Quest®

SharePlex Manager 3.0

User Guide

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Preface

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About This Guide

This guide describes how to use SharePlex Manager.

Additional Information

In addition to this guide, there are a number of options available for quickly finding the information you need.

Online Help

There are several ways to access online help topics.

To...	Do This...
Display the table of contents for help topics	You can open online help by selecting the Help tab in the action panel. Then select the Contents tab in the Help window.
Search for a specific help topic	Select the Search tab in an open Help window.
Display the index for help topics	Select **Help	Index**. If required, in the Help window, select the Index tab.
Display help for a specific window or dialog	In the window or dialog, do one of the following: • Click **Help** • Press F1 **Note** Not all windows and dialogs are linked to specific help topics.

Release Notes

To access the release notes, please visit the SharePlex product support page at: https://support.quest.com/shareplex-manager. The release notes are also available on the installation CD.

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- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product

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SharePlex Manager Overview

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Introduction

SharePlex Manager harnesses the technology of Foglight 5 to provide 24 x 7 monitoring of your entire SharePlex infrastructure, from the initial capture of the Oracle redo logs in the source database to the importing and post processing of that data in each target database. In addition, SharePlex Manager enables users to execute control commands on replication processes.

In SharePlex Manager, specific data concerning database replication are collected and stored in the Foglight database. SharePlex Manager then transforms this data and displays performance-related metrics visually to the user in a series of easy-to-understand charts and graphs. Any warnings or errors encountered by SharePlex during the replication process are displayed to the user as color-coded alerts.

By visualizing SharePlex information this way, SharePlex Manager allows you to optimize performance and diagnose database replication problems before they cause serious disruptions or downtime. For example, if the latency in a particular replication process is unexpectedly high, SharePlex Manager can quickly tell you in which stage of the process the problem originates. With the proper security rights, you then could execute a Stop command on the process, resolve the problem, and then re-start the process by executing a Start command.

How SharePlex Manager Works

SharePlex Manager organizes and displays data in terms of replication streams and SharePlex instances:

- A SharePlex instance is a separate installation of SharePlex with a unique configuration consisting of three parameters: host, port number, and data source. One SharePlex instance may share any two parameter values with another instance, but it cannot share all three values. For example, a SharePlex instance may be installed on the same host and share the same port number as another SharePlex instance, but it must target a different Oracle database.

- A replication stream consists of the SharePlex instance associated with the source database of a replication and all of SharePlex instances associated with the *immediate* target databases. If the data imported to one of the target databases is then replicated and exported to a different set of target databases, the SharePlex instances associated with the databases of that replication constitute a separate stream. In SharePlex Manager, the right to execute control commands is given on a per-stream basis.

The illustration below shows an architectural diagram of SharePlex Manager and depicts its interaction with SharePlex through the SharePlex Web Services component.

As shown in the diagram, data is collected from SharePlex through SharePlex Web Services before it is sent to SharePlex Manager, which is installed on a Foglight 5 platform and consists of three main components:

- The Agent - Pulls the SharePlex data through SharePlex Web Services and transforms it into a format compatible with the Foglight 5 topology. The Agent also processes the control commands made in the Monitoring Component.

- Monitoring Component - Defines how the specific collections of data are visually rendered as charts and graphs and also provides the interface for executing control commands (Start, Stop, Abort) on SharePlex processes.

- Discovery and Configuration Component - Runs on the Foglight 5 server and defines replication streams by specifying the relationships between source and target SharePlex instances, which are identified during the discovery phase when the user first runs SharePlex Manager.
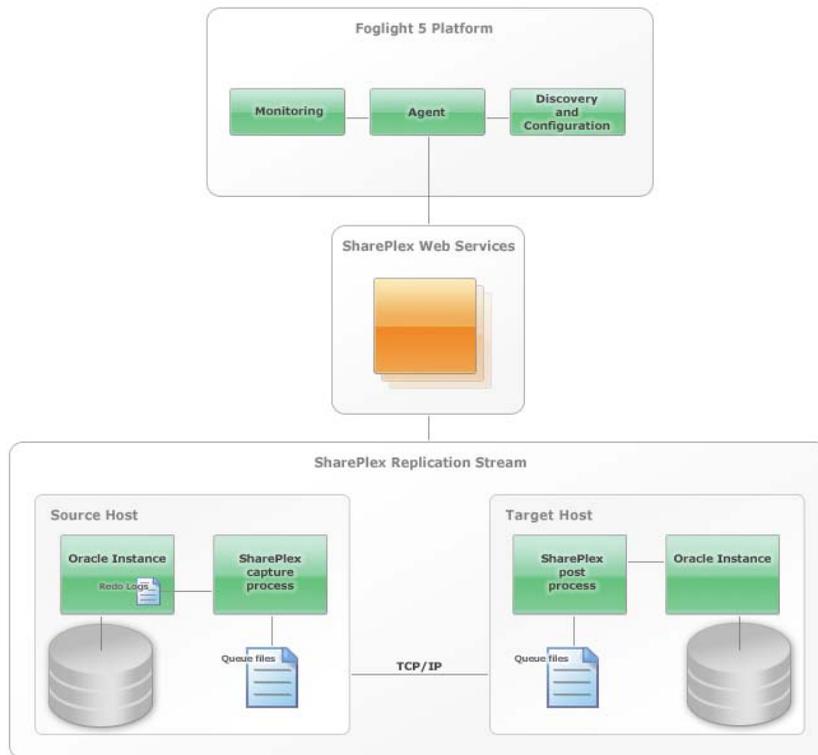
The SharePlex Web Services is the component that enables SharePlex Manager to communicate with your SharePlex instances. It is installed separately from SharePlex Manager and forms the layer through which raw data is collected by the Agent.

The monitoring process consists of the following steps:

1   The Discovery and Configuration Component identifies the replication streams that will be monitored by specifying the source and target SharePlex instances of each stream.

2   The SharePlex Web Services invokes API calls to each SharePlex instance in the monitored replication streams to collect specific data.

3   This data pulled by the Agent and transformed into a Foglight 5 compatible format.

4   The data is stored as Foglight 5 topology objects and visually displayed according to the rendering specifications defined in the Monitoring Component.

SharePlex Manager Windows

SharePlex Manager displays information in a set of Foglight-standard windows. Data is retrieved by SharePlex Web Services, transformed by the SharePlex Manager Agent, and then rendered graphically by the Monitoring component. The SharePlex Manager Dashboard is a top-level window containing links that drill down to other windows in which more detailed information is shown.

The two main SharePlex Manager windows are Replication Overview and Instance Overview, which respectively display top-level information related to all the replication streams that SharePlex Manager is currently configured to monitor as well as the SharePlex instances associated with the source and target databases of those streams.

Much of the performance-related data that SharePlex Manager collects are derived by calculating time-based statistics at certain stages of the replication process, such as rates of change and processing speed. SharePlex Manager then visually renders this information with sparklines in a series of windows. These sparklines are configured so that they can be drilled down to separate, pop-up windows showing the same information plotted in a more detailed graph.

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Replication Streams and Configuration

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Replication Stream Overview

As explained in the previous chapter, a replication stream consists of the SharePlex instance associated with the source database of a replication and all of SharePlex instances associated with the *immediate* target databases. If the data imported to one of the target databases is then replicated and exported to a different set of target databases, the SharePlex instances associated with the databases of that replication constitute a separate stream.

Selecting the Replication Streams

After installing SharePlex Manager, the first step is to select the replication streams you want to monitor. If you have many replication streams existing in your SharePlex infrastructure, you can run the Discovery Wizard to identify these streams automatically. If you are a new SharePlex user and do not have any streams in place, or if there is a specific stream you want to edit before you monitor it, you can select the option to set up a replication stream manually.

The Discovery Wizard

If your site maintains a large number of SharePlex instances, manually identifying each instance and each replication stream could be both time-consuming and error-prone. For this reason, SharePlex Manager features the Discovery Wizard which scans your SharePlex infrastructure and automatically identifies instances and replication stream

The Discovery Wizard connects to your SharePlex infrastructure from a starting source instance that you specify. Following the data replication process, it then attempts to connect to the target instances of the initial source. If any of these target instances function in turn as the source in another replication stream, the wizard automatically identifies this 2nd set of target instances and tries to connect to them. The wizard continues scanning your SharePlex infrastructure this way until each instance in all the interconnected replication streams have been identified or until you manually stop the discovery process.

Setting Up Replication Streams

Setting up replication streams manually allows you to create the replication streams you want to monitor. When you set up a replication stream, you can edit the configuration file you want to activate for the source instance of the stream, or you create a new configuration. This gives you the ability to add and remove target instances from the

stream and specify other replication parameters. For more information on configuration files, see the section "Managing SharePlex Configuration Files" on page 20

Replication Views

You do not need to identify all the instances and replication streams in your SharePlex infrastructure – just the ones you want to monitor. It may be that there are certain instances and replication streams you are not interested in. For this reason, SharePlex Manager only displays information regarding the instances and replication streams that you have added to a replication view, which is basically a collection of replication streams that have been identified and grouped by you into a single monitoring space. SharePlex Manager does not display information regarding any replication stream that has not been added to a replication view.

Replication Models

In SharePlex Manager, a replication model consists of one or more replication streams, each of which can trace the source of their replicated data back to the same SharePlex instance. However, because two replication streams may not share the same data source, it is possible to have several unrelated replication models in your SharePlex infrastructure. This situation is illustrated in the figure below which shows a hypothetical SharePlex infrastructure consisting of two replication models.
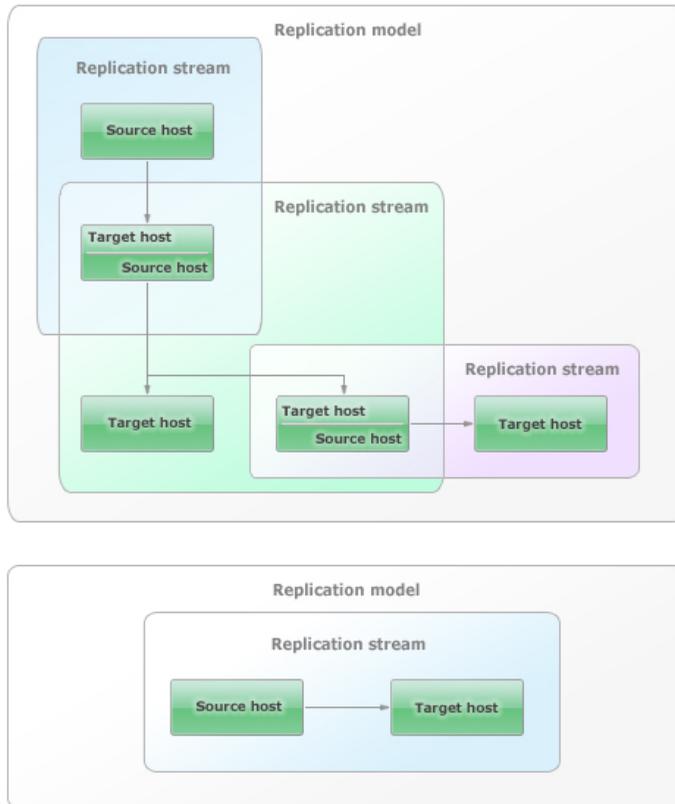
Both models originate with single source instances, but while the first model consists of three separate replication streams, all of which can be traced back to same source instance, the second model consists of a single replication stream with a single source and a single target. In this example, if you wanted to monitor the instances and replication streams in both replication models, you would run the Discovery Wizard twice:

- For the first model, the wizard would identify five instances and three replication streams

- For the second model, the wizard would identify two instances and one replication stream.

Note If you wanted to add a replication stream to the either model, you would select the option to set up a replication stream manually after running the Discovery Wizard.

