



Disaster Recovery System Administration Guide for Cisco Unified Expert Advisor, Release 7.6(1)

May 2009

This guide provides an overview of the Disaster Recovery System (DRS), describes how to use the DRS, and provides procedures for completing various backup-related tasks and restore-related tasks. This guide serves as a reference and procedural guide that is intended for users of Cisco Unified Expert Advisor and other Cisco Unified Communications applications.



Note

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<http://www.cisco.com/go/ea>

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What is DRS?

The Disaster Recovery System (DRS), which can be invoked from Cisco Unified Expert Advisor operations console, provides full data backup and restore capabilities for all servers in the cluster. The DRS allows you to perform regularly scheduled automatic or user-invoked data backups.

The DRS performs a cluster-level backup, which means that it collects backups for all servers in a Cisco Unified Expert Advisor cluster to a central location and archives the backup data to physical storage device.

When restoring system data, you can choose which servers in the cluster you want to restore.

The DRS includes a user interface and a distributed system architecture to perform the following functions:

- Backup and restore tasks
- Schedule backups
- Archive backups to a physical tape drive or remote SFTP server

The DRS contains two key capabilities, Master Agent and Local Agent. The master agent coordinates backup and restore activity with local agents.

The system automatically activates both the master agent and the local agent on all servers in the cluster.

**Caution**

Schedule backups during off-peak hours to avoid call-processing interruptions and impact to service.

Reference Tables for Backup and Restore Procedures

The tables in this section provide a quick reference for the backup and restore procedures.

**Caution**

Backup and purge cannot occur within three hours of each other.

Backup Quick Reference

[Table 2](#) provides a quick, high-level reference of the major steps required to perform a backup procedure using the DRS.

Table 1 Major Steps for Performing a Backup Procedure

Action	Reference
Create storage location on which to back up data.	“Managing Backup Devices” section on page 6
Create and edit backup schedules to back up data on a schedule. Note Either a manual or a scheduled backup backs up the whole cluster.	“Creating and Editing Backup Schedules” section on page 7
Enable and disable backup schedules to back up data.	“Enabling, Disabling, and Deleting Schedules” section on page 8
Optionally, run a manual backup.	“Starting a Manual Backup” section on page 9
Check the status of the backup—while a backup is running, you can check the status of the current backup job.	“Checking Backup Status” section on page 9

Restore Quick Reference

[Table 2](#) provides a quick, high-level reference of the major steps required to perform a restore procedure using DRS.

Table 2 Major Steps for Performing a Restore Procedure

Action	Reference
Choose Storage Location—You must first choose the storage location from which you want to restore a backup version.	“Restoring a Backup Version” section on page 10
Choose the Backup Version—From a list of available files, choose the backup version that you want to restore.	
Choose Features—From the list of available features, choose the features that you want to restore.	
Choose Servers—If the feature was backed up from multiple servers, you must choose the servers that you want to restore.	
Check the Status of the Restore—While the restore process is running, you can check the status of the current restore job.	“Viewing the Restore Status” section on page 15

Supported Feature Components

For each selected feature, the system automatically backs up all components. If you select the *CUEA* feature, the system backs up all components and files within the Cisco Unified Expert Advisor (see [Table 3](#)).

Table 3 *Component Details for the Cisco Unified Expert Advisor Option*

Component	Details
Cisco Unified Expert Advisor database (EADB)	Stores configuration information for the entire system. This database is installed on all servers in the Cisco Unified Expert Advisor cluster.
Platform (PLATFORM)	Stores certificate and licensing information.
Cisco Unified Expert Advisor configuration (EA_CONFIG)	Stores OAMP, CLI, RTMT, SNMP, license, and serviceability information.
Historical database (HRDB)	Stores data used in the historical reporting templates as well as system tables for the reporting server. This database is installed on the reporting server only.

System Requirements

Make sure that the DRF services (Cisco DRF master and local) are running.



Note

DRF refers to the Disaster Recovery Framework (DRF) which provides the customer interface for the disaster recovery process. DRF itself, does not backup or restore any data—it merely provides a user interface and set of tools/utilities to perform different DRS tasks.

