Backing Up the Data

This section contains information on topics that relate to using the backup portion of the BARS utility:

Figure 3-1 shows the BARS main window, with the choices of the Backup menu highlighted. The Backup menu items allow you to perform all necessary backup tasks.

Figure 3-1 Backup and Restore System Main Window

Accessing BARS

If you have an administrative account on the BARS backup server, you can access the BARS administration web interface by using the following URL from anywhere in the network:

http://*BackupServerName*/BARS/BARSmain.asp

where *BackupServerName* specifies the name of the BARS backup server.

Step 1 To access the BARS administration web interface when you are physically located at the backup server, if installed as a secure web application choose **Start > Programs > Cisco BARS > BARS Admin Secure**, otherwise choose **Start > Programs > Cisco BARS > BARS Admin**. The Backup and Restore System main window displays.

Configuring BARS for the First Time

To configure BARS for the first time, perform the following tasks that are described in Table 3-1.

Table 3-1 Configuring the Backup Utility

Step	Task	Related Information
Step 1	Configure the data source server(s) where the data exists.	Configuring a Data Source Server, page 3-2
Step 2	Choose the applications on the data source server that you want to back up.	Configuring a Data Source Server, page 3-2
Step 3	Configure the backup storage location where the utility will store the data.	Configuring the Backup Storage Location, page 3-7
Step 4	Accept the default schedule in which the backup will run or modify the schedule. You must enable the schedule before the backup utility will run.	Configuring the Schedule, page 3-4

Configuring a Data Source Server

Using the Backup and Restore Utility, you can add or delete a data source server, which houses the data that you want to back up. For more information on performing these tasks, see the following sections:

- Adding or Modifying a Data Source Server Configuration, page 3-3
- Deleting a Data Source Server, page 3-4

Adding or Modifying a Data Source Server Configuration

Adding or modifying a data source server configuration includes the following two-step process:

- Choosing the server where the data currently exists.
- Choosing the applications on the data source server that you want to back up.

  For lists of all data that the BARS utility backs up, see Chapter 1, "Backup and Restore Utility Overview."

Tip You can configure more than one data source server.

Caution For Customer Response Solutions (CRS) 4.0, you need to specify only one data source server to back up. The server that you specify will back up the data for all nodes in the CRS cluster. If you specify more than one data source server, duplicate data will get backed up, and the resultant .tar file will be much larger than necessary.

Procedure

Step 1 From the Backup and Restore System main window, choose **Backup > Data Source Server**.

Step 2 In the DNS/IP address field, enter the server name or server IP address where the data that you want to back up currently exists.

Note If you are modifying the data that you want to back up for a data source server that is already configured, click the name of that data source server in the Configured Servers list.

Step 3 If you entered a remote server, enter a username and password with administrator access rights for the remote server and then click **Next**.

Note BARS attempts to connect to the remote server. If the remote server is not found, the authentication fails, and a message displays.

Step 4 If no message displays, choose the applications that you want to back up on the data source server configuration window.

Caution These applications must exist on the data source server that you are configuring.

Step 5 Click **Finish**.

Step 6 The Data Source Server Summary window displays. Perform the following optional tasks:

a. If you want to add another Data Source Server, click **Configure More Data Source Servers**.

b. If you want to modify the default schedule, click **Modify Schedule**.

See the "Configuring the Schedule" section on page 3-4 for more information on how to update the schedule.

c. To configure the location where the utility will store the data, click **Modify Backup Storage Location**.

See the "Configuring the Backup Storage Location" section on page 3-7 for more information on how to add or modify the Backup Storage Location.

Related Topics

- Understanding How the Restore Utility Works, page 1-11
- Deleting a Data Source Server, page 3-4

Deleting a Data Source Server

This section describes how to delete a data source server from BARS. If you delete the server, BARS does not back up the data that resides on the server.

Procedure

Step 1 From the Backup and Restore System main window, choose **Backup > Data Source Server**.

Step 2 The configured Data Source Servers list displays in the pane on the left side of the window. Click the server that you want to delete.

Step 3 Click the **Delete** button.

Related Topic

- Adding or Modifying a Data Source Server Configuration, page 3-3

Configuring the Schedule

All data that you choose during the configuration is backed up on the day and time that you designate by using the Configure Scheduler window.

Cisco sets a default schedule for the backup to run. You can change the schedule at any time, restore the default schedule, and enable/disable the configured schedule.

Tip You must enable the schedule, even if you choose to use the default schedule that Cisco automatically configures.

