpf.

Sample Audit Reports

The following table lists the sample PowerPlay audit reports and describes the content of each report.

Table 18. Sample audit reports

Audit report name	Description
PowerPlay Access	Shows who accessed PowerPlay, what time they logged onto the portal, and which package they accessed.
PowerPlay Usage	Shows which users accessed which packages and the dimensions, levels and measures that they accessed within the package.

Data Schema for IBM Cognos PowerPlay Log Messages

The following section provides information about table definitions and interactions for IBM Cognos PowerPlay log messages.

This information supplements the data schema information for other IBM Cognos Analytics components that appears in the *Cognos Analytics Administration and Security Guide*.

Table Definitions

Log messages are recorded in a table in the logging database under certain conditions. These conditions depend on the logging level that you configure in the Web portal.

For information about logging levels, see the IBM Cognos Analytics *Administration and Security Guide*.

When a user logs on to Cognos Analytics, a session ID is assigned and recorded in all log messages. You can use the session ID to identify all actions performed by a user.

The database table definitions that are created in the Cognos Analytics logging database for PowerPlay are described in the following table, with a cross-reference to associated column definitions.

Table 19. Table definitions for the logging database

Table name	Description
COGIPF_POWERPLAY	Stores information about PowerPlay package, report and report view requests
COGIPF_POWERPLAY_DIM_USAGE	Stores information about dimensions used in PowerPlay package, report and report view requests
COGIPGF_POWERPLAY_LEVEL_USAGE	Stores information about levels used in PowerPlay package, report and report view requests
COGIPF_POWERPLAY_MEASURE_USAGE	Stores information about PowerPlay measures used in PowerPlay package, report and report view requests
COGIPF_MIGRATION	Stores information about migration service operations

Table Interactions

The following information describes columns for each IBM Cognos PowerPlay table in the logging database.

COGIPF_POWERPLAY Table:

The COGIPF_POWERPLAY table contains the following columns.

Table 20. Columns in the COGIPF_POWERPLAY table

Column name	Description and data type
COGIPF_HOST_ IPADDR	The host IP address where the log message is generated VARCHAR2 (15)
COGIPF_HOST_ PORT	The host port number NUMBER

Table 20. Columns in the COGIPF_POWERPLAY table (continued)

Column name	Description and data type
COGIPF_PROC_ID	The process ID assigned by the operating system NUMBER
COGIPF_LOCAL TIMESTAMP	The local date and time when the log message was generated While the report is executing, this is the time that the report execution started. After the report execution is complete, this is the end time of report execution. To calculate the execution start time for a report that has already completed execution, subtract COGIPF_RUNTIME from COGIPF_LOCALTIMESTAMP. DATE
COGIPF_TIMEZONE_ OFFSET	The time zone, offset from GMT NUMBER
COGIPF_SESSIONID	The identification number of the session VARCHAR2 (255)
COGIPF_ REQUESTID	The identification number of the request VARCHAR2 (255) UNIQUE NOT NULL
COGIPF_STEPID	The identification number for the step within a job run (empty if there is none) VARCHAR2 (255)
COGIPF_ SUBREQUESTID	The identification number of the component subrequest VARCHAR2 (255)
COGIPF_THREADID	The identification number of the thread where the request is run VARCHAR2 (255)
COGIPF_ COMPONENTID	The name of the component that generates the indication VARCHAR2 (4)
COGIPF_ BUILDNUMBER	The major build number for the component that generates the indication NUMBER

Table 20. Columns in the COGIPF_POWERPLAY table (continued)

Column name	Description and data type
COGIPF_ LOG_LEVEL	The level of the indication NUMBER
COGIPF_ TARGET_TYPE	The object on which the operation is run VARCHAR2 (255)
COGIPF_ REPORTPATH	The report path VARCHAR2 (512)
COGIPF_STATUS	The status of the operation: blank if execution has not completed, success, warning, or failure VARCHAR2 (255)
COGIPF_ RUNTIME	The number of milliseconds required to execute the report NUMBER
COGIPF_REPORTNAME	The name of the report VARCHAR2 (255)
COGIPF_PACKAGE	The package that the report is associated with VARCHAR2 (512)
COGIPF_DATASOURCE	The data source that the report is associated with VARCHAR2 (512)
COGIPF_DATASOURCE_CONNECTION	The data source connection that the report is associated with VARCHAR2 (512)
COGIPF_CUBEPATH	The path to the local PowerCube that the report is associated with VARCHAR2 (512)
COGIPF_OPERATION	The action performed on the object VARCHAR2 (128)
COGIPF_MESSAGE	Error details VARCHAR2 (2000)

Table 20. Columns in the COGIPF_POWERPLAY table (continued)

Column name	Description and data type
COGIPF_REQUEST_TYPE	NUMBER
COGIPF_SUB_COMPONENTID	VARCHAR2 (64)

COGIPF_POWERPLAY_DIM_USAGE Table:

The COGIPF_POWERPLAY_DIM_USAGE table contains the following columns.