Make sure that Cisco Unified Expert Advisor is running on all servers in the cluster.

To back up data to a remote device on the network, you must have an SFTP server configured. The following SFTP servers are supported and recommended, but you may use any SFTP server:

- Open SSH (for Unix systems)
- Cygwin (refer to <http://sshtwindows.sourceforge.net/>)
- freeFTPD (refer to <http://www.freeftpd.com/?ctt=download>)

How to Access the DRS



Note

You set the Administrator username and password during Cisco Unified Expert Advisor installation, and you can change the Administrator password or set up a new Administrator account by using the Command Line Interface (CLI). Refer to the *Cisco Unified Operating System Administration Guide for Cisco Unified Expert Advisor* for more information.

**Tip**

Only users with *superuser* privilege in Cisco Unified Expert Advisor can access DRS. Refer to the *Cisco Unified Operating System Administration Guide for Cisco Unified Expert Advisor* for more information.

Method 1

You can also directly access DRS for the Cisco Unified Expert Advisor directly by entering the following URL:

http://server-name/drf.

where **drf** refers to the Disaster Recovery Framework (DRF) which provides the customer interface for the disaster recovery process. DRF itself, does not backup or restore any data—it merely provides a user interface and set of tools/utilities to perform different DRS tasks.

Method 2

Alternately, you can access this console through the Cisco Unified Expert Advisor operations console as provided in the following procedure.

Procedure

-
- Step 1** Access the DRS operations console (see [How to Access the DRS, page 4](#))
- Step 2** Log in to Cisco Unified Expert Advisor operations console, choose **Disaster Recovery System** from the **Navigation** menu in the upper, right corner of the Cisco Unified Expert Advisor operations console window,.
- Step 3** Click **Go**.
- The DRS Logon window displays.
-

Master Agent Duties and Activation

The system automatically activates the master agent (background process in DRS) on the server.

In a cluster, the master agent is automatically activated on all servers in the cluster, but only the master agent running on the publisher server is fully active.

Duties That the Master Agent Performs

The master agent performs the following duties:

- The master agent stores systemwide component registration information.
- The master agent maintains a complete set of scheduled tasks in the database. When it receives updates from the user interface, the master agent sends executable tasks to the applicable local agents, as scheduled. (Local agents execute immediate-backup tasks without delay.)
- You access the master agent through the DRS user interface to perform activities such as configuring storage locations, scheduling backups by adding new backup schedules, viewing or updating an existing schedule, displaying status of executed schedules, and performing system restoration.
- The master agent stores backup data on a locally attached tape drive or a remote network location.

Local Agent Duties and Activation

The server also has a local agent (background process in DRS) to perform backup and restore functions.

Each server in a Cisco Unified Expert Advisor cluster, including the server that contains the master agent, must have its own local agent to perform backup and restore functions for its server.


Note

By default, a local agent is automatically activated on each server in the cluster.

Duties That Local Agents Perform

The local agent runs backup and restore scripts on the server.

In a cluster, the local agent runs backup and restore scripts on each server in the cluster.

Managing Backup Devices

Before using the DRS, you must configure the locations where you want the backup versions to be stored. You can configure up to 10 backup devices.

Perform the following steps to configure backup devices.

Procedure

-
- Step 1** Access the DRS operations console (see [How to Access the DRS, page 4](#))
- Step 2** Log in to the DRS by using the same Administrator username and password that you use for Cisco Unified Expert Advisor operations console.
- Step 3** Navigate to **Backup > Backup Device**.
The Backup Device List window displays.
- Step 4** To configure a new backup device, click **Add New**.
- Step 5** To edit a backup device, click on the required device in the Backup Device list.
The Backup Device window displays.
- Step 6** In the **Backup device name** field, enter the backup device name.



Note The backup device name may contain only alphanumeric characters, spaces (), dashes (-) and underscores (_). No other characters are allowed.

- Step 7** Choose one of the following backup devices and enter the appropriate field values in the Select Destination area:
- **Tape Device**—Stores the backup version on a locally attached tape drive. Choose the appropriate tape device from the list.



Note You cannot span tapes or store more than one backup per tape.

