

Managing Server Utilities

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Exporting Technical Support Data to a Remote Server

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.

- **Step 1** In the Navigation pane, click the Admin menu.
- **Step 2** In the **Admin** menu, click **Utilities**.
- Step 3 In the Actions area of the Utilities pane, click Export Technical Support Data.
- **Step 4** Review the following information in the dialog box:

Name	Description		
Export Technical Support Data to drop down	The remote server type. This can be one of the following:		
	• TFTP Server		
	• FTP Server		
	• SFTP Server		
	• SCP Server		
	• HTTP Server		
	Note If you choose SCP or SFTP as the remote server type while performing this action, a pop-up window is displayed with the message Server (RSA) key fingerprint is <server_finger_print _ID> Do you wish to continue?. Click Yes or No depending on the authenticity of the server fingerprint.</server_finger_print 		
Server IP/Hostname field	The IP address or hostname of the server on which the support data file should be stored. Depending on the setting in the Export Technical Support Data to drop-down list, the name of the field may vary.		
Path and Filename field	The path and filename Cisco IMC should use when exporting the file to the remote server.		
	Note If the server includes any of the supported network adapter cards, the data file also includes technical support data from the adapter card.		
Username field	The username the system should use to log in to the remote server. This field does not apply if the protocol is TFTP or HTTP.		
Password field	The password for the remote server username. This field does not apply if the protocol is TFTP or HTTP.		

Step 5

Click Export.

What to do next

Provide the generated report file to Cisco TAC.

Downloading Technical Support Data to a Local File

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

- **Step 1** In the **Navigation** pane, click the **Admin** menu.
- Step 2 In the Admin menu, click Utilities.
- **Step 3** In the Actions area of the Utilities pane, click Generate Technical Support Data for Local Download.
- **Step 4** Review the following information in the dialog box:

Name	Description	
Generate Technical Support Data radio button	CIMC disables this radio button when there is no technical support data file to download.	
	Click Generate to create the data file. When data collection is complete, click DownloadTechnical Support Data to Local File in the Actions area to download the file.	
Download to local file radio button	CIMC enablesthis radio button when a technical support data file is available to download.	
	To download the existing file, choose this option and click Download .	
	Note If the server includes any of the supported network adapter cards, the data file also includes technical support data from the adapter card.	
Generate and Download button	Allows you to generate and download the technical support data file.	
Generate button	Allows you to generate the technical support data file.	
Download button	Allows you to download the technical support data file after it is generated.	

Step 5Click Generate to create the data file. When data collection is complete, click Download Technical Support
Data to Local File in the Actions area to download the file.

Note Once the technical support file is locally downloaded, it will be deleted from the Cisco IMC.

What to do next

Provide the generated report file to Cisco TAC.

Exporting and Importing the CIMC Configuration

To perform a backup of the configuration, you take a snapshot of the system configuration and export the resulting configuration file to a location on your network. The export 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 an exported configuration file to the same system or you can import it to another 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 configuration file is an XML text file whose structure and elements correspond to the command modes. When performing an export or import operation, consider these guidelines:

- You can perform an export or an import while the system is up and running. While an export 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 an export and an import simultaneously.

You can perform an import or an export operation on the following features:

Version



Note You can only export this information.

- Network settings
- Technical support
- Logging control for local and remote logs
- Power policies
- BIOS Parameters



Note Precision boot is not supported.

- Communication services
- Remote presence
- User management LDAP
- SNMP

Exporting the CIMC Configuration

Note

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

Before you begin

Obtain the backup remote server IP address.

- **Step 1** In the Navigation pane, click the Admin menu.
- Step 2 In the Admin menu, click Utilities.
- **Step 3** In the Actions area of the Utilities pane, click Export Configuration.
- **Step 4** Review the following information in the dialog box:

Name	Description
Select Component for Export drop down	Allows you to select the component for export.
Export To drop down	 The location where you want to save the XML configuration file. This can be one of the following: Local: Choose this option and click Export to save the XML configuration file to a drive that is local to the computer running the Cisco IMC. When you choose this option, CIMC displays a File Download dialog box that lets you navigate to the location to which the configuration file should be saved. Remote Server: Choose this option to import the XML configuration file from a remote server. When you choose this option, CIMC displays the remote server fields.

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Name	Description		
Export To drop down	Note These options are available only when you choose Remote Server .		
	The remote server type. This can be one of the following:		
	TFTP Server		
	• FTP Server		
	SFTP Server		
	• SCP Server		
	HTTP Server		
	Note If you chose SCP or SFTP as the remote server type while performing this action, a pop-up window is displayed with the message Server (RSA) key fingerprint is <server_finger_print_id> Do you wish to continue?. Click Yes or No depending on the authenticity of the server fingerprint.</server_finger_print_id>		
	The fingerprint is based on the host's public key and helps you to identify or verify the host you are connecting to.		
Path and Filename field	The path and filename should use when exporting the file to the remote server.		
Username field	The username the system should use to log in to the remote server. This field does not apply if the protocol is TFTP or HTTP.		
Password field	The password for the remote server username. This field does not apply if the protocol is TFTP or HTTP.		
Passphrase field	The passphrase that uses the AES256 algorithm to encrypt the LDAP andSNMP v3 user passwords in the exported configuration files. Enter a string of 6 to 127 characters. Do not enter the following characters: $! # $ & <>?; ' `~\%^()"		

Step 5 Click Export.