Table 21. Columns in the COGIPF_POWERPLAY_DIM_USAGE table

Column name	Description and data type
COGIPF_SESSIONID	The identification number of the session VARCHAR2 (255)
COGIPF_REQUESTID	The identification number of the request VARCHAR2 (255) UNIQUE NOT NULL
COGIPF_DIM_CODE	The dimension code associated with the request VARCHAR2 (256) UNIQUE NOT NULL
COGIPF_DIM_NAME	The dimension name associated with the request VARCHAR2 (256)
COGIPF_DIM_COUNT	The dimension count associated with the request NUMBER

COGIPF_POWERPLAY_LEVEL_USAGE Table:

The COGIPF_POWERPLAY_LEVEL_USAGE table contains the following columns.

Table 22. Columns in the COGIPF_POWERPLAY_LEVEL_USAGE table

Column name	Description and data type
COGIPF_SESSIONID	The identification number of the session VARCHAR2 (255)
COGIPF_REQUESTID	The identification number of the request VARCHAR2 (255) UNIQUE NOT NULL

Table 22. Columns in the COGIPF_POWERPLAY_LEVEL_USAGE table (continued)

Column name	Description and data type
COGIPF_DIM_CODE	The dimension code associated with the request VARCHAR2 (256) UNIQUE NOT NULL
COGIPF_LEVEL_CODE	The level code associated with the request VARCHAR2 (256) UNIQUE NOT NULL
COGIPF_LEVEL_NAME	The level name associated with the request VARCHAR2 (256)
COGIPF_LEVEL_COUNT	The level count associated with the request NUMBER

COGIPF_POWERPLAY_MEASURE_USAGE Table:

The COGIPF_POWERPLAY_MEASURE_USAGE table contains the following columns.

Table 23. Columns in the COGIPF_POWERPLAY_MEASURE_USAGE table

Column name	Description and data type
COGIPF_SESSIONID	The identification number of the session VARCHAR2 (255)
COGIPF_REQUESTID	The identification number of the request VARCHAR2 (255)
COGIPF_MEASURE_CODE	The measure code associated with the request VARCHAR2 (256)UNIQUE NOT NULL
COGIPF_MEASURE_NAME	The measure name associated with the request VARCHAR2 (256)
COGIPF_MEASURE_COUNT	The measure count associated with the request NUMBER

COGIPF_MIGRATION Table::

The COGIPF_MIGRATION table contains the following columns.

Table 24. Columns in the COGIPF_MIGRATION table

Column name	Description and data type
COGIPF_HOST_ IPADDR	The host IP address where the log message is generated VARCHAR(128)
COGIPF_HOST_ PORT	The host port number INT(4)
COGIPF_PROC_ID	The process ID assigned by the operating system INT(4)
COGIPF_LOCALTIMESTAMP	The local date and time when the log message was generated DATETIME(8)
COGIPF_TIMEZONE_ OFFSET	The time zone, offset from GMT INT(4)
COGIPF_SESSIONID	The identification number of the session VARCHAR(255)
COGIPF_ REQUESTID	The identification number of the request VARCHAR(255)
COGIPF_STEPID	The identification number for the step within a job run (empty if there is none) VARCHAR(255)
COGIPF_ SUBREQUESTID	The identification number of the component subrequest VARCHAR(255)
COGIPF_THREADID	The identification number of the thread where the request is run VARCHAR(255)
COGIPF_ COMPONENTID	The name of the component that generates the indication VARCHAR(64)

Table 24. Columns in the COGIPF_MIGRATION table (continued)

Column name	Description and data type
COGIPF_ BUILDNUMBER	The major build number for the component that generates the indication INT(4)
COGIPF_ LOG_LEVEL	The level of the indication INT(4)
COGIPF_OPERATION	The action performed on the object VARCHAR(64)
COGIPF_TARGET_TYPE	The type of object that is migrated VARCHAR(64)
COGIPF_TARGET_PATH	The path of the migrated object in IBM Cognos Analytics nVARCHAR(1024)
COGIPF_TARGET_NAME	The name of the migrated object in IBM Cognos Analytics nVARCHAR(255)
COGIPF_STATUS	The status of the operation VARCHAR(64)
COGIPF_DETAILS	Detailed information about the operation nVARCHAR(2000)
COGIPF_PACKAGE	The package that was created as part of the migration task nVARCHAR(512)
COGIPF_MIGRATION_TASK	The name of the migration task nVARCHAR(1024)
COGIPF_MSGNUM	The message number INT(4)
COGIPF_SOURCE_TYPE	The migration source type (IBM Cognos Connection, Upfront, or PowerPlay Enterprise Server) VARCHAR(64)

Table 24. Columns in the COGIPF_MIGRATION table (continued)

Column name	Description and data type
COGIPF_SOURCE_PATH	The path of the object in IBM Cognos Series 7 nVARCHAR(1024)
COGIPF_SOURCE_NAME	The name of the object in IBM Cognos Series 7 nVARCHAR(255)

Chapter 5. PowerPlay Batch Administration

This section describes the administration options available in the IBM Cognos PowerPlay batch administration utility. With the batch administration utility, you can execute administration commands for IBM Cognos PowerPlay from the Microsoft Windows operating system command prompt or UNIX operating system command shell instead of using IBM Cognos Administration in a browser session. Also, you can redirect stdin to use batch commands and redirect stdout to a log file.

In a UNIX operating system, you access the batch administration utility using the ppadmtool.sh script. This script sets the appropriate environment variables and starts the utility. Parameters appended to the script are passed to the administration utility for processing.