- **Network Directory**—Stores the backup version on a networked drive that is accessed through an SFTP connection. Enter the following required information:
 - **Server name:** Name or IP address of the network server
 - **Path name:** Path name for the directory where you want to store the backup version
 - **User name:** Valid username for an account on the remote system
 - **Password:** Valid password for the account on the remote system
 - **Number of backups to store on Network Directory:** The number of backups to store on this network directory.



Note You must have access to an SFTP server to configure a network storage location. The SFTP path must exist prior to the backup. The account that is used to access the SFTP server must have write permission for the selected path.

Step 8 To update these settings, click **Save**.



Note After you click the **Save** button, the DRS master agent validates the selected backup device. If the user name, password, server name, or directory path is invalid, the save will fail.

Step 9 To delete a backup device, select it in the Backup Device list, then click **Delete Selected**.



Note You cannot delete a backup device that is configured as the backup device in a backup schedule.

Creating and Editing Backup Schedules

You can create up to 10 backup schedules. Each backup schedule has its own set of properties, including a schedule for automatic backups, the set of features to back up, and a storage location.



Caution

Schedule backups during off-peak hours to avoid call-processing interruptions and impact to service. Backup and purge cannot occur within three hours of each other.

Perform the following steps to manage backup schedules:

Procedure

- Step 1** Access the DRS operations console (see [How to Access the DRS, page 4](#))
- Step 2** Log in to the DRS by using the same Administrator username and password that you use for Cisco Unified Operating System administration console for Cisco Unified Expert Advisor.
- Step 3** Navigate to **Backup > Scheduler**.
The Schedule List window displays.

Step 4 Perform one of the following steps to add a new schedule or edit an existing schedule:

- a. To create a new schedule, click **Add New**.
- b. To configure an existing schedule, click its name in the **Schedule List** column.

The scheduler window displays.

Step 5 Enter a schedule name in the **Schedule Name** field.



Note You cannot change the name of the default schedule.

Step 6 In the **Select Backup Device** area, select the backup device.

Step 7 Select the check box next to the CUEA feature to select the Cisco Unified Expert Advisor.

Step 8 In the **Start Backup at** area, choose the date and time when you want the backup to begin.

Step 9 In the **Frequency** area, choose the frequency at which you want the backup to occur: Once, Daily, Weekly, or Monthly. If you choose Weekly, you can also choose the days of the week when the backup will occur.

Step 10 To update these settings, click **Save**.

Step 11 To enable the schedule, click **Enable Schedule**.

The next backup occurs automatically at the time that you set.



Note Ensure that all servers in the cluster are running the same version of Cisco Unified Expert Advisor and are reachable through the network. Servers that are not running at the time of the scheduled backup will not be backed up.

Step 12 To disable the schedule, click **Disable Schedule**.

Enabling, Disabling, and Deleting Schedules

Perform the following steps to enable, disable, or delete schedules.

Procedure

Step 1 Access the DRS operations console (see [How to Access the DRS, page 4](#)).

Step 2 Log in to the DRS by using the same Administrator username and password that you use for Cisco Unified Operating System administration console for Cisco Unified Expert Advisor.

Step 3 Navigate to **Backup > Scheduler**.

The Schedule List window displays.

Step 4 Check the check boxes next to the schedules that you want to modify.

- To select all schedules, click **Select All**.
- To clear all check boxes, click **Clear All**.

Step 5 Select the required task from the following choices:

- To enable the selected schedules, click **Enable Selected Schedules**.
- To disable the selected schedules, click **Disable Selected Schedules**.
- To delete the selected schedules, click **Delete Selected**.

Starting a Manual Backup



Caution

Backup and purge cannot occur within three hours of each other.

Perform the following steps to start a manual backup.

