



# Cisco Workload Automation Cognos Adapter Guide

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# Preface

This guide describes the installation, configuration, and usage of the Cognos Adapter with Cisco Workload Automation (CWA).

## Audience

This guide is for administrators who install and configure the Cognos Adapter for use with CWA, and who troubleshoot CWA installation and requirements issues.

## Related Documentation

See the *Cisco Workload Automation Documentation Overview* for your release on [cisco.com](http://cisco.com) at:

<http://www.cisco.com/c/en/us/support/cloud-systems-management/tidal-enterprise-scheduler/products-documentation-roadmaps-list.html>

...for a list of all CWA guides.

**Note:** We sometimes update the documentation after original publication. Therefore, you should also review the documentation on [Cisco.com](http://cisco.com) for any updates.

## Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>.

Subscribe to *What's New in Cisco Product Documentation*, which lists all new and revised Cisco technical documentation, as an RSS feed and deliver content directly to your desktop using a reader application. The RSS feeds are a free service.

## Document Change History

The table below provides the revision history for the Cognos Adapter Guide.

Version Number	Issue Date	Reason for Change
6.1.0	October 2012	New Cisco version.
6.2.1	June 2014	Available in online Help only.

Document Change History

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Version Number	Issue Date	Reason for Change
6.2.1 SP2	June 2015	Configuration provided in the <i>TES Installation Guide</i> ; usage provided in online Help only.
6.2.1 SP3	May 2016	Consolidated all BusinessObjects Adapter documentation into one document.
6.3	August 2016	Rebranded “Cisco Tidal Enterprise Scheduler (TES)” to “Cisco Workload Automation (CWA)”.  Miscellaneous edits for the 6.3 release.



# 1

## Introducing the Cognos Adapter

This chapter provides an overview of the Cognos Adapter and its requirements:

- [Overview, page 7](#)
- [Prerequisites, page 7](#)

### Overview

The Cisco Workload Automation (CWA) Adapter for Cognos is an API-level integration solution. This solution hides implementation details in screens that connect to Cognos instances and define Cognos tasks as part of CWA job definitions. It accesses the Cognos Business Intelligence content store using the Cognos Content Manager Service. As a platform independent solution, the adapter can run on any platform where the CWA master runs.

The Cognos adapter enforces Cognos security by authenticating with Cognos through associations between CWA runtime users and Cognos namespaces, users, and roles. Creating a Cognos job from CWA is highly secure, but as simple as creating any other job.

A job definition refers to report and query data that is retrieved from the Cognos content store including format, print, save, and email disposition options as well as parameter value overrides that can refer to Scheduling variables. Based on defined scheduling criteria, the Enterprise Adapter submits a Cognos task to run either directly through the Cognos Batch Report Service or indirectly as an event that tracks background processes and history from the Cognos Monitor Service. Once the task has been submitted, the Adapter monitors the process until it is completed. The Adapter returns the final completion status (used to control downstream jobs) as well as details associated with the run to the console. In addition, the Adapter lets users cancel, abort or rerun tasks from CWA, a feature that provides significantly more control over the environment than afforded by scripting or other non-integrated scheduling solutions.

The Cognos adapter is event-based. It launches processes based on defined calendars and schedules and uses asynchronous callbacks for monitoring—enabling users to see status changes in real time and to control those processes as they execute. This capability reduces production processing time windows, because the Adapter does not need to wait for a polling interval to pass before reacting to the completion of a Cognos task.

### Prerequisites

If Cognos is configured to use SSL for external communication (HTTPS), you must complete the following steps as described in detail in [Configuring the HTTPS Protocol, page 12](#).

- Obtain security certificates for all target servers
- Export security certificates for all target servers to a local directory
- Import security certificates for all target servers into a Java keystore

## Prerequisites

### Software Requirements

Cisco Workload Automation works with Cognos BI 8.4+.

See the *Cisco Workload Automation Compatibility Guide* for current software support.



# 2

## Configuring the Cognos Adapter

### Overview

The Cognos Adapter software is already installed as part of a standard installation of CWA. However, you must perform the following steps to license and configure the adapter before you can schedule and run Cognos jobs:

- [Licensing an Adapter, page 9](#) - License the connection(s) to the Cognos instance. You cannot define a Cognos connection until you have applied the Cognos license from Cisco.
- [Defining Cognos Adapter Users, page 10](#) - Define a Cognos Authentication user to authorize a connection to be established to the Cognos Web server and permit requests to be made on behalf of the authenticated account.
- [Configuring the HTTPS Protocol, page 12](#) - Define the HTTPS security protocol for the Cognos Adapter.
- [Defining a Cognos Adapter Connection, page 15](#) - Define a Cognos connection so the master can communicate with the Cognos server.

See [Configuring service.props, page 39](#) for details about configuring service.props to control such things as polling, output, and log gathering.

### Licensing an Adapter

Each CWA Adapter must be separately licensed. You cannot use an Adapter until you apply the license file. If you purchase the Adapter after the original installation of CWA, you will receive a new license file authorizing the use of the Adapter.

You might have a Demo license which is good for 30 days, or you might have a Permanent license. The procedures to install these license files are described below.

#### To license an Adapter:

1. Stop the master:

Windows:

- a. Click on **Start** and select **All Programs>Cisco Workload Automation>Scheduler>Service Control Manager**.
- b. Verify that the master is displayed in the **Service** list and click on the **Stop** button to stop the master.

UNIX:

Enter **tesm stop**

2. Create the license file:

## Defining Cognos Adapter Users

- For a Permanent license, rename your Permanent license file to *master.lic*.
  - For a Demo license, create a file called *demo.lic*, then type the demo code into the *demo.lic* file.
3. Place the file in the **C:\Program Files\TIDAL\Scheduler\Master\config** directory.
  4. Restart the master:  
Windows:  
Click **Start** in the Service Control Manager.  
UNIX:  
Enter **tesm start**  
The master will read and apply the license when it starts.
  5. To validate that the license was applied, select **Registered License** from **Activities** main menu.

## Defining Cognos Adapter Users

There are two types of users associated with the Cognos Adapter, Runtime Users and Schedulers. You maintain definitions for both types of users from the **Users** pane.

### ■ Runtime Users

Runtime users in the context of Cognos jobs represent those namespaces, users and passwords required for Authentication. Cognos operations require authentication against a valid Cognos user as defined by a Cognos administrator.

### ■ Schedulers

Schedulers are those users who will define and/or manage Cognos jobs. There are three aspects of a user profile that grant and/or limit access to scheduling jobs that affect Cognos:

- Security policy that grants or denies add, edit, delete and view capabilities for Cognos jobs.
- Authorized runtime user list that grants or denies access to specific authentication accounts for use with Cognos jobs.
- Authorized agent list that grants or denies access to specific Cognos Adapter connections for use when defining Cognos jobs.

## Defining Runtime Users

### To define a runtime user:

1. From the **Navigator** pane, expand the **Administration** node and select **Runtime Users** to display the defined users.
2. Right-click **Runtime Users** and select **Add Runtime User** from the context menu (*Insert mode*).

–or–

You can also right-click a user in the **Runtime Users** pane and select **Edit Runtime User** from the shortcut menu (*Edit mode*).

The **User Definition** dialog displays.

3. If this is a new user definition, enter the new user name in the **User/Group Name** field.

4. For documentation, enter the **Full Name** or description associated with this user.
5. In the **Domain** field, enter a valid Cognos authentication method (for example, Enterprise or WinAD).
6. To define this user as a runtime user for Cognos jobs, click **Add** on the **Passwords** tab.

The **Change Password** dialog displays.

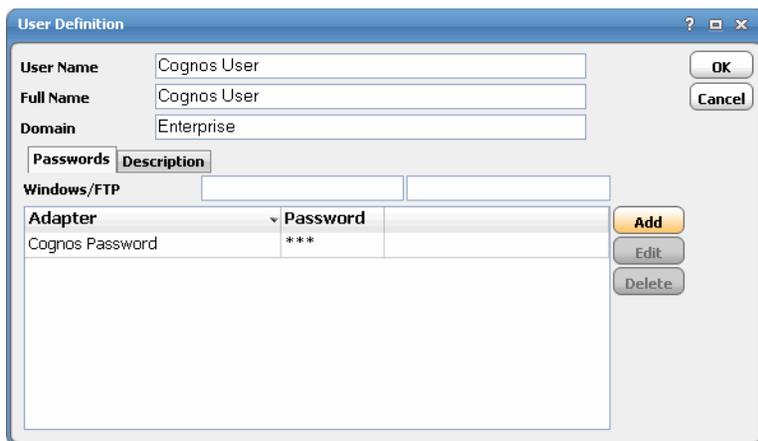
7. Select **Cognos** from the **Password Type** list.
8. Enter a password (along with confirmation) in the **Password/Confirm Password** fields.

Only those users with a password specified for Cognos will be available for use with Cognos jobs. The password might be the same as the one specified for Windows/FTP jobs.

The password cannot be blank.

9. Click **OK** to return to the **User Definition** dialog.

The new password record displays on the **Passwords** tab.