The utility backs up all data at the same time. You cannot configure a separate schedule for each application.

This section contains the following topics:

Enabling the Scheduler

You must enable the Scheduler to ensure that the scheduled backup occurs at the designated time.

Procedure

Step 1 Choose **Backup > Scheduler**.

Step 2 Click the **Enable Scheduler** button.

The message "Scheduler Status: Enabled" displays.

Related Topics

- Disabling the Scheduler, page 3-5
- Updating the Schedule, page 3-6
- Restoring the Default Schedule, page 3-6

Disabling the Scheduler

When you disable the Scheduler, scheduled backups do not occur. If you disable the Scheduler, Cisco recommends that you perform regular backups by using the information in "Performing a Backup Now" section on page 3-8.

Procedure

Step 1 Choose **Backup > Scheduler**.

Step 2 Click the **Disable Scheduler** button.

The message "Scheduler Status: Disabled" displays.

Related Topics

- Stopping the BARS Scheduler, page 3-9—This section describes how to stop and restart the BARS Scheduler from the Windows **Start** menu.
- Enabling the Scheduler, page 3-5
- Updating the Schedule, page 3-6
- Restoring the Default Schedule, page 3-6

Updating the Schedule

This section describes how to change the defaults that Cisco automatically configures. When you click the Update Schedule button, BARS saves the frequency and log settings that you configured.

Procedure

Step 1 Cisco sets a default schedule for when the backup is to run. If you want to change the default, choose **Backup > Scheduler** from the main window.

The utility backs up all data at the same time. You cannot configure a separate schedule for each application.

Step 2 For the frequency, choose the time from the drop-down list boxes.

Step 3 Choose one of the following buttons, depending on your schedule preference:

a. Click the radio button **On every** and check the check boxes for the days when you want the backup to run.

b. Click the radio button **After every** and choose the number of days from the drop-down list box.

Step 4 If you want BARS to erase the log after a certain number of days, choose the number of days from the Erase logs after drop-down list box.

Step 5 If you want BARS to erase the backup file after a certain number of days, choose the number of days from the Erase logs after drop-down list box.

Step 6 Click **Update Schedule**.

Related Topics

- Understanding How the Restore Utility Works, page 1-11
- Enabling the Scheduler, page 3-5
- Disabling the Scheduler, page 3-5
- Updating the Schedule, page 3-6

Restoring the Default Schedule

If you want to restore the default schedule that Cisco automatically provides, perform the following procedure:

Procedure

Step 1 From the main window, choose **Backup > Scheduler**.

Step 2 Click the **Restore Defaults** button.

The default schedule displays in the window.

Step 3 To ensure that backup runs as scheduled, click the **Enable Scheduler** button.

Step 4 To save the default settings, click the **Update Schedule** button.

When you restore the default schedule, all default settings including the frequency and the log settings display in the Configure Scheduler window. Schedule status—*enabled* or *disabled*—does not change.

Related Topics

- Enabling the Scheduler, page 3-5
- Disabling the Scheduler, page 3-5
- Updating the Schedule, page 3-6

Configuring the Backup Storage Location

This section describes the procedure for configuring the backup storage location, which is the location in which BARS stores the data.

Caution BARS configuration allows it to preserve a specific number of .tar files each time that a backup is performed, and all .tar files beyond this specified number get deleted from the directory. This presents a risk if two BARS servers are configured to store archive files in the same storage location because one BARS instance can delete archive files that belong to a different BARS instance; a BARS instance cannot distinguish its archive files from those of other BARS instances. For example, if two BARS servers are configured with the same storage location and if the number of .tar files to be preserved is set to three, the three most recent .tar files will get preserved, and all others in the directory will get deleted before the backup process begins, regardless of which BARS instance that created those .tar files. Therefore, Cisco recommends that each instance of BARS that is running on the network (whether it is in the same cluster or not) be configured with a unique storage location.

You can configure the number of preserved .tar files by selecting **Backup > Scheduler** and setting the **Preserve latest TAR files** option.

Perform the following steps to configure the backup storage location.

Procedure

Step 1 Choose **Backup > Storage Location**.

Cisco allows you to choose only one Backup Storage Location for all data that is backed up. The utility compresses the data to a single file, the Backup*mm-dd-yy#hh-mm*.tar file, and stores the file in the location that you choose.

For the backup destination, Cisco strongly recommends that you specify a tape drive or a network directory, not a local directory.

Step 2 Click the **Network Directory**, **Local Directory**, or **Tape Device** radio button.

