



## **Cisco Tidal Enterprise Scheduler Remote Job Adapter Guide**

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## Preface

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This guide describes the installation, configuration, and usage of the Remote Job Adapter with Cisco Tidal Enterprise Scheduler (TES).

## Audience

This guide is for administrators who install and configure the Remote Job Adapter for use with TES, and who troubleshoot TES installation and requirements issues.

## Related Documentation

See the *Cisco Tidal Enterprise Scheduler Documentation Overview* for your release on 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 TES guides.



### Note

We sometimes update the documentation after original publication. Therefore, you should also review the documentation on Cisco.com for any updates.

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## 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>.

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# Document Change History

The table below provides the revision history for the *Cisco Tidal Enterprise Scheduler Remote Job Adapter Guide*.

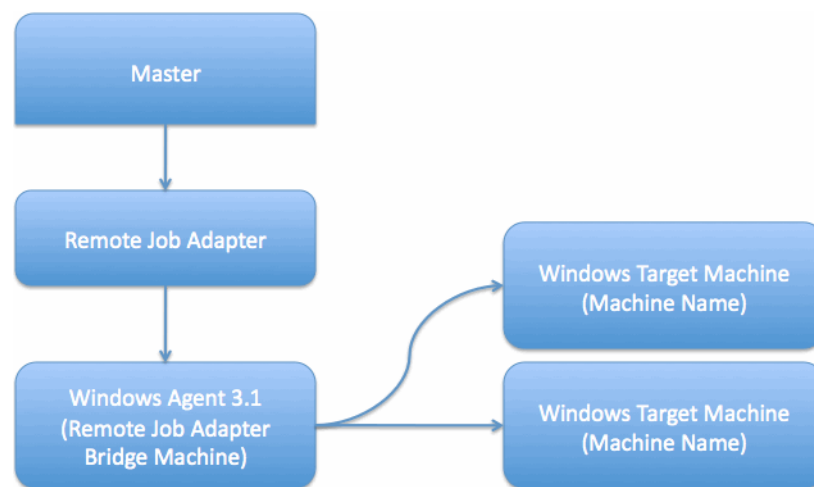
Version Number	Issue Date	Reason for Change
6.1.0	October 2012	<ul style="list-style-type: none"><li>• New Cisco version.</li></ul>
6.2.1	June 2014	<ul style="list-style-type: none"><li>• Available in online Help only.</li></ul>
6.2.1 SP2	June 2015	<ul style="list-style-type: none"><li>• Configuration provided in the <i>TES Installation Guide</i>; usage provided in online Help only.</li></ul>
6.2.1 SP3	May 2016	<ul style="list-style-type: none"><li>• Consolidated all Remote Job Adapter documentation into one document.</li></ul>



# Introducing the Remote Job Adapter

## Overview

The Tidal Enterprise Scheduler Adapter for Remote Job allows you to launch jobs in a Windows environment where access to a machine is restricted or limited and the job load is light.



## Prerequisites

Prior to configuring the Remote Job Adapter, you must ensure that the following prerequisites have been met.

- Tidal Enterprise Scheduler 6.0 or above  
See the *Tidal Enterprise Scheduler Compatibility Guide* for a complete list of software and hardware requirements.
- Task Manager is available.
- User defined as the Connection user has specific privileges on the Target machine. See [Assigning Privileges on the Target Machine](#).
- Windows Agent machine is configured as a Remote Job Adapter proxy. See [Configuring a Windows Agent to be a Remote Job Adapter Proxy](#).







# Configuring the Remote Job Adapter

## Overview

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

- [Licensing an Adapter](#) – License the Remote Job adapter. You cannot define a Remote connection until you have applied the Remote Job license from Tidal Software.
- [Securing the Remote Job Adapter](#) – Define a Remote Job Authentication user to authorize a connection to be established to the Remote Job agent and permit requests to be made on behalf of the authenticated account.
- [Assigning Privileges on the Target Machine](#) – Assign specific privileges for the user defined as the Connection user on the Target machine.
- [Configuring a Windows Agent to be a Remote Job Adapter Proxy](#) – Configure the Windows Agent machine to be a Remote Job adapter proxy.
- [Defining a Remote Job Adapter Connection](#) – Define a Remote Job connection so the master can communicate with the Remote Job server.

See [Configuring service.props](#) for information about general and adapter-specific properties that can be set to control things like logging and connection properties.