After running the Discovery Wizard twice, you would have identified the seven instances and four replication streams that comprise your SharePlex infrastructure. You would then group and organize the replication streams you want to monitor in replication views.

Running the Discovery Wizard

The first step in using the Discovery Wizard is to specify the connection properties of the starting source instance in a replication model. These properties include host machine, port number, username and password.

Because the wizard identifies replication streams in a strictly linear direction from source to each of its targets, it is recommended that you start the Discovery Wizard with a SharePlex instance defined at the earliest stages of a data replication process. This allows the wizard to identify a greater number of replication streams than would otherwise be possible if you started the discovery process with an instance that was further 'downstream'.

Note To run the Discovery Wizard, you must have the ability to connect to SharePlex (meaning, the ability to successfully execute the "su" command). If you receive an "Invalid Username/ Password" error message during discovery (and the username and password are correct), this may indicate that you don't have the ability to connect to SharePlex. Also, to control Capture processes, you must be a member of the SharePlex Administrators group.

To run the Discovery Wizard:

1 Do one of the following:

- If you are a new user, click **Discover Replication Stream** in the Welcome window.

- In the Manage Monitoring console, click **Discovery**.

  Note Access to the Manage Monitoring console is controlled by security rights. If you do not have proper security rights, the **Manage Monitoring** option is deactivated. For more information, see the section "Manage Monitoring" on page 27.

2 In the Welcome screen, click **Next**.

3 Specify the connection properties of the initial source instance:

- **Hostname** - Name of the machine on which the SharePlex instance is installed
- **Port** - Port number used by the instance.
- **Username** - Username assigned to the SharePlex instance
- **Password** - Password assigned to the SharePlex instance

> **Note** The default port value is 2100 to match SharePlex. You can change this value as needed.

4 (Optional) Deselect the **Use as default credentials** option if you do not want the username and password you specify for the initial instance to be used as the default credentials for the other instances identified by the wizard.

Select this option if many of the instances in your SharePlex infrastructure use the same username and password. If the wizard is unable to connect to an instance using the default username and password, it displays a warning message and prompts you to specify different credentials manually.

If you do not select the **Use as default credentials** option, the wizard prompts you to specify the username and password for each instance it discovers.

5 Click **Next**.

The Discovery Wizard initiates the discovery process by attempting to connect to the source instance using the connection properties you specified.

- If the wizard is able to connect, the source is listed as the first identified instance. The wizard then determines the target instances connected to the source and attempts to connect to those instances using the default connection properties.

- If the wizard is able to connect but the source instance does not have an active configuration file, the wizard prompts you to either activate a configuration file and continue with the discovery process, or to add the source instance and activate one of its configuration files later. An inactive source instance cannot be added to a replication view or monitored. For more information on activating configuration files, see the section, "Managing SharePlex Configuration Files" on page 20.

  > **Note** When you add an inactive source instance and then later activate one of its configuration files, you need to discover the source instance before it can be added to a replication view and monitored. Until you discover a newly activated source instance, it will be labeled as "Undiscovered" in both the Replication Overview and Instance Overview windows.

Define Replication Model

The instance discovered has not been activated with a valid configuration. The
instance must be activated with a valid configuration or be part of an existing
replication model to be monitored.

You can select and activate a configuration now or later use the instance property
dialog to create and manage configurations.

Configurations

Select Activate from the action menu for the inactive configuration on which you
want to enable the replication model.

Filename	Datasource	Date Activated	State↑
Prod_2a	Unknown	-	Inactive ▼
Prod_test	o.SOURCE_SID	-	Inactive ▼
Production	o.ora10r2	-	Inactive ▼
Production_Copy	o.ora10r2	-	Inactive ▼
Template	o.SOURCE_SID	-	Inactive ▼

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- If the wizard cannot connect to an instance, it displays an error message
  describing the nature of the problem (instance not responding, invalid login
  credentials, etc.). The wizard cannot proceed until the error is corrected. After
  correcting any errors that may be reported with the source instance, click **Next**
  again to continue with the discovery process.

Currently Examining

Enter the Username and Password for the SharePlex Instance
at irvspxu05.quest.com: 2222

Host:	irvspxu05.quest.com
Port:	2222
*Username:	qarun
*Password:	

[Continue] [Skip]

Progress So Far

SharePlex Instances found:	5
Connections Validated:	2
Streams Found:	1

[🛑 Stop] [✕ Cancel]

Host	IP Address	Port	Connection Status
irvspxl04.quest.com	10.1.2.14	2101	Connection Validated
irvspxu09.quest.com	10.1.2.48	2101	Not Connected
irvspxud.quest.com	10.1.0.27	2101	Not Connected
irvspxuc.quest.com	10.1.0.26	2101	Connection Validated
irvspxu05.quest.com	10.1.18.25	2222	Connection Invalid

At this point, you can either correct the error and continue processing, or you can skip the particular instance.

6 If errors are reported, do one of the following:

- If you want to continue processing, correct the error that was reported, enter the username and password again and click **Continue**.

- If you want to skip the instance, click **Skip**. Skipped instances are included in the list of identified instances but because the connection was not validated, data for that instance cannot be monitored in SharePlex Manager. Also, if you skip an instance that functions as the source in a replication stream, the Discovery Wizard will not be able to identify the target instances in that replication stream.

The Discovery Wizard continues identifying all the instances and replication streams in the replication model. You can wait for the wizard to complete the discovery process, or if you do not want the wizard to continue processing you can click **Stop** at any point.

After the discovery process is completed or you click **Stop**, the Discovery Wizard displays more detailed information about each SharePlex instance and replication stream it has identified:

- For each instance, the wizard identifies the name of its host machine, IP address, port number, and connection status (skipped instances have a **Not Connected** status).

- For each replication stream, the wizard identifies the source instance, and in a tree view, each target instance

Note   By default, instance names consist of the name of the host machine concatenated with the port number. You can edit the names of instance and replication streams in the Manage Monitoring console, as described in the section, "Manage Monitoring" on page 27.

The automatic discovery of the SharePlex Replication Model has ended.

SharePlex Instances Discovered

4 SharePlex Instances were discovered

Host	IP Address	Port	Connection Status
irvspxu17	10.1.2.117	8800	Connection Validated
irvqasl20.quest.com	10.1.2.112	8800	Connection Validated
irvqasu06.quest.com	10.1.0.141	8800	Connection Validated
irvqasu10.quest.com	10.1.17.40	8800	Connection Validated

SharePlex Streams Discovered

The following replication streams have been identified. A replication stream consists of a single source SharePlex instance and one or more target instances.

3 SharePlex Streams were discovered

irvspxu17.quest.com:8800
 └irvqasl20:8800

irvqasl20:8800
 └irvspxu17.quest.com:8800
 └irvqasu06.quest.com:8800
 └irvqasu10.quest.com:8800

irvqasu06.quest.com:8800
 └irvqasl20:8800

Next, the SharePlex Streams discovered can be added to a Replication View. In order to monitor a SharePlex Stream it must be added to a Replication View.

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At this point, you need to select the replication streams you want to add to a replication view. If this is the first time running the Discovery Wizard, you must first define the replication view you want to use.

7   Click **Next.**

You have the option of adding the replication streams you want to a new replication view, to an existing replication view (if any are currently defined), or you can opt *not* to add the replication streams to a replication view, in which case no information about any of the replication streams identified by the Discovery Wizard will be displayed in SharePlex Manager.

8   Do one of the following:

- If you want to add the replication streams in the replication model to a new replication view, select the **New View** option.

- If you have already run the wizard and want to add any of the replication streams in the replication model to an existing replication view, select the **Existing View** option and select the view you in the drop-down list.

  Note The **Existing View** Option is disabled if this is the first time you have run the wizard and there are no replication views yet defined.

- If you do not want to add any of the replication streams in the replication model, select the **Do Not Add to View** option.

  Note If you do not add any replication streams to a replication view, the discovery process is concluded when you click **Next**.

9 Click **Next**.

Whether you are adding replication streams to a new or existing view, the Discovery Wizard displays all the replication streams that have been discovered, including replication streams identified in previous discovery sessions (if any).

Note When a SharePlex instance is modified or added or removed from a replication stream, SharePlex Manager is able to detect these changes and automatically refresh the displayed data. However, changes to login credentials (such as updated passwords) are not automatically detected. When this is the case, SharePlex Manager displays an error message and prompts you to rediscover the affected replication stream by running the Discovery Wizard again.

10 If you selected the **New View** option, specify a name for view and (optional) add a description.

11 Select the replication streams you want to add to the view.

Note You can expand a replication stream to view the target instances.

12 Click **Next**.

This completes the discovery process. At this point you can do one of the following:

- Run the Discovery Wizard again to identify any other replication models in your SharePlex infrastructure.

- Perform Manage Monitoring tasks on the instances, replication streams, and views defined in SharePlex Manager.

- Proceed directly to the SharePlex Manager dashboard and begin monitoring.

  Note After adding a replication stream to a replication view, it may take up to 5 minutes before all the data has been calculated and displayed.

Caution An inactive Instance, which is persisted in SPM due to running "Setup Replication Stream" or "Discovery" on an inactive Instance, will not be cleared in two situations: 1) Manually clicking the Discovery link from within SharePlex Management or 2) Auto discovery. The inactive Instance is cleared if the user successfully completes the "Setup Replication Stream" wizard or successfully discovers Streams from the discovery required warning link. The user can also manually remove the inactive Instance via the Instances Property dialog.

Setting Up a New Replication Stream

You can use SharePlex Manager to guide you through the process of setting up new replication streams. When you set up a new replication stream, you have the option of modifying an existing configuration file or creating a new one.

To set up a new replication stream:

1. Do one of the following:

   - If you are a new user, click **Setup Replication Stream** in the Welcome window.

   - In the Manage Monitoring console, click **Setup Replication Stream**.

   Note Access to the Manage Monitoring console is controlled by security rights. If you do not have proper security rights, the **Manage Monitoring** option is deactivated. For more information, see the section "Manage Monitoring" on page 27.

2. Specify the connection properties of the source instance:

   - **Hostname** - Name of the machine on which the SharePlex instance is installed

   - **Port** - Port number used by the instance.

   - **Username** - Username assigned to the SharePlex instance

   - **Password** - Password assigned to the SharePlex instance

   Note The default port value is 2100 to match SharePlex. You can change this value as needed.

3. Click **Next**.

   SharePlex Manager attempts to connect to the source instance using the connection properties you specified.

If the wizard is able to connect, SharePlex Manager prompt you to select the configuration for the source instance. You can use the currently active configuration file (if one exists), or you can select a different configuration file or create a new configuration.

4 Do one of the following:

- To use the currently active configuration file, click **Next**
- To use a different configuration file, select it and then click **Next**.
- To create a new configuration file, click **Create New Configuration**. Then follow the steps for creating a new configuration described in the section "Creating Configuration Files" on page 23.

SharePlex Manager displays the contents of the file.
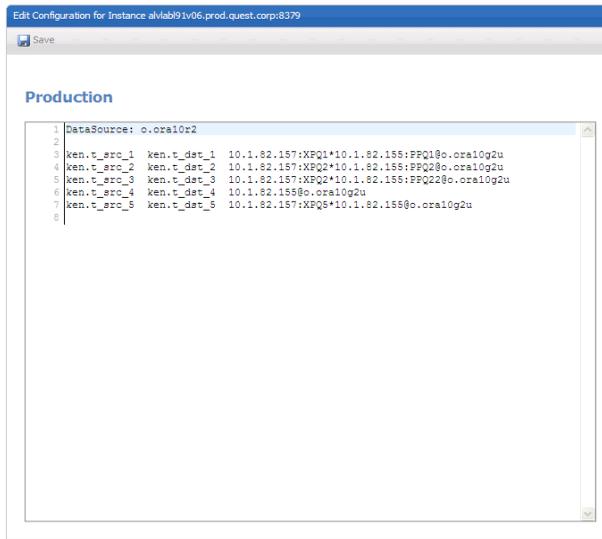
5 (Optional) If you selected a currently inactive file, edit the contents of the configuration file as needed. When finished, click **Save**.