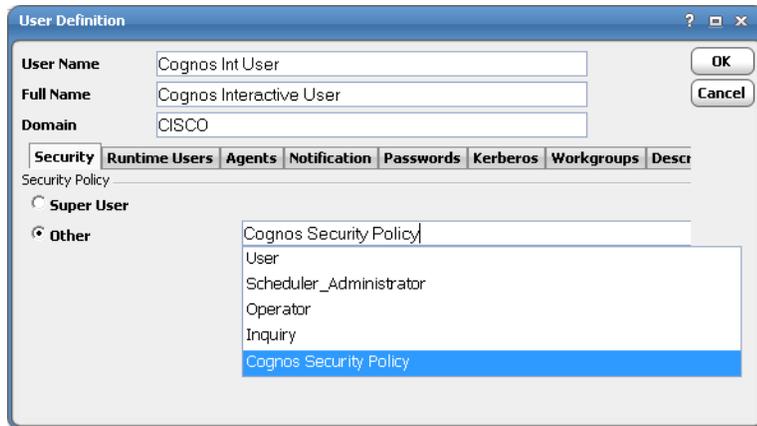
10. Click **OK** to add or save the user record in the CWA database.

## Defining an Interactive User

### To define an Interactive user for Cognos:

1. From the **Navigator** pane, select **Administration>Interactive Users** folder to display the **Users** pane.

2. Either click the **Add** button  in the toolbar, or right-click in the **Users** pane and select **Add Interactive User** from the context menu to display the **User Definition** dialog.



3. If this is a new user definition, enter the new user name in the **User/Group Name** field.
4. For documentation, enter the **Full Name** or description associated with this user.
5. In the **Domain** field, select a Windows domain associated with the user account required for authentication, if necessary.
6. On the **Security** page, select the **Other** option and then select the security policy that includes authorization for Cognos jobs.
7. Click the **Runtime Users** tab.



8. Select the Cognos users that this scheduling user can use for Cognos authentication from Cognos jobs.
9. Click the **Agents** tab.
10. Select the check boxes for the Cognos connections that this scheduling user can access when scheduling jobs.
11. Click **OK** to save the user definition.

## Configuring the HTTPS Protocol

It is recommended that Cognos servers be configured to use SSL via the HTTPS protocol. If your environment is configured to use HTTP, you can skip this section.

For complete instructions on configuring Cognos servers to use the HTTP or HTTPS protocol, refer to the Cognos documentation that ships with the product.

## Obtain Security Certificates

From a Windows desktop, you can obtain a security certificates for each target Cognos server using the Microsoft Internet Explorer Certificate Cache.

**Note:** Although other procedures are available for obtaining the required certificates, the procedure below can be performed from your Windows desktop.

**Note:** You need to carry out the following instructions only if your server certificate is generated in-house (that is, self-signed) or if your server certificate is signed by a Certification Authority that is not trusted by the version of Java you are using. Alternatively, if your adapter connection fails by reporting the error “unable to find valid certification path to requested target” you need to carry out the following instructions.

### To obtain target Cognos server security certificates

1. Open the Internet Explorer browser and navigate to the following dispatch URL (replacing servername and port as it applies to your environment).

```
https://<cognos_server:https port>/cognos8/p2pd/dispatch
```

A **Security Alert** message displays.

2. Click **View Certificate** to open the **Certificate** dialog.



3. Click **Install Certificate**.
4. On the **Certificate Import Wizard Welcome** panel, click **Next**.
5. On the **Certificate Store** panel, use the default option **Automatically select the certificate store based on the type of certificate** and click **Next**.
6. On the **Completing Certificate Import Wizard** panel, click **Finish**.

A **Security Warning** message displays informing you that you are about to install a certificate from a certification authority.

7. Click **Yes** to continue with the certificate installation.

A message stating *The import was successful* displays.

8. Click **OK** to close the message and return to the **Certificate** dialog.
9. Click **OK** on the **Certificate** dialog. You can close your browser now.
10. Repeat the process for each Cognos server that you want to connect to with the Cognos adapter.

## Export Security Certificates

After you have obtained the security certificates for the target servers, you must export them from the Internet Explorer cache to a local directory.

### To export the cached certificates to a local directory

1. On the local computer, create the following directory for the certificates:

```
C:\Cognos-Certs
```

2. In Internet Explorer, select **Tools>Internet Options**.
3. On the **Internet Options** dialog, select the **Content** tab.
4. In the Certificates area, click **Certificates**.
5. On the **Certificates** dialog, select the **Trusted Root Certification Authorities** tab to display the list of trusted certificates. This list should contain the certificates for the target servers that were obtained in the previous procedure (see [Obtain Security Certificates, page 13](#)).
6. Scroll through the list of certificates to find the certificates.
7. Perform the following procedure for each target server certificate:
  - a. Select the certificate and click **Export** to launch the Certificate Export Wizard.
  - b. On the **Welcome** panel, click **Next**.
  - c. On the **Export File Format** panel, use the default option DER encoded binary X.509 (.CER) and click **Next**.
  - d. On the File To Export panel, enter the complete path to the Cognos-Certs directory and a unique name for the certificate:

```
C:\Cognos-Certs\servername.cer
```

- e. Click **Next**.
  - f. On the **Completing the Certificate Export Wizard** panel, click **Finish** to complete the export.
- A message stating *The export was successful* displays.
- g. Click **OK** to close the message box.
8. After all target server certificates have been exported, click **Close** to exit the **Certificates** dialog.
  9. Click **OK** to close the **Internet Options** dialog.

## Import Target Server Certificates Into a Java Keystore

You must now import the target server certificates into a local Java keystore.

**Note:** These instructions assume that a JRE or JDK is in your system PATH.

### To import certificates into a Java keystore

1. Open a Windows **Command Prompt** window.
2. Change to the directory where the certificates are stored by entering the following commands:

```
c:
cd \Cognos-Certs
```

3. Use the Java keytool utility to import a certificate. The following syntax is used:

```
keytool -import -file <certificate-filename> -alias <server-name> -keystore Cognos.keystore
```

For example:

```
C:\Cognos-Certs>keytool -import -file sdkpubs01.crt -alias sdkpubs01 -keystore Cognos.keystore
```

4. When prompted to create a password for the keystore, enter a password at the prompt. The keystore utility displays the certificate information.
5. At the **Trust this certificate? [no]** prompt, type **yes** and press **Enter**. The certificate is imported into the **Cognos.keystore** keystore and the following message displays:

```
Certificate was added to keystore
```

6. Repeat this procedure for each target server.
7. Navigate to the following folder where the CWA Cognos adapter is installed and create a new directory named **config**:

```
<install_dir>\master\services\{0ADEF70E-8EAE-4477-8B50-A248592A0897}\config
```

8. If necessary, create a text file named *service.props*. See [Configuring service.props, page 39](#) for more information about configuring polling, output, and log gathering for the Cognos Adapter.
9. Open the *service.props* text file and add the following line:

```
Keystore=c:\\Cognos-Certs\\Cognos.keystore
```

(Note the use of escaped backslashes for windows directories).

## Defining a Cognos Adapter Connection

You must create one or more Cognos connections before CWA can run your Cognos jobs. These connections also must be licensed before CWA can use them. A connection is created using the **Connection Definition** dialog.

### To add a connection:

1. From the **Navigator** pane, navigate to **Administration>Connections** to display the **Connections** pane.
2. Right-click **Connections** and select **Add Connection>Cognos Adapter** from the context menu.

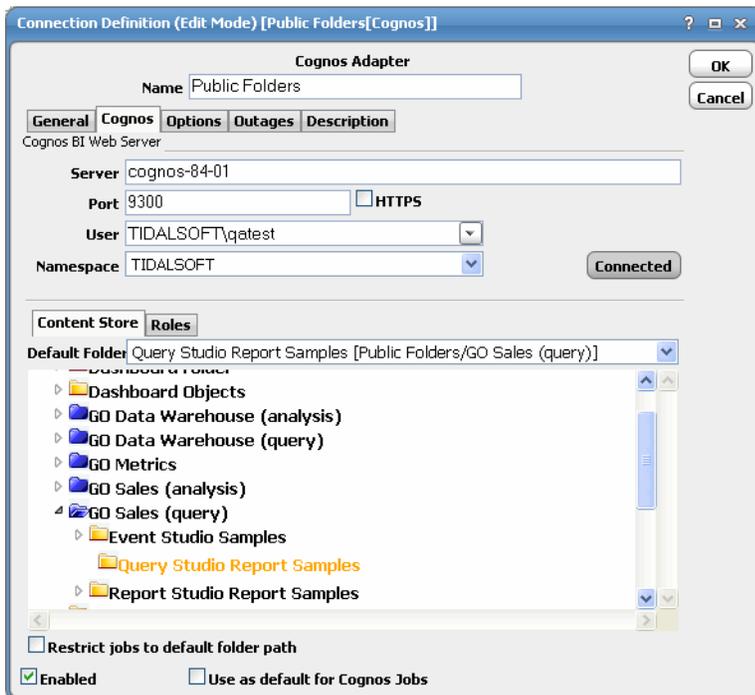
The **Cognos Adapter Connection Definition** dialog displays.