## Licensing an Adapter

Each TES 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 TES, 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:

**Step 1** Stop the master:

Windows:

- a. Click **Start** and select **Programs>TIDAL Software>Scheduler>Master>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**

**Step 2** Create the license file:

- 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.

**Step 3** Place the file in the **C:\Program File\TIDAL\Scheduler\Master\config** directory.

**Step 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.

**Step 5** To validate that the license was applied, select **Registered License** from **Activities** main menu.

## Securing the Remote Job Adapter

There are two types of users associated with the Remote Job 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 Remote jobs represent those users and passwords required for Remote Job Authentication. If the Remote Job server requires authentication based on user and password credentials, these users will need to be defined as runtime users.

- **Schedulers**

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

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

## Defining Runtime Users

To define a runtime user:

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

- Step 3** If this is a new user definition, enter the new user name in the **User/Group Name** field.
- Step 4** For documentation, enter the **Full Name** or description associated with this user.
- Step 5** In the **Domain** field, select a Windows domain associated with the user account required for authentication, if necessary.
- Step 6** On the **Passwords** tab, click the **Add** button to view the **Change Password** dialog.
- Step 7** Select **Remote Job** from the **Password Type** list.
- Step 8** Enter a password (along with confirmation) in the **Password** field.  
Only those users with a password specified for Remote Job will be available for use with Remote jobs. The password might be the same as the one specified for Windows/FTP jobs.
- Step 9** Click **OK** to add or save the user record in the Enterprise Scheduler database.

## Authorizing Schedulers to Work With Remote Jobs

To define a Scheduler user to work with Remote jobs:

- Step 1** From the **Navigator** pane, expand the **Administration** node and select **Interactive Users** to display the defined users.

- Step 2** Right-click **Interactive Users** and select **Add Interactive User** from the context menu (*Insert mode*). You can also right-click a user in the **Interactive Users** pane and select **Edit Interactive User** from the shortcut menu (*Edit mode*).

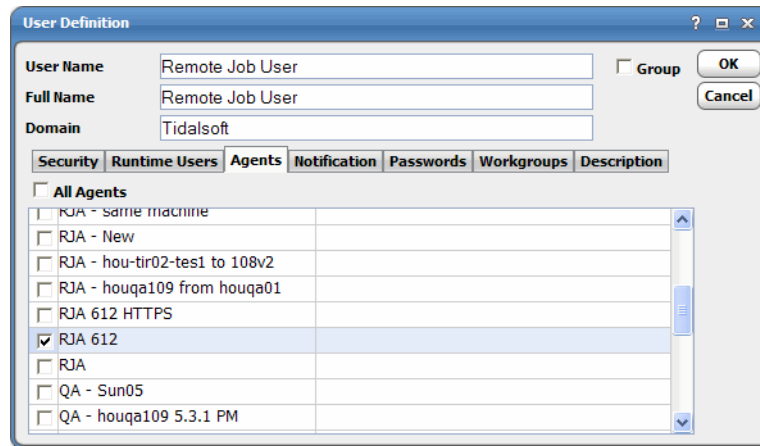
The **User Definition** dialog displays.

The **User Definition** dialog box is shown with the **Security** tab selected. The **User Name** field contains 'Remote Job User', the **Full Name** field contains 'Remote Job User', and the **Domain** field contains 'Tidalsoft'. There are **OK** and **Cancel** buttons. Below the fields are tabs for **Security**, **Runtime Users**, **Agents**, **Notification**, **Passwords**, **Workgroups**, and **Description**. Under **Security Policy**, the **Other** radio button is selected, and a list of users is displayed: Scheduler\_Administrator, User, Operator, Administrator, Inquiry, and Scheduler.

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

The **User Definition** dialog box is shown with the **Runtime Users** tab selected. The **User Name** field contains 'Remote Job User', the **Full Name** field contains 'Remote Job User', and the **Domain** field contains 'Tidalsoft'. There are **OK** and **Cancel** buttons. Below the fields are tabs for **Security**, **Runtime Users**, **Agents**, **Notification**, **Passwords**, **Workgroups**, and **Description**. Under **Runtime Users**, the **Show Users** radio button is selected, and a list of users is displayed with checkboxes: houqa109\sa (checked), Tidalsoft\tmims, TIDALSOFT\SQL User, TIDALSOFT\qatest, tidal, SSH User, SSH Runtime User, sa, and ps.

- Step 8** Select the Remote Job users that this scheduling user may use for Remote Job authentication in Remote jobs.
- Step 9** Click the **Agents** tab.