Note   You cannot edit the configuration file that is currently active.

6 Click **Next**.

SharePlex Manager prompts you to validate the connection properties of the target instances specified in the configuration file.

7 (Optional) Click **Validate Connection**.

SharePlex Manager attempts to connect to the target instances in the replication stream. If unsuccessful, check the connection properties specified in the configuration file and try again.

8 Click **Next**.

SharePlex Manager displays a message that it is about to activate the configuration file you selected.

At this point, you need to add the replication stream to a replication view. You can add the replication stream to an existing replication view (if any) or to a new replication view.

9 Click **Next.**

You have the option of adding the replication stream to a new replication view, to an existing replication view (if any are currently defined), or you can opt *not* to add the replication stream to a replication view, in which case no information about the replication stream will be displayed in SharePlex Manager.

10 Do one of the following:

- If you want to add the replication stream to a new replication view, select the **New View** option.

- If you want the replication stream to an existing replication view, select the **Existing View** option and select the view you in the drop-down list.

  Note   The **Existing View** Option is disabled if there are no replication views yet defined.

- If you do not want to add the replication stream to any replication view, select the **Do Not Add to View** option.

11 Click **Next**.

Whether you are adding the replication stream to a new or existing view, SharePlex Manager displays all the replication streams that have been selected for monitoring, including previously selected sessions streams (if any).

Note   When a SharePlex instance is modified or added or removed from a replication stream, SharePlex Manager is able to detect these changes and automatically refresh the displayed data. However, changes to login credentials (such as updated passwords) are not automatically detected. When this is the case, SharePlex Manager displays an error message and prompts you to rediscover the affected replication stream by running the Discovery Wizard again.

12 If you selected the **New View** option, specify a name for view and (optional) add a description.

13 Select the replication stream you want to add to the view.

> **Note** You can expand a replication stream to view the target instances.

14 Click **Next**.

This completes the replication stream setup process. At this point you can do one of the following:

- Perform Manage Monitoring tasks on the instances, replication streams, and views defined in SharePlex Manager.

- Proceed directly to the SharePlex Manager dashboard and begin monitoring.

> **Note** After adding a replication stream to a replication view, it may take up to 5 minutes before all the data has been calculated and displayed.

Managing SharePlex Configuration Files

The Configurations section of a SharePlex Instance screen displays a list of all the configuration files currently saved in the configuration directory of that particular SharePlex instance. For each configuration file the list displays its datasource, its activation status, and (if currently active) the date and time it was activated. From here you can perform various administrative tasks to manage configuration files, including activating and inactivating files, removing and renaming files, and copying files. You can also modify the contents of a configuration file in a text editor, create a new file, or upload an existing one.

Activating and Deactivating Configuration Files

Only one configuration file can be active at a time. This means that when you activate a file, the file that was previously active for the same data source is automatically deactivated.

To activate a configuration file:

1 Click the **Active/Inactive** status of the configuration file you want to activate.

2 In the **Actions** pop-up menu, select **Activate**.

This opens the Active Configuration window.

> **Note** To deactivate a currently active file, select **Deactivate** in the pop-up menu. Be aware, however, that at least one configuration file must be active for replication processing to occur on the SharePlex instance. Also, if you have made system changes since activating the current file and want to refresh your configuration, open the **Actions** pop-up menu for the currently active file and select **Reactivate**.

3 Click **Activate**.

SharePlex Manager scans the configuration file and, if properly formatted, activates the file. If the file is not properly formatted, it displays an error message and does not activate the file.

When you activate a configuration file, SharePlex Manager opens the Discovery Wizard and prompts you to go through the steps of discovering the replications streams associated with the source instance. If SharePlex Manager is already monitoring any replications streams associated with the source instance, those replication streams will be updated to reflect any system changes that may have occurred since the last time the source instance was active. See the section, for more information.

> **Note** If it takes longer than 60 seconds to activate a configuration, SharePlex Manager displays a window indicating that the configuration is taking an extended amount of time to activate. You can continue working in SharePlex Manager while the activation process is occurring in the background. In the case of a new configuration file, you are prompted to run the Discovery Wizard when the file is finally activated. For an existing stream, SharePlex Manager updates the replication streams associated with the source instance automatically once the file is successfully activated.

> **Caution** Advanced activation options are highly sensitive and should only be set under the direction of Quest Support.

To deactivate a configuration file:

1 Click the **Active/Inactive** status of the configuration file you want to deactivate.

2 In the **Actions** pop-up menu, select **Deactivate**.

At least one configuration file must be active for replication processing to occur on the SharePlex instance. Also, if you have made system changes since activating the current file and want to refresh your configuration, open the **Actions** pop-up menu for the currently active file and select **Reactivate**.

Renaming, Removing, and Copying Configuration Files

1 To rename, remove, or a copy a configuration file, click the **Active/Inactive** status of the configuration file you want to manage.

2 In the **Actions** pop-up menu, select one of the following:

- Select **Rename** to rename the file.

    This opens the Configuration File Rename window which prompts you to specify a new name for the file.

- Select **Remove** to delete the file from the configuration directory of the SharePlex instance.
- Select **Copy** to create a copy of the file.

  This opens the Configuration File Copy window which prompts you to specify a unique name for the copied file.

Uploading Configuration Files

You can use SharePlex Manager to upload a configuration directory of a SharePlex instance.

To upload a configuration file:

1 Click **Upload Configuration File**.

2 Browse for the file you want to upload.

3 (Optional) Specify a name for the copy of the file you want to upload.

  If you do not specify a name, the name of the original file is used.

4 Click **Upload**.

Editing Configuration Files

You can edit the contents of a configuration file directly within SharePlex Manager.

To edit a configuration file:

1 Click the name of the configuration you want to edit.

  This opens the file in the SharePlex Configuration File Property window.

2 Click **Edit**.

  This opens the file in a text editor.

  Note For active configuration files, SharePlex Manager displays additional information, such as the activation id, total number of objects, total objects replicating, total objects not replicating and the log file location.

3 Edit the file as needed.

  Caution When editing a configuration file, be careful to use proper SharePlex syntax for routing specifications and datasource parameters. SharePlex Manager will not activate improperly formatted configuration files.

4 Click **Save**.

Creating Configuration Files

You can create configuration files directly within SharePlex Manager.

To create a configuration file:

1   Click **Create New Configuration File**.

    SharePlex Manager prompts you to specify a name for the new file.

2   Specify a unique name for the file and click **Create New**.

    This opens the new file in a text editor which displays a pre-loaded configuration
    file template. The template includes a properly formatted default datasource
    parameter and a sample routing specification.

3   Using the default template as a guide, specify your own datasource parameter and
    routing specifications.

    Caution   When creating a configuration file, be careful to use proper SharePlex syntax.
    SharePlex Manager will not activate improperly formatted configuration files.

4   Click **Save**.

    The new configuration is saved to the configuration directory of the SharePlex
    instance.

Setting Parameters

SharePlex parameters control and tune various aspects of replication. SharePlex is
designed to operate optimally with the default settings. In general, you should not
change a parameter's value except in the following circumstances:

• your replication strategy requires it

• you are following a documented SharePlex procedure

• you are instructed to do so by Quest Support

With the Parameter Management console in SharePlex manager, users with proper
security rights can view the parameter settings for each SharePlex instance in their
monitoring environment and modify their values as needed.

Note   See your SharePlex documentation for more information on SharePlex parameters

The Parameter Console displays the following information for each parameter:

Value	Description
Parameter	The name of the parameter in SharePlex
Value	The current value of the parameter
Default Value	The default value of the parameter
Units	The unit measurement type of the parameter value
Set At	The point at which a change to the parameter value effect. Options include: • **Live** - the change takes effect immediately • **COP Restart** - the change takes effect after the **sp_cop** is restarted • **Process Restart** - the change take effect after the affected SharePlex process restarts (Typically this option applies to Capture, Read, Export, Import and Post processes).
Classification	The configuration level of the parameter. Options include: • **General** - these are external parameters that are user-configurable • **Restricted** - these are internal parameters that should only be modified under the guidance of Quest Support.
Description	A brief description of the parameter

To change a parameter:

1 In the Replication Overview window, click **Administration**.

2 Click **Manage SharePlex Parameters**.

Note This option is deactivated if you do not have configuration rights on any replication stream, or if you have not yet run the Discovery Wizard and added any replication streams to your monitoring environment

This opens the Parameter Management console, which displays parameters based on the selected instance and module. If you want to view process-based parameters, you must also specify the queue or data source.

When you open the console, the Instance field display the first instance that you discovered and added to your monitoring environment.

3 In the **Instance** field, select the instance you want.

4 In the **Module** field, select the SharePlex module that the parameters you want to view are applied.

The list of available modules varies depending on whether the selected instance is a source or target instance.

5 If you selected a process module (Capture, Read, Export, Import or Post), do one of the following:

- For Export, Import and Post processes, select the queue that the process belongs to in **Queue** field.

- For Capture and Read processes, select the data source of the process in the **Datasource** field.

Note You can also open the Parameter Management console directly from Process Detail views. When opened from a Process Detail view, the **Instance and Module** fields in the Parameter Management console default to the particular process. For more information, see the section, "Instance Detail" on page 60.

6 The Parameter Console displays a list of all the parameters that apply to the selected instance, module, and data source or queue (for process-based parameters).

Instance:	10.1.81.191:8379				
Module:	Read				
Datasource:	ora10r2				

Parameter List

	Parameter ▲	Value	Default Value	Units	Set At	Classification	Description
	SP_ORD_CDA_LIMIT	5	5	cdas	Process Restart	Restricted	Number of cda allowed per login
	SP_ORD_DATE_MSG	0	0		Live	General	Flag to print reader error msg to event_log
	SP_ORD_DEBUG	0x00000000	0x00000000	bitflag	Live	Restricted	Oracle reader module debug flag
	SP_ORD_DEBUG_FLAG	0x00000000	0x00000000	bitflag	Live	Restricted	Reader dynamic debug flag
	SP_ORD_DEBUG_OBJECT	0	0	objectid	Live	Restricted	Reader debug objectid
	SP_ORD_DELAY_RECORDS	200	200	records	Live	General	Num records to process together
	SP_ORD_FIRST_FIND	1	1		Process Restart	General	Flag to send first qualifying condition in Horizontal Partition
	SP_ORD_HP_HASH	16	16	slots	Process Restart	General	Num buckets in horizontal partitioning insert hash table
	SP_ORD_HP_IN_SYNC	0	0		Process Restart	General	Flag to activate partition switching capability in Horizontal Partitioning
	SP_ORD_LDA_ARRAY_SIZE	5	5	logins	Process Restart	Restricted	Number of logins for marker
	SP_ORD_LOG_FILESIZE	50000000	50000000	bytes	Process Restart	Restricted	Size of reader debug logfile
	SP_ORD_LOG_NUMFILES	3	3	number	Process Restart	Restricted	number of reader debug logfiles
	SP_ORD_MSGS_CK_FREQ	0	0	number	Process Restart	Restricted	number of messages determine frequency of checking performance degradatio
	SP_ORD_NLS_LANG				Process Restart	Restricted	list of sids and character sets in this format "ora_sid,character_set/ora_sid,cha
	SP_ORD_RCM_SKIP_RATIO	0	0	ratio	Process Restart	Restricted	threshold ratio of blocks retrieved versus executes before we skip the current
	SP_ORD_RESTART_THRESHOLD	0	0	retries	Live	Restricted	number of logon failures before restarting capture
	SP_ORD_RMSG_LIMIT	1000	1000	readreleases	Live	Restricted	upon reaching it readrelease
	SP_ORD_UTILIZATION_TIMERS	0	0		Live	Restricted	If 1, start process utilization timers

7 Click the Edit icon for the parameter you want to change.

This opens the Edit SharePlex Parameter window.

