



Restoring the Data

This section provides information on the following topics that relate to the restore process:

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Understanding How the Restore Process Works

The BARS restore process allows you to recover all data that was compressed into the Backup*mm-dd-yy*.tar file. The BARS Restore Wizard prompts you for the following information:

- The backup storage location of the archived Backup*mm-dd-yy*.tar file.
- The data destination server where you want the restore utility to send the restored data.
- The application that you want restored.

The BARS restore process stops system services, copies the data that you want restored to a staging directory, notifies the data destination server that the data is ready for restoration, and then sends the data to the data destination server.



Caution

During the restoration, services stop, which causes call-processing interruptions. Cisco recommends that you use the restore utility during off-peak hours to minimize call-processing interruptions.



Caution

All-third party applications, including Cisco-provided and approved applications that are co-resident on the Cisco CallManager server, must be stopped and disabled before you use the Restore process.

The restore process creates log files, which are text files that are saved by date, in the following folder:
C:\Program Files\Common Files\Cisco\Logs\BARS\Restore.

If the following error messages or other error messages appear in the log file, the process did not successfully restore the data:

- Failed to drop CCM/ART/CDR database from <Server Name>
- Failed to restore DC Directory
- Failed to stop DC Directory service
- Failed to restart DC Directory service

Related Topics

- [Accessing the Backup Log File After the Backup Completes, page 3-9](#)
- [Restoring the Data, page 4-1](#)
- [Appendix A, “BARS Error Messages”](#)
- [Location of Trace Files, page 1-10](#)

Important Information About the Restore Process

Be aware of the following items relating to the restore process:

- While restoring a server, you should not change passwords for SQL and LDAP directory. These passwords will be the same as they were when the backup was performed.
- The restore process cannot selectively restore user-level components, such as mailboxes or device settings.
- The restore process does not reinstall locale settings that were installed with Locale Installer.
- The restore process does not reinstall bootstrap files.
- The restore process does not reinstall custom configurations.

Restoring the Data

This section describes how to restore data that the backup process stored in the Backup Storage Location.

Procedure

Step 1 Choose **Restore > Restore Wizard**.

The Restore Wizard guides you through the restoration.

Step 2 Choose the backup storage location where the data is stored. Click **Next**.

Step 3 From the drop-down list boxes, first choose the data destination server, then choose the application to restore. Click **Next**.

You can only choose a single application to restore. If you want to restore additional applications, you must repeat the process.

Step 4 In the Authentication Information portion of Step 3 of 4 of the Restore Wizard, enter a user name and a password that has administrative access privileges on the data destination server. Click **Next**.

- Step 5** The restoration process overwrites all data on the data destination server that you chose in [Step 3](#). To complete the restoration process, click the **Restore** button.
- Step 6** When the restore process finishes, reboot the restored server for the process to take effect.
- Step 7** Verify that the restored data is on the server.
- Step 8** Repeat this procedure to restore any other servers in the system.
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Related Topics

- [Restoring the Cisco CallManager Cluster, page 4-3](#)
- [Restoring Subscriber Servers, page 4-4](#)
- [Restoring Subscriber Servers, page 4-4](#)

Restoring the Cisco CallManager Cluster



Caution

All pre-installation and post-installation tasks that are noted in the Cisco CallManager installation and upgrade documents apply to restoring the cluster. Review the guidelines before you begin any restoration procedures.

You need to reinstall Cisco CallManager on every server in the cluster *only* if all of the following conditions exist:

- Every machine in the Cisco CallManager cluster crashes
- You do not have a current backup of Cisco CallManager
- The Publisher database server crashes and the backup-up version of Cisco CallManager does not match the version currently running within the cluster. For example, a backup was taken of Cisco CallManager 3.3(2) but the cluster is currently running Cisco CallManager 3.3(3).

If the above conditions exist, install the operating system and Cisco CallManager on the publisher and on all subscribers in the cluster. Always restore one server at a time. Make sure that the Cisco CallManager version that is installed on each subscriber server matches the version of Cisco CallManager that is installed on the publisher database server.



Caution

Cisco strongly recommends that you do not change any passwords when you are restoring/replacing the server or cluster. The restoration process restores the previously backed up passwords, does not acknowledge the new passwords, and causes the system to malfunction.

