



## **Cisco HyperFlex Smart Call Home Quick Start Guide**

**First Published:** 2018-05-17

**Last Modified:** 2020-08-04

### **Americas Headquarters**

Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-1706  
USA  
<http://www.cisco.com>  
Tel: 408 526-4000  
800 553-NETS (6387)  
Fax: 408 527-0883

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# CHAPTER 1

## Automatic Support and Smart Call Home for HyperFlex

This chapter provides information on automatic support and Smart Call Home for Cisco HyperFlex systems.

- [Auto Support and Smart Call Home for HyperFlex, on page 1](#)

### Auto Support and Smart Call Home for HyperFlex

You can configure the HX storage cluster to send automated email notifications regarding documented events. You can use the data collected in the notifications to help troubleshoot issues in your HX storage cluster.



**Note** Auto Support (ASUP) and Smart Call Home (SCH) support the use of a proxy server. You can enable the use of a proxy server and configure proxy settings for both using HX Connect.

#### Auto Support (ASUP)

Auto Support is the alert notification service provided through HX Data Platform. If you enable Auto Support, notifications are sent from HX Data Platform to designated email addresses or email aliases that you want to receive the notifications. Typically, Auto Support is configured during HX storage cluster creation by configuring the SMTP mail server and adding email recipients.



**Note** Only unauthenticated SMTP is supported for ASUP.

If the **Enable Auto Support** check box was not selected during configuration, Auto Support can be enabled post-cluster creation using the following methods:

Post-Cluster ASUP Configuration Method	Associated Topic
HX Connect user interface	<a href="#">Configuring Auto Support Using HX Connect, on page 3</a>
Command Line Interface (CLI)	<a href="#">Configuring Notification Settings Using CLI, on page 4</a>

Post-Cluster ASUP Configuration Method	Associated Topic
REST APIs	Cisco HyperFlex Support REST APIs on <a href="#">Cisco DevNet</a> .

Auto Support can also be used to connect your HX storage cluster to monitoring tools.

### Smart Call Home (SCH)

Smart Call Home is an automated support capability that monitors your HX storage clusters and then flags issues and initiates resolution before your business operations are affected. This results in higher network availability and increased operational efficiency.

Call Home is a product feature embedded in the operating system of Cisco devices that detects and notifies the user of a variety of fault conditions and critical system events. Smart Call Home adds automation and convenience features to enhance basic Call Home functionality. After Smart Call Home is enabled, Call Home messages/alerts are sent to Smart Call Home.

Smart Call Home is included with many Cisco service contracts and includes:

- Automated, around-the-clock device monitoring, proactive diagnostics, real-time email alerts, service ticket notifications, and remediation recommendations.
- Proactive messaging sent to your designated contacts by capturing and processing Call Home diagnostics and inventory alarms. These email messages contain links to the Smart Call Home portal and the TAC case if one was automatically created.
- Expedited support from the Cisco Technical Assistance Center (TAC). With Smart Call Home, if an alert is critical enough, a TAC case is automatically generated and routed to the appropriate support team through `https`, with debug and other CLI output attached.
- Customized status reports and performance analysis.
- Web-based access to all Call Home messages, diagnostics, and recommendations for remediation in one place; TAC case status; and up-to-date inventory and configuration information for all Call Home devices.

To ensure automatic communication among your HX storage cluster, you, and Support, see [Configuring Smart Call Home for Data Collection, on page 7](#).



## CHAPTER 2

# Configuring Automatic Support and Smart Call Home for HyperFlex

This chapter provides information on automatic support and Smart Call Home for Cisco HyperFlex systems.

- [Configuring Auto Support Using HX Connect, on page 3](#)
- [Configuring Notification Settings Using CLI, on page 4](#)

## Configuring Auto Support Using HX Connect

Typically, Auto Support (ASUP) is configured during HX storage cluster creation. If it was not, you can enable it post cluster creation using the HX Connect user interface.

**Step 1** Log into HX Connect.

**Step 2** In the banner, click **Edit settings (gear icon)** > **Auto Support Settings** and fill in the following fields.

