

### **Server Utilities**

This chapter includes the following sections:

- Exporting Technical Support Data, page 1
- Rebooting the CIMC, page 2
- Clearing the BIOS CMOS, page 2
- Recovering from a Corrupted BIOS, page 3
- Resetting the CIMC to Factory Defaults, page 4
- Backing Up and Importing the CIMC Configuration, page 4

# **Exporting Technical Support Data**

Perform this task when requested by the Cisco Technical Assistance Center (TAC). This utility creates a summary report containing configuration information, logs and diagnostic data that will help TAC in troubleshooting and resolving a technical issue.

#### **Procedure**

	<b>Command or Action</b>	Purpose
Step 1	Server# scope cimc	Enters the CIMC command mode.
Step 2	Server /cimc # scope tech-support	Enters the tech-support command mode.
Step 3	Server /cimc/tech-support # set tftp-ip ip-address	Specifies the IP address of the TFTP server on which the support data file should be stored.
Step 4	Server /cimc/tech-support # set path path/filename	Specifies the file name in which the support data should be stored on the server. When you enter this name, include the relative path for the file from the top of the TFTP tree to the desired location.
Step 5	Server /cimc/tech-support # commit	Commits the transaction to the system configuration.

	Command or Action	Purpose
Step 6	Server /cimc/tech-support # start	Begins the transfer of the support data file to the TFTP server.
Step 7	Server /cimc/tech-support # cancel	(Optional) Cancels the transfer of the support data file to the TFTP server.

This example creates a support data file and transfers the file to a TFTP server:

```
Server# scope cimc
Server /cimc # scope tech-support
Server /cimc/tech-support # set tftp-ip 10.20.30.41
Server /cimc/tech-support *# set path /user/user1/supportfile
Server /cimc/tech-support *# commit
Server /cimc/tech-support # start
```

#### What to Do Next

Provide the generated report file to Cisco TAC.

### **Rebooting the CIMC**

On rare occasions, such as an issue with the current running firmware, troubleshooting a server may require you to reboot the CIMC. This procedure is not part of the normal maintenance of a server. After you reboot the CIMC, you are logged off and the CIMC will be unavailable for a few minutes.



If you reboot the CIMC while the server is performing power-on self test (POST) or is operating in the Extensible Firmware Interface (EFI) shell, the server will be powered down until the CIMC reboot is complete.

#### **Procedure**

	Command or Action	Purpose
Step 1	Server# scope cimc	Enters the CIMC command mode.
Step 2	Server /cimc # reboot	The CIMC reboots.

This example reboots the CIMC:

```
Server# scope cimc
Server /cimc # reboot
```

# **Clearing the BIOS CMOS**

On rare occasions, troubleshooting a server may require you to clear the server's BIOS CMOS memory. This procedure is not part of the normal maintenance of a server.

#### **Procedure**

	Command or Action	Purpose
Step 1	Server# scope bios	Enters the bios command mode.
Step 2	Server /bios # clear-cmos	After a prompt to confirm, clears the CMOS memory.

This example clears the BIOS CMOS memory:

```
Server# scope bios
Server /bios # clear-cmos

This operation will clear the BIOS CMOS.
Note: Server should be in powered off state to clear CMOS.
Continue?[y|n] y

Server /bios #
```

## **Recovering from a Corrupted BIOS**

#### **Before You Begin**

- You must be logged in as admin to recover from a corrupted BIOS.
- Have the BIOS recovery ISO image ready. You will find the BIOS recovery ISO image under the Recovery folder of the firmware distribution package.
- Schedule some down time for the server because it will be power cycled at the end of the recovery procedure.

#### **Procedure**

	Command or Action	Purpose
Step 1	Server# scope bios	Enters the bios command mode.
Step 2	Server# recover	Launches a dialog for loading the BIOS recovery image.

This example shows how to recover from a corrupted BIOS:

```
Server# scope bios Server /bios # recover This operation will automatically power on the server to perform BIOS FW recovery. Continue?[y|N]\mathbf{y}
```

#### What to Do Next

Power cycle or reset the server.