If the IBM Cognos Analytics environment is configured to use SSL protocol for communication between IBM Cognos Analytics components you must complete additional configuration steps before you can use the ppadmtool utility.

Make frequent backups of your IBM Cognos content store to ensure that you can return to a fully functional environment should unexpected problems occur.

The ppadmtool Utility

To launch the ppadmtool utility, from the *installation_location*\webapps\utilities\ppadmtool directory, on a Microsoft Windows operating system, double-click the ppadmtool.bat file. And on a UNIX operating system, execute ./ppadmtool.sh.

After you start the ppadmtool utility, you can issue the following commands against IBM Cognos PowerPlay servers, cubes, and reports.

HELP

CONNECT <*dispatcherURI*> USER username PASSWORD password NAMESPACE namespace_ID

CONNECT <*dispatcher URI*> -i username -j password -k namespace

ADD type name [PATH path]

CD folder

COPY name name

CRN REPLACE {(CUBENAME)} old_value new_value

DISABLE name

ENABLE name

LIST [folder]

MOVE name name

QUIT

REMOVE type [PATH] name

RENAME source destination

RESET name property

RESET BELOW name property

SET name property=value

SHOW name

EXIT

filename

Specifies the fully qualified path of the mdc file, including the file extension.

folder

Specifies an object name of type FOLDER, which represents the folder path within the portal hierarchy.

name

Specifies the name of an object (cube, report, or folder). When the object is a folder, it can be used to form a folder hierarchy. A server is also considered the root folder.

namespace

Specifies the namespace ID that contains the user you are using to log in.

objectname

Specifies the logical name of the cube package, report, or folder as defined in the portal.

option

Specifies a command option, as described in the Options.

password

Specifies either a simple server password or the password for the specified Access Manager user name. Do not include the password command if the username does not require a password.

path

Specifies a physical path to the data source file. Uses the format of your operating system (UNIX or Windows).

property

Specifies an object property in (.) object hierarchy format. For a list of properties, use the SHOW command.

server

Specifies the name or IP address of a PowerPlay server.

type

Specifies the type of object. The type can be PACKAGE, REPORT, or FOLDER.

username

Specifies a user name to log on as.

value

Specifies the value for a property.

Conventions

When entering file paths or the variable name (when the object is a folder), a dot (.) represents the current folder, two dots (..) represent the parent folder, and a slash (/) represents the root folder, which is the server. For example, the following script disables all objects on server hp_srv.

```
ppadmtool
> connect hp_srv
> disable ./
> exit
```

When entering file names or paths containing spaces, enclose the entire file name or path in quotation marks ("). For example

```
SHOW "great outdoors"
COPY ../gnt "/CF systems/great outdoors"
```

You can also redirect input from a file and output to a file.

```
ppadmtool < ../adm/daily_update.txt > check.log
```

Commands

With the batch administration utility, you can execute administration commands for IBM Cognos PowerPlay from the Microsoft Windows operating system command prompt or UNIX operating system command shell instead of using IBM Cognos Administration in a browser session.

ADD

Adds a new object to the connected server. PATH indicates a data source. The following example adds the cube "Great Outdoors" to the connected server. The command creates a data source and package in IBM Cognos Analytics:

```
ADD CUBE "Great Outdoors" PATH "F:/cubes/great outdoors.mdc"
```

If a type is not specified, the object is assumed to be a cube.

CONNECT

Connects to a IBM Cognos PowerPlay server. The following example connects to the server *cognos_server_name* as the user name JuliaX from the Default namespace using the password neptune:

```
CONNECT http://cognos_server_name:9300/p2pd/servlet/dispatch
USER JuliaX PASSWORD neptune NAMESPACE Default
```

You can also use -i -j and -k in place of USER, PASSWORD, and NAMESPACE. The example would then become:

```
CONNECT http://cognos_server_name:9300/p2pd/servlet/dispatch
-i JuliaX -j neptune -k Default
```

CD

Changes the current folder. The command-line prompt indicates the current folder and the path from the root folder. The following example changes the current folder from “/global networking/finances” to “/global networking/hub product/marketing”. For clarity, the prompt is included in the example:

global networking /finances> CD “../hub products/marketing” global networking/hub products/marketing>

COPY

Creates a copy of an object and its associated overridden properties in a new object. The following example copies the report gnt from the parent folder to the folder “/CF systems” and names the new object “great outdoors”:

```
COPY ../gnt "/CF systems/great outdoors"
```

CRN REPLACE CUBENAME

Changes the package name of all cube packages or reports that match a current cube name and whose gateway matches the current server's gateway. The following example changes the name of all objects named "Great Outdoors" on the current gateway to "Sample Cube":

```
CRN REPLACE CUBENAME "Great Outdoors" "Sample Cube"
```

DISABLE

Disable selects the disable check box within the package properties page. This property is accessible from the portal. When an object is disabled, users who do not have write permissions for this entry cannot access it. The entry is no longer visible in the portal. If an entry is disabled and users have write access to it, the disabled icon appears next to the entry. The following example makes the object "Finance" unavailable:

```
DISABLE Finance
```

The following example makes the object "Great Outdoors" unavailable:

```
DISABLE "Great Outdoors"
```

ENABLE

Enable clears the disable check box on the package properties page:

```
ENABLE "Sales 2009"
```

EXIT

Closes the ppadmtool utility.