Edit SharePlex Parameter □ ×

SP_OCT_APPL_PARSE_FLAG
Flag to parse redo record by application

Instance: 10.1.81.191:8379
Module: Capture
Datasource: ora10r2

Value: 0

Default: 1
Range: an integer in the range 0-1
☑ Restart processs now

[OK] [Cancel]

8 In the **Value** field, enter a valid value.

The value you specify must be in the correct units and within the supported range for the selected parameter. If you enter an invalid value, SharePlex Manger displays an error message after you click **OK**.

> **Note** Most SharePlex parameters require a non-null value. However, you can set a null value for certain parameters that are defined in string units by leaving the **Value** field blank. When this is the case, SharePlex Manager displays a warning symbol (red exclamation point) which can be disregarded.

9 If you are changing the Process Restart value of a process-based Set At parameter, do one of the following:

- Select the **Restart process now** option if you want the change to take effect immediately.
- Deselect the **Restart process now** option if you want the change to take effect the next time you restart the Foglight server.

> **Note** If you are changing a parameter that requires COP to be restarted, SharePlex Manager displays an alert message reminding you that you must use **sp_ctrl** to restart COP manually for the change to take effect.

If you are changing the value of a restricted parameter, SharePlex Manager displays a warning message.
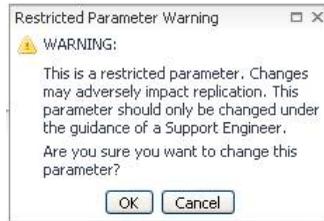
Caution   Do not change the value of a restricted parameter unless instructed to do so by Quest Technical Support.

10 Click **OK**.

Manage Monitoring

After running the Discovery Wizard and organizing the replication streams you want to monitor by adding them to user-defined replication views, you can open the Manage Monitoring console and perform various tasks to keep your monitoring environment easier to use and up to date:

- You can edit instances and replication streams by changing their system-assigned names and adding descriptions. In the case of instances, you can also edit their usernames or passwords (which may be a periodic security requirement).

- You can edit replication views by changing their names and descriptions and by adding or removing replication streams. You can also create new replication views and delete views.

- You can specify which users can execute control commands on processes in selected replication streams.

- You can discover new or additional replication streams by running the Discovery Wizard again.

To open the Manage Monitoring console, do one of the following:

- Click **Manage Monitoring** at the conclusion of the discovery process.

- In the Replication Overview window, click **Administration**. Then click **Manage Monitoring**.

  You must have at least one replication view already defined to open the Manage Monitoring console. If not, SharePlex Manager opens the Discovery Wizard

when you click **Manage Monitoring**. For more information, see the section,

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Note Access to the Manage Monitoring console is controlled by security rights. If you do not have proper security rights, the **Manage Monitoring** option is deactivated.

Editing SharePlex Instances

You can edit instances by changing their system-assigned names, adding or modifying descriptions, and by changing usernames or passwords (which may be a periodic security requirement).

To edit an instance:

1 In the Manage Monitoring console, click **Instances**.

This opens a list of all the currently identified SharePlex instances.

SharePlex Instances				
Name†	Host	IP Address	Port	Datasource
irvqasl20:8800	irvqasl20	10.1.2.112	8800	a920a32a
irvqasu06.quest.com:8800	irvqasu06.quest.com	10.1.0.141	8800	o920v64a
irvqasu13.quest.com:8404	irvqasu13.quest.com	10.1.0.180	8404	a102a64f
irvqasu19:8404	irvqasu19	10.1.2.128	8404	a102a64f
irvspxu17.quest.com:8800	irvspxu17.quest.com	10.1.2.117	8800	a920a64f

2 Click the name of the instance you want to edit.

Note By default instance names consist of the host name concatenated with the port number

This opens the SharePlex Instance Properties window which shows the connection properties of the instance, the configuration files defined for that instance, as well as details regarding the last time SharePlex Manager attempted to connect to the instance.

Note If at no time SharePlex Manager was able to connect to the instance, the date/time stamp will be blank.

3 Click **Edit**.

4 Edit the instance by renaming it, adding or modifying its description, or by changing its username or password.

> **Caution** If you are not able to monitor an instance after editing it, it may be because the username and password is not valid. Check the log and/or validate the current username/password.

5 Click **Save**.

> **Caution**   An inactive Instance, which is persisted in SPM due to running "Setup Replication
> Stream" or "Discovery" on an inactive Instance, will not be cleared in two situations: 1)
> Manually clicking the Discovery link from within SharePlex Management or 2) Auto
> discovery. The inactive Instance is cleared if the user successfully completes the "Setup
> Replication Stream" wizard or successfully discovers Streams from the discovery
> required warning link. The user can also manually remove the inactive Instance via the
> Instances Property dialog.

Editing Replication Views

You can edit replication views by changing their names and descriptions and by adding
or removing replication streams. You can also create new replication views and delete
views you do not want.

To edit a replication view:

1   In the Manage Monitoring console, click **Views**.

    This opens a list of all the currently identified replication views.
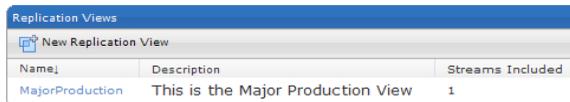
2   Click the name of the replication view you want to edit.

    > **Note**   If you want to create a new replication view, click **New Replication View**. Then
    > specify a name for view, add a description (optional), and lastly select the replication
    > streams you want to add to the view.

3   In the Replication View window, click **Edit**.

    This opens the Replication View Edit window, which shows the name and
    description of the view as well as all the replication streams that currently belong
    to the view (selected) and all the other replication streams that have been
    identified by the Discovery Wizard.
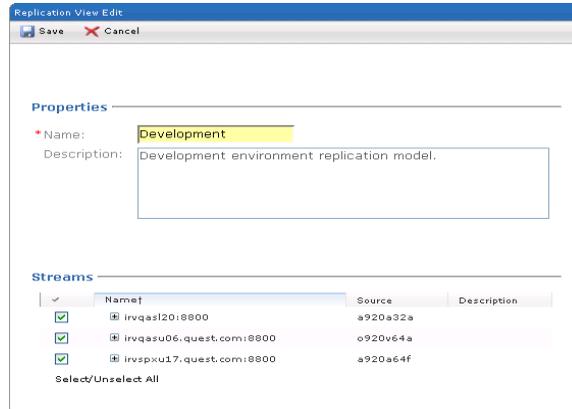
4 Do any of the following to edit the view:

- Modify the view name
- Add or modify the view description
- Select the replication streams you want to add to the view and de-select any replication stream you want to remove from the view

5 Click **Save**.

Editing Replication Streams

You can edit a replication stream by removing it, changing its name, adding a description. or adjusting its baseline time remaining value.

To edit a replication stream:

1 In the Manage Monitoring console, click **Streams**.

This opens a list of all the currently identified replication streams.

2 Click the name of the replication stream.

Note By default, replication stream names consist of the system-assigned name of the source instance plus the port number.

This opens the Stream window.
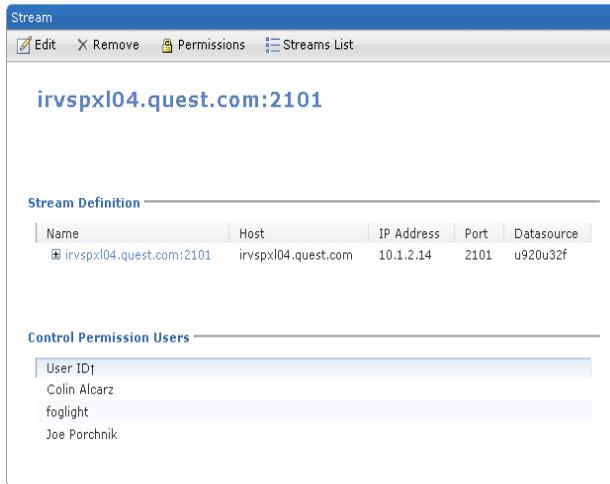
Note If you have the security rights to set control permissions, you can click **Permissions** and specify which users have the right to execute control commands on replication processes for the selected stream. For more information on setting control permissions, see the section, "Setting Control Permissions" on page 34.

3 (Optional) Click **Remove** to delete the replication stream from any replication views. Then when prompted to confirm the removal, click **OK**.

Caution When you remove a stream, it is removed from all the replication views in which it is monitored. Also, all the data that SharePlex Manager has compiled regarding that stream is deleted. If you want to monitor a replication stream you removed, it must be identified again by the Discovery Wizard.

4 Click **Edit**.

This opens the Stream Properties Edit window.
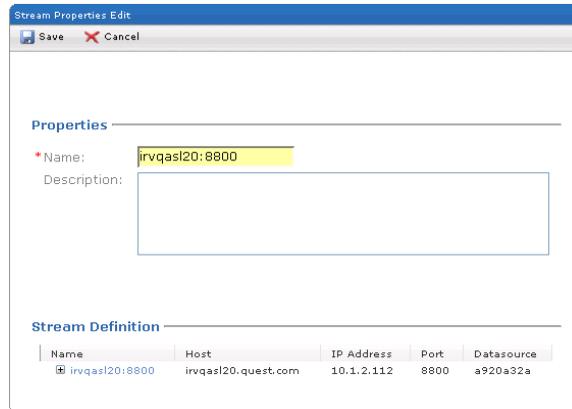
5 Rename the replication stream or modify its description as needed.

Because the time remaining baseline is a weekly moving average, values may be misleading within the first week of monitoring the instances in a particular replication stream, especially if the replication stream was discovered while processing a large amount of data. For this reason, SharePlex Manager allows you to reset the baseline time remaining value on a replication stream.

6 (Optional) Specify the baseline time remaining value for the replication stream in seconds.

7 Click **Save**.

Setting Control Permissions

If you have the security rights to set control permissions, you can specify which users can execute control commands on processes in selected replication streams. The right to execute control commands can be granted on either a per-stream or a per-user basis.

Note Control permissions in SharePlex Manager do not correspond to user authorization levels defined in SharePlex. This means that while users may have control permissions on a replication stream in SharePlex Manager, they may still be unable to execute control commands because the username that was specified to connect to the SharePlex instances does not have the proper authorization level. See your SharePlex documentation for more information on authorization levels.

SharePlex Manager Permissions can also be set for individual streams in the Stream window. For more information, see the section, "Managing SharePlex Configuration Files" on page 20.

To set control permissions:

1 In the Manage Monitoring console, click **Permissions**.

This opens the Permissions window, which is divided into two tabs: Streams and Users.

2 Do the following to set permissions on a per-stream basis:

a Click the stream or user you want.

If you selected a stream, this opens a window displaying a list of all the users currently defined in the database. If you selected a user, the window displays a list of all the replication streams.

b To set permissions on a per-stream basis, select each user you want to grant control rights.

c To set permissions on a per-user basis, select each stream for which you want to grant the user control rights.

d Click **Save**.

3

Alert and Alarm Rules

Contents

Global SharePlex Manager Rules

You can configure SharePlex Manager to execute an alert or alarm rule whenever the performance of a monitored replication stream or SharePlex instance falls below an acceptable level.

SharePlex Manager comes installed with a number of pre-defined alert and alarm rules that, when enabled, apply to all the replication stream and instances that are currently being monitored.

