



## CHAPTER 6

# Cisco HSI Backup and Restore Procedures

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The Cisco HSI provides a script for backing up configuration data. The script enables a system administrator to perform manual backups, schedule and administer automatic backups, and view a history of the most recent 30 backups performed.



### Note

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You must be logged in to the Cisco HSI system as root to run the backup procedures described in this appendix.

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The procedures for restoring system data are in the [“Cisco HSI Restore Procedures”](#) section on page 6-9.

## Backup Procedures

This section describes the following backup procedures:

- [Performing a Manual Backup](#)
- [Scheduling an Automatic Backup](#)
- [Listing Scheduled Automatic Backups](#)
- [Removing all Automatic Backups from the Schedule](#)
- [Listing Previous Backups](#)

## Performing a Manual Backup

To perform a manual backup, enter the following UNIX command on the Cisco HSI:

```
hsibackup -d path [-r retries -t retry_time]
```

### Command Description

The **hsibackup** command includes the following parameters:

- **path**—The full path of the directory in which the backup file is stored. The target directory could be on a remote server that is mounted on your system or on the local tape drive. (The local tape drive is the default location.)

**Caution**

Because storing backup files on the local host reduces the amount of disk space available for processing call data, we recommend that you do not store backup files on your local Cisco HSI host. Also, storing backup files on the local host does not ensure that the data is safe in the event of a natural disaster.

**Note**

If the path you enter is for a tape device, insert a new tape into the device for each backup. Backup data present on a used tape will be overwritten by a manual backup.

- **retries**—The number of times to check for an active provisioning session on the Cisco HSI before terminating the backup operation. The default value is 0 and the maximum value is 100.
- **retry\_time**—The number of seconds to wait between checks for an active provisioning session on the Cisco HSI. The default value is 30 seconds and the maximum value is 3600 seconds.

**Example**

To perform a manual backup for which the backup file is saved to a directory path named `/dev/rmt/h0`, with a maximum of one attempt and with consecutive attempts, 30 seconds apart, enter the following UNIX command:

```
hsibackup -d /dev/rmt/h0 -r 1 -t 30
```

**Note**

You can enter the keystroke command **Ctrl-C** at any time to halt execution of the `hsibackup` script.

The name of the backup file is stored in the specified directory path in the following format:

```
hsi_hostname_yyyymmdd_hhmmss_backup
```

In this format:

- **hostname**—The name of the Cisco HSI host, such as HSI-01.
- **yyymmdd**—The date on which the backup file is created, in a year-month-day format, such as 20011130 (November 30, 2001).
- **hhmmss**—The time when the backup file is created, in an hour-minute-second format, such as 115923 (11:59:23 a.m.).

## Scheduling an Automatic Backup

To schedule an automatic backup, perform the following steps.



**Note** You must be logged in to the Cisco HSI system as root to schedule an automatic backup.

**Step 1** Enter the following UNIX command on the Cisco HSI:

```
hsibackup -s
```

The system displays a response similar to the following:

```
Backup Schedule Menu
-----
Note: to exit the script at anytime enter Ctrl-C.

1. Add a scheduled backup
2. Delete a scheduled backup
3. Delete all scheduled backups
4. List scheduled backups
5. Exit
```

**Step 2** Enter **1** to add an automatic backup to the schedule.

The system displays a response similar to the following:

```
Add a Scheduled Backup
-----
Enter the name of the backup:
```

**Step 3** Enter the name of your backup.



**Note** The name of the backup must be from 1 to 10 alphanumeric characters in length.

When you enter the name of your automatic backup, the system returns a response similar to the following:

```
Enter the directory in which to place the backup file (default=/dev/rmt/0):
```

**Step 4** Enter the directory path where you want the backup file stored.



**Note** Your local tape drive is the default directory.



**Caution** Because storing backup files on the local host reduces the amount of disk space available to process call data, we recommend that you do not store backup files on your local Cisco HSI host. Also, storing backup files on the local host does not ensure that the data is safe in the event of a natural disaster.




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**Note** If the path you enter is for a tape device, insert a new tape into the device for each backup. Backup data present on a used tape is overwritten by a manual backup.

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When you enter your directory path, the system displays a response similar to the following:

```
Enter the number of retries (default=0):
```

**Step 5** Enter the number of times to check for an active provisioning session on the Cisco HSI before the backup is terminated.




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**Note** The maximum number of retries is 100.

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When you enter the number of retries, the system displays a response similar to the following:

```
Enter the time between retries (default=30 seconds):
```

**Step 6** Enter the number of seconds to wait between checks for an active provisioning session on the Cisco HSI.




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**Note** The maximum number of seconds between checks is 3600.