Procedure

-
- Step 1** Access the DRS operations console (see [How to Access the DRS, page 4](#))
- Step 2** Log in to the DRS by using the same Administrator username and password that you use for Cisco Unified Operating System administration console for Cisco Unified Expert Advisor.
- Step 3** Navigate to **Backup > Manual Backup**. The Manual Backup window displays.
- Step 4** Select a backup device in the **Select Backup Device** drop-down list.
- Step 5** Select the check box next to the CUEA feature to select the Cisco Unified Expert Advisor.
- Step 6** To start the manual backup, click **Start Backup**.
- The backup progresses and the status summary is displayed on the screen.
-

Checking Backup Status

You can check the status of the current backup job and cancel the current backup job. To view the backup history, see the [“Viewing the Backup and Restore History”](#) section on page 16.

Checking the Status of the Current Backup Job



Caution

Backup and purge cannot occur within three hours of each other.

Perform the following steps to check the status of the current backup job.

Procedure

-
- Step 1** Access the DRS operations console (see [How to Access the DRS, page 4](#))
- Step 2** Log in to the DRS by using the same Administrator username and password that you use for Cisco Unified Operating System administration console for Cisco Unified Expert Advisor.

Step 3 Navigate to **Backup > Current Status**. The Backup Status window displays.

Step 4 To view the backup log file, click the log filename link.

Step 5 To cancel the current backup, click **Cancel Backup**.



Note The backup cancels after the current component has completed its backup operation.

Restoring a Backup Version

The Restore Wizard walks you through the steps that are required to restore a backup version.



Tip

To restore all servers in a cluster, see the [“Restoring a Cluster” section on page 11](#).



Caution

Before you restore Cisco Unified Expert Advisor, ensure that the version installed on the server matches the version of the backup version that you want to restore.

Perform the following steps to restore a backup version.

Procedure

Step 1 Access the DRS operations console (see [How to Access the DRS, page 4](#))

Step 2 Log in to the DRS by using the same Administrator username and password that you use for Cisco Unified Operating System administration console for Cisco Unified Expert Advisor.

Step 3 Navigate to **Restore > Restore Wizard**.

The Restore Wizard Step 1 window displays.

Step 4 Choose the backup device from which to restore in the **Select Backup Device** area, then click **Next**.

The Restore Wizard Step 2 window displays.

Step 5 Choose the backup file version that you want to restore.



Note The backup file version name indicates the date and time that the system created the backup version.

Step 6 Click **Next**.

The Restore Wizard Step 3 window displays.

Step 7 Choose the features that you want to restore. Select the check box next to the CUEA feature to select the Cisco Unified Expert Advisor.

Step 8 Click **Next**.

The Restore Wizard Step 4 window displays.

Step 9 Choose the appropriate server to be restored.

**Caution**

After you choose the server to which you want the data restored, any existing data on that server gets overwritten.

Step 10 To start restoring the data, click **Restore**.

The restore status details are displayed in this window as the restore progresses.

Step 11 Your data gets restored on the servers that you chose. To view the status of the restore, see the “[Viewing the Restore Status](#)” section on page 15.

Step 12 Restart the server. For more information on restarting, see the *Cisco Unified Operating System Administration Guide for Cisco Unified Expert Advisor*.

**Note**

Depending on the size of your database and the components that you choose to restore, the system can require one hour or more to restore.

Restoring a Cluster

**Tip**

See the Hardware and System Software Specification (Bill of Materials) at the following web site to obtain a complete list of supported hardware and software information for Cisco Unified Expert Advisor: http://www.cisco.com/en/US/products/sw/custcosw/ps1001/products_user_guide_list.html

If a major failure or a hardware upgrade occurs, you may need to restore all servers in the cluster. While restoring data for a cluster, you must select each server in the cluster and each image individually. First restore the publisher and then restore the other servers after the publisher.

A cluster in the Cisco Unified Expert Advisor environment is made up of three servers:

- The primary server (also referred to as a runtime server or a publisher or active server). This is the first runtime server installed in a cluster.
- Subsequent servers in the cluster (also referred to as subscribers):
 - The High Availability (HA) server (also referred to as a runtime server or standby server or secondary server).
 - The reporting server (also referred to as the historical reporting server). This is an optional server.

**Note**

In Cisco Unified Expert Advisor, the terms publisher and subscriber are used in the context of database replication. The Cisco Unified Expert Advisor publisher (primary server) publishes OAMP configuration data. The Cisco Unified Expert Advisor subscribers (high availability and reporting servers) subscribe to the data.