**Step 10** Select the check boxes for the Remote Job connections that this scheduling user can access when scheduling jobs.

**Step 11** Click **OK** to save the user definition.

## Assigning Privileges on the Target Machine

The user defined as the Connection user on the Remote Job adapter needs to have specific privileges on the Target machine. The Remote Job adapter performs several operations with respect to the remote machine that require certain privileges in order to be successful.

### Permissions

- The Remote Job adapter must be able to connect to the remote machine's scheduled tasks folder. The process involves connecting to the `\\server\IPC$` administrative share, so the user associated with the connection must have access to this share in order to for this operation to succeed.



#### Note

To test if the share is accessible you can try the command `net use \\server\IPC$ /user:connection_user connection_password`. The net use command can also be used to see what connections are currently established.

If you have problems when everything seems configured properly ensure that you do not have an already established connection to the **IPC\$** administrative share that may be masking the one you are trying to create.

For a Windows Server 2003, Windows XP or Windows 2000 computer to connect to the scheduled tasks folder on a Windows Vista machine the following operations should be completed on the Windows Vista computer:

- Enable the Share File and Printers exception in Windows Firewall
- Enable the Remote Registry service

Also, ensure the user associated with the connection is a member of the Administrators group on the remote Windows Vista computer. See

[http://msdn.microsoft.com/en-us/library/aa381831\(VS.85\).aspx](http://msdn.microsoft.com/en-us/library/aa381831(VS.85).aspx) for more information

- The Remote Job adapter must be able to connect and read from the remote machine's registry. This requires the following:
  - Both machines must be running the remote registry service and have remote administration enabled.
  - The user associated with the connection must have read permission on the **HKEY\_LOCAL\_MACHINE** registry hive and the **HKLM/CurrentControlSet/Control/TimeZoneInformation** registry key.
- In order to report "load" data for the remote machine the Remote Job adapter must be able to retrieve the performance counter data associated with CPU utilization. By default, all users should have access to the necessary resources for this to be successful. If not, see the following knowledge base article for a discussion on the security settings <http://support.microsoft.com/kb/164018>.

## Configuring a Windows Agent to be a Remote Job Adapter Proxy

### Designating the port to use for HTTPS

To designate the port:

- Step 1** Use Service Manager to edit the command line of the Agent and add the following parameter to the Command Line:

```
RJAPort=xxxxx
```

Where **xxxxx** is the port number you want to use for the HTTPS connection from the Adapter.

- Step 2** Allow Service Manager to restart the agent when you save the change.



**Note** The proxy support is not available in this Agent if the RJAPort is not specified in the command line. The Agent will not be usable by the Adapter until the RJAPort parameter is specified.

After adding the RJAPort parameter, you must add another dependency to the Agent service definition - HTTP SSL. You can do this by going into Service Manager and clicking the ellipses (...) for the specific agent and selecting the Dependencies tab and selecting 'HTTP SSL' as a new dependency. The Agent will not start automatically at system start-up without adding this (May not be available in Windows 2008 and beyond).

### Assigning a Certificate to port for HTTPS

To create a self-signed host certificate and configure it to a port:



**Note** If your machine already has a valid server certificate, you should only have to do step 3 below.

- Step 1** Open a DOS prompt (Command Shell) and create a self-signed certificate:

```
makecert -r -pe -n "CN=localhost" -eku 1.3.6.1.5.5.7.3.1 -ss my -sr
localMachine -sky exchange
```

This will create the certificate and install it (named "**localhost**") in the certificate store.



**Note** makecert is available in the SDK if you have Visual Studio 2005 installed (Microsoft Visual Studio 8\SDK\v2.0\Bin). There are other ways to get a certificate. An internet search will give you several options.

**Step 2** Start Microsoft Management Console (mmc) and copy the certificate "local" located in **Personal\Certificates** into **Trusted Root Certification Authorities\Certificates**.

**Step 3** In the DOS prompt (Command shell) run:

For pre-2008 systems:

```
httpcfg.exe set ssl -i 0.0.0.0:50001 -c "Root" -h XXXXX
```

where:

**0.0.0.0:50001** is the IP and port (this is for **https://localhost:50001**)

**XXXXX** is the Thumbprint value of the local certificate.

**To obtain the thumbprint of a certificate:**

- a. Open the certificate and then click on the **Details** tab.
- b. Copy the thumbprint and delete all blanks (spaces) between numbers in 'Thumbprint'.



**Note** The Windows XP Service Pack 2 Support Tools download contains httpcfg.exe. However, this is an optional install element and you have to select the Optional Tools item to have it install httpcfg.exe.