HELP

Shows a list of the ppadmtool commands.

LIST

Lists all the objects in the specified folder. The following example lists all objects in the folder "/docs/recent reports":

```
LIST "/docs/recent reports"
```

If no folder is specified, all the objects in the current folder are listed.

MOVE

Moves an object and its associated overridden properties to a new object. You must specify both a target location as well as a name for the moved object. If the target location does not exist, it will be created for you. The following example creates a new object "bls"in the "/new/" folder:

```
MOVE gnt "/new/bls"
```

REMOVE

Removes an object or the reference to its data source file without deleting the actual file. If the operation removes all references, the object is removed in its entirety. The following example removes the cube "new_sales" from the connected server.

```
REMOVE CUBE new_sales
```

The following example removes the reference to the data source file for the object "general networks".

```
REMOVE PATH "general networks"
```

If the object is a folder, all child objects are also removed. If a type is not specified, the object is assumed to be a cube.

RESET

Resets the selected properties on an object to the properties inherited from higher level folders. If there are no higher level folders, the properties are set to the default properties for that object. The following example resets the value "LA" on the object "Great Outdoors" to the default value for the folder, or, if there is no default folder, the default value for the object type:

```
RESET "Great Outdoors" LA
```

RESET BELOW

Resets the properties on the contents of a folder and its subfolders, but not the properties of the folder itself. The following example resets the value "Published" on the contents of the root folder to the default value specified for the folder, or, if there is no folder default, the default for the object type:

```
RESET BELOW / Published
```

SET

Assigns property values to an object. Properties are case sensitive. You must enter the property name exactly as it is used. To display the properties for an object, use the SHOW option.

- The following example sets the maximum number of processes for the Great Outdoors cube to 5:

  ```
  SET
  "Great Outdoors"
  .PWQ.Control.MaxProcess=5
  ```

- To set a property for all of the objects on the server insert a forward slash (/) instead of an object name. The following example sets the property "PWQ.Control.MaxProcess" to "5" on the root folder (or server):

```
SET / .PWQ.Control.MaxProcess=5
```

- To set a property for content in **My content** for a specific user, use the search path from the user's properties to specify the location. The following example sets the property

```
SET CAMID(...
some cam id )/folder[@name='My content'] <some property>=<some
value>
```

SHOW

Displays all the properties for the specified object. The following example displays all properties for the "Sales 2009" object:

```
SHOW "Sales 2009"
```

The following example displays .FLD.Control.MinProcess property for the testfolder2 object:

```
SHOW /testfolder2 .FLD.Control.MinProcess
```

Deprecated Commands

The following commands have been deprecated and are not available in the IBM Cognos PowerPlay version of the ppadmtool.

ADD DS type name DS mirror

CRN REPLACE GATEWAY

KILL name

NOTIFY {(CUBE_OBJECT objectname | CUBE_FILEfilename)} EVENT = UPDATE [ON_ERROR IGNORE | FAIL]

PUBLISH name

PUBLISHLINK name

REMOVEDS name DS mirror

REMOVELINK name

Changed Commands

The following changes have been made in the IBM Cognos PowerPlay version of the ppadmtool.

- The IBM Cognos Analytics dispatcher URI is now used for the server name. You can obtain the dispatcher information from Cognos Configuration.
- If your connection to the server requires authentication, you must provide a user name, password, and namespace ID to connect. You will not be prompted if this information is not provided. No authentication is required if you are connecting using anonymous access.
- If the user name that you are using to connect has no password, then do not add the PASSWORD parameter as part of the connect command. In the IBM Cognos Series 7 ppadmtool, no password was specified using quotes with no text with the PASSWORD parameter.
- You can no longer issue additional commands as arguments when initially calling the program. For example, the following command is invalid.

D:\ppadmtool>ppadmtool connect "http://wottppeslab3:9300/p2pd/servlet/dispatch" user dan password dan namespace s7 add cube cubename path d:\cubes\ppweb.mdc

You must first connect to the server and then issue commands.

- CRN REPLACE CUBENAME does not replace all matching cube names on the server. When the command is executed from a folder named XY, only objects in XY are changed.
- Add will create a data source and a package in the Cognos Analytics portal if the object you are adding is an IBM Cognos PowerCube.

Configuration Requirements to Use SSL for the PowerPlay Server Batch Administration Utility

If IBM Cognos Analytics is configured to use the Secure Sockets Layer (SSL) protocol for communication between IBM Cognos Analytics components, you must complete the following configuration before you can use the PowerPlay Server Batch Administration utility. This configuration is not required if SSL is enabled only on the web server. Configuration involves three steps.

- Extract an SSL certificate.
- Create a key store for the certificate.
- Modify the parameters in the ppadmintool.bat file.

Extract an SSL Certificate

Extract an SSL certificate to use the IBM Cognos PowerPlay Server Batch Administration utility.

Procedure

1. Go to the *installation_location*\bin directory.
2. Type the following command:

   ThirdPartyCertificateTool.bat -java:local -E -T -r cacert.cer -k ..\configuration\signkeypair\jCAKeystore -p password

Results

The CA certificate, cacert.cer, is exported to the *installation_location*\bin directory. You can now create a keystore for the certificate.