You can customize pre-defined SharePlex Manager rules as you see fit, or you can use them as the basis for alert and alarm rules that are applied to specific replication streams or instances.

Note   Creating and modifying rules is a Foglight administration function restricted to user groups that have been granted administrator privileges. See "Introduction to Rules" and "Creating and Editing Rules" in the Foglight Administration and Configuration Guide for more information.

Most of the pre-defined rules for SharePlex Manager are disabled by default. A rule must be enabled before you can use it. For more information, see the section, "Enabling SharePlex Manager Rules" on page 43.

To view the pre-defined alert and alarm rules for SharePlex Manager:

1   Open the Foglight Navigation panel.

2   Open the Dashboards menu and select **Administration>Rules & Notifications>Manage Rules**.
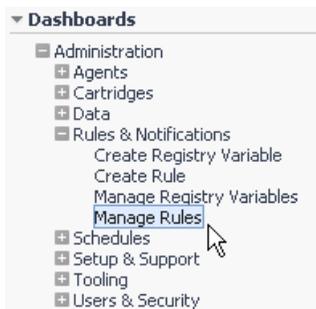
3 Filter the list of rules by the SharePlex Manager Cartridge.

> **Note** The SharePlex Manager Cartridge only includes the pre-defined SharePlex Manager rules. User-defined rules and rules applied to specific SharePlex Manager replication streams and instances are not included in the list.

Types of Rules

Most global SharePlex Manager rules are categorized according to the three factors that most affect performance levels in a SharePlex environment:

- Latency Rules
- Time Remaining Rules
- Queue Size Rules

SharePlex Manager also includes four miscellaneous rules. These include:

Latency Rules

In SharePlex Manager, latency is the amount of time it takes to process a redo log record after it has been posted by Oracle for a particular process. Latency is measured in seconds. Pre-defined Latency Alerts and Alarms include the following:

- SharePlex Capture Process Latency
- SharePlex Read Process Latency
- SharePlex Post Process Latency
- SharePlex Replication Stream Latency

SharePlex Capture Process Latency

Description	Capture Process Latency is represented by the Latency Metric found on the SharePlexCaptureProcess Topology Object. By default, the alert fires when Latency is greater than 2 minutes. The alarm fires when Latency is greater than 10 minutes.
Field	SharePlexCaptureProcess Latency
Alert/Alarm Levels	2 Minutes/10 Minutes

SharePlex Read Process Latency

Description	Read Process Latency is represented by the Latency Metric found on the SharePlexReadProcess Topology Object. By default, the alert fires when Latency is greater than 2 minutes. The alarm fires when Latency is greater than 10 minutes.
Field	SharePlexReadProcess Latency
Alert/Alarm Levels	2 Minutes/10 Minutes

SharePlex Post Process Latency

Description	Post Process Latency is represented by the Latency Metric found on the SharePlexPostProcess Topology Object. By default, the alert fires when Latency is greater than 2 minutes. The alarm fires when Latency is greater than 10 minutes.
Field	SharePlexPostProcess Latency
Alert/Alarm Levels	2 Minutes/10 Minutes

SharePlex Replication Stream Latency

Description	Replication Stream Latency is represented by the Latency Metric found on the SharePlexStream Topology Object. Alert fires when Latency is greater than 5 minutes. The alarm fires when TimeRemaining is greater than 10 minutes.
Field	SharePlexStream Latency
Alert/Alarm Levels	5 Minutes/10 Minutes

Time Remaining Rules

In SharePlex Manager, time remaining metrics indicate the amount of time remaining in seconds to complete processes:

- For source instances, time remaining equals the slowest current Export process plus the time to complete the current Capture and Read processes.

- For target instances, time remaining equals the time to complete the slowest current Post process

Pre-defined Time Remaining Alerts and Alarms include the following:

- SharePlex Capture Process Time Remaining

- SharePlex Read Process Time Remaining

- SharePlex Export Process Time Remaining

- SharePlex Post Process Time Remaining

- SharePlex Source Instance Time Remaining

- SharePlex Source Instance Time Remaining

SharePlex Capture Process Time Remaining

Description	Capture Process Time Remaining is represented by the TimeRemaining Metric found on the SharePlexCaptureProcess Topology Object. By default, the alert fires when TimeRemaining is greater than 5 minutes. The alarm fires when TimeRemaining is greater than 10 minutes.
Field	SharePlexCaptureProcess Time Remaining
Alert/Alarm Levels	5 Minutes/15 Minutes

SharePlex Read Process Time Remaining

Description	Read Process Time Remaining is represented by the TimeRemaining Metric found on the SharePlexReadProcess Topology Object. By default, the alert fires when TimeRemaining is greater than 5 minutes. The alarm fires when TimeRemaining is greater than 10 minutes.
Field	SharePlexReadProcess Time Remaining
Alert/Alarm Levels	5 Minutes/15 Minutes

SharePlex Export Process Time Remaining

Description	Export Process Time Remaining is represented by the TimeRemaining Metric found on the SharePlexExportProcess Topology Object. By default, the alert fires when TimeRemaining is greater than 5 minutes. The alarm fires when TimeRemaining is greater than 10 minutes.
Field	SharePlexExportProcess Time Remaining
Alert/Alarm Levels	5 Minutes/15 Minutes

SharePlex Post Process Time Remaining

Description	Post Process Time Remaining is represented by the TimeRemaining Metric found on the SharePlexPostProcess Topology Object. By default, the alert fires when TimeRemaining is greater than 5 minutes. The alarm fires when TimeRemaining is greater than 10 minutes.
Field	SharePlex Post Process Time Remaining
Alert/Alarm Levels	5 Minutes/15 Minutes

SharePlex Source Instance Time Remaining

Description	Source Instance Time Remaining is represented by the TimeRemaining Metric found on the SharePlexSource Topology Object. Alert fires when TimeRemaining is greater than 5 minutes. The alarm fires when TimeRemaining is greater than 10 minutes.
Field	SharePlex Source Time Remaining
Alert/Alarm Levels	5 Minutes/15 Minutes

SharePlex Target Instance Time Remaining

Description	Target Instance Time Remaining is represented by the TimeRemaining Metric found on the SharePlexTarget Topology Object. Alert fires when TimeRemaining is greater than 5 minutes. The alarm fires when TimeRemaining is greater than 10 minutes.
Field	SharePlex Target Time Remaining
Alert/Alarm Levels	5 Minutes/15 Minutes

Queue Size Rules

In SharePlex Manager, queue size is the number of messages in the backlog for a particular process. Pre-defined Queue Size Alerts and Alarms include the following:

- SharePlex Capture Queue
- SharePlex Export Queue
- SharePlex Post Queue

SharePlex Capture Queue

Description	Capture Queue size is represented by the Backlog Metric found on the SharePlexReadProcess Topology Object. Alert fires when Backlog is greater than 500 messages. The alarm fires when Backlog is greater than 1000 messages
Field	SharePlexReadProcess Backlog
Alert/Alarm Levels	100.000 messages/1,000,000 messages

SharePlex Export Queue

Description	Export Queue size is represented by the Backlog Metric found on the SharePlexExportProcess Topology Object. Alert fires when Backlog is greater than 500 messages. The alarm fires when Backlog is greater than 1000 messages.
Field	SharePlexExportProcess Backlog
Alert/Alarm Levels	100.000 messages/1,000,000 messages

SharePlex Post Queue

Description	Post Queue size is represented by the Backlog Metric found on the SharePlexPostProcess Topology Object. Alert fires when Backlog is greater than 500 messages. The alarm fires when Backlog is greater than 1000 messages.
Field	SharePlexPostProcess Backlog
Alert/Alarm Levels	100.000 messages/1,000,000 messages

Miscellaneous SharePlex Manager Rules

SharePlex Manager includes four additional rules that are triggered when errors occur pertaining to Post processing, stream configuration files, and connections to Web Services. Because these rules are triggered by errors, they are all configured at the alarm level, which means alert levels do not apply. These pre-defined alert and alarm rules include the following:

- SharePlex Manager No Active Configuration
- SharePlex Manager Out of Sync
- SharePlex Manager Bad Configuration File
- SharePlex Manager Web Services Unavailable

Note Except for the SharePlex Manager Bad Configuration File rule, miscellaneous rules are enabled by default.

SharePlex Manager No Active Configuration

Description	This rule fires when there's no active configuration for a SharePlex Source Instance
Field	SharePlexSource

SharePlex Manager Bad Configuration File

Description	This rule fires when an error event with a condition id of 15 exists on a SharePlex Source Instance
Field	SharePlexSource

SharePlex Manager Out of Sync

Description	This rule fires when a post process gets an out of sync error (an error with a condition id of 19).
Field	SharePlexPostProcess

SharePlex Manager Web Services Unavailable

Description	Fires when the agent cannot communicate to the SharePlex Web Services.
Field	SharePlexMonitoringParameters

Enabling SharePlex Manager Rules

Each global SharePlex Manager rule is a multiple-severity type rule and defines conditions for both alerts (warnings) and alarms (fatal errors).

Note   There are many ways to edit or enhance rules in Foglight. See "Introduction to Rules" and "Creating and Editing Rules" in the Foglight Administration and Configuration Guide for more information.

To activate a global rule:

1 Navigate to the Manage Rules page and filter the list of rules by the SharePlex Manager Cartridge.

2 Click the SharePlex Manager global rule you want to enable in the Rule Name table.

The Edit Rule page appears.

3 Click the drop-down button to open the Rule Summary page.

Rule Summary   ◢

4 Click on the icon (🔧) next to the **Rule Status** property to enable the rule.

A confirmation dialog appears.

5 Click **OK** in the confirmation dialog.

The Edit Rule - <Rule Name> page is refreshed.

6 The Rule Summary page to confirm that the rule has been enabled.

After enabling a global SharePlex Manager rule, you can make a copy of it and then use that copy as the basis for a new rule that is applied to specific SharePlex objects. See the section "Specific SharePlex Manager Rules" on page 45 for more information.

Specific SharePlex Manager Rules

By default, the pre-defined global SharePlex Manager alert and alarm rules apply to all the SharePlex objects that are currently monitored. If you want to apply an alert and alarm rule to a specific stream, instance or queue, you can do so by making a copy of the appropriate global rule and adding logic that applies the rule to the object you want.

Note   There are many ways to edit or enhance rules in Foglight. See "Introduction to Rules" and "Creating and Editing Rules" in the Foglight Administration and Configuration Guide for more information.

To make an alert and alarm rule specific:

1 Navigate to the Manage Rules page and filter the list of rules by the SharePlex Manager Cartridge.

2 Click the copy icon (📋) in the Rule Name table to create a copy of the rule and open it for editing

   This opens the Rule Definition page.

3 Specify a unique name for the rule that will make it easily identifiable.

4 In the Rule Scope section, select and delete the topology type value that is currently displayed in the text area.

5 Click the **Topology Type** field and in the drop-down list select the SharePlex topology type you the rule is based on, i.e., SharePlex Capture Process.

   Note   It is necessary to delete the original topology value even if it is the same value you select in the drop-down list.

6 Click the wrench icon (🔧).

   This opens the Scoping Query Editor.

7 Select the replication stream or SharePlex instance to which you want to apply the rule.

8 Click **Insert Query**.

9 Close the Scoping Query Editor and click **Save**.

   At this point, you to need to edit either alert portion of the rule or the alarm portion. The Fatal severity level is the trigger event value for alarms, while the Warning severity level is the trigger event value for alerts.

10 Navigate to the Conditions, Alarms & Actions tab for the new rule.

11 (Optional) Click the **Fatal** severity level to edit the alarm portion of the rule.

This opens the Condition tab for the severity. The conditions for each global SharePlex Manager rule have been pre-defined in the **Condition** field with default trigger event values.