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When you enter the time between checks, the system displays a response similar to the following:

```
Enter the day of the week (default=everyday):
```

**Step 7** Enter the day(s) of the week on which you would like the backup performed. The following values are valid:

- SUNDAY
- MONDAY
- TUESDAY
- WEDNESDAY
- THURSDAY
- FRIDAY
- SATURDAY
- WEEKDAYS
- WEEKENDS
- EVERYDAY

When you enter your day(s) of the week setting, the system displays a response similar to the following:

```
Enter the time (HH:MM):
```

- Step 8** Enter the time when you want to start the automatic backup operation, in hour:minute format. The range for hour is 00-23, and the range for minute is 00-59.



**Note** Schedule your automatic backup for a time when your system experiences its lowest call volume to minimize the effect of the backup on call processing.

When you enter your time setting, the system displays a response similar to the following:

```
Save this scheduled backup (y/n)?
```

- Step 9** Enter **Y** if you want to add this automatic backup. Enter **N** if you do not want to add an automatic backup.



**Note** You can enter the keystroke command **Ctrl-C** at any time to halt execution of the `hsibackup` script.

The system displays a response similar to the following:

```
Press enter to continue:
```

- Step 10** Press **Enter** to return to the backup schedule menu. You can exit the utility or schedule another backup.

When the automatic backup executes, the backup file is stored in the specified directory path in the following format:

```
hsi_hostname_yyyymmdd_hhmmss_backup
```

In this format:

- **hostname**—The name of the Cisco HSI host, such as HSI-01.
- **yyymmdd**—The date on which the backup file is created, in a year-month-day format, such as 20011130 (November 30, 2001).
- **hhmmss**—The time when the backup file is created, in an hour-minute-second format, such as 115923 (11:59:23 a.m.).

## Removing an Automatic Backup from the Schedule

To remove an automatic backup from the schedule, perform the following steps:

**Step 1** Enter the following UNIX command on the Cisco HSI:

```
hsibackup -s
```

The system displays a response similar to the following:

```
Backup Schedule Menu
-----

To exit the script at anytime enter Ctrl-C.

1. Add a scheduled backup
2. Delete a scheduled backup
3. Delete all scheduled backups
4. List scheduled backups
5. Exit

Selection:
```

**Step 2** Enter **2** to remove an automatic backup from the schedule.

The system displays a response similar to the following:

```
Delete a Scheduled Backup
-----

Name      Retries      Timeout      Day          Time      Directory
-----
Back1     5             60           everyday     12:00    /var/cisco
Mybackup  0             30           weekdays     04:00    /var/cisco

Enter the name of the backup to be deleted:
```

**Step 3** Enter the name of the automatic backup you want to remove from the schedule.

The system displays a response similar to the following:

```
Delete the scheduled backup <name> (y/n)?
```

**Step 4** Enter **Y** if you want to continue deleting an automatic backup. Enter **N** if you do not want to delete an automatic backup.



**Note** You can enter the keystroke command **Ctrl-C** at any time to halt execution of the `hsibackup` script.

The system displays a response similar to the following:

```
Scheduled backup name deleted.

Press enter to continue:
```

The “name” is the name of the scheduled backup (specified in Step 3) that was deleted.

- Step 5** Press **Enter** to return to the backup schedule menu. You can exit the utility or schedule another backup.

## Removing all Automatic Backups from the Schedule

To remove all of the automatic backups from the schedule, perform the following steps:

- Step 1** Enter the following UNIX command on the Cisco HSI:

```
hsibackup -s
```

The system displays a response similar to the following:

```
Backup Schedule Menu
-----

Note: to exit the script at anytime enter Ctrl-C.

1. Add a scheduled backup
2. Delete a scheduled backup
3. Delete all scheduled backups
4. List scheduled backups
5. Exit

Selection:
```

- Step 2** Enter **3** to remove all automatic backups from the schedule.

The system displays a response similar to the following:

```
Delete all Scheduled Backups
-----

Scheduled Backups
-----

Name      Retries Timeout   Day           Time           Directory
-----
Back1     5           60    everyday     12:00          /var/cisco
Mybackup  0           30    weekdays     04:00          /var/cisco

Delete all scheduled backups (y/n)?
```

- Step 3** Enter **Y** if you want to continue deleting all automatic backups. Enter **N** if you do not want to delete all automatic backups.