Create a Keystore for the Certificate

After you extracted an SSL certificate, you create a keystore for the certificate to be able to use the IBM Cognos PowerPlay Server Batch Administration utility.

Procedure

1. Go to the *installation_location*\bin\jre\version\bindirectory.
2. Type the following command:

   keytool.exe -import -file *installation_location*\bin\cacert.cer -keystore *installation_location*\webapps\utilities\ppadmtool\MyKeyStore -storepass *password* -alias *ibmcognos_alias*

Results

The key store file, MyKeyStore, is created in the *installation_location*\webapps\utilities\ppadmtool directory. You can now modify the parameters for the batch administration utility.

Modify the Parameters for the Batch Administration Utility

After you created a keystore for the certificate, you can modify the parameters for the IBM Cognos PowerPlay Server Batch Administration utility.

Procedure

1. From the *installation_location*\webapps\utilities\ppadmtool directory, open ppadmtool.bat in a text editor.
2. Locate the following line:

   %_RUNJAVA% -cp %CP%%J_OPTS% com/spotonsystems/cubeadmin/cli/PpAdmin%*
3. Edit the line to identify the keystore and password:

   %_RUNJAVA% -cp %CP% %J_OPTS% -Djavax.net.ssl.trustStore=MyKeystore -Djavax.net.ssl.trustStorePassword=password com/spotonsystems/cubeadmin/cli/PpAdmin %*

Results

When the IBM Cognos Analytics installation is configured to use the SSL protocol, use the following format for the CONNECT command in the ppadmtool utility:

CONNECT https://server_name:port/p2pd/servlet/dispatch

Appendix A. Troubleshooting

Use this troubleshooting reference information and solutions as a resource to help you solve specific problems you may encounter when using IBM Cognos PowerPlay.

Problems that you may encounter are organized in the following areas. Log files may also contain information to help you solve problems.

Problems Working in IBM Cognos PowerPlay Administration

This section describes problems you may encounter working in IBM Cognos PowerPlay Administration.

PowerPlay Requests Do Not Appear in System Status or Activities Lists

Some IBM Cognos PowerPlay requests do not appear when you view the system status or activities lists in IBM Cognos Administration.

- Requests from PowerPlay Studio that complete in five seconds or less do not appear in the system status for the PowerPlay service
- Requests from PowerPlay Client, regardless of the length of time required to process the request, do not appear in system status, current activities, past activities, or upcoming activities

Some PowerPlay Activity Is Not Logged

If you view the log file or log database and information about IBM Cognos PowerPlay activity you want to track does not appear you can increase the logging level to record more information.

Connection Error When PowerCube File Name Includes Simplified Chinese Characters

When IBM Cognos PowerPlay is installed on an IBM AIX® computer, you may encounter the following error when connecting to a PowerCube that has Simplified Chinese characters in the file name. The error can occur when testing the data source connection or when opening a package based on the PowerCube.

```
 The cube was not opened successfully.
 PDS-PPE-0084 No error message is available.
{0}ppdsweb/source/CExecCrosstab.cpp(1313): CPPWebException: CCL_THROW:
CExecCrosstab::Execute
```

To prevent this error, rename the cube to use English characters, and remove native characters from the cube name. Another option is to use UTF-8 characters for Simplified Chinese (GB2312) code points when you create the data source connection. These characters will appear incorrectly in the IBM Cognos Analytics portal, however, the connection will work correctly.

Problems Working in IBM Cognos PowerPlay Studio

This section describes problems users may encounter working in IBM Cognos PowerPlay Studio.

Error After Inserting a Calculation in PowerPlay Studio

After inserting a calculation, you may receive a browser error and the calculation action does not complete successfully. The problem can occur on Microsoft Internet Explorer 7 and Mozilla Firefox.

There is currently no workaround for this problem in Internet Explorer 7 and Mozilla Firefox. The problem does not exist when using Internet Explorer 6.

Error When Opening the Link in the Email for a Scheduled Report

When a user schedules a report to run and requests the delivery option to be email, only the most recently sent email will contain a valid link. Any previous email will contain a link to a report that no longer exists and result in either a blank page or a page not found error.

Page Error When Editing a Chart Title in Japanese

When you set the font of a chart title to a Japanese font, you may get an error. This error occurs if the selected Japanese font is not an UTF-8 font.

To fix this error, select a UTF-8 Japanese font.

Long Strings Are Truncated

Word-wrapping works only in languages that use a space to separate words.

To force a word wrap in languages such as Chinese, Korean, Japanese and Thai, insert a single-byte space at an appropriate place to simulate a word break.

Hebrew Text Displayed in Charts

In some chart elements, bi-directional Hebrew text may be displayed in a "logical" order rather than the expected "visual" order. For more information, go to http://people.w3.org/rishida/scripts/bidi/

After Exporting to PDF the Label for the OTHER Category in a Pie Chart Changes to Actual Category Name

When creating a pie chart in IBM Cognos PowerPlay Studio, the OTHER category is generated and is visible in the legend. After exporting to PDF, the correct category name replaces OTHER in the legend. This is the expected behavior.

Unreadable or Inaccessible Display

If you use Microsoft Internet Explorer web browser 7, you may get an unreadable display with higher zoom settings. For example, some display elements may overlap.