It is critical that the name after '-c' in the httpcfg set matches the Store that the certificate is in, Root is recommended (see [Store Names](#)).

### Store Names

- **AddressBook** – The X.509 certificate store for other users.
- **AuthRoot** – The X.509 certificate store for third-party certificate authorities (CAs).
- **CertificateAuthority** – The X.509 certificate store for intermediate certificate authorities (CAs).
- **Disallowed** – The X.509 certificate store for revoked certificates.
- **My** – The X.509 certificate store for personal certificates.
- **Root** – The X.509 certificate store for trusted root certificate authorities (CAs).
- **TrustedPeople** – The X.509 certificate store for directly trusted people and resources.
- **TrustedPublisher** – The X.509 certificate store for directly trusted publishers.

For post-2008 systems

```
netsh http add sslcert ipport=0.0.0.0:50001 certhash=XXXX apid={YYYYYY}
```

where:

**ipport=0.0.0.0:50001** is the IP and port. This is for **https://localhost:50001**.

`certhash= XXXX` is the Thumbprint value of the local certificate.

## Defining a Remote Job Adapter Connection

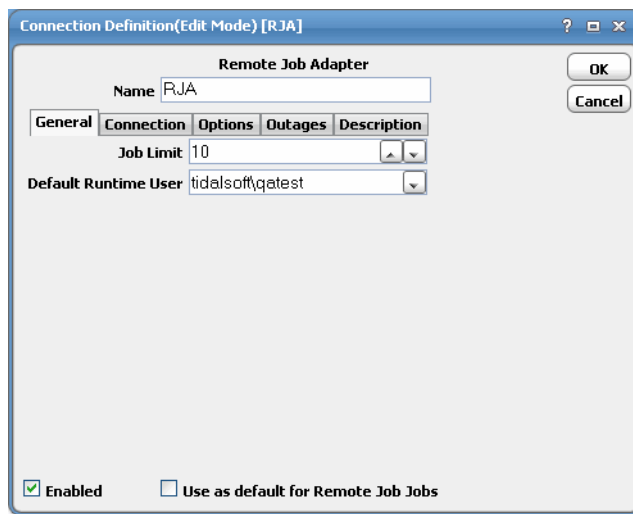
You must create a connection to a Remote Job server before Enterprise Scheduler can run your Remote jobs. These connections also must be licensed before Enterprise Scheduler can use them. A connection is created using the **Connection Definition** dialog.

## Adding a Remote Job Adapter Connection

To add a connection:

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

The **Remote Job Adapter Connection Definition** dialog displays.

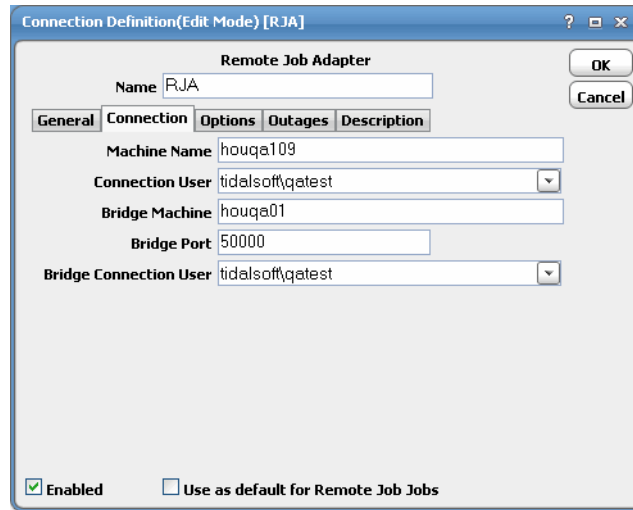


- Step 3** On the **General** page, enter a name for the new connection in the **Name** field.
- Step 4** In the **Job Limit** field, select the maximum number of concurrent active processes that Enterprise Scheduler should submit to the Remote Job server at one time.
- Step 5** (Optional) From the **Default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

Only authorized users that have been defined with Remote Job passwords display in this list. The selected user is automatically supplied as the runtime user in Enterprise Scheduler Remote job definitions.