**Caution**

DRS does not block restore attempts between minor restore versions of the Cisco Unified Expert Advisor software. Therefore, performing a restore between certain minor versions of previously-installed Cisco Unified Expert Advisor software may cause system issues. Exercise caution when using the restore

function. DRS displays a warning message explaining the consequences before such restores are about to be performed. We recommend you reinstall the system with the earlier version before performing a restore. Otherwise, downgrades to earlier installations of major versions are blocked by DRS.

The restore for each server depends on when your last back up was initiated. [Table 5](#) provides a general guideline for restore scenarios.

Table 4 List of Restored Components in the Cisco Unified Expert Advisor Cluster

Components to be Restored	Publisher (first node in cluster)	Subscribers (subsequent servers in the cluster)	
	Primary Runtime Server (Publisher/Active)	High Availability Runtime Server (Secondary/Standby)	Historical Reporting Server (Reporting)
Cisco Unified Expert Advisor database (EADB)	Yes	No	No
Platform (PLATFORM)	Yes	Yes	Yes
Cisco Unified Expert Advisor configuration (EA_CONFIG)	Maybe. This depends on the delta between the current version and the last backed-up version.		Yes
Historical database (HRDB)	No	No	Yes



Note

The term node and server are used interchangeably in this document and refers to a computer that provides services or resources to other computers (called clients) connected to it through a network.

Perform the following steps to restore an entire cluster:

Procedure

Step 1 Shut down all servers in the cluster.



Note

Refer to the *Cisco Unified Expert Advisor Option OAMP Configuration Guide* for more information on starting, shutting down, or restarting a server and its associated impact on a Cisco Unified Expert Advisor cluster.

Step 2 Restore the first cluster server.

See the “[Restoring the Primary Server](#)” section on page 13.

Step 3 Restore the subsequent cluster servers in the same order in which they were initially installed.

See the “[Restoring Subsequent Cluster Servers](#)” section on page 14.

The following sections provide the procedures for restoring cluster servers:

- “[Restoring the Primary Server](#)” section on page 13
- “[Restoring Subsequent Cluster Servers](#)” section on page 14
- “[Restoring License Information](#)” section on page 15

Restoring the Primary Server

Perform the following steps to restore primary server or publisher server in the cluster.



Caution You must shut down subsequent cluster servers before restoring the first cluster server.

Procedure

Step 1 Perform a fresh installation of Cisco Unified Expert Advisor on the first server or publisher server. For more information on installing Cisco Unified Expert Advisor, see *Installation Guide for Cisco Unified Expert Advisor*.



Caution Before you restore the Cisco Unified Expert Advisor, ensure that the Cisco Unified Expert Advisor version that is installed on the server matches the version of the backup version to restore.

Step 2 Access the DRS operations console (see [How to Access the DRS, page 4](#))

Step 3 Log in to the DRS by using the same Administrator username and password that you use for Cisco Unified Operating System administration console for Cisco Unified Expert Advisor.

Step 4 Navigate to **Restore > Restore Wizard**.

The Restore Wizard Step 1 window displays.

Step 5 In the **Select Backup Device** area, choose the backup device from which to restore.

Step 6 Click **Next**.

The Restore Wizard Step 2 window displays.

Step 7 Choose the backup version that you want to restore.



Note The backup version name indicates the date and time that the system created the backup version.

Step 8 Click **Next**.

The Restore Wizard Step 3 window displays.

Step 9 Choose the features that you want to restore.



Note Only the features that were backed up to the file that you chose display.

Step 10 Click **Next**. The Restore Wizard Step 4 window displays.

Step 11 To start restoring the data, click **Restore**.

Step 12 When you are prompted to choose the servers to restore, choose only the primary server (the publisher). Your data is restored on the publisher server.

To view the status of the restore, see the [“Viewing the Restore Status” section on page 15](#).



Note During the restore process, do not perform any tasks with Cisco Unified Expert Advisor operations console or User Pages.

- Step 13** Restart the server. For more information on restarting, see the *Cisco Unified Operating System Administration Guide for Cisco Unified Expert Advisor*.