To correct the display, reduce the Internet Explorer 7 zoom setting.

Cognos Application Firewall Error When Saving a PowerPlay Studio Report

If your IBM Cognos Analytics installation uses the Cognos Content Database you will receive the following error when you attempt to save a PowerPlay Studio report.

```
An error has occurred.

DPR-ERR-2079 Firewall Security Rejection. Your request
was rejected by the security firewall.

CAF rejection details are available in the log. Please
contact your administrator.
```

To prevent this error use a different supported database for the IBM Cognos Analytics content store.

Appendix B. Japanese Shift-JIS Character Mapping

When migrating reports or cubes whose names contain Japanese characters, issues may occur because there is no industry standard for mapping byte sequences from Shift-JIS characters to and from Unicode.

IBM Cognos Series 7 PowerPlay Enterprise Server uses operating-system specific variants of the Shift-JIS multibyte character encoding scheme to store Japanese characters. IBM Cognos Analytics stores all characters internally in Unicode.

Problems may arise when migrating from IBM Cognos Series 7 to IBM Cognos Analytics because translations from Shift-JIS to Unicode and from Unicode back to Shift-JIS are performed by different software. If these translations do not all use the same mapping from Shift-JIS to and from Unicode, report and cube names may not match, resulting in items that fail to migrate or in migrated reports that cannot run.

Encoding mappings may be performed by

- the IBM Cognos Series 7 migration service

  By default, the IBM Cognos Series 7 migration service uses built-in libraries to encode and decode characters, mapping them between Shift-JIS and Unicode. You may need to reconfigure the mappings.
- the IBM Cognos Series 7 PowerPlay Enterprise Server Administration Tool (ppsrvadm)

  If you publish IBM Cognos Series 7 PowerPlay content to IBM Cognos Analytics from this tool, references to the PowerPlay 7 cube and report names are converted to Unicode using the character conversion libraries provided by the Java™ Virtual Machine (JVM) used to launch the tool. When migrating the content to IBM Cognos Analytics, the IBM Cognos Series 7 migration service must be able to reconvert the cube and report names to Shift-JIS and back to Unicode using the same set of mappings.
- file transfer programs used to move files from one server to another

  If you transfer cubes and reports from one server to another and the underlying file system's encoding has changed in the process, then you may be impacted by the character mapping chosen by the file transfer program that you used. For example, when migrating content from an IBM Cognos Series 7 server on the Solaris operating system that uses the Japanese locale JP.PCK, file names are stored on disk using the Solaris operating system's variant of Shift-JIS. When you transfer these files to a new server that is using a Unicode-based locale, you may be impacted by the character mapping that the file transfer program used for the transfer.
- operating system API functions used to read and write files

  If the file system used by your IBM Cognos Series 7 server uses a character set that is different than that used in the locale in which your IBM Cognos Series 7 PowerPlay Enterprise Server is running, then you may be impacted by the character mapping that is chosen by the file system. For example, if IBM Cognos Series 7 PowerPlay Enterprise Server is running on Windows with an NTFS file system in the Japanese locale, then PowerPlay is running in Window's CodePage 932, which is the Microsoft variant of Shift-JIS. But file names are stored on disk in Unicode. Mapping between the two encodings is performed at run-time.
- the IBM Cognos Analytics server

The IBM Cognos Analytics server relies on the JVM used to run IBM Cognos Analytics to perform character mappings. Even if you are using the same JVM vendor for IBM Cognos Analytics and ppsrvadm, the two servers may map some Shift-JIS characters to different Unicode codepoints.

If any of the encoding points do not employ the same characters mappings, you must either change cube and report names to remove the problem characters or reconfigure characters to make them use the same mapping.

Characters that Cause Problems

The following table describes the Shift-JIS characters that can cause problems. Characters marked with an asterisk (*) are mappings that are rare and it is unlikely that you will encounter them.

Table 25. Shift-JIS characters that can cause problems in migration

JIS bytes	Shift-JIS bytes	Unicode codepoints	Description
0x5C	0x5C	U+005C u+00A5	Reverse solidus Yen sign
0x7E	0x7E	U+007E U+203E	Tilde Overline
0x2131	0x8150	U+203E* U+FFE3	Overline Full width macron
0x213D	0x815C	U+2014 U+2015	Em dash Horizontal bar
0x2140	0x815F	U+005C* U+FF3C	Reverse solidus Full width reverse solidus
0x2141	0x8160	U+301C U+FF5E	Wave dash Full width tilde
0x2142	0x8161	U+2016 U+2225	Double vertical line parallel to
0x215D	0x817C	U+2212 U+FF0D	Minus sign Full width hyphen-minus
0x216F	0x818F	U+00A5* U+FFE5	Yen sign Full width yen sign

Table 25. Shift-JIS characters that can cause problems in migration (continued)

JIS bytes	Shift-JIS bytes	Unicode codepoints	Description
0x2171	0x8191	U+00A2 U+FFE0	Cent sign Fullwidth cent sign
0x2172	0x8192	U+00A3 U+FFE1	Pound sign Full width pound sign
0x224C	0x81CA	U+00AC U+FFE2	Not sign Full width not sign

Reconfigure the Shift-JIS Characters to Unicode Mapping

You can fine tune the mapping from Shift-JIS to Unicode and back that the IBM Cognos Series 7 migration service uses by placing a configuration file named shift-jis.xml in your s7_location\migs7 directory.