Managing Server Utilities

Importing the CIMC Configuration

Before you begin

If you want to restore the SNMP configuration information when you import the configuration file, make sure that SNMP is disabled on this server before you do the import. If SNMP is enabled when you perform the import, does not overwrite the current values with those saved in the configuration file.

- **Step 1** In the Navigation pane, click the Admin menu.
- **Step 2** In the **Admin** menu, click **Utilities**.
- **Step 3** In the Actions area of the Utilities pane, click import Configuration.
- **Step 4** Review the following information in the dialog box:

Name	Description
Import From drop down	The location of the XML configuration file. This can be one of the following:
	• Local : Choose this option to import the XML configuration file to a drive that is local to the computer running the Cisco IMC.
	When you choose this option, CIMC displays a Browse button that lets you navigate to the file you want to import.
	• Remote Server : Choose this option to import the XML configuration file from a remote server.
	When you choose this option, CIMC displays the remote server fields.

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Name	Description			
Import From drop down	Note These options are available only wh you choose Remote Server .	en		
	The remote server type. This can be one of the following:			
	• TFTP Server			
	• FTP Server			
	SFTP Server			
	• SCP Server			
	• HTTP Server			
	Note If you chose SCP or SFTP as the rem server type while performing this acti a pop-up window is displayed with a message Server (RSA) key fingerprin <server_finger_print_id> Do you w to continue?. Click Yes or No depend on the authenticity of the server fingerprint.</server_finger_print_id>	the <i>ut is</i> <i>vish</i>		
	The fingerprint is based on the host's public key helps you to identify or verify the host you are connecting to.	and		
Path and Filename field	The path and filename of the configuration file on the remote server.			
Username field	The username the system should use to log in to the remote server. This field does not apply if the protocol is TFTP or HTTP.			
Password field	The password for the remote server username. This field does not apply if the protocol is TFTP or HTTP			
Passphrase field	The passphrase that uses the AES256 algorithm encrypt the LDAP andSNMP v3 user passwords the exported configuration files. Enter a string of 127 characters. Do not enter the following charact $! \# \& \& <>?; ' ` ~ \ \% ^ ()"$	to in 6 to ters:		
	Note If you edit the encrypted sections in configuration file and try to import i the edits will be ignored and the impoperation displays a partially success message.	the it, port sful		

Step 5 Click Import.

Resetting to Factory Default

On rare occasions, such as an issue with the current running firmware or troubleshooting a server, you might require resetting the server components 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 server components, you are logged off and must log in again. You might also lose connectivity and might need to reconfigure the network settings. Some of the inventory information might not be available during this transition.

When you reset the CIMC to factory settings, the serial number is displayed in the Cisco IMCXXXXXX format, where XXXXXX is the serial number of the server.

Before you begin

You must log in as a user with admin privileges to perform this task.

Procedure

Step 1 In the Navigation pane, click the Admin menu.

Step 2 In the **Admin** menu, click **Utilities**.

Step 3 In the Actions area of the Utilities pane, click Reset to Factory Default.

Step 4 Review the following information in the dialog box:

Name	Description
All check box	Selects all available components for reset.
BMC check box	Selects BMC (CIMC) for reset.

Step 5 Click **Reset** to reset the selected components to the factory-default settings.

Generating Non Maskable Interrupts to the Host

In some situations, the server might hang and not respond to traditional debug mechanisms. By generating a non maskable interrupt (NMI) to the host, you can create and send a crash dump file of the server and use it to debug the server.

Depending on the type of operating system associated with the server, this task might restart the host OS.

Before you begin

• You must log in as a user with admin privileges.

• The server must be powered on.

Procedure

Step 1	In the Navigation pane, click the Admin menu.
Step 2	In the Admin menu, click Utilities.
Step 3	In the Actions area of the Utilities pane, click Generate NMI to Host.
Step 4	In the dialog box, click OK to proceed, or click Cancel to cancel.

This action sends an NMI signal to the host, which might restart the OS.

Adding or Updating the Cisco IMC Banner

You can add or update the Cisco IMC banner by entering important information such as copyright or customized messages.

Procedure

Step 1	In t	he Navigation	pane, clicl	k the A	Admin	menu.
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- Step 2 In the Admin menu, click Utilities.
- Step 3 In the Actions area of the Utilities pane, click Add/Update Cisco IMC Banner.
- **Step 4** Review the following information in the dialog box:

Name	Description
Banner (80 Chars per line. Max 2K Chars.) field	Enter copyright information or messages that you want to display on the login screen, before logging on to the Web UI or the command line interface.
Restart SSH check box	When checked, the active SSH sessions are terminated after you click the Save Banner button.

Step 5

Click **Save Banner** to save your updates, **Clear banner** to clear the text, or **Cancel** to close the dialog box and return to the previous page.