If you change the Directory Manager password when you are restoring/replacing the server or cluster, the server cannot access the directory.

If you do have a current backup, use the following procedure to restore the cluster:

Procedure

Step 1 Reinstall the operating system on the publisher database server.

Choose the **Same Server Recovery** option during the operating system installation to ensure that the original information you entered during the initial operating system installation displays in the appropriate fields.



Note If you will be reinstalling Cisco CallManager 3.3(2), manually remove the `D:\stiRecover.flg` file before proceeding with Cisco CallManager reinstallation.

Step 2 Reinstall Cisco CallManager on the publisher database server.

Make sure that the Cisco CallManager version that is installed on the server matches the version of the latest successful publisher database server backup.

Step 3 Restore the data to the publisher database server.



Note To restore subscribers, see the [“Restoring Subscriber Servers” section on page 4-4](#).

The restore process resynchronizes the replications between the publisher and subscribers.

Step 4 After you restore the Cisco CallManager servers, you can restore other application servers.

Restoring Subscriber Servers

Cisco no longer requires that you remove the subscriber server from the Cisco CallManager database before recovering the server. When the subscriber server authenticates to the publisher database server and pulls a duplicate of the database from the server, the subscriber server automatically adds itself to the database.

Use the following guidelines to restore the subscriber server(s):

- Perform a new installation of both Cisco CallManager and the Cisco-provided operating system:
 - For Cisco CallManager 3.3(3), the minimum required operating system is version 2000.2.3 with and upgrade to 2000.2.4, or a fresh install to operating system version 2000.2.4.
 - For Cisco CallManager 4.0(1), the minimum required operating system is version 2000.2.3 with an upgrade to version 2000.2.5. The operating system must also be SR2 or later.



Note The version of Cisco CallManager must match the version that is running on the publisher database server.

- Restore the subscriber if its CDR and TFTP data was backed up.

Restoring a CRA Server or CER Server

Use the following guidelines to restore these application servers:

- Make sure that you have restored the Cisco CallManager servers/data before you restore these application servers.
- Install the operating system on the server, if it is not already installed.
- Co-resident servers (Cisco CallManager and CRA/CRS installed on the same server) may already have the operating system installed.
- Install the application as if it were a new installation.
- Upgrade the application to the version of the backup that you want to restore, if necessary.
- Restore the backup data to the new server.
- To restore the data, Cisco recommends that you have backup data stored on tape device or on a network directory, not on the local directory of the failed server.
- Verify that the data was restored to the new server.

Replacing an Existing or a Failed Server

When one server is configured to replace an existing or failed server, the new server uses the IP information and computer name of the original server. To replace an existing or failed server, perform the following tasks:

- Install the operating system and the software as if it were a new installation.
- Upgrade the application to the version of the backup that you want to restore.
- Restore the backup data to the new server.

You must have backup data stored on tape or on a network directory, not on the local directory of the existing or failed server, to replace the server.



Tip

When you replace a server that has Cisco CallManager installed, choose the **Server Replacement/Same Server Recovery** option during the operating system installation to ensure that the original information that you entered during the initial operating system installation displays in the appropriate fields.

When you perform a server replacement, you must always manually enter the IP information, computer name, and other configuration data exactly as it was entered on the original server.

Make sure that you locate the configuration information for this server before you begin.

Related Documents

- *Installing Operating System Version 2000.2.2* (or later)
- *Installing Cisco CallManager Release 3.3* (or later)

Tasks to Perform After Restoration

Whenever you run a restoration process, perform the following post-restoration tasks:

- For the restoration to take effect, make sure that you reboot the server after you restore the data.
- Verify that no errors occurred during the restoration.
- If necessary, reinstall the Cisco IP telephony applications/products/plugins/service releases to versions that are compatible with the restored version of Cisco CallManager. Refer to the *Cisco CallManager Compatibility Matrix* for more information. To obtain the most recent version of the matrix document, see [Table 2 on page -ix](#).
- To obtain the locales that were used prior to the restoration, reinstall the Cisco IP Telephony Locale Installer. To obtain locale installer documentation, see [Table 2 on page -ix](#).