3. On the **General** page, enter a name for the new connection in the **Name** field.
4. In the **Job Limit** field, select the maximum number of concurrent active processes that CWA should submit to the Cognos server at one time.
5. From the **Default Runtime User** drop-down list, select the name of the default user for Cognos jobs. The runtime user is used for authentication with Cognos to authorize scheduled operations.

Only authorized users that have been defined with Cognos passwords display in this list. The selected user is automatically supplied as the default runtime user in a new CWA Cognos job definition.

6. Click the **Cognos Connection** tab.



7. In the **Server** field, enter the name of your Cognos server.

Defining a Cognos Adapter Connection

- In the **Port** field, enter the appropriate port number.

The default port is **9300**. If Cognos has been configured for SSL and the **HTTPS** check box is selected, the default port is **9343**.

- From the **User** list, select the associated Runtime User for Cognos to be used for connecting to Cognos.

This is a persistent user connection to Cognos that is only used for administration and monitoring and for jobs with a matching runtime user. Jobs with a different runtime user specified will create additional temporary connections.

**Note:** A Connect button activates when all required fields are populated.

- In the **Namespace** field, select the appropriate namespace for the user supplied.

It will default to the domain associated with the **User** field.

- Click the **Connect** button to test the connection. When a successful connection has been made, the button will switch to **Connected** and will be grayed out.

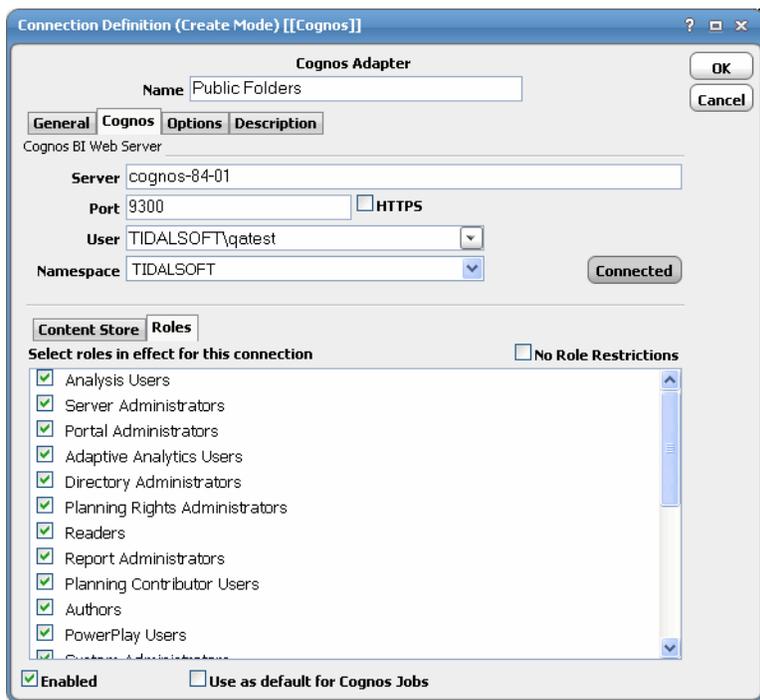
- On the **Content Store** tab, you can select a folder from the content tree or from the **Default Folder** drop-down list to be the default folder when scheduling reports, queries, cubes, report views and other jobs.

If you want to restrict scheduling to objects in the default folder (or any of its subfolders), select the **Restrict jobs to default folder path** option.

You can also create a Report View, which is an instance of a report with a pre-defined set of parameter values and options. This simplifies the scheduling of reports for which there may be specific pre-defined variants.

**Note:** If a view name has not been specified in the option, the existing view name is used.

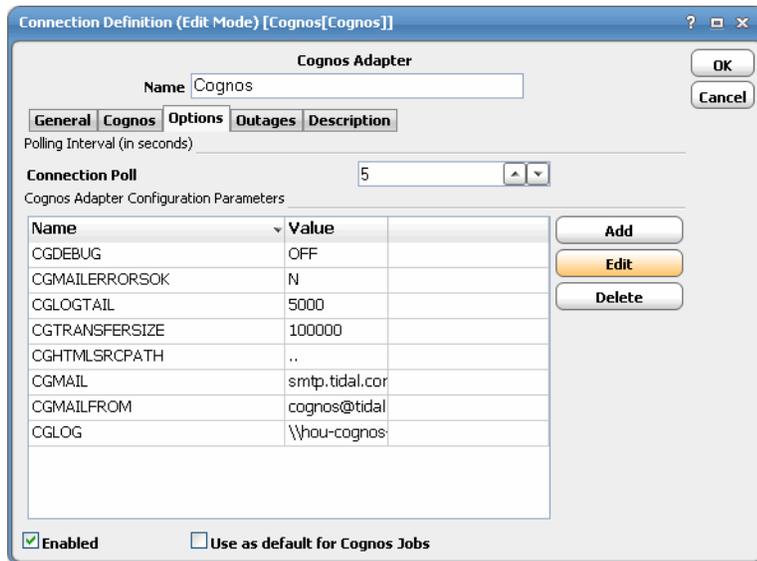
- If you want to limit what users can do within CWA based on Cognos roles, click the **Roles** tab to select one or more security roles.



- Select the appropriate roles.

It is recommended that you select the **No Role Restrictions** option or leave all available roles unchecked to ensure that all scheduling features will be available. Selecting all roles is not the same as "no role restrictions", because if roles are added in the future, they are not automatically included; use the **No Role Restrictions** option instead.

- Click the **Options** tab to configure parameters for this connection.



**Note:** The Connection Poll option is used to monitor connections in the Cognos system.

The following parameters are available:

- **CGDEBUG** – Turns the debugging function on/off. When set to ON, diagnostic data is added to the adapter log and job output. You may be asked to turn this option on when working with technical support to investigate an issue.
- **CGMAILERRORSOK** – Set to **Y** if you want a Cognos job to complete normally, even if errors occur when sending email after a report is run. The default is **N**.
- **CGLOGTAIL** – Along with **CGLOG**, this parameter specifies how many bytes from the end of cogserver.log should be included in the output of a job that has failed. The default is 5000 bytes.
- **CGTRANSFERSIZE** – The maximum number of bytes of data the adapter transfers from the Cognos Server to the master machine for emailing attachments and saving reports locally. The default value is 100K.
- **CGHTMLSRCPATH** – Refers to a web content path that contains common images shared by all reports. This can be a network share to the Cognos webcontent folder.
- The default is ". ."
- For HTML output only, this option replaces all occurrences of `Jobs** to display the **Jobs** pane.
2. Right-click **Jobs** and select **Add Job>Cognos Job** from the context menus.

The **Cognos Job Definition** dialog displays.

The **Run** tab is selected by default. You must first specify a name for the job, a valid runtime user who has the appropriate Cognos authority for the report being scheduled, and the Cognos adapter connection that will be used for the job.

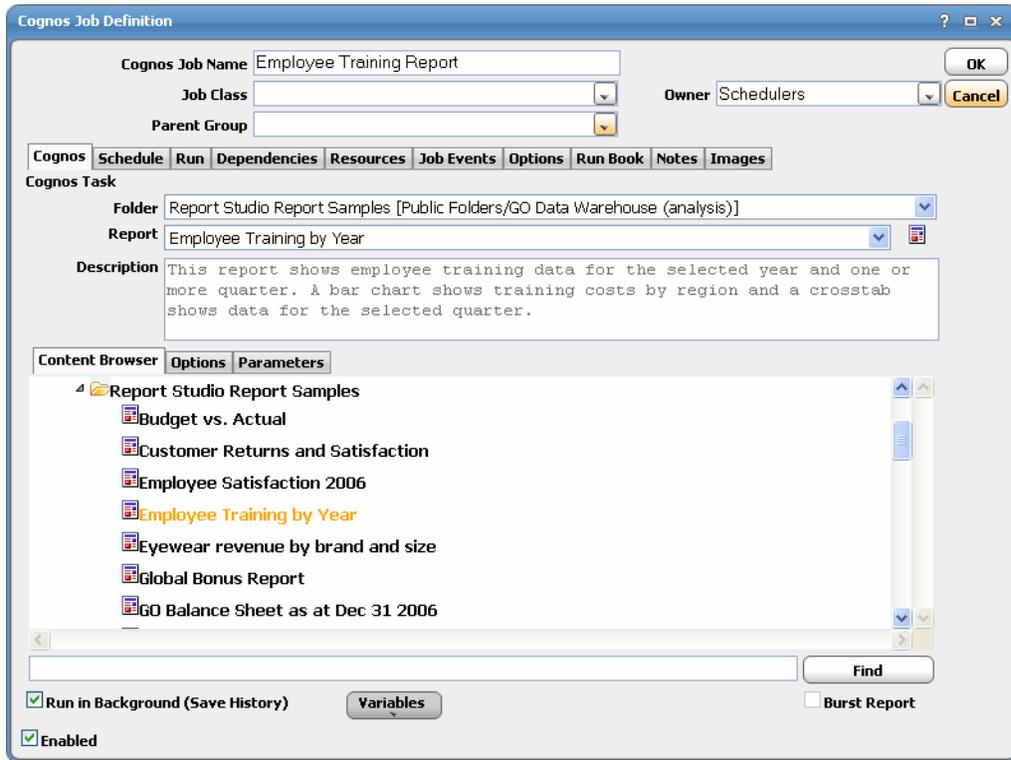
3. In the upper portion of the dialog, specify the following information to describe the job:

- **Job Name** – Enter a name that describes the job.
- **Job Class** – If you want to assign a defined job class to this job, select it from the drop-down list. This field is optional.
- **Owner** – Select the user name from the drop-down list for the person who owns this job. The user must have the appropriate Cognos authority for the operation.
- **Parent Group** – If this job exists under a parent group, select the name of the parent group from the drop-down list. All properties in the Agent Information section are inherited from its parent job group.

