

Configuring Communication Services

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Configuring HTTP

Before you begin

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

- **Step 1** In the **Navigation** pane, click the **Admin** menu.
- Step 2 In the Admin menu, click Communication Services.
- **Step 3** In the **HTTP Properties** area, update the following properties:

Name	Description
HTTP/S Enabled check box	Whether HTTP and HTTPS are enabled on the .
Redirect HTTP to HTTPS Enabled check box	If enabled, all attempts to communicate via HTTP are redirected to the equivalent HTTPS address. We strongly recommend that you enable this option if you enable HTTP.
HTTP Port field	The port to use for HTTP communication. The default is 80.
HTTPS Port field	The port to use for HTTPS communication. The default is 443

Name	Description
Session Timeout field	The number of seconds to wait between HTTP requests before the times out and terminates the session.
	Enter an integer between 60 and 10,800. The default is 1,800 seconds.
Max Sessions field	The maximum number of concurrent HTTP and HTTPS sessions allowed on the . This value may not be changed.
Active Sessions field	The number of HTTP and HTTPS sessions currently running on the .

Step 4 Click Save Changes.

Configuring SSH

Before you begin

You must log in as a user with admin privileges to configure SSH.

Procedure

- **Step 1** In the **Navigation** pane, click the **Admin** menu.
- Step 2 In the Admin menu, click Communication Services.
- **Step 3** In the **SSH Properties** area, update the following properties:

Name	Description
SSH Enabled check box	Whether SSH is enabled on the .
SSH Port field	The port to use for secure shell access. The default is 22.
SSH Timeout field	The number of seconds to wait before the system considers an SSH request to have timed out. Enter an integer between 60 and 10,800. The default is 1,800 seconds.
Max Sessions field	The maximum number of concurrent SSH sessions allowed on the . This value may not be changed.
Active Sessions field	The number of SSH sessions currently running on the .

Step 4 Click Save Changes.

Configuring Redfish

Before you begin

You must log in as a user with admin privileges to configure SSH.

Procedure

- **Step 1** In the **Navigation** pane, click the **Admin** menu.
- **Step 2** In the **Admin** menu, click **Communication Services**.
- **Step 3** In the **Redfish Properties** area, update the following properties:

Name	Description
Redfish Enabled check box	Whether Redfish is enabled on the .
Max Sessions field	The number of maximmum sessions.
Active Sessions field	The number of active sessions.

Step 4 Click Save Changes.

Configuring XML API

XML API for

The Cisco XML application programming interface (API) is a programmatic interface to for a E-Series Rack-Mount Server. The API accepts XML documents through HTTP or HTTPS.

Enabling the XML API

Before you begin

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

- **Step 1** In the **Navigation** pane, click the **Admin** menu.
- **Step 2** In the **Admin** menu, click **Communication Services**.
- **Step 3** In the **XML API Properties** area, update the following properties:

Name	Description
XML API Enabled check box	Whether API access is allowed on this server.
Max Sessions field	The maximum number of concurrent API sessions allowed on the . This value may not be changed.
Active Sessions field	The number of API sessions currently running on the .

Step 4 Click Save Changes.

Configuring IPMI

IPMI Over LAN

Intelligent Platform Management Interface (IPMI) defines the protocols for interfacing with a service processor embedded in a server platform. This service processor is called a Baseboard Management Controller (BMC) and resides on the server motherboard. The BMC links to a main processor and other on-board elements using a simple serial bus.

During normal operations, IPMI lets a server operating system obtain information about system health and control system hardware. For example, IPMI enables the monitoring of sensors, such as temperature, fan speeds and voltages, for proactive problem detection. If server temperature rises above specified levels, the server operating system can direct the BMC to increase fan speed or reduce processor speed to address the problem.

Configuring IPMI over LAN

Configure IPMI over LAN when you want to manage the with IPMI messages.

Before you begin

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

- **Step 1** In the **Navigation** pane, click the **Admin** menu.
- Step 2 In the Admin menu, click Communication Services.
- **Step 3** In the **IPMI over LAN Properties** area, update the following properties for BMC 1, BMC 2, CMC 1, or CMC 2:

Name	Description
Enabled check box	Whether IPMI access is allowed on this server.

Name	Description
Privilege Level Limit drop-down list	The highest privilege level that can be assigned to an IPMI session on this server. This can be one of the following:
	 read-only—IPMI users can view information but cannot make any changes. If you select this option, IPMI users with the "Administrator", "Operator", or "User" user roles can only create read-only IPMI sessions, regardless of their other IPMI privileges. user—IPMI users can perform some functions but cannot perform administrative tasks. If you select this option, IPMI users with the "Administrator" or "Operator" user role can create user and read-only sessions on this server. admin—IPMI users can perform all available actions. If you select this option, IPMI users with the "Administrator" user role can create admin, user, and read-only sessions on this server.
Encryption Key field	The IPMI encryption key to use for IPMI communications.

Step 4 Click Save Changes.

Configuring SNMP

SNMP

The Cisco UCS E-Series Rack-Mount Servers support the Simple Network Management Protocol (SNMP) for viewing the server configuration and status, and for sending fault and alert information by SNMP traps.