For example, the pre-defined Fatal condition for the SharePlex Read Process Latency rule is the following:

```
#Latency# > 600
```

12 Make the changes you want in the **Condition** field.

For example, if you made a copy of the global rule SharePlex Read Process Latency and are applying it to a specific SharePlex instance, you might edit the rule as follows:

```
#Latency# > 500
```

This way, the alarm would be displayed when the latency on the Read process of the specific SharePlex instance reached 500 seconds, as opposed to 600 seconds for the global rule.

13 (Optional) In the Conditions & Actions tab, click the **Warning** severity level and edit the alert portion of the rule the same way you did the alarm portion.

14 Click **Save**.

Setting Up E-mail Notifications

You can configure a SharePlex Manager alert and alarm rule so that e-mail notifications are sent out to specific users whenever the conditions of that rule are met.

Note   Setting up e-mail notifications for alert and alarm rules is a function of Foglight administration. The following instructions are meant as a quick start guide specifically for SharePlex Manager users. For more detailed instructions, see the section "Working with Rules" in the Foglight Administration and Configuration Guide.

To set up e-mail notifications for a SharePlex Manager rule:

   1   Select **Administration>Rules & Notifications>Manage Registry Variable**.

   2   In the **Filter by Variable Name** field, enter "mail."

   This displays the mail-specific Registry Variables.
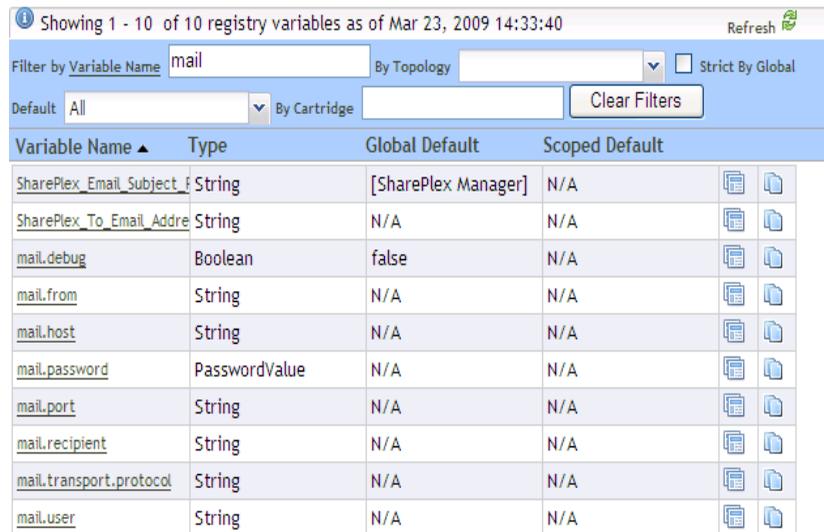
Here you must specify the following e-mail variable settings:

   •   **SharePlex_To_Email_Address** - the recipients of the e-mail

   •   **mail.host** - the e-mail host machine

   •   **mail.from** - the sender's e-mail address

Optionally, you can also set a value for the **SharePlex_Email_Subject_Prefix** variable if you want to specify a different prefix in the e-mail subject line. By default, the prefix is **[SharePlex Manager]**.

> **Note** For detailed descriptions of each e-mail variable, see the Foglight Administration and Configuration Guide.

3 Set the appropriate values for **SharePlex_To_Email_Address, mail.from,** and **mail.host** by clicking on the Variable Name.

This opens the Edit Registry Variable page.

4 Enter the appropriate value into the **Global Default** field and click **Save**.

After configuring the default variables for SharePlex Manager e-mail notifications, you need to enable any rules you want to trigger the e-mail, if they are not enabled already and (optionally) specify different e-mail recipients if you want to override the default recipients at a specific severity level.

> **Note** For instructions on modifying the default behavior and schedule of a SharePlex Manager Rule, contact Quest Support.

5 Select **Administration>Rules & Notifications>Manage Rules**.

6 In the Manage Rules page, select the SharePlex Manager rule you want.

7 Enable the rule, if needed.

> **Note** For instructions on enabling rules, see "Enabling SharePlex Manager Rules" on page 43.

8 (Optional) If you want to override the default e-mail recipient value at a specific rule severity level, do the following:

a Open the severity level at which you want to override the default e-mail recipient value.

b Click the Severity Level Variables tab.

c Click the **To** variable.

d In the Expression/Message field, add the e-mail address of each recipient you want with commas separating multiple entries.

You can also remove the default recipient by deleting the **@ToEmail** value.

A

Appendix: SharePlex Manager Dashboard

Contents

Replication Overview

Purpose

Replication Overview displays a list of each replication stream within the selected replication view.

How to Get Here

The Replication Overview window is the default view displayed in the SharePlex Manager Dashboard. If you switch to Instance Overview, you can return to Replication Overview by clicking **Display Replication Overview**.

Description of the View

Status	Indicates the overall status of the replication in three parts. • The left-hand drum indicates worst-case status of all source-related activities, including the status of SharePlex Manager's connection to the source SharePlex instance, source-related events, the state (running or not running) of Capture and Read processing tasks, and alert/alarm levels for data collected. Yellow indicates a warning and red indicates a failure. • The connector arrow indicates worst-case status of the replication between source and target, including the ability of SharePlex Manager to connect, or not connect, to the source machine. The source-to-target connectivity is represented by the process state (running or not running) for export process on the source or for import processes on all targets. A solid line indicates an active connection and a broken line indicates an inactive or broken connection. • The right-hand drum indicates worst-case status of all target-related activities, including the status of SharePlex Manager's connection to the target SharePlex instance, the events that are target-related, the state (running or not running) of post processing tasks, and alert/alarm levels for data collected. Yellow indicates a warning and red indicates a failure.

> **Note** Position your cursor over a source or target drum to view a pop-up window that summarizes all the errors and warnings that have been reported for each SharePlex instance as well as the status of each process in the replication stream.

Stream Name	Name of the replication stream name.
Instance Name	Names of the source and target SharePlex instances. If there are multiple targets, the data includes the number of target instances instead of each name.

> **Note** You can open the SharePlex Instance Properties window for any of the instances listed. Click in the field and then in the pop-up click the name of the instance you want. For more information on the SharePlex Instance Properties window, see "Editing SharePlex Instances" on page 28.

Description of the View

Latency	The latency of a replication stream is the same as the latency of the slowest Post process in all the target instances included in that replication stream. Post process latency is calculated as the posted time of the target minus the source Redo log time.
	Note Click the sparkline to open an expanded view of the Latency data.
Operation Rate	The operation rate equals the current count of Oracle operations per second minus the previous operation count (current timestamp - previous timestamp).
	Note Click the sparkline to open an expanded view of the Operation Rate data.
Operations in Period	The number of Oracle operations processed over the current view period as configured in Foglight (defaults to the last 4 hours). This metric considers cases where a process is restarted and the number goes down. In this case, the value becomes the count of current operations processed.
Total Operations	The total number of operations completed for all post processes. This value decreases if a process is restarted, but it should continue to increase as operations are executed through the system. As long as data is being processed, this value will constantly change.
	Note This number increases as data is processed, which indicates that SharePlex Manager is running.
Events	The number of error (red) and warning (yellow) SharePlex Manager log entries currently written for each instance.
	Note Click in the Event column to open the embedded Event Details view.

Where To Go Next

Drill down on any Stream Name field. Links to "Instance Detail" on page 60.

Description of Embedded Views

This view is made up of the following embedded views:

Event Details

Event Details

Description	Shows a detailed list of each error and warning posted to the SharePlex Manager event log for each instance in the stream. Events logged for the source instance are listed first, followed by events for each target instance in the stream.
Time	The time the log was posted.
Event Level	The type of log entry. Options include Error, Warning, and Information.
Messages	The system-generated contents of the log.
Event Count	The total number of logs entered for the same event.

Instance Overview

Purpose

The Instance Overview dashboard displays a list of each currently monitored SharePlex instance, organized by replication stream. For each stream, the source SharePlex instance is associated with the source database while each target instance is associated with its respective target database.

How to Get Here

In Replication Overview, click **Display Instance Overview**.

Description of the View

Status	Indicates the status of the source instance and each target instance in the replication stream, represented in a tree view. • The parent drum indicates worst-case status of all source-related activities, including the status of SharePlex Manager's connection to the source SharePlex instance, source-related events, the state (running or not running) of Capture and Read processing tasks, and alert/alarm levels for data collected. • The connector arrow indicates worst-case status of the replication between source and target, including the ability of SharePlex Manager to connect, or not connect, to the source machine. The source-to-target connectivity is represented by the process state (running or not running) for export process on the source or for import processes on all targets. A solid line indicates an active connection and a broken line indicates an inactive or broken connection. • Each child drum indicates worst-case status of all target-related activities, including the status of SharePlex Manager's connection to the target SharePlex instance, the events that are target-related, the state (running or not running) of post processing tasks, and alert/alarm levels for data collected.

> **Note**   Position your cursor over a source or target drum to view a pop-up window that summarizes all the errors and warnings that have been reported for that SharePlex instance, as well as the status of each associated process.

Stream Name	Name of the replication stream.
Instance Name	Names of the SharePlex source and target instances.

> **Note**   Click the name of an instance to open the SharePlex Instance Properties window for that instance. For more information on the SharePlex Instance Properties window, see "Editing SharePlex Instances" on page 28.

Description of the View

Rate	Indicates completed operations per second: • For source instances, indicates the number of operations completed by the Export process. • For target instances, indicates the number of operations completed by the Post process.
	Note Click the sparkline to open an expanded view of the Rate data.
Time Remaining	Indicates the projected amount of time remaining in seconds for processing to return to its baseline operating level. For more information, see "How Time Remaining is Calculated" on page 58.
	Note Click the value to open an expanded view of the Time Remaining data, which includes separate time remaining values for each process (Capture, Read, and Export for source instances and Post for target instances).
Events	The number of error (red) and warning (yellow) SharePlex Manager log entries currently written for each instance.
	Note Click the event log to open the embedded Event Details view.

Where To Go Next

Drill down on any Stream Name field. Links to "Instance Detail" on page 60.

How Time Remaining is Calculated

In the Instance Overview dashboard, the time remaining value reported for each instance is an aggregate of the time remaining values calculated for the individual processes running on that instance:

- For a source instance, the general time remaining value equals the highest time remaining value of all the current Export processes plus the values of the current Capture and Read process.

- For a target instance, the general time remaining value equals the highest time remaining value of all the current Post processes.

For Capture processes, SharePlex Manager bases the time remaining value on the current latency. For Read, Export, and Post processes, the time remaining value is based on the current size of the backlog.

After determining the latency or backlog size for a process, SharePlex Manager compares that number to the baseline, which is 110% of the weekly moving metric

average (latency or backlog). The extra 10% is added to take in account normal fluctuations in latency or backlog sizes.

SharePlex Manager then calculates the amount of time in seconds it should take the process to return to its baseline operating level and reports this projection as the time remaining value. Any time remaining value greater than 0 means that the latency or backlog size is higher than the baseline, while a time remaining rate of 0 means that the latency or backlog size is equal to or less than the baseline.

Note   Because the baseline is a weekly moving average, time remaining values may be misleading within the first week of monitoring the instances in a particular replication stream, especially if the replication stream was discovered while processing a large amount of data. For this reason, SharePlex Manager allows you to reset the baseline time remaining value on a particular replication stream. For more information on resetting the time remaining value, see "Editing Replication Streams" on page 31.

Description of Embedded Views

This view is made up of the following embedded views:

- Event Details

Event Details

Description	Shows a detailed list of each error and warning posted to the SharePlex Manager event log for each instance in the stream. Events logged for the source instance are listed first, followed by events for each target instance in the stream.
Time	The time the log was posted.
Event Level	The type of log entry. Options include Error, Warning, and Information.
Messages	The system-generated contents of the log.
Event Count	The total number of logs entered for the same event.