UI Element	Essential Information
<b>Enable Auto Support (Recommended)</b> check box	Configures Call home for this HX storage cluster by enabling: <ul style="list-style-type: none"><li>• Data delivery to Cisco TAC for analysis.</li><li>• Notifications from Support as part of proactive support.</li></ul>
<b>Send service ticket notifications to</b> field	Enter the email address that you want to receive the notifications.
<b>Terms and Conditions</b> check box	End user usage agreement. The check box must be checked to use the Auto-Support feature.
<b>Use Proxy Server</b> check box	<ul style="list-style-type: none"><li>• <b>Web Proxy Server</b> url</li><li>• <b>Port</b></li><li>• <b>Username</b></li><li>• <b>Password</b></li></ul>

**Step 3** Click **OK**.

**Step 4** In the banner, click **Edit settings (gear icon) > Notifications Settings** and fill in the following fields.

UI Element	Essential Information
Send email notifications for alarms check box	<p>If checked, fill in the following fields:</p> <ul style="list-style-type: none"> <li>• <b>Mail Server Address</b></li> <li>• <b>From Address</b>—Enter the email address used to identify your HX storage cluster in Support service tickets, and as the sender for Auto Support notifications. Support information is currently not sent to this email address.</li> <li>• <b>Recipient List (Comma separated)</b></li> </ul>

**Step 5** Click **OK**.

## Configuring Notification Settings Using CLI

Use the following procedure to configure and verify that you are set up to receive alarm notifications from your HX storage cluster.



**Note** Only unauthenticated SMTP is supported for ASUP.

**Step 1** Log into a storage controller VM in your HX storage cluster using `ssh`.

**Step 2** Configure the SMTP mail server, then verify the configuration.

Email address used by the SMTP mail server to send email notifications to designated recipients.

Syntax: `stcli services smtp set [-h] --smtp SMTPSERVER --fromaddress FROMADDRESS`

Example:

```
# stcli services smtp set --smtp mailhost.eng.mycompany.com --fromaddress smtpnotice@mycompany.com
# stcli services smtp show
```

**Step 3** Enable ASUP notifications.

```
# stcli services asup enable
```

**Step 4** Add recipient email addresses, then verify the configuration.

List of email addresses or email aliases to receive email notifications. Separate multiple emails with a space.

Syntax: `stcli services asup recipients add --recipients RECIPIENTS`

Example:

```
# stcli services asup recipients add --recipients user1@mycompany.com user2@mycompany.com
# stcli services asup show
```

**Step 5** From the controller VM that owns the eth1:0 IP address for the HX storage cluster, send a test ASUP notification to your email.



```
# sendasup -t
```

To determine the node that owns the eth1:0 IP address, log into each storage controller VM in your HX storage cluster using `ssh` and run the `ifconfig` command. Running the `sendasup` command from any other node does not return any output and tests are not received by recipients.

**Step 6** Configure your email server to allow email to be sent from the IP address of all the storage controller VMs.

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## CHAPTER 3

# Configuring HX Smart Call Home Data Collection

This chapter provides information on how to configure Smart Call Home data collection for Cisco HyperFlex systems.

- [Configuring Smart Call Home for Data Collection, on page 7](#)

## Configuring Smart Call Home for Data Collection

Data collection is enabled by default but, you can opt-out (disable) during installation. You can also enable data collection post cluster creation. During an upgrade, Smart Call Home enablement is determined by your legacy configuration. For example, if `stcli services asup` show as enabled, Smart Call Home is enabled on upgrade.

Data collection about your HX storage cluster is forwarded to Cisco TAC through `https`. If you have a firewall installed, configuring a proxy server for Smart Call Home is completed after cluster creation.



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**Note** Smart Call Home does not support the use of a proxy server in deployments where outgoing connections from an HX cluster require to go through a proxy server.

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**Note** In HyperFlex Data Platform release 2.5(1.a), Smart Call Home Service Request (SR) generation does not use a proxy server.

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Using Smart Call Home requires the following:

- A Cisco.com ID associated with a corresponding Cisco Unified Computing Support Service or Cisco Unified Computing Mission Critical Support Service contract for your company.
- Cisco Unified Computing Support Service or Cisco Unified Computing Mission Critical Support Service for the device to be registered.

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**Step 1** Log into a storage controller VM in your HX storage cluster.