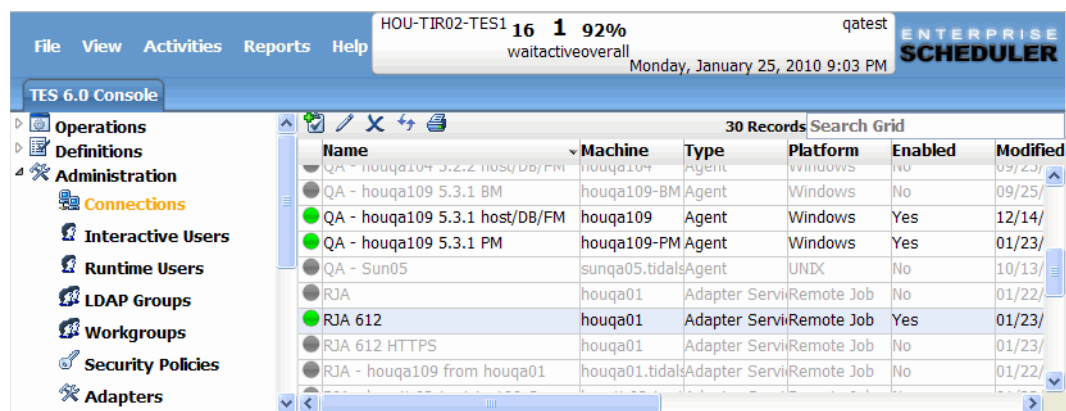
- Step 6** Click the **Remote Job Connection** tab.





The dialog box is titled "Connection Definition(Edit Mode) [RJA]". It has tabs for "General", "Connection", "Options", "Outages", and "Description". The "Connection" tab is selected. Fields include: "Name" (RJA), "Machine Name" (houqa109), "Connection User" (tidalsoft\qatest), "Bridge Machine" (houqa01), "Bridge Port" (50000), and "Bridge Connection User" (tidalsoft\qatest). There are "OK" and "Cancel" buttons. At the bottom, there are checkboxes for "Enabled" (checked) and "Use as default for Remote Job Jobs" (unchecked).

- Step 7** In the **Machine Name** field, enter the name of the target machine on which you want to run jobs.
- Step 8** In the **Connection User** field, select a user from the drop-down list who is authorized to connect and monitor attributes and invoke connection level operations. The user name is preceded with the domain name.
- Step 9** In the **Bridge Machine** name field, enter the name for machine where Windows 3.0 Agent with the RWS option is installed.
- Step 10** In the **Bridge Port** field, enter the appropriate port number for the Remote Job listener. The default port is 22.
- Step 11** From the **Bridge Connection User** list, select a Enterprise Scheduler runtime user with a password for Remote Job adapter.  
The user name is preceded with a fully qualified domain name.
- Step 12** Click **OK**. The configured connection displays in the **Connections** pane.



The screenshot shows the Enterprise Scheduler console with the "Connections" pane selected. The console displays system status at the top: "HOU-TIR02-TES1 16 1 92% waitactiveoverall qatest Monday, January 25, 2010 9:03 PM". The left sidebar shows a tree view with "Connections" highlighted. The main area shows a table of connections.

Name	Machine	Type	Platform	Enabled	Modified
QA - houqa109 5.3.1 host/DB/FM	houqa109	Agent	Windows	No	09/23/
QA - houqa109 5.3.1 BM	houqa109-BM	Agent	Windows	No	09/25/
QA - houqa109 5.3.1 PM	houqa109-PM	Agent	Windows	Yes	12/14/
QA - Sun05	sunqa05.tidal	Agent	UNIX	No	01/23/
RJA	houqa01	Adapter Service	Remote Job	No	10/13/
RJA 612	houqa01	Adapter Service	Remote Job	Yes	01/22/
RJA 612 HTTPS	houqa01	Adapter Service	Remote Job	No	01/23/
RJA - houqa109 from houqa01	houqa01.tidal	Adapter Service	Remote Job	No	01/22/

The status light next to the connection indicates whether the Enterprise Scheduler Master is connected to the Remote Job instance. If the light is green, the Remote Job instance is connected.

A red light indicates that the master cannot connect to the Remote Job instance. However, the jobs will not run without a connection to the Remote Job instance.

**Note**

If there is an attribute associated with Health, this also determines whether the light is green or red.

If the light is red, check **Operations>Logs** for any associated error messages. You can also test the connection to determine the problem. Right-click the connection and select **Test** from the shortcut menu. A message displays on the **Test Remote Job Connection** dialog describing the problem.