This file employs the same format as is used by the IBM Cognos Analytics Round Trip Safety Configuration utility.

For more information about the Round Trip Safety Configuration utility and how it affects IBM Cognos Analytics's runtime behavior, see the IBM Cognos Analytics *Administration and Security Guide*.

Tip: You may find it easier to generate a shift-jis.xml file with the Round Trip Safety Configuration utility and then fine tune the resulting shift-jis.xml file by hand.

Before you begin

We recommend that you first back up the existing shift-jis.xml file in case you want to go back to the original version.

Procedure

1. Start the Round Trip Safety Configuration utility:
   - On the Microsoft Windows operating system, double-click *install_location*\bin\rtsconfig.bat.
   - on the UNIX operating system, run the command *install_location*/bin/rtsconfig.
2. In the **Conversion** tab, specify how to render the listed Unicode characters to Shift-JIS.
3. In the **Substitution** tab, specify how certain Shift-JIS characters are rendered into Unicode.
4. Save your changes.

   The file *install_location*\bin\shift-jis.xml is updated.
5. Copy the shift-jis.xml file to the *s7_location*\migs7 location.

6. If you need to manually edit the file, open the file in the *s7_location*\migs7 location using an XML or text editor and make the changes that you want.
7. Create an environment variable named PYCODECS_MAP_DIR and point it to the *s7_location*\migs7 folder.

   For example, C:\Program Files\Cognos\cer5\migs7.

   Note: In Windows, you must make this a system environment variable and not a user variable so that it is accessible to the IBM Cognos Series 7 migration service.
8. Stop and restart the IBM Cognos Series 7 migration service:
   - On Windows, change to the *s7_location*/migs7 directory, and use the following command:

     configure.exe --stop

     To restart the service, use the following command:

     configure.exe --start
   - on the UNIX operating system, change to the *s7_location*/migs7 directory, and use the following command:

     ./configure --stop

     To restart the service, use the following command:

     ./configure --start

Results

Note: If you leave a copy of your shift-jis.xml file in the *install_location*\bin directory, it will affect IBM Cognos Analytics's run-time behavior when interacting with end users and with databases that do not provide their own conversion mechanisms. If you do not want to change this behavior, restore the shift-jis.xml file located in the *install_location*\bin\folder to the backup version.

Manually Editing the shift-jis.xml File

Manually edit the shift-jis.xml file when you require a more flexible mapping than what is provided. The Round Trip Configuration utility allows you to configure mappings for only common problem characters.

Manually editing the shift-jis.xml file may prevent the Round Trip Safety Configuration utility from correctly parsing it. We recommend that you use the utility to generate the initial mapping file and copy it to the *s7_location*\migs7 location before manually editing it.

Tip: You can also manually create the shift-jis.xml file without using the Round Trip Safety Configuration utility.

Before you edit the shift-jis.xml file, you must become familiar with the file format. The following example specifies that when the Unicode character U+2116 is encountered, it is converted to Shift-JIS 0x8782.

```
<conversion>
  <entry id="1">
   <unicode>U+2116</unicode>
   <native selected="true">0x8782</native>
   <native>0xFA59</native>
   <references>
```

```
    <reference>9333</reference>
    <reference>9334</reference>
   </references>
  </entry>
```

The following example specifies that when a Shift-JIS sequence can map to either U+00A2 or U+FFE0, it is mapped to U+FFE0.

```
<substitution>
  <entry id="1">
   <codepoint value="U+00A2" replaceWith="U+FFE0"/>
   <codepoint value="U+FFE0" replaceWith="U+FFE0"/>
  </entry>
```

Troubleshooting Problems when Migrating Shift-JIS Characters

This section describes some common problems you may encounter when attempting to use the shift-jis.xml file to migrate problematic Shift-JIS characters.

The shift-jis.xml File Does not Appear to Affect the Mappings Used

After making changes to the shift-jis.xml file, the mappings used are not affected.

To resolve the problem, try one of the following:

- Verify that the files *s7_location*\migs7\rtssubstitution.dat and *s7_location*\migs7\rtsconversion.dat were created and are newer than the *s7_location*\migs7\shift-jis.xml file. If this is not the case, stop and restart the IBM Cognos Series 7 migration service.
- Verify that the .dat files are readable by the userid under which the IBM Cognos Series 7 migration service is running. For example, on Windows, the Local System account may not have read access to the files.
- Turn on debug logging by setting the system environment variable PYCODECS_MAP_DEBUG to 1 and then restarting the IBM Cognos Series 7 migration service. This generates the text file %PYCODECS_MAP_DIR%\ PyCodec.txt that may help diagnose the problem.

Multibyte Error Message Appears During a Migration

When performing a migration, the following error message appears:

```
Illegal multibyte code sequence: <Byte sequence name>
```

To resolve the problem, try one of the following:

- If you created a shift-jis.xml file, check for the presence of the byte sequence in the file. Verify that both a forward (substitution) and reverse (conversion) mapping were defined. For example, if you defined the substitution U+2015 -> U+2014, you should also define the conversion U+2014 -> 0x815C.
- Verify that your mappings are loading as expected by enabling PYCODECS_MAP_DEBUG.