**Note** You can enter the keystroke command **Ctrl-C** at any time to halt execution of the `hsibackup` script.

The system displays a response similar to the following:

```
All scheduled backups were deleted.

Press Enter to continue:
```

**Step 4** Press **Enter** to return to the backup schedule menu. You can exit the utility or schedule another backup.

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## Listing Scheduled Automatic Backups

To list the scheduled automatic backups, perform the following steps:

**Step 1** Enter the following UNIX command on the Cisco HSI:

```
hsibackup -s
```

The system displays a response similar to the following:

```
Backup Schedule Menu
-----

Note: to exit the script at anytime, enter Ctrl-C.

1. Add a scheduled backup
2. Delete a scheduled backup
3. Delete all scheduled backups
4. List scheduled backups
5. Exit

Selection:
```

**Step 2** Enter **4** to list the scheduled automatic backups.

The system displays a response similar to the following:

```
Scheduled Backups
-----
Name      Retries Timeout   Day           Time      Directory
-----
Back1     5         60    everyday     12:00    /var/cisco
Mybackup  0         30    weekdays     04:00    /var/cisco

Press enter to continue:
```

**Step 3** Press **Enter** to return to the backup schedule menu. You can exit the utility or perform another backup.

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## Listing Previous Backups

To list the previous 30 backups, perform the following steps:

**Step 1** Enter the following UNIX command on the Cisco HSI:

```
hsibackup -l
```

The system displays a response similar to the following:

```
Status      File
-----
Success    /tmp/hsi_hsi-01_20040915_144847_backup

Press enter to continue:
```



**Note** If a backup fails, the reason for the failure is listed below the file name.

**Step 2** Press **Enter** to exit.

## Cisco HSI Restore Procedures

The Cisco HSI software provides a script you can use to restore the configuration data. This section includes descriptions of the following restoration procedures:

- [Listing Backup Files](#)
- [Restoring a Backup File from a Directory](#)
- [Restoring a Backup File from a Device](#)
- [Restoring a Backup File Using the hsirestore Script](#)



**Note** The restoration procedures are based on the presumption that you back up your system configuration data regularly. The procedures for system configuration backup can be found in the “[Backup Procedures](#)” section on page 6-1.

## Listing Backup Files

To list the backup files in a particular directory, enter the following UNIX command on the Cisco HSI:

```
hsirestore -d path -l
```

In the preceding command example, “path” is the path for the directory in which you stored the backup files, such as a directory on a remote server or a local tape device.

In response to the command, the system displays a message a similar to the following:

```
Backup files in /var/cisco
-----
hsi_hsi-01_20031010_153003_backup
hsi_hsi-01_20031011_153003_backup
hsi_hsi-01_20031012_153003_backup
```

## Restoring a Backup File from a Directory

To restore the configuration data stored in a particular backup file, enter the following UNIX command on the Cisco HSI to run the restore script:

```
hsirestore -d path -f filename
```



### Note

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You must be logged in to the Cisco HSI system as root to restore a backup file.

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The **hsirestore** command in the example has the following parameters:

- path—The directory path to the location where your backup files are stored.
- filename—The file name of the backup file you want to restore.

### Example

To restore a backup file called `hsi_hsi-01_20031012_153003_backup`, stored in a directory path called `/var/cisco`, enter the following command:

```
hsirestore -d /var/cisco -f hsi_hsi-01_20031012_153003_backup
```

## Restoring a Backup File from a Device

To restore the configuration data stored in a particular backup file stored on a device, such as a tape drive, enter the following UNIX command on the Cisco HSI to run the restore script.



### Note

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You must be logged into the Cisco HSI as root to restore a backup file.

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```
hsirestore -d device
```

The **hsirestore** command in the example has the following parameter:

- device—The device on which your backup files are stored.

**Example**

To restore a backup file stored on a tape drive called /dev/rmt/0, enter the following command:

```
hsirestore -d /dev/rmt/0
```

## Restoring a Backup File Using the hsirestore Script

You can restore a configuration by running the **hsirestore** script. To restore the configuration data stored in a particular backup file stored in a directory, perform the following steps.

**Note**

You must be logged into the Cisco HSI as root to restore a backup file.

**Step 1** Enter the following UNIX command on the Cisco HSI:

```
hsirestore
```

The system displays a response similar to the following:

```
Restore Main Menu
-----

Note: to exit the script at anytime enter Ctrl-C.

1. Restore a backup
2. List Backup Files
3. Exit

Selection:
```

**Step 2** Enter **1** to restore a backup file.

The system displays a response similar to the following:

```
Restore
-----

Enter the directory of the backup file (default=/dev/rmt/0):
```

**Step 3** Enter the directory name.

The system displays a response similar to the following:

```
Enter the directory of the backup file (default=/dev/rmt/0): /tmp
Retrieving the backup files...
Backup files in /tmp
-----
hsi_gp-io_20040915_144847_backup

Enter the filename of the backup file:
```

**Step 4** Enter the name of the automatic backup you want to restore.

The system displays a response similar to the following:

```
Restore this backup (y/n)?
```

**Step 5** Enter **Y** if you want to continue restoring a backup. Enter **N** if you do not want to restore a backup.

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**Note** You can enter the keystroke command **Ctrl-C** at any time to halt execution of the hsirestore script.

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