**Step 2** Register your HX storage cluster with Support.

Registering your HX storage cluster adds identification to the collected data and automatically enables Smart Call Home. To register your HX storage cluster, you need to specify an email address. After registration, this email address receives support notifications whenever there is an issue and a TAC service request is generated.

Syntax:

```
stcli services sch set [-h] --email EMAILADDRESS
```

Example:

```
# stcli services sch set --email name@company.com
```

**Step 3** Verify data flow from your HX storage cluster to Support is operational.

Operational data flow ensures that pertinent information is readily available to help Support troubleshoot any issues that might arise.

**Note** Contact TAC to verify connectivity.

```
# asupcli [--all] ping
```

--all option runs the commands on all the nodes in the HX cluster.

**Step 4** (Optional) Configure a proxy server to enable Smart Call Home access through port 443.

If your HX storage cluster is behind a firewall, after cluster creation, you must configure the Smart Call Home proxy server. Support collects data at the url: `https://diag.hyperflex.io:443` endpoint.

a. Clear any existing registration email and proxy settings.

```
# stcli services sch clear
```

b. Set the proxy and registration email.

Syntax:

```
stcli services sch set [-h] --email EMAILADDRESS [--proxy-url PROXYURL] [--proxy-port PROXYPORT]
[--proxy-user PROXYUSER] [--portal-url PORTALURL] [--enable-proxy ENABLEPROXY]
```

Syntax Description	Option	Required or Optional	Description
	<b>--email EMAILADDRESS</b>	Required.	Add an email address for someone to receive email from Cisco support. Recommendation is to use a distribution list or alias.
	<b>--enable-proxy ENABLEPROXY</b>	Optional.	Explicitly enable or disable use of proxy.
	<b>--portal-url PORTALURL</b>	Optional.	Specify an alternative Smart Call Home portal URL, if applicable.
	<b>--proxy-url PROXYURL</b>	Optional.	Specify the HTTP or HTTPS proxy URL, if applicable.
	<b>--proxy-port PROXYPORT</b>	Optional.	Specify the HTTP or HTTPS proxy port, if applicable.

Option	Required or Optional	Description
<code>--proxy-user PROXYUSER</code>	Optional.	Specify the HTTP or HTTPS proxy user, if applicable. Specify the HTTP or HTTPS proxy password, when prompted.

Example:

```
# stcli services sch set
--email name@company.com
--proxy-url www.company.com
--proxy-port 443
--proxy-user admin
--proxy-password adminpassword
```

- c. Ping to verify the proxy server is working and data can flow from your HX storage cluster to the Support location.

**Note** Contact TAC to verify connectivity.

```
# asupcli [--all] ping
--all option runs the command on all the nodes in the HX cluster.
```

**Step 5** Verify Smart Call Home is enabled.

When Smart Call Home configuration is `set`, it is automatically enabled.

```
# stcli services sch show
```

**Step 6** Enable Auto Support (ASUP) notifications.

Typically, Auto Support (ASUP) is configured during HX storage cluster creation. If it was not, you can enable it post cluster creation using HX Connect or CLI.

If Smart Call Home is disabled, enable it manually.

```
# stcli services sch enable
```





# CHAPTER 4

## HyperFlex Smart Call Home CLI Commands

This chapter provides reference information on the HyperFlex Smart Call Home CLI commands.

- [stcli services sch Commands](#), on page 11
- [stcli services sch clear Command](#), on page 12
- [stcli services sch disable Command](#), on page 12
- [stcli services sch enable Command](#), on page 12
- [stcli services sch ping Command](#), on page 13
- [stcli services sch set Command](#), on page 13
- [stcli services sch show Command](#), on page 14

### stcli services sch Commands

This section lists and describes the Cisco Smart Call Home (SCH) commands. Smart call home provides continuous monitoring, proactive diagnostics, alerts, service ticket notifications, and remediation recommendations about the HX storage cluster to the designated ASUP customer contacts. It also provides a means to provide the information through HTTPS and a proxy server, if needed.



**Note** If your HX storage cluster is behind a firewall, a proxy server is required for access.

The **stcli services cli** support both HTTP and HTTPS proxy.