Viewing Cisco IMC Last Reset Reason

You can set a lockout period for accounts, after which the account is locked out. As an administrator, you can set this time in minutes. You can also set the number of attempts allowed before the account is locked. This configuration is common to all users.

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Before you begin

You must log in as a user with admin privileges to perform this task.

Procedure

- **Step 1** In the **Navigation** pane, click the **Admin** menu.
- Step 2 In the Admin menu, click Utilities.
- **Step 3** In the Actions area of the Utilities pane, view the following information under the Last Reset Reason area:

Name	Description	
Component field	The component that was last reset.	
Status field	The reason why the component was last reset. This can be one of the following:	
	• watchdog-reset—The watchdog-timer resets when the Cisco IMC memory reaches full capacity.	
	• ac-cycle —PSU power cables are removed (no power input).	
	• graceful-reboot—Cisco IMC reboot occurs.	

Downloading Hardware Inventory to a Local File

- **Step 1** In the **Navigation** pane, click the **Admin** menu.
- Step 2 In the Admin menu, click Utilities.
- Step 3 In the Actions area of the Utilities pane, click Download Hardware Inventory Data to Local Download.
- **Step 4** Review the following information in the dialog box:

Name	Description
Generate Inventory Data radio button	Cisco IMC displaysthis radio button when there is no hardware inventory data file to download. Click this button to generate data.
Download inventory data to local file radio button	Cisco IMC enablesthis radio button when a inventory data file is available to download.
	To download the existing file, choose this option and click Download .

Step 5 Click Generate to create the data file. When data collection is complete, choose the Download inventory data to local file radio button and click Download to download the file locally.

Exporting Hardware Inventory Data to a Remote Server

- **Step 1** In the Navigation pane, click the Admin menu.
- **Step 2** In the **Admin** menu, click **Utilities**.
- Step 3 In the Actions area of the Utilities pane, click Export Hardware Inventory Data to Remote.
- **Step 4** Review the following information in the dialog box:

Name	Description
Export Technical Support Data to drop down	The remote server type. This can be one of the following:
	• TFTP Server
	• FTP Server
	• SFTP Server
	• SCP Server
	• HTTP Server
	NoteIf you choose SCP or SFTP as the remote server type while performing this action, a pop-up window is displayed with the message Server (RSA) key fingerprint is <server_finger_print </server_finger_print _ID> Do you wish to continue?. Click Yes or No depending on the authenticity of the server fingerprint.
	The fingerprint is based on the host's public key and helps you to identify or verify the host you are connecting to.
Server IP/Hostname field	The IP address or hostname of the server on which the data file should be stored. Depending on the setting in the Export Technical Support Data to drop-down list, the name of the field may vary.
Path and Filename field	The path and filename Cisco IMC should use when exporting the file to the remote server.

Name	Description
Username field	The username the system should use to log in to the remote server. This field does not apply if the protocol is TFTP or HTTP.
Password field	The password for the remote server username. This field does not apply if the protocol is TFTP or HTTP.

Step 5 Click Export.

Enabling Smart Access USB

You can enable smart access USB from Cisco IMC.

Procedure

Step 1	In the Navigation pane, click the Admin menu.
Step 2	In the Admin menu, click Utilities.
Stop 2	In the Actions area of the Utilities name alight Enable S

- Step 3 In the Actions area of the Utilities pane, click Enable Smart Access USB.
- **Step 4** In the dialog box, click **OK**.

This process disables the front-panel USBs on the host operating system.

Viewing Utilities Data

Procedure

- **Step 1** In the Navigation pane, click the Admin menu.
- Step 2 In the Admin menu, click Utilities.
- **Step 3** Review the following fields:

Table 1: Last Technical Support Data Export Area

Name	Description
Status field	The status of the last technical support data export or file generation operation, if any.
Last Generated Time field	The time of last generation of technical support data.
Cancel button	Cancels the process.

Table 2: Cisco IMC Last Reset Area

Name	Description
Status field	The reason why the component was last reset. This can be one of the following:
	• watchdog-reset—The watchdog-timer resets when the Cisco IMC memory reaches full capacity.
	• ac-cycle — PSU power cables are removed (no power input).
	• graceful-reboot— Cisco IMC reboot occurs.

Table 3: Cisco IMC Configuration Import/Export Area

Name	Description
Action field	If the configuration for this server has been previously exported or imported, this field displays whether the most recent operation was an import or an export.
Status field	The status of the last import or export operation performed on this server, if any.
Diagnostic Message field	If the import or export operation fails, this field displays the reason for failure.

Table 4: Front Panel USB Area

Name	Description
Smart Access USB field	The status of the smart access USB, if any.
Storage Device Attached field	The status of storage device attached, if any.

Table 5: PID Catalog Area

Name	Description
Upload Status field	The status of the PID catalog upload.
Activation Status field	The activation status of the PID catalog.
Current Activated Version field	The current activated version of the PID catalog.

Table 6: Inventory Data Area

Name	Description
Status field	The status of the last hardware inventory data export or file generation operation, if any.

Table 7: Factory Default Status Area

Name	Description
CIMC field	CIMC factory default status.
Storage field	Storage factory default status.
VIC field	VIC factory default status.