Note Depending on the size of your database and the components that you choose to restore, the system can require one hour or more to restore.

- Step 14** After the first server restarts, continue with the “[Restoring Subsequent Cluster Servers](#)” section on [page 14](#).

Restoring Subsequent Cluster Servers

Perform the following steps to restore subsequent servers in the cluster.



Caution

When restoring an entire cluster, you must restore the first server, then restore the subsequent servers in the order in which they were initially installed. For more information, see the “[Restoring a Cluster](#)” section on [page 11](#).

Procedure

- Step 1** Perform a fresh installation of Cisco Unified Expert Advisor on the subsequent servers. For more information on installing Cisco Unified Expert Advisor, see *Installation Guide for Cisco Unified Expert Advisor*.



Caution

Before you restore Cisco Unified Expert Advisor, ensure that the Cisco Unified Expert Advisor version that is installed on the server matches the version of the backup version to restore.

- Step 2** Access the DRS operations console (see [How to Access the DRS, page 4](#))
- Step 3** Log in to the DRS by using the same Administrator username and password that you use for Cisco Unified Operating System administration console for Cisco Unified Expert Advisor.
- Step 4** Navigate to **Restore > Restore Wizard**.
The Restore Wizard Step 1 window displays.
- Step 5** In the **Select Backup Device** area, choose the backup device from which to restore.
- Step 6** Click **Next**.
The Restore Wizard Step 2 window displays.
- Step 7** Choose the backup version that you want to restore.



Caution

To restore subsequent servers in the cluster, you must choose the same backup version that you used to restore the primary server.

- Step 8** Click **Next**.
The Restore Wizard Step 3 window displays.

Step 9 Choose the features that you want to restore.



Note Only the features that were backed up to the file that you chose display.

Step 10 Click **Next**.

Step 11 The Restore Wizard Step 4 window displays.

Step 12 To start restoring the data, click **Restore**.

Step 13 When you get prompted to choose the servers to restore, choose only the subsequent servers.

Your data gets restored on the subsequent servers.

To view the status of the restore, see the [“Viewing the Restore Status” section on page 15](#).

Step 14 Restart the server. For more information on restarting, see the *Cisco Unified Operating System Administration Guide for Cisco Unified Expert Advisor*.



Note Depending on the size of your database and the components that you choose to restore, the system can require one hour or more to restore.

Restoring License Information

The Cisco Unified Expert Advisor Option includes five seats for evaluation purposes. When completing the initial configuration, you can upload the additional license that you purchase. If you do not upload an additional license, the five evaluation seats are used by default.

The system checks if an additional license was uploaded. If an uploaded license is found, the system uses the uploaded license to overwrite the five evaluation seats. The uploaded license determines the maximum number of configured seats.



Note If you backup a system with only the five evaluation seats, then proceed to refresh with a new image containing an uploaded license, and finally decide to restore the original image with the five evaluation seats, you will still be allowed to use the maximum number of seats provided with the uploaded license. This is because DRS does not remove uploaded licenses. At any given time, a restored image uses the uploaded license—if this license exists. If it does not exist, the system continues to use the five evaluation seats.

Viewing the Restore Status

Perform the following steps to check the status of the current restore job.

Procedure

Step 1 Access the DRS operations console (see [How to Access the DRS, page 4](#))

Step 2 Log in to the Disaster Recovery System by using the same Administrator username and password that you use for Cisco Unified Operating System administration console for Cisco Unified Expert Advisor.

- Step 3** Navigate to **Restore > Status**. The Restore Status window displays.
- Step 4** To view the restore log file, click the log filename link.
-

Viewing the Backup and Restore History

Using the following procedures, you can see the last 20 backup and restore jobs:

- [Backup History](#)
- [Restore History](#)

Backup History

Perform the following steps to view the backup history.

Procedure

- Step 1** Access the DRS operations console (see [How to Access the DRS, page 4](#))
- Step 2** Log in to the DRS by using the same Administrator username and password that you use for Cisco Unified Operating System administration console for Cisco Unified Expert Advisor.
- Step 3** Navigate to **Backup > History**.
- The Backup History window displays.
- From the Backup History window, you can view the backups that you have performed, including filename, backup device, completion date, result, and features that are backed up.