Configuring SNMP Properties

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 Communication Services.
Step 3 In the Communications Services pane, click the SNMP tab.
Step 4 In the SNMP Properties area, update the following properties:

Name	Description
SNMP Enabled check box	Whether this server sends SNMP traps to the designated host.
	Note After you check this check box, you need to click Save Changes before you can configure SNMP users or traps.
SNMP Port field	The port on which SNMP agent runs.
Access Community String field	The default SNMP v1 or v2c community name includes on any SNMP get operations.
	Enter a string up to 18 characters.
SNMP Community Access	This can be one of the following:
drop-down list	• Disabled — This option blocks access to the information in the inventory tables.
	• Limited — This option provides partial access to read the information in the inventory tables.
	• Full — This option provides full access to read the information in the inventory tables.
	Note SNMP Community Access is applicable only for SNMP v1 and v2c users.
Trap Community String field	The name of the SNMP community group used for sending SNMP trap to other devices.
	Enter a string up to 18 characters.
	Note This field is visible only for SNMP v1 and v2c users. SNMP v3 users need to use SNMP v3 credentials.
System Contact field	The system contact person responsible for the SNMP implementation.
	Enter a string up to 64 characters, such as an email address or a name and telephone number.
System Location field	The location of the host on which the SNMP agent (server) runs.
	Enter a string up to 64 characters.
SNMP Input Engine ID field	User-defined unique identification of the static engine.
SNMP Engine ID field	Unique string to identify the device for administration purpose. This is generated from the SNMP Input Engine ID if it is already defined, else it is derived from the BMC serial number.

Step 5 Click Save Changes.

What to do next

Configure SNMP trap settings.

Configuring SNMP Trap Settings

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 **Communication Services**.
- Step 3 In the Communications Services pane, click the SNMP tab.
- Step 4 Click on Trap Destinations tab.
- **Step 5** In the **Trap Destinations** area, you can perform one of the following:
 - Select an existing user from the table and click **Modify Trap**.
 - Click Add Trap to create a new user.

Note If the fields are not highlighted, select **Enabled**.

Step 6 In the **Trap Details** dialog box, complete the following fields:

Name	Description
ID field	The trap destination ID. This value cannot be modified.
Enabled	If checked, then this trap is active on the server.
Version drop-down list	The SNMP version and model used for the trap. This can be one of the following: • V2 • V3
Туре	 The type of trap to send. This can be one of the following: Trap: If this option is chosen, the trap will be sent to the destination but you do not receive any notifications. Inform: You can choose this option only for V2 users. If chosen, you will receive a notification when a trap is received at the destination.
User drop-down list	The drop-down list displays all available users, select a user from the list.

- Step 7 Click Save Changes.
- **Step 8** If you want to delete a trap destination, select the row and click **Delete**.

Click **OK** in the delete confirmation prompt.

Note From CIMC 3.2.13 release, SNMP trap support for storage disk removal or insertion is supported in ENCS.

Sending a Test SNMP Trap Message

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 **Communication Services**.
- **Step 3** In the Communication Services pane, click SNMP.
- **Step 4** In the **Trap Destinations** area, select the row of the desired SNMP trap destination.
- Step 5 Click Send SNMP Test Trap.

An SNMP test trap message is sent to the trap destination.

Note The trap must be configured and enabled in order to send a test message.

Managing SNMP Users

Before you begin

- You must log in as a user with admin privileges to perform this task.
- SNMP must be enabled.

- **Step 1** In the **Navigation** pane, click the **Admin** menu.
- Step 2 In the Admin menu, click Communication Services.
- Step 3 In the Communications Services pane, click the SNMP tab.
- **Step 4** In the **User Settings** area, update the following properties:

Name	Description
Add User button	Click an available row in the table then click this button to add a new SNMP user.
Modify User button	Select the user you want to change in the table then click this button to modify the selected SNMP user.
Delete User button	Select the user you want to delete in the table then click this button to delete the selected SNMP user.
ID column	The system-assigned identifier for the SNMP user.
Name column	The SNMP user name.
Auth Type column	The user authentication type.
Privacy Type column	The user privacy type.

Step 5 Click Save Changes.

Configuring SNMP Users

Before you begin

- You must log in as a user with admin privileges to perform this task.
- SNMP must be enabled.

Procedure

- **Step 1** In the **Navigation** pane, click the **Admin** menu.
- Step 2 In the Admin menu, click Communication Services.
- **Step 3** In the **Communications Services** pane, click the **SNMP** tab.
- **Step 4** In the **User Settings** area, perform one of the following actions:
 - Select an existing user from the table and click **Modify User**.
 - Select a row in the Users area and click Add User to create a new user.

Step 5 In the **SNMP User Details** dialog box, update the following properties:

Name	Description
ID field	The unique identifier for the user. This field cannot be changed.
Name field	The SNMP username.
	Enter between 1 and 31 characters or spaces.
	Note automatically trims leading or trailing spaces.

Name	Description
Security Level drop-down list	The security level for this user. This can be one of the following:
	• no auth, no priv —The user does not require an authorization or privacy password.
	• auth, no priv—The user requires an authorization password but not a privacy password. If you select this option, enables the Auth fields described below.
	• auth, priv—The user requires both an authorization password and a privacy password. If you select this option, enables the Auth and Privacy fields.
Auth Type drop-down	The authorization type. This can be one of the following:
	• MD5
	• SHA
Auth Password field	The authorization password for this SNMP user.
	Enter between 8 and 64 characters or spaces.
	Note automatically trims leading or trailing spaces.
Confirm Auth Password field	The authorization password again for confirmation purposes.
Privacy Type drop-down	The privacy type. This can be one of the following:
	• DES
	· AES
Privacy Password field	The privacy password for this SNMP user.
	Enter between 8 and 64 characters or spaces.
	Note automatically trims leading or trailing spaces.
Confirm Privacy Password field	The authorization password again for confirmation purposes.

Step 6 Click Save Changes.

Step 7 If you want to delete a user, select the user and click **Delete User**.

Click \mathbf{OK} in the delete confirmation prompt.