# Using the Remote Job Adapter

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## Overview

This chapter guides you through using the features of the Remote Job Adapter in Enterprise Scheduler, including:

- Defining Remote Jobs
- Monitoring Remote Jobs
- Controlling Remote Jobs

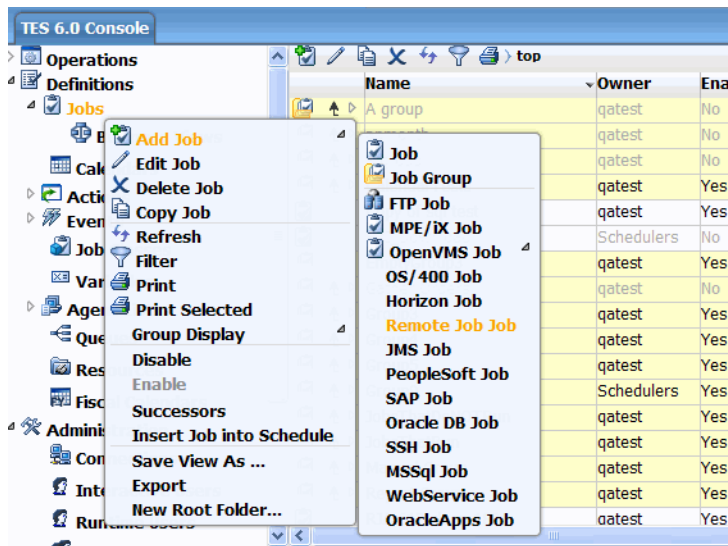
## Defining Remote Jobs

This section provides instructions for defining a Remote job in Enterprise Scheduler.

### Remote Job Definition

**To define a Remote job:**

- 
- Step 1** In the **Navigator** pane, select **Definitions>Jobs** to display the **Jobs** pane.
- Step 2** Right-click **Jobs** and select **Add>Remote Job** from the context menus.



The **Remote 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 Remote Job authority for the operation, and the Remote Job adapter connection that will be used for the job.

**Step 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.
- (Optional) **Job Class** – If you want to assign a defined job class to this job, select it from the drop-down list.

- **Owner** – Select the user name from the drop-down list for the person who owns this job. The user must have the appropriate Remote Job 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.

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

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

**Step 5** Specify the appropriate **Tracking** and **Duration** information for the job. Refer to the *Tidal Enterprise Scheduler User Guide* for information on these options.

**Step 6** Click the **Remote Job** tab.

**Step 7** In the **Command** field, enter the absolute path and filename of the command, script, batch file or executable that you want the job to run.



**Note** You can use TES variables from the Variable button to populate these fields.

**Step 8** In the **Parameters** field, enter either the hard-coded value for each parameter or type a parameter name.

**Step 9** In the **Working Dir** field, enter the path for the working directory of the program or script specified in the **Command** field.

**Step 10** (Optional) In the **Audit Comment** field, enter any comments. This is used to populate the **Task Comment** field on the task created by the Remote Job adapter to execute the job on the target machine.

**Step 11** Click **OK** to save the job.

# Monitoring Remote Jobs

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

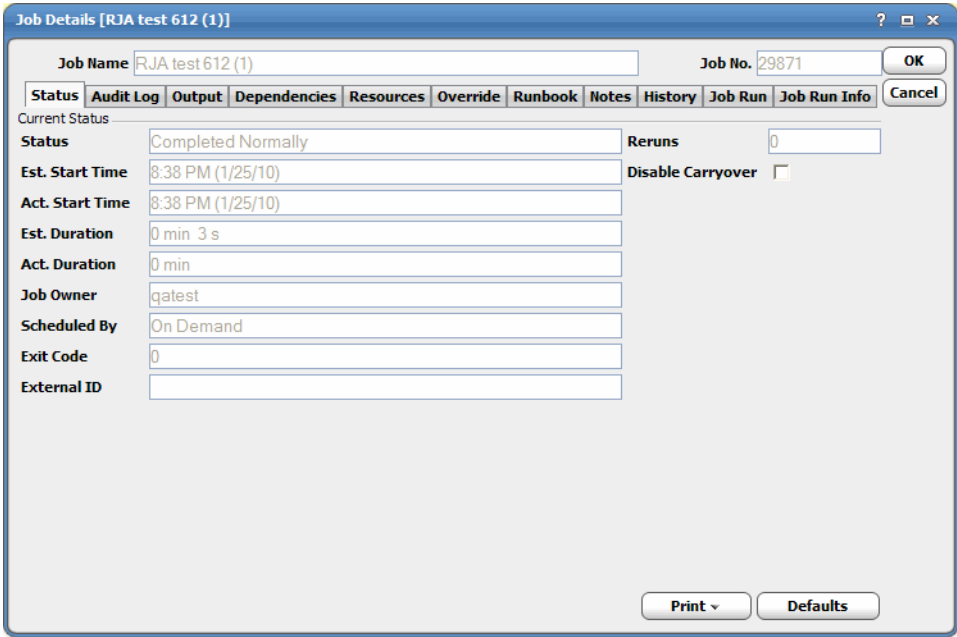
To monitor job activity:

- Step 1

In the **Navigator** pane, select **Operations>Job Activity** to display the **Job Activity** console.
- Step 2

Right-click job and select **Details** from the context menu.