4. Specify the following connection information in the **Agent/Adapter Information** section:

- **Agent/Adapter Name** – Select the Cognos adapter connection to be used for this job from the drop-down list.
- **Runtime User** – Select a valid runtime user with the appropriate Cognos authority for the job from the drop-down list.

5. Specify the appropriate **Tracking** and **Duration** information for the job. Refer to the *Cisco Workload Automation User Guide* for information on these options.

6. Click the **Cognos** tab.7. In the **Name** field (or in the **Content Browser** tab below), select the report, query, report view, import/export deployment task or existing job you want to schedule.

The task type, such as "Report", "Query" or "Job", will replace the "Name" label, and a description of the selected task displays in the **Description** field

You can search for a task by entering part of the folder, report, or job name in the **Find** field (located below the Content Browser), then click **Find**. Click **Find** again to find the next occurrence. After the last occurrence, Find will begin its search from the beginning again.

**Note:** When using Find, all content will be expanded, so you may see an hourglass while the entire Content Store is loaded.

If you select a report or query, the **Cognos** tab contains an **Options** tab, as shown above in [Figure 14](#).

If you select a pre-existing job, the **Cognos** tab contains a **Job Steps** tab as shown below.

Cognos Job Definition [SDK Report Samples Job]

Cognos Job Name: SDK Report Samples Job

Job Class:  Owner: qatest

Parent Group:

Cognos Schedule Run Dependencies Resources Job Events Options Run Book Notes History Images

Cognos Task

Folder: Tidal Test Folder [My Folders]

Job: SDK Report Samples Job

Description:

Content Browser Job Steps Parameters

Type	Step
Report	Date Between List
Report	Order Product List

Continue On Error

Enabled Last Modified : 02/01/2011 21:21:01

8. If you are scheduling a report or query, click the **Options** tab.

The [Print Option, page 25](#), [Email Option, page 26](#), and [Save Option, page 28](#) options are described below:

## Print Option

The screenshot shows the 'Cognos Job Definition [Employee Training Report]' dialog box. It has a title bar with standard window controls. The main area is divided into several sections:

- Job Information:** 'Cognos Job Name' is 'Employee Training Report'. 'Job Class' and 'Parent Group' are dropdown menus. 'Owner' is 'Schedulers'. There are 'OK' and 'Cancel' buttons.
- Navigation:** A row of tabs: 'Cognos', 'Schedule', 'Run', 'Dependencies', 'Resources', 'Job Events', 'Options', 'Run Book', 'Notes', 'History', 'Images'. The 'Options' tab is selected.
- Cognos Task:** 'Folder' is 'Report Studio Report Samples [Public Folders/GO Data Warehouse (analysis)]'. 'Report' is 'Employee Training by Year'. 'Description' contains text about the report's content. 'Owner: Anonymous' is shown.
- Content Browser:** 'Options' and 'Parameters' sub-tabs are visible. 'Output Format' is 'PDF'. 'Orientation' is 'Portrait'. 'Paper' is 'Letter'.
- Print Section:** 'Print', 'Email', and 'Save' buttons are present. An 'Enabled' checkbox is checked. 'Printer Name' is 'CISCO Houston HP LaserJet 4100 Series PCL6'. 'Printer Address' is an empty text field.
- Bottom Section:** 'Run in Background (Save History)' checkbox is checked. A 'Variables' button is present. 'Burst Report' checkbox is unchecked. 'Last Modified: 01/20/2011 21:38:24' is displayed.

This tab contains the following elements:

- **Enabled Checkbox** - Select this option if you want the output printed.
- **Printer Name** - Select the name of the printer as defined in the Cognos configuration.
- **Printer Address** - Enter the address of the printer.

If a Printer Name is selected, the address is displayed from the Cognos configuration, and the field is disabled. To override the printer address, clear out the Printer Name by selecting the blank item in the list (the first item) and the field is enabled again.

## Email Option

The screenshot shows the 'Cognos Job Definition [Employee Training Report]' dialog box. The 'Email' tab is selected, and the 'Enabled' checkbox is checked. The configuration includes:

- Cognos Job Name:** Employee Training Report
- Job Class:** (dropdown menu)
- Parent Group:** (dropdown menu)
- Owner:** Schedulers
- Cognos Task:** Report Studio Report Samples [Public Folders/GO Data Warehouse (analysis)]
- Report:** Employee Training by Year
- Description:** This report shows employee training data for the selected year and one or more quarter. A bar chart shows training costs by region and a crosstab shows data for the selected quarter.
- Output Format:** PDF
- Orientation:** Portrait
- Paper:** Letter
- To:** user@tidal.com
- Subject:** Your <JobName> report is ready!
- Body:** Click the link below to view your report. You may be prompted to logon.
- Attach Report:**  (checked)
- Provide Link to Report (requires output to be saved on server):**  (unchecked)
- Run in Background (Save History):**  (checked)
- Burst Report:**  (unchecked)
- Last Modified:** 01/20/2011 21:38:24

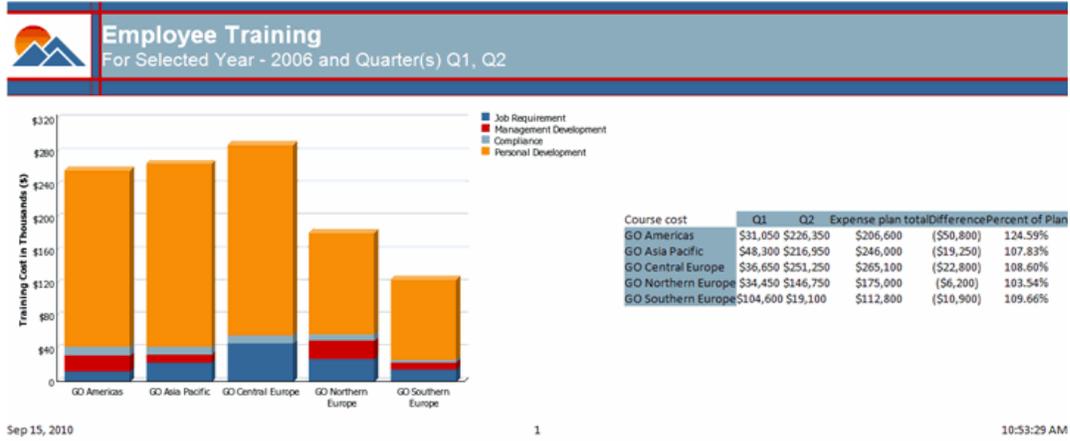
This tab contains the following elements:

- **Enabled** - Select this checkbox if you want the output emailed.
- **To** - You can use any valid email addresses separated by commas. You can also include Cognos user names or distribution list names and the Adapter will look up the corresponding email addresses from the configuration. You can use variables from the **Variable** button to populate this field.
- **Subject** - Enter the subject for the email. You can use variables from the **Variable** button to populate this field.
- **Body** - Contains the body of the email message instead of attaching the report.

You can use variables from the **Variable** button to populate this field.

If you leave the **Body** field empty and the output format selected is HTML, the report will be embedded in the e-mail.

From: tes-cognos@cisco.com [mailto:tes-cognos@cisco.com]  
 Sent: Wednesday, September 15, 2010 8:55 AM  
 To: tbdal-admin@mycompany.com  
 Subject: See your report below



- **Attach Report** – Select this option if you want the report attached to the body of the email.
- **Provide Link To Report** – Select this option if you want a link displayed in the body of the email instead of the attached report. This option requires that the output be saved on the server. See [Save Option, page 28](#). This is more secure as Cognos will require users to log on prior to displaying the report.

**Note:** If using history to track jobs (Run in Background option selected), the Adapter will send the email; if the job is tracked in real-time, the email is sent by Cognos. For information on configuring email parameters (CGMAILFROM and CGMAIL) used by the adapter to send mail, see [Defining a Cognos Adapter Connection, page 15](#).

**Note:** If saving the file locally, you can use CWA to attach the report to its own email, rather than using the Cognos email facility. See [Save Option, page 28](#).

