cisco.



Cisco ACI Smart Callhome New and Changed Information 2

New and Changed Information

The following table provides an overview of the significant changes up to this current release. The table does not provide an exhaustive list of all changes or the new features up to this release.

Table 1: New and Changed Information

Cisco APIC Release Version	Feature	Description
Release 3.2(1)	This feature was introduced	

About Smart Callhome

Smart Callhome provides an email-based notification for critical system policies in a similar way as Callhome. However, Smart Callhome collects a more specific selection of faults to deliver in email messages.



Note Smart Callhome <u>only</u> collects and delivers faults.

The fault triggers that are typical of the Smart Callhome feature correspond to the kind of events that threaten to disrupt your network. Examples are:

- Temperature Faults: The temperature of a sensor exceeds a threshold.
- Fan/ Power Supply Faults: A fan or power supply unit goes offline.
- Disk Utilization Faults: The disk usage of a device exceeds a threshold.

Smart Callhome collects faults and emails them to a network support engineer, a Network Operations Center, or to the Cisco Technical Assistance Center (TAC).

Smart Callhome Destination Groups

Creating a Smart Callhome Destination Group and Destinations Using the GUI

Smart Callhome faults can be collected and exported to a destination group for delivery to your network support team or Cisco's Smart Callhome services. The **Create Smart Callhome Destination Group** screen contains properties for specifying a Smart Callhome destination group and associated destinations.

The Smart Callhome Destination Group is used by the Cisco ACI Fabric for sending Smart Callhome messages to configured destinations.

Procedure

Step 1 Choose Admin > External Data Collectors.

- Step 2In the Navigation pane, right-click Monitoring Destinations and choose Create Smart Callhome Destination Group.Alternatively, expand Monitoring Destinations in the Navigation pane, click Smart Callhome, and in the Smart
Callhome work pane, click theActions drop down list, then clickCreate Smart Callhome Destination Group.
 - In the **Create Smart Callhome Destination Group** dialog, perform the following actions:
 - a) (Required) Enter a name in the Name field.
 - b) Enter a description in the **Description** field.
 - c) From the Admin State drop-down list, choose a value.
 - d) Use the Port Number up and down arrows to choose the port number.
 - e) (Required) Enter the IP address of the SMTP server in the SMTP Server field.
 - f) From the Management EPG drop-down list, choose a value.
 - g) Enter an email address in the From Email field.
 - h) Enter an email address in the Reply To Email field.
 - i) Enter an email address in the Customer Contact Email field.
 - j) Enter a phone number in the **Phone Contact** field.
 - k) Enter a name in the Contact Information field.
 - 1) Enter an address in the Street Address field.
 - m) Enter a contact id value in the Contract Id field.
 - n) Enter the customer ID in the Customer Id field.
 - o) Enter the site ID in the Site Id field.
 - p) Click Next.

Step 3

Step 4 In the **Smart Destinations** dialog box, click the + symbol above the **Create Smart Destinations** table.

Step 5 In the **Create Smart Destinations** table editor, perform the following actions:

- a) Enter a name in the Name field.
- b) From the Admin State drop-down list, choose a value.
- c) Enter an email address in the Email field.
- d) From the Format drop-down list, choose a format.
- e) Put a check in the RFC Compliant box if you want the emails to be in an RFC-compliant format.

If you put a check in the box, then, among other things, the email includes the description of the fault in the email body, which makes the email human-readable. If you do not put a check in the box, the email instead includes the description of the fault in the subject.

f) Click Update.

Step 6 Click Finish.

Creating a Smart Callhome Destination Group Using the NX-OS-Style CLI

Smart Callhome collects faults and emails them to a network support engineer, a Network Operations Center, or to the Cisco Technical Assistance Center (TAC).

You can use the NX-OS-style CLI to configure Smart Callhome destination groups and destinations. A Smart Callhome destination group enables you to create a list of email destinations to which fault data is sent. You can create one or more destinations in a group. After the destination group is created, you can associate it with a Smart Callhome source, either for the entire switch fabric supported by the Cisco Application Policy Infrastructure Controller (Cisco APIC) or for a specific Tenant.

The following example CLI commands show how to configure a Smart Callhome destination group and destination using the NX-OS-style CLI:

Procedure

Step 1	Enter the configuration mode.			
	Example: apic1# config			
Step 2	Enter the Smart Callhome common policy configuration mode. Example:			
	apic1(config)# smartcallhome common			
	Note The default name for the common policy configuration mode is "common". It is the only name that can be created.			
Step 3	Create a Smart Callhome destination group.			
	Example:			
	In the following command, a Smart Callhome destination group is created:			
	<pre>apic1(config-smartcallhome)# destination-profile</pre>			
Step 4	Configure an SMTP server in the new destination group.			
	Example:			
	In the following command, an SMTP server with an IP address of "10.10.10.2" is added to the destination group:			
	<pre>apic1(config-callhome-destnprof)# transport email mail-server 10.10.10.2</pre>			
Step 5	Configure profile parameters about the new Smart Callhome destination group.			
	Example:			
	The following commands provide additional information about the destination group:			
	• contract-id: The service contract ID of the customer.			
	• customer-id: The customer ID.			
	• description: A description for the Smart Callhome destination profile.			
	• email-contact: The customer contact e-mail address.			
	• phone-contact: The customer contact phone number.			
	• site-id: The ID of the site where the network is deployed.			
	• street-address: The street address of the site.			
Step 6	Create a Smart Callhome destination in the new destination group.			
	Example:			
	In the following command, a remote Smart Callhome destination named "sch-dest-1" is created:			
	<pre>apic1(config-callhome-destnprof)# destination sch-dest-1</pre>			
Step 7	Configure specific parameters for the new remote Smart Callhome destination. Example:			

In the following command example, the following characteristics are configured for the new remote destination:

- Email address: net-admin@site.com
- · Message format: Short text
- RFC Compliant: True

```
apic1(config-callhome-destnprof-destn)# email-addr net-admin@site.com
apic1(config-callhome-destnprof-destn)# format short-txt
apic1(config-callhome-destnprof-destn)# rfc-compliant true
```

The result of this configuration is the creation of a Smart Callhome destination group containing a remote email destination. If you want the same Smart Callhome fault data sent to multiple email destinations, you can repeat steps 5 and 6 as many times as needed.

Creating a Smart Callhome Destination Group Using the REST API

Procedure

Create a Smart Callhome destination group.

Example:

{

POST https://192.168.1.141/api/node/mo/uni/fabric.json

```
"callhomeSmartGroup": {
  "attributes": {
   "name": "<destination-group-name>",
   "descr": "<description>"
  },
  "children": [
    {
      "callhomeSmartDest": {
        "attributes": {
          "name": "<destination-name>",
          "email": "<email-address>",
          format="xml"
        },
        "children": []
      }
   },
    {
      "callhomeProf": {
        "attributes": {
          "from": "<email-address>",
          "port": "<number>",
          "replyTo": "<email-address>",
          "email": "<customer-contact-email>",
          "phone": "<contact-phone-number>",
          "contact": "<name>",
          "addr": "<streeet-address>",
          "contract": "<id>",
          "customer": "<id>",-
          "site": "<id>"
        },
        "children": [
          {
            "callhomeSmtpServer": {
              "attributes": {
```

```
"host": "<hostname-or-ip-address>"
              },
              "children": [
                {
                  "file RsARemoteHostToEpg": {
                    "attributes": {
                      "tDn": "uni/tn-mgmt/mgmtp-default/oob- default"
                    },
                    "children": []
                  }
                }
             ]
           }
         }
    ]
}
   }
 1
}
```

Smart Callhome Sources

Creating a Smart Callhome Source Using the GUI

The Smart Callhome source is used by the Cisco ACI Fabric to collect fault information to send in messages to destinations created in Smart Callhome destination groups.

The origin of the faults collected is dependent on where the source is configured. If, for example, the Smart Callhome source is created for the Fabric, then all faults generated in all switches supported by the Cisco APIC are collected and delivered to the associated Smart Callhome destinations. Alternatively, the source can be configured for a specific tenant or for external access policies. Subsequently, faults associated with the tenant or external access policy are collected and delivered to the associated destinations.

Note You can only create <u>one</u> Smart Callhome source for a specific monitoring policy (fabric policy, external access policy, or tenant).

The following procedure configures a Smart Callhome source in the fabric policy.

Procedure

	Choose Fabric > Fabric Policies.
	In the Navigation pane, expand the following:
	a) Policies
	b) Monitoring
	c) Common Policy
Click Callhome/Smart Callhome/SNMP/Syslog/TACACS.	
	In the Callhome/Smart Callhome/SNMP/Syslog/TACACS work pane, click the Smart Callhome tab
	In the Smart Callhome work pane double-click the Faults entry (under Include)

If the Faults entry does not exist, follow these steps:

- a) Click the Actions drop-down list, then click Create Smart Callhome Source. Alternatively, right-click Callhome/Smart Callhome/SNMP/Syslog/TACACS in the Navigation pane and select Create Smart Callhome Source.
- b) In the **Create Smart Callhome Source** dialog, choose a destination group from the **Destination Group** drop-down list.
 - **Note** If you do not want to choose an existing Smart Callhome destination group in the drop-down list, or one is not available, create one by clicking **Create Smart Callhome Destination Group**.
- c) Click Submit.
- **Step 6** In the **Smart Callhome Source** dialog, choose a destination group from the **Destination Group** drop-down list.
 - **Note** If you do not want to choose an existing Smart Callhome destination group in the drop-down list, or one is not available, create one by clicking **Create Smart Callhome Destination Group**.

Step 7 Click Submit.

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