Note The Backup History window displays only the last 20 backup jobs.

Restore History

Perform the following steps to view the restore history.

Procedure

- Step 1** Access the DRS operations console (see [How to Access the DRS, page 4](#))
- Step 2** Log in to the DRS by using the same Administrator username and password that you use for Cisco Unified Operating System administration console for Cisco Unified Expert Advisor.
- Step 3** Navigate to **Restore>History**. The Restore History window displays.
- Step 4** From the Restore History window, you can view the restores that you have performed, including filename, backup device, completion date, result, and the features that were restored.

**Note**

The Restore History window displays only the last 20 restore jobs.

Trace Files

In this release of the DRS, trace files for the master agent, the GUI, and each local agent are written to the following locations:

- For the master agent, find the trace file at *platform/drf/trace/drfMA0**
- For each local agent, find the trace file at *platform/drf/trace/drfLA0**
- For the GUI, find the trace file at *platform/drf/trace/drfConfLib0**

You can view trace files by using the command line interface. See the *Cisco Unified Operating System Administration Guide for Cisco Unified Expert Advisor* for more information.

Error Messages

The DRS issues alarms for various errors that could occur during a backup or restore procedure. [Table 5](#) provides a list of Cisco DRS alarms.

Table 5 **Disaster Recovery System Alarms**

Alarm Name	Description	Explanation
CiscoDRFBackupDeviceError	DRF backup process has problems accessing device.	DRS backup process encountered errors while accessing device.
CiscoDRFBackupFailure	Cisco DRF Backup process failed.	DRS backup process encountered errors.
CiscoDRFBackupInProgress	Unable to start new backup while another backup is still running.	DRS cannot start new backup while another backup is still running.
CiscoDRFInternalProcessFailure	DRF internal process has encountered an error.	DRS internal process encountered an error.
CiscoDRFLA2MAFailure	DRF local agent is not able to connect to master agent.	DRS local agent cannot connect to master agent.
CiscoDRFLocalAgentStartFailure	DRF local agent was not able to start	DRS local agent might be down.
CiscoDRFMA2LAFailure	DRF master agent is not able to connect to local agent.	DRS master agent cannot connect to local agent.
CiscoDRFMABackupComponent Failure	DRF was unable to backup at least one component.	DRS requested a component to back up its data; however, an error occurred during the backup process, and the component did not get backed up.
CiscoDRFMABackupNodeDisconnect	The server being backed up disconnected from the master agent prior to being fully backed up.	While the DRS master agent was running a backup operation on a Cisco Unified Expert Advisor server, the server disconnected before the backup operation completed.

Table 5 *Disaster Recovery System Alarms (continued)*

Alarm Name	Description	Explanation
CiscoDRFMARestoreComponent Failure	DRF was unable to restore at least one component.	DRS requested a component to restore its data; however, an error occurred during the restore process, and the component did not get restored.
CiscoDRFMARestoreNodeDisconnect	The server being restored disconnected from the master agent prior to being fully restored.	While the DRS master agent was running a restore operation on a Cisco Unified Expert Advisor server, the server disconnected before the restore operation completed.
CiscoDRFMasterAgentStartFailure	DRF master agent was not able to start.	DRS master agent might be down.
CiscoDRFNoRegisteredComponent	No registered components available, backup failed.	DRS backup failed because no registered components are available.
CiscoDRFNoRegisteredComponent	No feature selected for backup.	No feature got selected for backup.
CiscoDRFRestoreDeviceError	DRF restore process has problems accessing device.	DRS restore process cannot read from device.
CiscoDRFRestoreFailure	DRF restore process failed.	DRS restore process encountered errors.
CiscoDRFSftpFailure	DRF SFTPoperation has errors.	Errors exist in DRS SFTP operation.

Related Documentation

You can obtain the most current documentation list by accessing Cisco's product documentation page at this URL: http://www.cisco.com/en/US/products/ps9675/tsd_products_support_series_home.html

Obtaining Documentation

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