## Save Option

The screenshot shows the 'Cognos Job Definition [Employee Training Report]' dialog box. It has several tabs: 'Cognos', 'Schedule', 'Run', 'Dependencies', 'Resources', 'Job Events', 'Options', 'Run Book', 'Notes', 'History', and 'Images'. The 'Options' tab is active. At the top, there are fields for 'Cognos Job Name' (Employee Training Report), 'Job Class', 'Parent Group', and 'Owner' (Schedulers). Below these are 'Cognos Task' fields for 'Folder' (Report Studio Report Samples [Public Folders/GO Data Warehouse (analysis)]) and 'Report' (Employee Training by Year). A 'Description' field contains text about the report's content. The 'Options' sub-tab is active, showing 'Output Format' (PDF), 'Orientation' (Portrait), and 'Paper' (Letter). There are 'Print', 'Email', and 'Save' buttons. Under 'Save', there are checkboxes for 'Save to Content Store as Version', 'Save View as' (Employee Training by Year), 'Folder' (Public Folders), and 'Save to File'. At the bottom, there are checkboxes for 'Run in Background (Save History)', 'Enabled', and 'Burst Report', along with a 'Variables' button. The 'Last Modified' timestamp is 01/20/2011 21:38:24.

This tab contains the following elements:

- **Output Format** – Select the desired format from the list (e.g. PDF, HTML, CSV, etc.).

The screenshot shows the 'Output Format' dropdown menu. The current selection is 'PDF'. The list of options includes: CSV, Excel 2000, Excel 2000 Single Sheet, Excel 2002, Excel 2007, HTML, HTML Web Archive, PDF (highlighted), and XML.

For PDF and HTML, there are additional options you can set for the selected output.

The following items have additional options:

- PDF

**Orientation** – Select the paper orientation, **Landscape** or **Portrait**.

**Paper** – Select the paper size. For example, **Letter** or **Legal**.

- HTML

**Rows** – Maximum number of vertical rows of data per HTML page.

- **HTML Fragment**

**Rows** – Maximum number of vertical rows of data per HTML page.

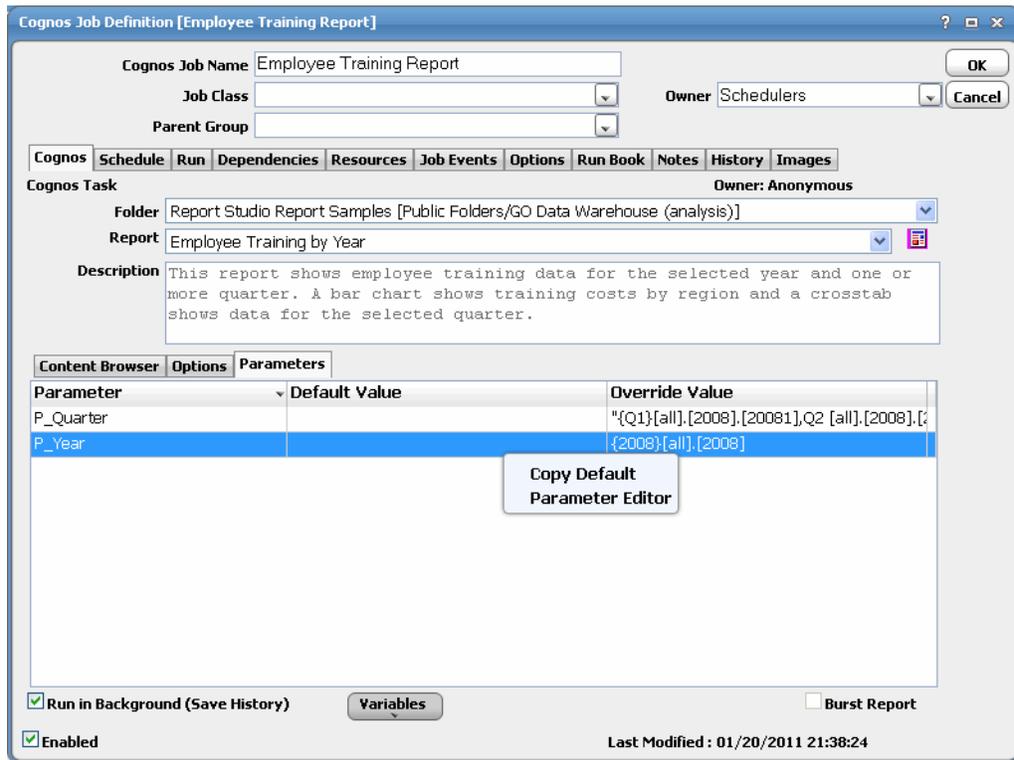
- HTML WebArchive

Defining Cognos Jobs

**Rows** – Maximum number of vertical rows of data per HTML page.

- **Save to Content Store as Version** – Saves the report output as the latest version of the report in the content store.
- **Save View As** – Creates a saved view of the generated report in the Content Store for subsequent viewing. You can use variables.
  - **Folder** – Select the folder you want the report view saved to.
- **Save to File** – Enter a name for the file you want to save. The filename is relative to the Scheduling master machine, so use UNC naming or a shared network location to save the file remotely. You can use variables.

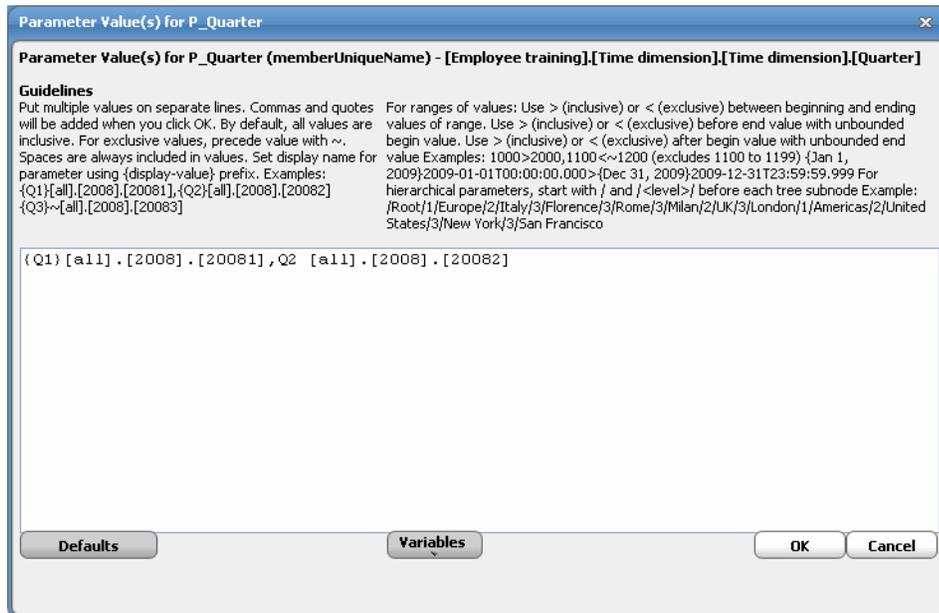
9. Click the **Parameters** tab.



10. Right click on a parameter and select Parameter Editor to display the **Parameter Editor** dialog.

-or-

Select **Copy Default** to clear the **Override Value** field and to use the default value.



If you do not fill in the override value, the default value will be used, if any.

- Enter the new parameter value in the field provided corresponding to the parameter shown at the top of the screen.

**Note:** You can also use the Variable button to insert a variable anywhere into this field.

You can click the **Defaults** button to populate the field with the default value, if one is available.

At the top of the **Parameter Value Override** dialog, you will see the parameter name, type, and associated model that determines the required format for the parameter's value(s). Values that you enter for parameter overrides must be in the format expected by Cognos. For example,

```
[a11].[2008]
```

When you use a CWA variable such as Production Date, you must set the format to match that expected by Cognos. For example,

```
[a11].[<ProdDate.YYYY>]
```

### Captions

If the report shows the value in the title or header of a report, you may want to assign a display name or caption for the value, so that instead of displaying "[a11].[2008]", it displays "2008". To do this, put the display name in curly braces as a prefix to the value. For example,

```
{2008}[a11].[2008]
```

-or-

```
{<ProdDate.YYYY>}[a11].[<ProdDate.YYYY>]
```

### Exclusive Values

For any value that is meant to exclude data, use the tilde (~) prefix before the value. For example,

```
{Q2}~[a11].[2008].[20082]
```

### Multiple Values

For parameters that accept multiple values, list the values separated by commas, or put one value on each line. There is no need to put any values in quotes. For example,

```
{Paris}[Europe].[France].[Paris], {London}[Europe].[United Kingdom].[London],
{Rome}[Europe].[Italy].[Rome]
```

-or-

```
{Paris}[Europe].[France].[Paris]
{London}[Europe].[United Kingdom].[London]
{Rome}[Europe].[Italy].[Rome]
```

### Ranges

You can specify ranges of values using > or < between low and high values. For ranges to include, use >. For ranges to exclude, use <. Separate multiple ranges with commas (or one range per line in the Parameter Override dialog). For example,

1>100, 20<30 includes the range between 1 and 100, excluding 20 to 30.