### **Resetting the CIMC to Factory Defaults**

On rare occasions, such as an issue with the current running firmware, troubleshooting a server may require you to reset the CIMC to the factory default. When this happens, all user-configurable settings are reset.

This procedure is not part of the normal server maintenance. After you reset the CIMC, you are logged off and must log in again. You may also lose connectivity and may need to reconfigure the network settings.

#### **Procedure**

	Command or Action	Purpose
Step 1	Server# scope cimc	Enters the CIMC command mode.
Step 2	Server /cimc # factory-default	After a prompt to confirm, the CIMC resets to factory defaults.

The CIMC factory defaults include the following conditions:

- SSH is enabled for access to the CIMC CLI. Telnet is disabled.
- HTTPS is enabled for access to the CIMC GUI.
- A single user account exists (user name is admin, password is password).
- DHCP is enabled on the management port.
- The boot order is EFI, CDROM, PXE (using LoM), FDD, HDD.
- KVM and vMedia are enabled.
- USB is enabled.
- · SoL is disabled.

This example resets the CIMC to factory defaults:

```
Server# scope cimc Server /cimc # factory-default This operation will reset the CIMC configuration to factory default. All your configuration will be lost. Continue?[y|N]
```

## **Backing Up and Importing the CIMC Configuration**

### **Backing Up and Importing the CIMC Configuration**

When you perform a backup of the CIMC configuration, you take a snapshot of the system configuration and export the resulting CIMC configuration file to a location on your network. The backup operation saves information from the management plane only; it does not back up data on the servers. Sensitive configuration information such as user accounts and the server certificate are not exported.

You can restore a backup CIMC configuration file to the same system or you can import it to another CIMC system, provided that the software version of the importing system is the same as or is configuration-compatible

with the software version of the exporting system. When you import a configuration file to another system as a configuration template, you must modify system-specific settings such as IP addresses and host names. An import operation modifies information on the management plane only.

The CIMC configuration file is an XML text file whose structure and elements correspond to the CIMC command modes.

When performing a backup or import operation, consider these guidelines:

- You can perform a backup or an import while the system is up and running. While a backup operation
  has no impact on the server or network traffic, some modifications caused by an import operation, such
  as IP address changes, can disrupt traffic or cause a server reboot.
- You cannot execute a backup and an import simultaneously.

### **Backing Up the CIMC Configuration**



For security reasons, this operation does not export user accounts or the server certificate.

#### **Before You Begin**

Obtain the backup TFTP server IP address.

#### **Procedure**

	Command or Action	Purpose
Step 1	Server# scope cimc	Enters the CIMC command mode.
Step 2	Server /cimc # scope import-export	Enters the import-export command mode.
Step 3	Server /cimc/import-export # export-config tftp-ip-address path-and-filename	Starts the backup operation. The configuration file will be stored at the specified path and file name on the TFTP server at the specified IP address.

To determine whether the export operation has completed successfully, use the **show detail** command. To abort the operation, type CTRL+C.

This example shows how to back up the CIMC configuration:

```
Server# scope cimc
Server /cimc # scope import-export
Server /cimc/import-export # export-config 192.0.2.34 /ucs/backups/cimc5.xml
Export config started. Please check the status using "show detail".
Server /cimc/import-export # show detail
Import Export:
    Operation: EXPORT
    Status: COMPLETED
    Error Code: 100 (No Error)
    Diagnostic Message: NONE

Server /cimc/import-export #
```

### **Importing a CIMC Configuration**

#### **Procedure**

	Command or Action	Purpose
Step 1	Server# scope cimc	Enters the CIMC command mode.
Step 2	Server /cimc # scope import-export	Enters the import-export command mode.
Step 3	Server /cimc/import-export # import-config tftp-ip-address path-and-filename	Starts the import operation. The configuration file at the specified path and file name on the TFTP server at the specified IP address will be imported.

To determine whether the import operation has completed successfully, use the **show detail** command. To abort the operation, type CTRL+C.

This example shows how to import a CIMC configuration:

```
Server# scope cimc
Server /cimc # scope import-export
Server /cimc/import-export # import-config 192.0.2.34 /ucs/backups/cimc5.xml
Import config started. Please check the status using "show detail".
Server /cimc/import-export #
```