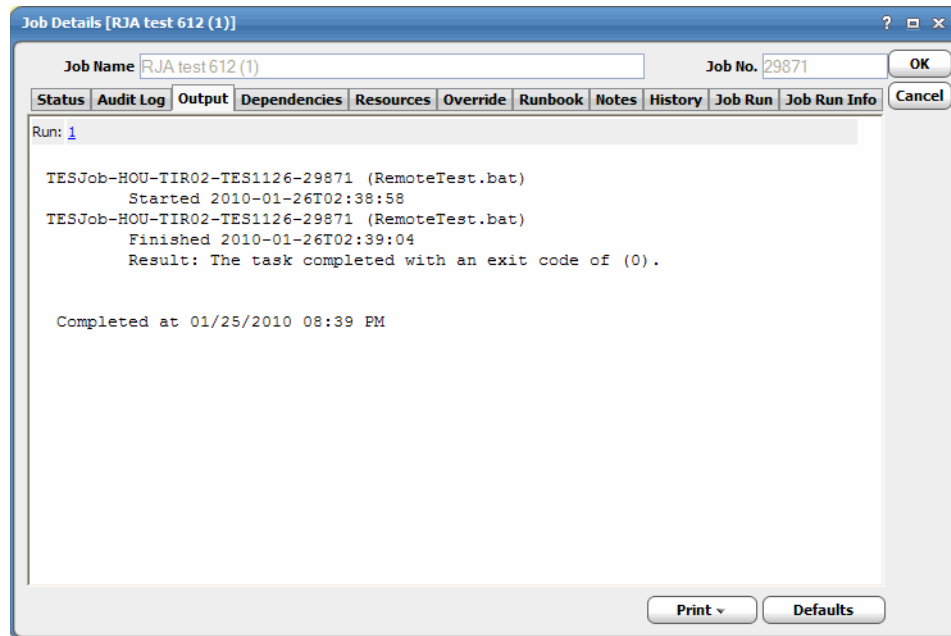
The **Job Details** dialog displays.



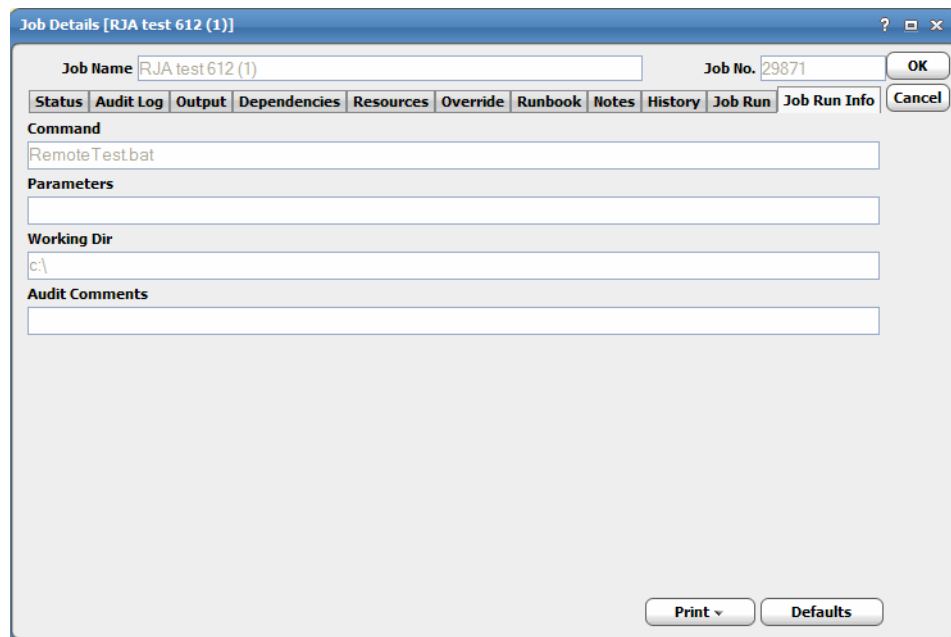
The **Status** page displays by default. You can view the status of the job, the start and end time, how long it ran, and how it was scheduled.