Ranges can have an unbounded high or low value by omitting the value at the high or low end. For example,

>1000 includes any value up to and including 1000

1000< excludes any value greater than or equal to 1000

You can exclude the high or low value itself from the range with the ~ prefix. For example,

~1000< excludes any value greater than 1000

### Hierarchical Parameters

Hierarchical parameters can have multiple nested values. To represent a tree of values, start with / followed by the first level, and for each nested value, prefix it with /<level>/. For example,

```
/World/1/Europe/2/Italy/3/Florence/3/Rome/3/Milan/2/UK/3/London
/1/Americas/2/United States/3/New York/3/San Francisco
```

In this example, the root of the tree has the value "World" with the first level including "Europe" and "Americas" with nested countries and cities. The tree is interpreted as follows:

```
World
  Europe
    Italy
      Florence
      Rome
      Milan
    UK
      London
  Americas
    United States
      New York
      San Francisco
```

Any value can be excluded, by prefixing the value with ~.

### Parameter Guidelines

- Use commas to separate multiple values.

- By default, all values are inclusive. For exclusive values, precede the value with a tilde ~.
- Spaces are always included in the values.
- Do not use quotes.
- Set the display name for a parameter using the {display-value} prefix.

For example:

```
{Q1}{all}. [2008]. [20081], {Q2}{all}. [2008]. [20082]
{Q3}~[all]. [2008]. [20083]
```

- For ranges of values:

Use > [inclusive] or < [exclusive] between beginning and ending values of range.

Use > [inclusive] or < [exclusive] before an end value with an unbounded begin value.

Use > [inclusive] or < [exclusive] after a begin value with an unbounded end value.

For example:

```
1000>2000,1100<~1200 (excludes 1100 to 1199)
```

- For hierarchical parameters, start with / and /<level>/ before each tree subnode

For example:

```
/Root/1/Europe/2/Italy/3/Florence/3/Rome/3/Milan/2/UK/3/London/1/Americas/2/United States/3/New
York/3/San Francisco
```

12. Click **OK** to save the override parameters.

13. Optionally, use the check boxes at the bottom of the Connection Definition panel as follows:

- Run in Background (Save History) Option

Select the **Run in Background (Save History)** option to create history in the content store for this job.

If you disconnect from Cognos, your job can be recovered when you reconnect and resume.

**Note:** To reduce overhead and improve performance, Cognos suggests that you select this option only for critical jobs and/or long-running jobs. Do not select this option for jobs that are easily recovered through a rerun.

- Burst Report Option

Select the **Burst Report** option if you want to run a report once and then divide the results for distribution to recipients who each receive only a subset of the data. This option is only available for reports that have been designed for bursting.

14. Click **OK** to save the job.

## Monitoring Cognos Jobs

As Cognos tasks run as pre-scheduled or event-based jobs, you can monitor the jobs as you would any other type of job in CWA using the **Job Details** dialog. You can also use Business Views to monitor job activity and view when the jobs are active (see the *Cisco Workload Automation User Guide* for instructions on using Business Views).

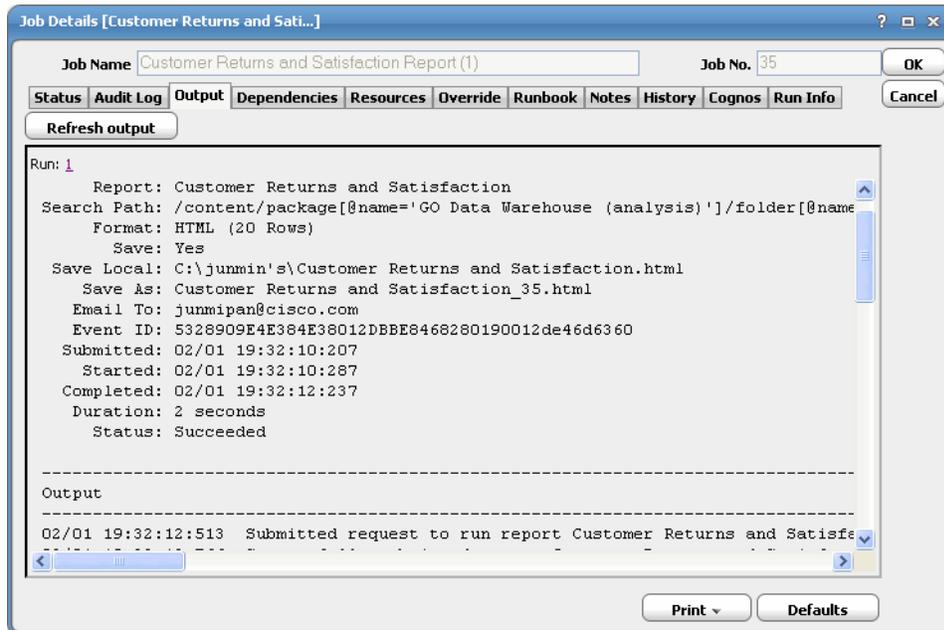
### To monitor job activity:

1. In the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** pane.

2. Right-click to select a job and choose **Details** from the context menu.

The **Job Details** dialog displays. The **Status** page displays by default. You can view the status of the job, the start and end time, how long it ran, and how it was scheduled.

3. Click the **Output** tab to view a task summary after the job completes.



If running a pre-existing job, the following is an example of the output in full:

```
Job: Execute Daily Reports
Search Path: /content/folder[@name='Saved Jobs']

-----

Parameters
-----
P_Year={2007}[all].[2007]
P_Quarter={Q1}[all].[2007].[20071],{Q2}[all].[2007].[20072]
-----

Event ID: 0A0A593201424189011EE12EA5CD80240011efb6358ec
Submitted: 01/21 14:50:38:700
Started: 01/21 14:50:38:967
Completed: 01/21 15:17:50:047
Status: Succeeded

-----

Job Steps
-----

Step: Employee Training by Year
Folder: /content/package[@name='GO Data Warehouse (analysis)']/folder[@name='Report Studio
Report Samples']/report[@name='Employee Training by Year']
Event ID: 0A0A593201424189011EE12EA5CD80250011efb635e8a
Submitted: 01/21 14:50:40:137
Started: 01/21 14:50:40:857
Completed: 01/21 14:51:00:043
Status: Succeeded
```

-----  
Messages

01/21 14:50:58:120 (Info): CNC-SDS-0408 There are email messages waiting to be sent.  
01/21 14:50:59:573 (Info): CNC-SDS-0409 The email messages were sent to 1 recipients.  
-----

Step: Employee expenses (report)  
Folder: /content/package[@name='GO Data Warehouse (query)']/folder[@name='Report Studio Report Samples']/report[@name='Employee expenses (report)']  
Event ID: 0A0A593201424189011EE12EA5CD80260011efb635ea9  
Submitted: 01/21 14:50:40:183  
Started: 01/21 14:51:00:497  
Completed: 01/21 15:17:49:997  
Status: Succeeded

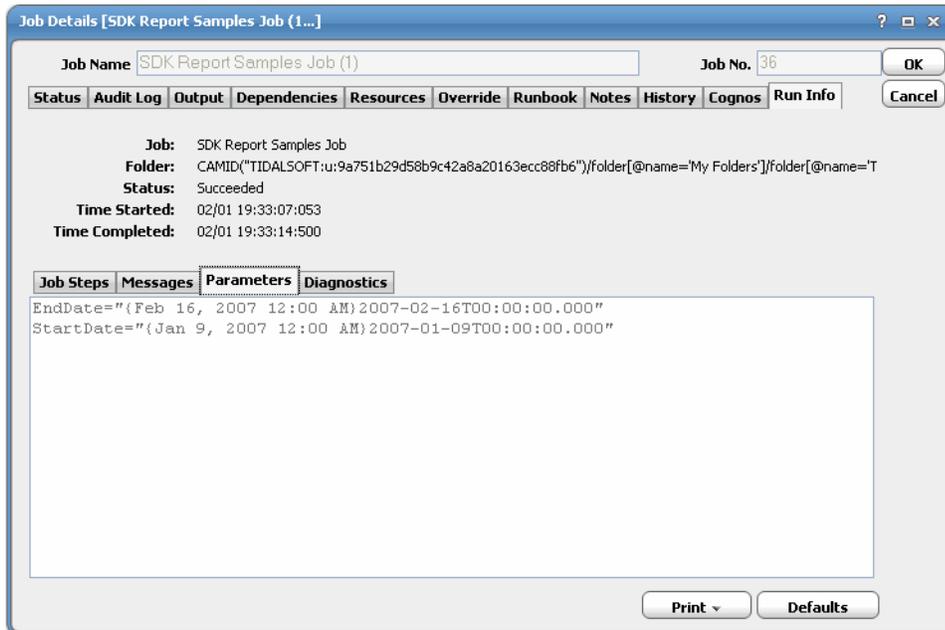
-----  
Messages

----- 01/21  
15:17:47:577 (Info): CNC-SDS-0408 There are email messages waiting to be sent.  
01/21 15:17:48:950 (Info): CNC-SDS-0409 The email messages were sent to 1 recipients.  
-----