No Cube Mapping Found for a Report

During a migration, no cube mapping was found for a report because the cube path contains problematic characters.

To resolve the problem, for each character in the table of problematic characters that is in the cube path, try mapping that character first one way and then the other way in the shift-jis.xml file.

For example, a .ppx report has the Shift-JIS byte sequence 81,61,2e,70,70,78 as its name. In Unicode, the name can be interpreted as "{DOUBLE VERTICAL LINE}.ppx" (2016, 002e, 0070, 0070, 0078) or "{PARALLEL TO}.ppx" (2225, 002e, 0070, 0070, 0078). If you do not override the mapping for 2016 and 2225, you will not be able to migrate this report. Try one of the following solutions:

- Add the following mapping to force the IBM Cognos Series 7 migration service to use 2016.

  Substitution: 2225 -> 2016

  Conversion: 2016 -> 81, 61

  Conversion: 2225 -> 81, 61
- If the mapping does not work, use 2225 instead.

  Substitution: 2016 -> 2225

  Conversion: 2016 -> 81, 61

  Conversion: 2225 -> 81,61

Note: You must restart the migration service and rerun a migration each time you modify the shift-jis.xml file.

Characters not Migrated Correctly when Using a Different Migration Source

Characters that migrate correctly when using IBM Cognos PowerPlay Enterprise Server as the migration source do not migrate correctly when using IBM Cognos Analytics as the migration source or vice versa.

To resolve the problem, define a separate shift-jis.xml file for each migration source type. Note that you must restart the IBM Cognos Series 7 migration service and rerun the migration each time you change the shift-jis.xml file.

Problems Migrating Cubes with non-ASCII Characters on UNIX

If the IBM Cognos Series 7 PowerPlay Enterprise Server service is using a non-ASCII path name to access a PowerCube and the IBM Cognos Analytics server is running in a locale that uses a different character set, then the IBM Cognos Analytics server is unable to locate the referenced PowerCube on disk.

For example, the PPES service is using a Japanese name encoded in Shift-JIS using the Solaris operating system locale ja_JP.PCK and the IBM Cognos Analytics server is running in the locale ja_JP.UTF-8. As a result, the migration of reports that depend on the PowerCube fails with error messages like the following:

MGD-msg-0424 Unable to create the following data source in IBM Cognos Analytics: cubes/Japanese/<*Japanese characters*>

MGD-msg-0422 MigDeploy Exception: MGD-msg-0432 Invalid data source parameters. The path to the physical cube is not specified.

The procedure to work around the problem depends on whether you want to use the same or different locale setting in IBM Cognos Analytics as in IBM Cognos Series 7.

If you want to use the same locale setting in IBM Cognos Analytics as in Series 7, set language environment variables to match those used when starting Series 7 PPES.

If you want to use a different locale setting in IBM Cognos Analytics, make a copy of the PowerCube under the locale's encoding. Note that you will probably need to use a custom shell or other file-copy utility because entering file names using two separate encodings at a shell command prompt may not work.

Procedure

1. To set language variables to match those used when starting Series 7 PPES, do the following:
   - Set the LANG, LC_ALL, and if applicable, LC_CTYPE environment variables to match those that were used when starting IBM Cognos Series 7 PPES.

     For example, LANG= ja_JP.UTF-8.
   - Launch *install_location*/bin/cogconfig.sh.
   - Restart the IBM Cognos service.
   - Redo the migration.
2. To make a copy of the PowerCube under the locale's encoding, do the following:
   - Copy the PowerCube .mdc file on disk from its name under the old locale's encoding to its new name under the new locale's encoding.

     For example, to move the file "cubes/Japanese/*Japanese characters*.mdc" from ja_JP.PCK to ja_JP.UTF-8, copy the file named

     ".../cubes/Japanese/\x93\xfa\x96{\x8c\xea\x82\xcc\x83L\x83\x85\ x83u.mdc"

     to the new filename

     ".../cubes/Japanese/\xe6\x97\xa5\xe6\x9c\xac\xe8\xaa\x9e\xe3\x81\ xae\xe3\x82\xad\xe3\x83\xa5\xe3\x83\x96.mdc"
   - Redo the migration.

Unable to Migrate Because Content Manager Reports Object with Same Name Already Exists

When running a migration task, the Content Manager reports an error in the run history details that an object with the same name already exists, and the migration is unable to continue. If you then query the Content Manager database, you cannot find the object.

This problem occurs only when the Content Manager is a Microsoft SQL Server database, and is caused by the existence of an object in the Content Manager database that contains a variant of one of the characters in the object name. For example, the object you are migrating contains the Unicode character U+00A2 (cent sign), and an object with the Unicode character U+FFE0 (full-width cent sign) exists in the database.

To resolve the problem, do one of the following before migrating:

- In the Content Manager database, delete the object that is stopping the migration.
- Recreate the Content Manager database using the collation sequence Latin1_General_CI_AS_KS_WS instead of Latin1_General_CI_AS.

  By creating the Content Manager database using a collation sequence that includes width-sensitive characters (_WS), you will avoid conflicts with objects that contain both half-width and full-width variants of the same character in their names.

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