**stcli services sch [-h] {enable | disable | show | ping | clear | set}**

Syntax Description	Option	Required or Optional	Description
	<b>clear</b>	One of set required.	Clears the smart call home configuration.
	<b>disable</b>	One of set required.	Disables smart call home.
	<b>enable</b>	One of set required.	Enables smart call home.
	<b>ping</b>	One of set required.	Pings the smart call home endpoint.
	<b>set</b>	One of set required.	Commands for smart call home registration, including proxy server for HTTPS access

Option	Required or Optional	Description
show	One of set required.	Shows the smart call home configuration.

**Command Default** None. One option from the set is required.

**Usage Guidelines** Accompany the `stcli services sch` command with one of the positional arguments enclosed in `{ }` or optional arguments enclosed in `[ ]`.

## stcli services sch clear Command

Removes the smart call home email and proxy settings from the storage cluster configuration.

**stcli services sch clear [-h]**

**Command Default** No additional options.

**Usage Guidelines** Run the `stcli services sch clear` command to remove the smart call home notification email and proxy settings from storage cluster configuration.

```
# stcli services sch clear
```

## stcli services sch disable Command

Disables HX smart call home.

**stcli services sch disable [-h]**

**Command Default** No additional options.

**Usage Guidelines** Run the `stcli services sch disable` command.

```
# stcli services sch disable
```

## stcli services sch enable Command

Enables HX smart call home. See `stcli services sch set` to configure the notification email address.

**stcli services sch enable [-h]**

**Command Default** No additional options.



**Usage Guidelines** Run the `stcli services sch enable` command.

```
# stcli services sch enable
```

## stcli services sch ping Command

Pings the Smart Call Home endpoint.

```
stcli services sch ping [-h]
```

**Command Default** No options.

**Usage Guidelines** Run the `stcli services sch ping` command.

This example shows:

```
# stcli services sch ping
ping to callhome endpoint was successful
```

## stcli services sch set Command

Configures the smart call home service required contact and proxy server.



**Important** Please enter password when prompted.

The `stcli services cli` support both HTTP and HTTPS proxy.

```
stcli services sch set [-h] --email EMAILADDRESS [--proxy-url PROXYURL] [--proxy-port PROXYPORT] [--proxy-user PROXYUSER] [--portal-url PORTALURL] [--enable-proxy ENABLEPROXY]
```

Syntax Description	Option	Required or Optional	Description
	<code>--email EMAILADDRESS</code>	Required.	Add an email address for someone to receive email from Cisco support. Recommendation is to use a distribution list or alias.
	<code>--enable-proxy ENABLEPROXY</code>	Optional.	Explicitly enable or disable use of proxy.
	<code>--portal-url PORTALURL</code>	Optional.	Specify an alternative Smart Call Home portal URL, if applicable.
	<code>--proxy-url PROXYURL</code>	Optional.	Specify the HTTP or HTTPS proxy URL, if applicable.

Option	Required or Optional	Description
<b>--proxy-port PROXYPORT</b>	Optional.	Specify the HTTP or HTTPS proxy port, if applicable.
<b>--proxy-user PROXYUSER</b>	Optional.	Specify the HTTP or HTTPS proxy user, if applicable. Specify the HTTP or HTTPS proxy password, when prompted.

**Command Default**

None. Email address is required. Proxy server is not configured by default.

**Usage Guidelines**

Accompany the `stcli services sch set` command with an email recipient address. Set the proxy server if your HX storage cluster is behind a firewall.

To use the smart call home service, ensure it is enabled. See the `stcli services sch show` and `stcli services sch enable` commands.

```
# stcli services sch set --email alias@mycompany.com
```

## stcli services sch show Command

Shows the smart call home configuration, this includes configured notification email and proxy settings, and whether smart call home is enabled or disabled.

**stcli services sch show [-h]**

**Command Default**

No additional options available.

**Usage Guidelines**

Run the `stcli services sch show` command to list the applied smart call home settings.

This sample response indicates that smart call home is enabled, but the email addresses and proxy settings are not configured.

```
# stcli services sch show

proxyPort: 0
proxyUser:
enabled: True
proxyPassword:
cloudEnvironment: production
proxyUrl:
emailAddress:
portalUrl:
cloudAsupEndpoint: https://diag-hyperflex.io/
```