- Step 3

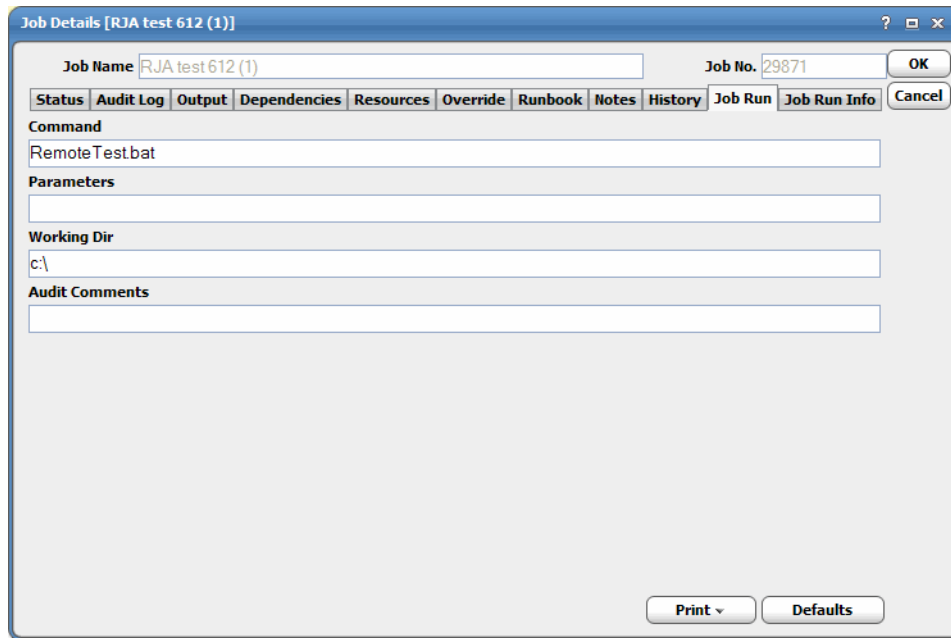
Click the **Output** tab to view a task summary.



**Step 4** Click the **Run Info** tab to view the request with the values used when this instance of the job was last run.



**Step 5** Click the **Remote Job** tab to view the job definition details and the variables that were used when the job was submitted. Changes only affect this instance of the job and can only be made before the job runs the first time or prior to a rerun (not while the job is running).



**Step 6** When you have completed 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:**

- 
- Step 1** From the **Job Activity** pane, right-click on the job.
- Step 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:**

- 
- Step 1** From the **Job Activity** pane, right-click on the job.
  - Step 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:**

- 
- Step 1** From the **Job Activity** pane, right-click the Adapter/Agent job you need to rerun.
  - Step 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:**

- 
- Step 1** From the **Job Activity** pane, double-click the Adapter/Agent job to display the **Job Details** dialog.
  - Step 2** Click the Adapter tab.
  - Step 3** Make the desired changes to the job and click **OK** to close the **Job Details** dialog.
  - Step 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:**

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



# 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	All	N	Setting this flag to Y allows synchronous connections without overloading the ROnly 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.

Property	Applicable Adapter(s)	Default	What It Controls
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.
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.
jarlib	Hive and MapReduce	<none>	Specifies the specific Java library to use for the adapter: <ul style="list-style-type: none"> <li>For Apache 1.1.2, add: <b>jarlib=apache1.1.2</b></li> <li>For Cloudera 3, add: <b>jarlib=cloudera</b></li> <li>For Cloudera 4, add: <b>jarlib=cdh4</b></li> <li>For MapR add: <b>jarlib=apache1.1.2</b></li> </ul>
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>
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>

Property	Applicable Adapter(s)	Default	What It Controls
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.
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	50	(Optional) – Number of logs to retain. Defaults to 50 if not specified.
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 in service.props of this adapter.
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 in the service.props of this adapter.
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.

Property	Applicable Adapter(s)	Default	What It Controls
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.
TDLJDBC_LIBPATH	JDBC (Windows only, optional)	<none>	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.
TDLJDBC_LOCALE	JDBC	<none>	The path to the JDBC locale files.
TDLINFA_REQUESTTIMEOUT	Informatica	<none>	(Optional) – The number of seconds before an API request times out. The default is 120 seconds, if not specified.
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.