Instance Detail

Purpose

The Instance Detail view displays detailed information about the source and target instances in a replication stream as well as the status of the Capture, Read and Export processes on the source instance and the Import and Post processes on each target instance.

How to Get Here

In Replication Overview or Instance Overview, click the name of the replication stream you want to view in the Stream Name column.

Description of the View

Status	For the source instance, indicates worst-case status of all source related activities, including the status of SharePlex Manager's connection to the source SharePlex instance, source-related events, the state (running or not running) of Capture and Read processing tasks, and alert/alarm levels for data collected.
	For the target instances, indicates worst-case status of all target-related activities, including the status of SharePlex Manager's connection to the target SharePlex instance, the events that are target-related, the state (running or not running) of Post processing tasks, and alert/alarm levels for data collected.
	Note Position your cursor over a source or target instance to view a pop-up window that summarizes all errors and warnings (if any) reported for that SharePlex instance and related processes.
Instance Name	Names of the SharePlex source and target instances.
	Note Click the name of an instance to open the SharePlex Instance Properties window for that instance. For more information on the SharePlex Instance Properties window, see "Editing SharePlex Instances" on page 28.
Host Name	Names of the machine hosting the source and target instances.
Source DB	Names of the Oracle source database and each of the target databases in the replication stream.

Description of the View

Events	The number of error (red) and warning (yellow) Oracle log entries currently written for the instance.
	Note Click the event log to open the embedded Event Details view.
Process Status	(Capture, Read, Export/Import, and Post) Indicates the status of the process. Green indicates an OK status, yellow indicates an alert status and red indicates an alarm status.
	Note Process statuses are displayed as jeweled disks. The source instance includes three disks for the Capture, Read and Export processes. while each target instance includes a paired set of disks for Import and Post processes. Position your cursor over a process to view a pop-up window that summarizes its status in more detail.
Latency	(Capture, Read, and Post) Indicates the total latency in seconds for the process.
	Note Click the sparkline to open an expanded view of the Latency data.
Queue	(Capture, Export, and Post) Indicates the name of the queue and the number of pending processes.
	Note Queues are displayed as drums, which depending on the number of processes in the respective queue, shown as being empty, partially full, or full.

Where To Go Next

You can view more detailed information about any process displayed in the Instance Detail view by opening the drop-down menu on the jeweled disk on any process and selecting **Show Details**. This links to the following:

- "Capture Process Detail" on page 62
- "Read Process Detail" on page 65
- "Post Process Detail" on page 68
- "Import Process Detail" on page 71
- "Export Process Detail" on page 73

Description of Embedded Views

This view is made up of the following embedded views:

- Event Details

Event Details

Description	Shows a detailed list of each error and warning posted to the Oracle event log for the selected instance.
Time	The time the log was posted.
Event Level	The type of log entry. Options include Error, Warning, and Information.
Messages	The system-generated contents of the log.
Event Count	The total number of logs entered for the same event.

Capture Process Detail

Purpose

The Capture Process Detail view displays various performance-related information about the Capture process of a source SharePlex instance.

How to Get Here

From Instance Detail, open the drop-down menu on a Capture jeweled disk and select **Show Details**.

Description of the View

Status	Indicates worst-case status of all source-related activities, including the status of SharePlex Manager's connection to the source SharePlex instance, source-related events, the state (running or not running) of Capture and Read processing tasks, and alert/alarm levels for data collected.
	Note Position your cursor over a process to view a pop-up window that summarizes its status in more detail
Stream Name	Name of the replication stream.
Instance Name	Name of the SharePlex source instance.
Host Name	Name of the machine hosting the SharePlex instance.
Source DB	The Oracle SID of the source database with the "o." dropped off the front.

Description of the View

Process Status	Indicates if the process is running or not.
State	The current state of the Capture process.
Activation ID	The current activation id.
Checkpoint	The number of checkpoints performed.
Last Record Processed	The date and time of the last redo record process string.
% of Redo Processed	The percentage of the redo records processed displayed as a spark line graph.
	Note Click the sparkline to open an expanded view of the % of Ratio Processed data.
Concurrent Sessions	The number of open sessions displayed as a spark line graph.
	Note Click the sparkline to open an expanded view of the Concurrent Sessions data.
HWM Concurrent Sessions	The high-water mark of open sessions displayed as a spark line graph.
	Note Click the sparkline to open an expanded view of the HWM Concurrent Sessions data.
Events	The number of error (red) and warning (yellow) Oracle log entries currently written for the process.
	Note Click the event log to open the embedded Event Details view.

Description of Embedded Views

This view is made up of the following embedded views:

- Latency
- Transaction Rate
- Operation Rate
- Capture Threads
- Non-Default Parameters
- Event Details

Latency

Description	Shows the latency in seconds of the Capture process. Capture latency is calculated as the current host time minus the Redo log time.

Transaction Rate

Description	The transaction rate equals the number of Capture process transactions per second.

Operation Rate

Description	The operation rate equals the number of Capture process operations per second.

Capture Threads

Description	Shows the details of the Capture Threads table for the source database.
Status	If Down, indicates if there is no data in the redo log number or offset. Otherwise the status is Up.
Instance	The Oracle SID of the source database.
Host Name	Name of the machine hosting the SharePlex instance.
Redo Log	Redo log number.
Offset	Number of bytes from the beginning of the redo log file where the thread is accessed.

Non-Default Parameters

Description	Lists non-default start-up parameters pertaining to the Capture process.
	Note If you have the security rights to modify the parameter values of a particular process, you can click Set Parameters to open the Parameter Management console. Here you can view all the parameters for the process and edit them as needed. If you do not have the security rights, the Set Parameter button is disabled. For more information, see the section, "Managing SharePlex Configuration Files" on page 20.
Parameters	Name of the start-up parameter.
Value	Value of the parameter used when the capture process is started.

Event Details

Description	Shows a detailed list of each error and warning posted to the Oracle event log for the selected Capture process.
Time	The time the log was posted.
Event Level	The type of log entry. Options include Error, Warning, and Information.
Messages	The system-generated contents of the log.
Event Count	The total number of logs entered for the same event.

Read Process Detail

Purpose

The Read Process Detail view displays various performance-related information about the Read Process of a source SharePlex instance.

How to Get Here

From Instance Detail, open the drop-down menu on a Read jeweled disk and select **Show Details**.

Description of the View

Status	Indicates worst-case status of all source-related activities, including the status of SharePlex Manager's connection to the source SharePlex instance, source-related events, the state (running or not running) of Capture and Read processing tasks, and alert/alarm levels for data collected.
	Note Position your cursor over a process to view a pop-up window that summarizes its status in more detail
Stream Name	Name of the replication stream.
Instance Name	Name of the SharePlex instance.
Host Name	Name of the machine hosting the SharePlex instance.
Source DB	The Oracle SID of the source database with the "o." dropped off the front.
Process Status	Indicates if the process is running or not.
State	The current state of the read process.
Activation ID	The current activation id.
Pass Cycle	The number of pass cycles.
Open Cursors	The number of open cursors.
	Note Click the sparkline to open an expanded view of the Open Cursors data.
Cursor Cache Ratio	The cursor cache ratio is defined as: (Cursor cache hit count) / (Cursor cache hit count + Cursor cache miss count).
	Note Click the sparkline to open an expanded view of the Cursor Cache Ratio data.
Last Record Processed	The date and time of the last redo record process string.
Events	The number of error (red) and warning (yellow) Oracle log entries currently written for the process.
	Note Click the event log to open the embedded Event Details view.

Description of Embedded Views

This view is made up of the following embedded views:

- [Latency](#)
- [Transaction Rate](#)
- [Operation Rate](#)
- [Updates](#)
- [Non-Default Parameters](#)
- [Event Details](#)

Latency

Description	Shows the latency in seconds of the Read process on the source instance. Read latency is calculated as the current host time minus the Redo log time.

Transaction Rate

Description	The transaction rate equals the number of Read process transaction per second.

Operation Rate

Description	The operation rate equals the number count of Read process operations per second.

Updates

Description	Total number of Update operations associated with the Read process
Complete Key	Number of Updates with all key columns present.
Key in Cache	Number of Updates with keys provided by the SharePlex instance.
Key from Oracle	Number of Updates with keys fetched from Oracle.
	Note The chart shows the cumulative values for the update metrics when stacked on top of each other. For example, if there's 1 Key from Oracle, 1 Key in Cache and 2 Complete Key updates, the Key from Oracle y-axis will be 1, the Key in Cache y-axis will be 2, and the Complete Key y-axis will be 4.

Non-Default Parameters

Description	Lists non-default start-up parameters of the source database pertaining to the Read process.
	Note If you have the security rights to modify the parameter values of a particular process, you can click Set Parameters to open the Parameter Management console. Here you can view all the parameters for the process and edit them as needed. If you do not have the security rights, the Set Parameter button is disabled. For more information, see the section, "Managing SharePlex Configuration Files" on page 20.
Parameters	Name of the start-up parameter.
Value	Value of the parameter used when the source database is started.

Event Details

Description	Shows a detailed list of each error and warning posted to the Oracle event log for the selected Read process.
Time	The time the log was posted.
Event Level	The type of log entry. Options include Error, Warning, and Information.
Messages	The system-generated contents of the log.
Event Count	The total number of logs entered for the same event.

Post Process Detail

Purpose

The Post Process Detail view displays various performance-related information about the Post Process of a target SharePlex instance.

How to Get Here

From Instance Detail, open the drop-down menu on a Post jeweled disk and select **Show Details**.

Description of the View

Target Status	Indicates worst-case status of all source-related activities, including the status of SharePlex Manager's connection to the source SharePlex instance, source-related events, the state (running or not running) of Capture and Read processing tasks, and alert/alarm levels for data collected.
	Note Position your cursor over a process to view a pop-up window that summarizes its status in more detail.
Stream Name	Name of the replication stream.
Target Instance Name	Name of the SharePlex instance.
Target Host Name	Name of the machine hosting the SharePlex instance.
Process Status	Indicates if the process is running or not.
Queue Name	Name of the Post process queue.
Source DB	The Oracle SID of the source database with the "o." dropped off the front.
Target DB	The Oracle SID of the target database with the "o." dropped off the front.
State	The current state of the post process.
Activation ID	The current activation id.
Checkpoint	Read release messages.
Last Record Processed	Redo log time.
SQL Cache Hit Ratio	The percentage of data pages found in memory defined as: sqlcache_hits*100/(insert_count+update_count+delete_count).
Events	The number of error (red) and warning (yellow) Oracle log entries currently written for the instance.
	Note Click the event log to open the embedded Event Details view.

Description of Embedded Views

This view is made up of the following embedded views:

- Latency
- Transaction Rate
- Operation Rate
- Operation Mix
- Transaction Concurrency
- Non-Default Parameters
- Event Details

Latency

Description	Shows the latency in seconds of the Post process on a target instance. Post latency is calculated as the posted time of target minus source Redo log time.

Transaction Rate

Description	The transaction rate equals the number of Post process transaction per second.

Operation Rate

Description	The operation rate equals the number of Post process operations per second.

Operation Mix

Description	Shows the total number of Insert, Delete, and Update operations related to Post processing.
Inserts	Number of Insert operations.
Deletes	Number of Delete operations.
Updates	Number of Update operations.

Transaction Concurrency

Description	Total number of open transactions through replication.

Non-Default Parameters

Description	Lists non-default start-up parameters of the source database pertaining to the Post process.
	Note If you have the security rights to modify the parameter values of a particular process, you can click Set Parameters to open the Parameter Management console. Here you can view all the parameters for the process and edit them as needed. If you do not have the security rights, the Set Parameter button is disabled. For more information, see the section, "Managing SharePlex Configuration Files" on page 20.
Parameters	Name of the start-up parameter.
Value	Value of the parameter used when the source database is started.