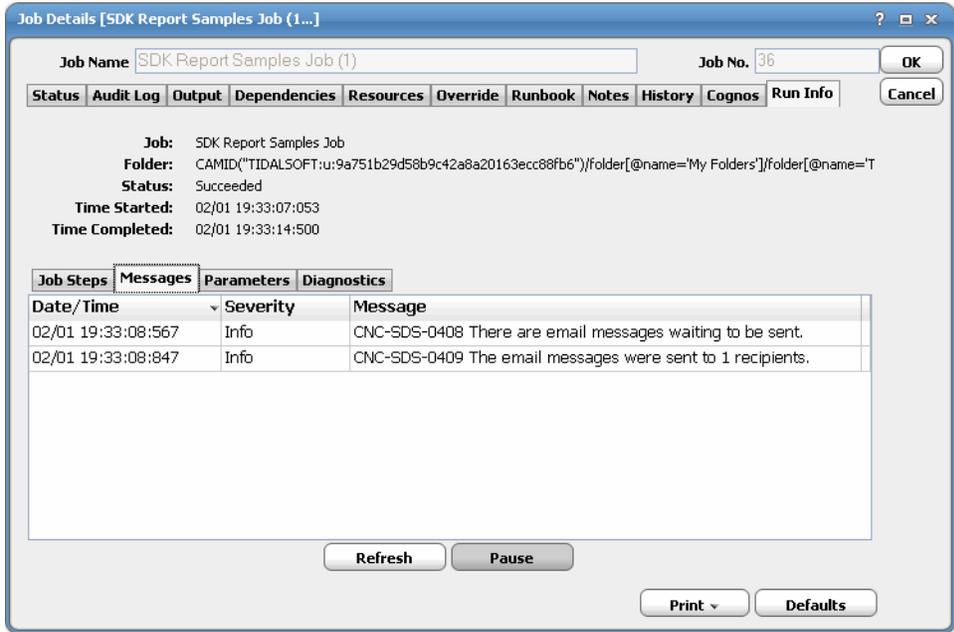
-----  
Output

01/21 14:50:36:952 Submitted request to run job Execute Daily Reports  
01/21 14:50:38:937 Successfully submitted job Execute Daily Reports

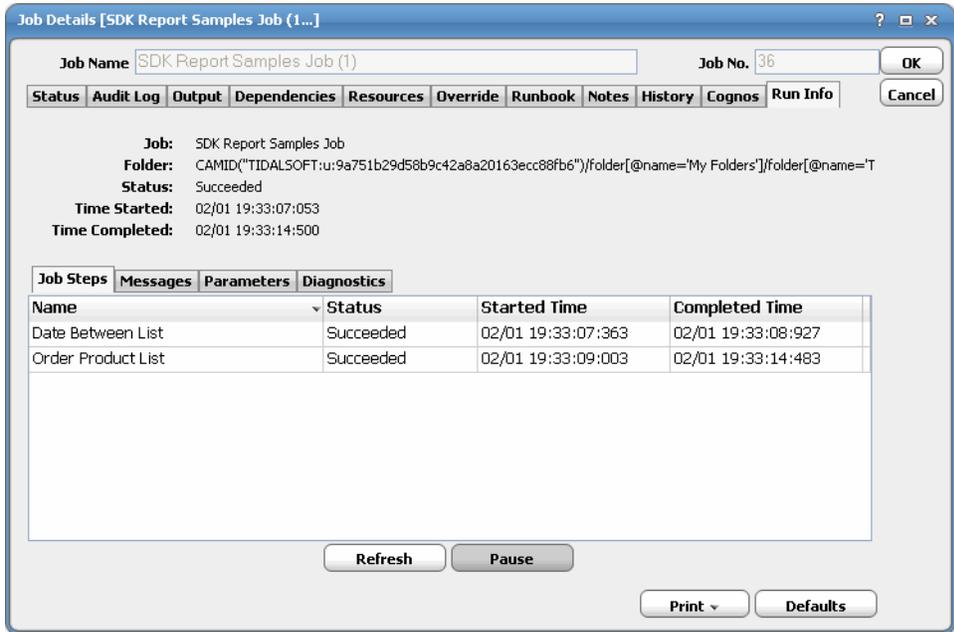
4. Click the **Run Info** tab to view additional details about the job. You can also view this tab to view information about the runtime status while the job is running, including any messages.



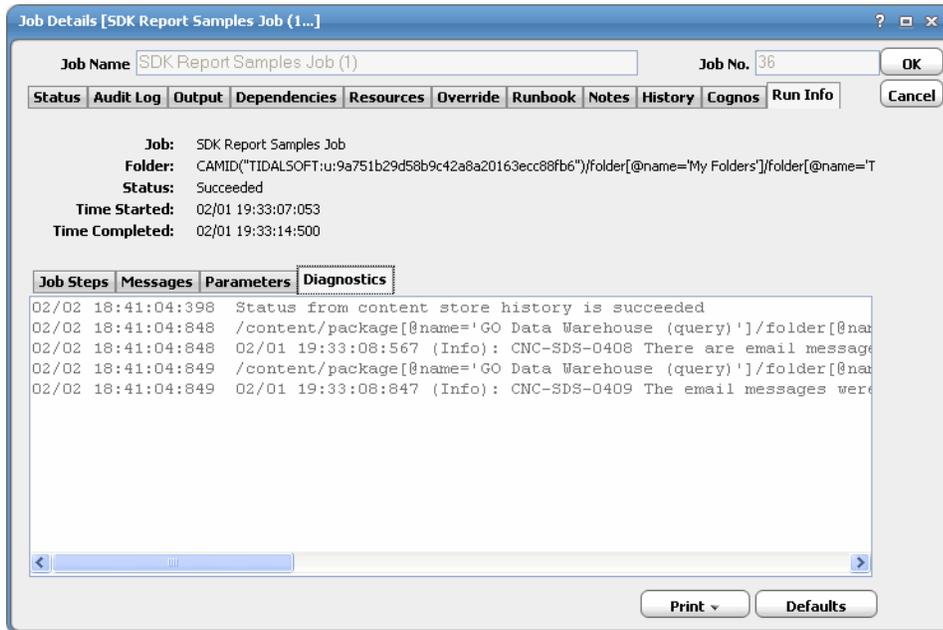
If you run a job that completes abnormally, you can click the **Messages** tab to view notes associated with the failure.



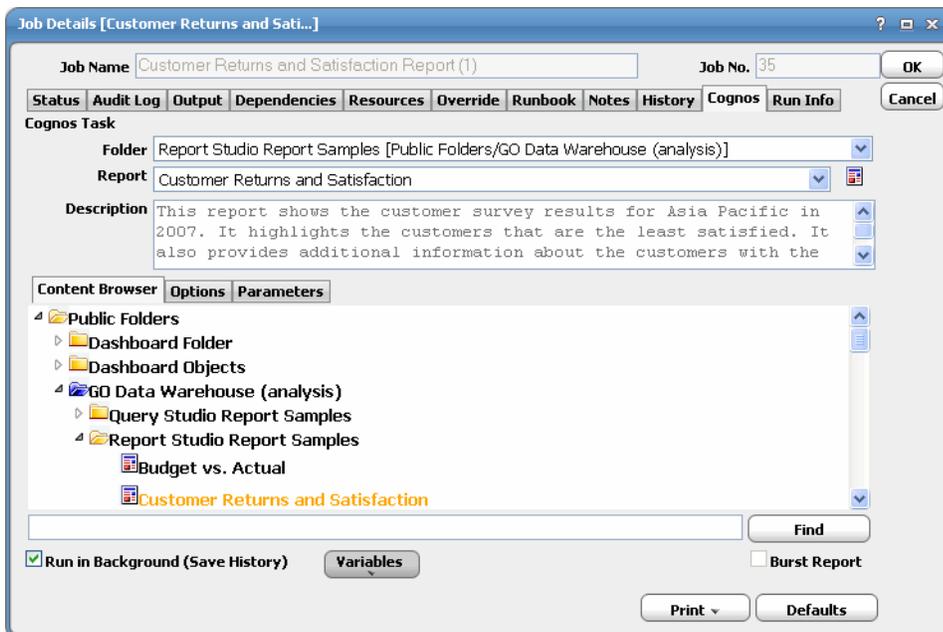
If you run a pre-existing job, the **Run Info** tab contains a **Job Steps** tab as shown below.



To view the diagnostic information for this job, select the **Diagnostics** tab.



5. Click the **Cognos** tab to view the job definition details and the variables that were used when the job was submitted.



While the job is running, the fields are disabled; however, prior to running or rerunning the job, you can override any value on this screen. Your changes here only apply to this instance of the job (the original job definition is not affected).