- Click the Tape device radio button only if you have the Cisco Unified CallManager server with tape drive (for example, the Cisco MCS 7835, Cisco MCS 7845-1400, or IBM xSeries 340 or xSeries 342 server).

  If you plan to restore data from one server to another server by using a tape drive, make sure that both servers use the same tape format.
- If you choose to use the Local Directory, make a copy of the Backup*mm-dd-yy#hh-mm*.tar file before you perform a restoration on the same server.

Note If the data is stored on the local directory and an unrecoverable error occurs on the server, the data gets lost. The potential exists of consuming all available disk space if the destination location is the local directory on the system, thus causing the system to crash and become unrecoverable.

- If you choose a network directory as the destination for the backup server, ensure that the directory is shared in Windows 2000 or 2003. To share a directory, log in on that server, right-click the directory folder icon that you want to share, click **Sharing...**, click **Share this folder**, and then click **OK**.

  If you choose to back up the data to a network directory, that server must have NETBIOS name resolution in place. (Use the computer name, the IP address, or the fully qualified DNS name.)

Step 3 Perform the following step, depending on the radio button that you chose in Step 2:

a. Network Directory—In the Path Name field, enter the name of the server on which you want BARS to store the data.

You must enter a user name and password with administrative access rights to the server; then, click **Verify**.

b. Local Directory—In the Path Name field, enter the directory path for where you want BARS to store the data.

c. Tape Device—From the Device Name drop-down list box, choose the device where you want to store the data.

Step 4 Click the **Update** button near the top of the Backup Storage Location window.

Caution Choosing the local drive could consume all available disk space and cause the system to crash and become unrecoverable.

Related Topics

- Configuring a Data Source Server, page 3-2
- Performing a Backup Now, page 3-8

Performing a Backup Now

If you want to perform a backup now, you can either back up all configured data source servers, or you can choose the data source servers that you want to back up immediately.

Procedure

Step 1 Choose **Backup > Backup Now**. The Backup Data Source Server window displays.

Step 2 Perform one of the following tasks, depending on the outcome that you want:

a. If you want to back up all configured data source servers, click the **All configured servers** radio button.

b. If you want to choose the data source servers that the utility will back up, click the **Selected servers** radio button; then, check the server check boxes.

Step 3 Click **Start Backup Now**. A window gives status of the backup process as it runs.

Related Topics

- Configuring the Backup Storage Location, page 3-7
- Accessing the Backup Log File After the Backup Completes, page 3-10

Canceling the BARS Backup Process

To cancel the backup process after it begins, perform the following procedure:

Procedure

Step 1 Choose **Start > Programs > Cisco BARS**.

Step 2 You now have two options. Choose **Cancel Backup**.

Stopping the BARS Scheduler

Note Stopping the BARS scheduler means that the scheduler gets disabled and BARS will not perform any scheduled backups.

To stop the BARS Scheduler, perform the following procedure:

Procedure

Step 1 Choose **Start > Programs > Administrative Tools > Services**.

Step 2 Locate the service that is named **Cisco BARS Scheduler**.

Step 3 To immediately stop the Scheduler, right-click **Stop**.

Step 4 To restart the Scheduler, you can navigate to the **Cisco BARS Scheduler** service again and right-click **Restart**.

Accessing the Backup Log File After the Backup Completes

The backup process creates a backup log file with the following format:

Backup*mm-dd-yy*.txt

where *mm* specifies the month, *dd* specifies the day, and *yy* specifies the year.

BARS puts this file in the following location on the backup server:

C:\Program Files\Common Files\Cisco\Logs\BARS\Backup

BARS writes all errors that occur during configuration or while the utility is running to the Backup*mm-dd-yy*.txt file. If you receive the following messages or other messages in the log file, the process did not successfully back up the data:

- Cisco Unified CallManager database could not be found on <Server Name>.
- Could not determine APPS version
- Could not find a CCM/ART/CDR SQL database on <Server Name>
- Error finding SQL database
- Error enumerating registry keys on <Server Name>
- Open file request returned Not Enough Space

Caution During the backup, heed warnings about the amount of temporary space that is available on the staging directory. The staging directory serves as a temporary directory where the backup utility places all files until it builds the single Backup*mm-dd-yy#hh-mm*.tar file. If you do not have enough temporary space, the backup will fail. Do not run a backup if you receive these warnings.

Always verify that the backup completed successfully.

Related Topics

- Appendix A, "BARS Error Messages"
- Location of Trace Files, page 1-11