Event Details

Description	Shows a detailed list of each error and warning posted to the Oracle event log for the selected Post process.
Time	The time the log was posted.
Event Level	The type of log entry. Options include Error, Warning, and Information.
Messages	The system-generated contents of the log.
Event Count	The total number of logs entered for the same event.

Import Process Detail

Purpose

The Import Process Detail view displays various performance-related information about the Import Process of a target SharePlex instance.

How to Get Here

From Instance Detail, open the drop-down menu on a Read jeweled disk and select
Show Details.

Description of the View

Target Status	Indicates worst-case status of all source-related activities, including the status of SharePlex Manager's connection to the source SharePlex instance, source-related events, the state (running or not running) of Capture and Read processing tasks, and alert/alarm levels for data collected.
	Note Position your cursor over a process to view a pop-up window that summarizes its status in more detail.
Stream Name	Name of the replication stream.
Target Instance Name	Name of the SharePlex instance.
Target Host Name	Name of the machine hosting the SharePlex instance.
Process Status	Indicates if the process is running or not.
From Export	Name of the export queue.
Source Instance	Name of the source instance.
Events	The number of error (red) and warning (yellow) Oracle log entries currently written for the instance.
	Note Click the event log to open the embedded Event Details view.

Description of Embedded Views

This view is made up of the following embedded views:

- Rate
- Non-Default Parameters
- Event Details

Rate

Description	The number of messages being imported per second.

Non-Default Parameters

Description	Lists non-default start-up parameters of the source database pertaining to the Import process.
	Note If you have the security rights to modify the parameter values of a particular process, you can click Set Parameters to open the Parameter Management console. Here you can view all the parameters for the process and edit them as needed. If you do not have the security rights, the Set Parameter button is disabled. For more information, see the section, "Managing SharePlex Configuration Files" on page 20.
Parameters	Name of the start-up parameter.
Value	Value of the parameter used when the source database is started.

Event Details

Description	Shows a detailed list of each error and warning posted to the Oracle event log for the selected Import process.
Time	The time the log was posted.
Event Level	The type of log entry. Options include Error, Warning, and Information.
Messages	The system-generated contents of the log.
Event Count	The total number of logs entered for the same event.

Export Process Detail

Purpose

The Export Process Detail view displays various performance-related information about the Export Process of a source SharePlex instance.

How to Get Here

From Instance Detail, open the drop-down menu on a Read jeweled disk and select
Show Details.

Description of the View

Status	Indicates worst-case status of all source-related activities, including the status of SharePlex Manager's connection to the source SharePlex instance, source-related events, the state (running or not running) of Capture and Read processing tasks, and alert/alarm levels for data collected.
	Note Position your cursor over a process to view a pop-up window that summarizes its status in more detail.
Stream Name	Name of the replication stream.
Instance Name	Name of the SharePlex instance.
Host Name	Name of the machine hosting the SharePlex instance.
Process Status	Indicates if the Export process is running or not.
Queue Name	Name of export queue.
Target Instance	Name of the target instance.
Messages	Number of exported messages.
Events	The number of error (red) and warning (yellow) Oracle log entries currently written for the instance.
	Note Click the event log to open the embedded Event Details view.

Description of Embedded Views

This view is made up of the following embedded views:

- Rate
- Non-Default Parameters
- Event Details

Rate

Description	The number of messages being exported per second.

Non-Default Parameters

Description	Lists non-default start-up parameters of the source database pertaining to the Export process.
	Note If you have the security rights to modify the parameter values of a particular process, you can click Set Parameters to open the Parameter Management console. Here you can view all the parameters for the process and edit them as needed. If you do not have the security rights, the Set Parameter button is disabled. For more information, see the section, "Managing SharePlex Configuration Files" on page 20.
Parameters	Name of the start-up parameter.
Value	Value of the parameter used when the source database is started.

Event Details

| Description	Shows a detailed list of each error and warning posted to the Oracle event log for the selected Export process.
Time	The time the log was posted.
Event Level	The type of log entry. Options include Error, Warning, and Information.
Messages	The system-generated contents of the log.
Event Count	The total number of logs entered for the same event.

Control Commands

Users that have been granted control rights for a particular replication stream can execute control commands on the processes within that stream directly from the Instance Detail window. In the case of Capture, Read, and Post processes, users can also execute commands from the menu bar in the Process Detail window. SharePlex Manager currently supports the following control commands:

- **Start** - Starts a stopped process
- **Stop** - Stops a process once it completes any currently active transactions
- **Abort** - Stops a process immediately

Note   Regarding control commands and security:

- The right to execute control commands are given on a per-stream and per-user basis. Control menu options and buttons on a particular replication stream are only available for users that have been given control rights for that stream by a SharePlex Manager administrator.

- Control permissions in SharePlex Manager do not correspond to user authorization levels defined in SharePlex. This means that while users may have control permissions on a replication stream in SharePlex Manager, they may still be unable to execute control commands because the username that was specified to connect to the SharePlex instances does not have the proper authorization level. See your SharePlex documentation for more information on authorization levels.

To execute control commands from the Instance Detail window, open the drop-down menu next to the process and select the command you want to execute.

```
  Capture
Show Details...
Stop
Abort
```
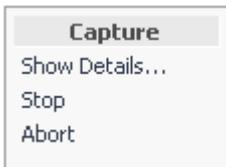
If the process is currently stopped, the only option is **Start**. If the process is currently running, options include **Stop** and **Abort**.

To execute control commands for a Capture, Read, Export, Import, and Post process from a Process Detail window, open the drop-down menu next to the process and select **Show Details**. Then in the Process Details window, click the command button you want to execute in the menu bar.

Stop Capture   X Abort Capture   Back to Instance Detail

While the command is being processed a pending icon is displayed.

Stopping Capture Process

Note   There is a delay between the moment a control command is executed on a replication process and the moment the data displayed in SharePlex Manager is updated. This means that if two users attempt to execute a command against the same process at approximately the same time, one of the users may receive an error message stating that the command cannot be executed.

Stopped and aborted process are indicated by a yellow jewel disk and the process status, **Stopped by user.**

Viewing, Clearing and Ignoring Events

SharePlex Manager allows you to view the SharePlex event log generated for the associated SharePlex instance. Also, you can use SharePlex Manager to remove or ignore clearable error and warning messages from event logs. Clearing messages removes them from the status database, but still retains them in the overall event log, which helps keeps the log up-to-date with the most current information. Ignoring an event, on the other hand, configures SharePlex Manager to stop issuing warning and error alerts for the event but does not remove the event itself from the status database.

To view, clear and ignore events, you must have control permissions for the replication stream that the SharePlex instance belongs to.

Viewing Events

In SharePlex Manager, Oracle event logs are instance-specific, which means there are not separate logs for replication streams or individual processes. To view an event log, either click the log icon in the Events column in the Instance Overview or Instance Details window, or click **View Event Log** in an Event Details window. This opens the Oracle event log for the associated instance. In the Replication Overview window, the Event Details window features a separate View Event Log button for each instance in the replication stream.

Note	Trying to view especially large event logs (in excess of 10 million lines) may result in connection errors.

Clearing Events

You can remove clearable errors and warnings from an Oracle event log. Clearable events are indicated by a corresponding checkbox in an Event Details window. Clear the events you want by selecting the corresponding checkbox of each event and clicking **Clear Events**.

Note	Clearable events include certain types of errors and warnings but not informational entries. For more information on clearable events, see your SharePlex documentation.

Ignoring Events

You can configure SharePlex Manager to ignore clearable events that automatically trigger warning and error notifications but which do not otherwise affect performance. Ignoring an event does not remove it from the status database or keep it from being written to the event log file; it only alters the way the data is presented to the user in SharePlex Manager.

After ignoring an event, you can enable it again at any time.

To ignore an event, select its corresponding checkbox and click **Ignore Events**. Ignored events are indicated in the Event Level column by the status "Ignored." To enable an ignored event, select its corresponding checkbox and click **Enable Ignored Events.**

B

Appendix: Starting SharePlex Web Services

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Overview

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Overview

SharePlex Web Services must be running to monitor your SharePlex instances. On Windows, SharePlex Web Services starts automatically at reboot. On Linux, you can start SharePlex Web Services manually, or you can configure it to start at reboot.

Note Before starting SharePlex Web Services, be aware of the following:

- It is not recommended that you start multiple instances of SharePlex Web Services on different ports using the same installation. You should only run one instance of SharePlex Web Services at a time.

- Occasionally you may receive an error message that SharePlex Web Services is not available at the specified port. This may be because SharePlex Web Services is down, or it may be because SharePlex Web Services is running but not responding. In either case, you should make sure SharePlex Web Services is not running by executing a *stop* command before executing a *start* command. If you execute a *stop* command when SharePlex Web Services is already stopped you will receive an error message which you can safely ignore.

Windows

As a Windows NT service, SharePlex Web Services is configured to start automatically when the machine reboots. However, if it is necessary to start SharePlex Web Services manually (for example, due to a port conflict), you can start it manually in two ways:

- By going to the **Start** menu and selecting **All Programs>Quest Software>SharePlex Manager**>**Start SharePlex Web Services.**

  Note   To stop SharePlex Web Services, select the **Stop SharePlex Web Services** option

- By executing the command `web-services start` from the *web-services.bat* file located in the *<install_dir>\Webservices\bin* directory.

  The commands are:

  ```
  web-services start
  ```

  Note   To stop SharePlex Web Services, execute the command `web-services stop`.

Linux

After the installation is complete, you can start SharePlex Web Services manually, or you can configure it to start at reboot.

1 To start SharePlex Web Services manually on Linux, execute the following command:

```
sh <install_dir>/Webservices/bin/web-services.sh start
```

Note To stop SharePlex Web Services for Linux, execute
`sh <install_dir>/Webservices/bin/web-services.sh stop`. For
Windows, close the window it is running in.

If started successfully, SharePlex Web Services writes log entries to the console that indicate it's running. For example:

$ sh ./bin/web-services.sh start

Activated on port 3000: <process entry from ps>

2 To configure SharePlex Web Services to start at reboot, do the following:

a Create the file */etc/init.d/spo-web-services* with the following content (assumes that Java is installed in the default *<install_dir>/jre* directory and the SharePlex Web Services is installed in *<install_dir>/Webservices/bin*):

```
#!/bin/sh

JAVA_HOME=<install_dir>/jre
PATH=/bin:/usr/bin:/usr/local/bin

export JAVA_HOME PATH

sh <install_dir>/Webservices/bin/web-services.sh "${@}"

#!/bin/bash

#

# SharePlex for Oracle Web Services

#

# chkconfig: 35 <start priority> <stop priority>

# description: SharePlex for Oracle Web Services

JAVA_HOME=<install_dir>/jre

PATH=/bin:/usr/bin:/usr/local/bin

export JAVA_HOME PATH

sh <install_dir>/Webservices/bin/web-services.sh "${@}"
```

Replace <install_dir> with the directory for the installation of SharePlex Manager.

Note   Unless there is a good reason to the contrary, the <endpriority> should be equal to 100 minus <startpriority>. <startpriority> is the "priority" weight for starting the service, while <endpriority> is the "priority" weight for stopping the service. Services are started and stopped in numerical order starting at 0, e.g., 90 for <startpriority> and 10 for <endpriority>.

Replace <start priority> and <stop priority> with

b Use the chkconfig command to configure the script to start at boot

[root@hostname dir]# /sbin/chkconfig --level 35 spo-web-services on

c Verify the installation with

[root@hostname dir]# service spo-web-services status

SharePlex Web Services is configured to start on next reboot.

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