6. When you have finished viewing the job activity details, click **OK** to close the dialog.

## Controlling Adapter and Agent Jobs

Scheduler provides the following job control capabilities for either the process currently running or the job as a whole:

- **Holding a Job**—Hold a job waiting to run.
- **Aborting a Job**—Abort an active job.
- **Rerunning a Job**—Rerun a job that completed.
- **Making One Time Changes to an Adapter or Agent Job Instance**—Make last minute changes to a job.
- **Deleting a Job Instance before It Has Run**—Delete a job instance before it has run.

### Holding a Job

Adapter/agent jobs are held in the same way as any other Scheduler jobs.

Adapter/agent jobs can only be held before they are launched. Once a job reaches the Adapter/Agent system, it cannot be held or suspended.

#### To hold a job:

1. From the **Job Activity** pane, right-click on the job.
2. Select **Job Control>Hold/Stop**.

### Aborting a Job

Adapter/agent jobs are aborted in the same way as any other Scheduler jobs.

#### To abort a job:

1. From the **Job Activity** pane, right-click on the job.
2. Select **Job Control>Cancel/Abort**.

### Rerunning a Job

On occasion, you may need to rerun an Adapter/Agent job. You can override parameter values first, if necessary, from the Adapter/Agent tab.

#### To rerun a job:

1. From the **Job Activity** pane, right-click the Adapter/Agent job you need to rerun.
2. Select **Job Control>Rerun** option from the context menu.

### Making One Time Changes to an Adapter or Agent Job Instance

Prior to a run or rerun, you can edit data on the specific **Adapter/Agent** tab. To ensure that there is an opportunity to edit the job prior to its run, you can set the **Require operator release** option on the **Options** tab in the Adapter **Job Definition** dialog. Use this function to make changes to an Adapter job after it enters Waiting on Operator status as described in the following procedure.

#### To make last minute changes:

1. From the **Job Activity** pane, double-click the Adapter/Agent job to display the **Job Details** dialog.

2. Click the Adapter tab.
3. Make the desired changes to the job and click **OK** to close the **Job Details** dialog.
4. If this job is Waiting on Operator, perform one of the following tasks:
  - To release the job, select **Job Control->Release**.
  - To rerun the job with changes, select **Job Control->Rerun**.

## Deleting a Job Instance before It Has Run

Adapter/Agent job instances are deleted in the same way as any other Scheduler job.

Deleting a job from the **Job Activity** pane removes the job from the Scheduler job activity only. The original definition is left in tact.

### To delete a job instance:

1. From the **Job Activity** pane, right-click the Adapter/Agent job to be deleted.
2. Select **Remove Job(s) From Schedule**.



# 5

## Configuring service.props

### About Configuring service.props

The **service.props** file is used to configure adapter behavior. **service.props** is located in the \config directory located under the Adapter's GUID directory, You can create both the directory and file if it does not yet exist. Properties that can be specified in service.props control things like logging and connection configuration. Many of the properties are specific to certain adapters; others are common across all adapters.

### service.props Properties

The table below lists many of the parameters that can be specified in service.props. Some properties apply to all adapters (shaded in the table) and some properties are adapter-specific as indicated by the **Applicable Adapter(s)** column. The properties are listed in alphabetical order.

Property	Applicable Adapter(s)	Default	What It Controls
BYPASS_SEC_VALIDATION	Oracle Apps	N	If set to Y, the secondary user validation is bypassed. If not, secondary user validation is performed.
CLASSPATH	All	<none>	(Optional) - The path to the JDBC driver. If the default CLASSPATH used when the Adapter process is started does not include an appropriate JDBC driver jar required to connect to the PowerCenter Repository Database, you will need to specify this <i>service.props</i> configuration
CONN_SYNC	Informatica, Oracle Apps, SAP	N	Setting this flag to Y allows synchronous connections without overloading the RDOOnly Thread. If set to N, the adapter might stop trying to reconnect after an outage or downtime.
DISCONN_ON_LOSTCONN	Informatica	N	Setting this flag to Y avoids an unnecessary logout call to the Informatica server when the connection is lost. This logout call usually hangs.
EnableDynamicPollingInterval	All	N	Use to avoid frequent polling on long-running jobs. When set to Y in service.props of a particular adapter, these properties are enabled: MinDynamicPollInterval—Minimum value should be 5 seconds. MaxDynamicPollIntervalInMin—Maximum value should be 5 minutes. PercentOfEstDuration—Default value is 5.

Property	Applicable Adapter(s)	Default	What It Controls
HADOOP_JAVA_HOME	Sqoop	<none>	If the Java version used in the Hadoop environment is lower than Java 8, then install the same lower JDK version in the in the Master and include the path of the JDK in this property.
IGNORE_CODES	Informatica	<none>	This parameter can be set in service.props, job configuration and connection configuration parameters. The order of precedence is service.props (applicable for all jobs running in all connections), job level (only for that particular job), and connection (applicable for all jobs in the connection). This parameter is used to specify Informatica-specific error codes, separated by commas (,), that you want to ignore while running a job.
IGNORESUBREQ	Oracle Apps	N	Y or N. Setting this flag to Y stops huge job xml file transfers back and forth between the adapter and the AdapterHost during polls when a single request set has multiple sub-requests of more than 100. The default value is N or empty.
kerbkdc	MapReduce	<none>	If the Hadoop cluster is Kerberos secured, use this value to specify the KDC Server. For example, <b>kerbkdc=172.25.6.112</b>
kerbrealm	MapReduce	<none>	If the Hadoop cluster is Kerberos secured, use this value to specify the Kerberos Realm.  For example, <b>kerbrealm=TIDALSOFT.LOCAL</b>
Keystore	BusinessObjects, BusinessObjects BI, BusinessObjects DS, Cognos, JD Edwards, Oracle Applications, UCS Manager, VMware, Web Service	<none>	Specify  Keystore=c:\\<adapter_certificate_directory>\\<your_trusted_keystore>.keystore  when importing certificates into a Java keystore.
LAUNCH_DELAY (in milliseconds)	Informatica	<none>	This parameter can be set in service.props, job configuration and connection configuration parameters. The order of precedence is service.props (applicable for all jobs running in all connections), job level (only for that particular job), and connection (applicable for all jobs in the connection). If a non-zero value is set for this parameter, then the jobs are delayed for the specified number of milliseconds before being submitted to Informatica.

Property	Applicable Adapter(s)	Default	What It Controls
LoginConfig	BusinessObjects BI Platform, BusinessObjects Data Services	<none>	Specifies the location of the login configuration if using WinAD or LDAP authentication. For example:  LoginConfig=c:\\windows\\bscLogin.conf  where "c:\\windows\\bscLogin.conf" is the location of the login configuration information. Note the use of \\ if this is a Windows location.
MaxLogFiles	Informatica, JDBC, PeopleSoft	50	(Optional) - Number of logs to retain.
OUTPUT_ASYNC_LOGOUT	Informatica	N	Setting this flag to Y avoids jobs getting stuck in Gathering Output status.
OUTPUT_SYNC	All	Y	Enables concurrent output gathering on a connection. To enable this feature, set the value to N.
POLL_SYNC	All	Y	Enables concurrent polling on connections of the same type. This is helpful when there is a heavily load on one connection of an adapter. The heavily loaded connection will not affect the other adapter connection. To enable this feature, set the value to N.
QUERY_TIMEOUT	Oracle Apps	N	Y or N. If set to Y, the timeout value defined using the parameter QUERY_TIMEOUT_VALUE is applied to the SQL queries. Default value is N or empty.
QUERY_TIMEOUT_VALUE	Oracle Apps	unset	The time period in seconds that SQL queries wait before timeout. If 0 or not set, there is no timeout.
READPCHAINLOG	SAP	Y	Used to control the log gathering in SAP Process Chain jobs. This property depends on the Summary Only check box of the job definition Options tab.
SCANFOR_SESSIONSTATS	Informatica	Y	Y or N - Set this parameter to N to turn off the default behavior of Informatica jobs collecting the session statistics during the job run.
SCANFOR_SESSIONSTATS_AFTER_WF_ENDS	Informatica	N	Y or N - Set this parameter to Y to turn off the gathering of session statistics during each poll for the status of Informatica jobs.
TDLINFA_LOCALE	Informatica	<none>	Points to the Load Manager Library locale directory. See "Configuring the Informatica Adapter" in the <i>Informatica Adapter Guide</i> for how to set this for Windows and Unix environments.
TDLINFA_REQUESTTIMEOUT	Informatica	<none>	(Optional) - The number of seconds before an API request times out. The default is 120 seconds, if not specified.
TDLJDBC_LIBPATH	JDBC	<none>	(Windows only, optional) An alternate path to the JDBC library files. The library file path should have been configured given system environment variables. This option is available in case you wish to use an alternate set of libraries and may be helpful for trouble-shooting purposes.

service.props Properties

---

Property	Applicable Adapter(s)	Default	What It Controls
TDLJDBC_LOCALE	JDBC	<none>	The path to the JDBC locale files.
TRANSACTION_LOG_BATCH_SIZE	MS SQL	5000	Set this parameter if more than 5000 lines need to be read from the transaction table.
version_pre898	JD Edwards	N	If running on a JD Edwards server version that is less than 8.9.8, set version_pre898=Y.