

Smart Call Home Quick Start Configuration Guide

Smart Call Home offers diagnostics and real-time alerts on select Cisco devices, which provides higher network availability and increased operational efficiency. Smart Call Home is a connected service of Cisco SMARTnet for the MDS 9000.

This document provides the minimum steps to configure and register a MDS 9000 system for Smart Call Home using the following four available options. It is assumed that the device has the necessary DNS configuration (ip domain-name and ip name-server for DNS look-ups or ip host for static entries) in order to resolve host-names that may appear in destination addresses.

1. [HTTPS transport from the MDS 9000 to Cisco](#)
2. [Email transport from the MDS 9000 to Cisco](#)
3. [HTTP from the MDS 9000 to a Transport Gateway \(TG\) - HTTPS transport to Cisco](#)
4. [Email from the MDS 9000 to a Transport Gateway \(TG\) - HTTPS transport to Cisco](#)

Note: For security reasons, Cisco recommends customers make use of the HTTPS transport option, due to the additional payload encryption that HTTPS offers. The [Transport Gateway software](#) is downloadable from Cisco and is available for customers that require an aggregation point or a proxy for connection to the internet.

Requirements for Smart Call Home:

- SAN-OS version 1.0(2) or greater and NX-OS version 4.1(1) or greater for the email transport options. NX-OS version 4.1(3) or greater for the HTTP or HTTPS options
- A CCO ID associated with an appropriate Cisco SMARTnet Service contract for your company
- Cisco SMARTnet Service for the device to be registered

Resources for Smart Call Home:

Smart Call Home resources are available at www.cisco.com/go/smartcall.

Smart Call-Home User Guide -

http://www.cisco.com/en/US/docs/switches/lan/smart_call_home/user_guides/Book.html

NX-OS 4.x Call-Home configuration guide -

http://www.cisco.com/en/US/docs/switches/datacenter/sw/4_1/nx-os/system_management/configuration/guide/sm_6callhome.html

SAN-OS 3.x Call-Home configuration guide -

http://cisco.com/en/US/docs/storage/san_switches/mds9000/sw/rel_3_x/configuration/guides/cli_3_3/call.html

Cisco MDS 9000 Series SAN-OS and NX-OS Configuration Guides -

http://cisco.com/en/US/products/ps5989/products_installation_and_configuration_guides_list.html

Smart Call Home server certificate for HTTPS -

http://www.cisco.com/en/US/docs/switches/lan/smart_call_home/user_guides/SCH_Ch6.pdf#G1039385

Call Home Configuration - HTTPS to Cisco

The following is a sample configuration showing the minimum steps required to configure Call Home on a MDS 9000 to communicate with the Smart Call Home System using HTTPS and a command to start the registration process.

1. **Set the system contact** - In global configuration mode enter the mandatory system contact using the `snmp-server contact` command.

```
MDS-9000#config t
MDS-9000 (config)#snmp-server contact sys-contact
```

2. **Configure the mandatory contact information (phone number, email address, & street address) and enable Callhome** -

```
MDS-9000 (config)#callhome
MDS-9000 (config-callhome)#email-contact email-address
MDS-9000 (config-callhome)#phone-contact +1-000-000-0000
MDS-9000 (config-callhome)#streetaddress a-street-address
MDS-9000 (config-callhome)#enable
```

3. **Set the destination profile CiscoTAC-1's transport method and address** -

```
MDS-9000 (config-callhome)#destination-profile CiscoTAC-1 transport-method http
MDS-9000 (config-callhome)#destination-profile CiscoTAC-1 http
https://tools.cisco.com/its/service/oddce/services/DDCEService
```

4. **Enable periodic inventory, set interval and Exit Callhome configuration mode** -

```
MDS-9000 (config-callhome)#periodic-inventory notification
MDS-9000 (config-callhome)#periodic-inventory notification interval 30
MDS-9000 (config-callhome)#exit
```

5. **Install a security certificate** - Copy the Cisco server certificate from http://www.cisco.com/en/US/docs/switches/lan/smart_call_home/user_guides/SCH_Ch6.pdf#G1039385. The security certificate can be copied from the previous URL, which is from the Smart Call Home User's Guide. Configure a trust-point and prepare to enroll the certificate via the terminal using copy and paste when prompted.

```
MDS-9000 (config)#crypto ca trustpoint cisco
MDS-9000 (config-trustpoint)#enroll terminal
MDS-9000 (config-trustpoint)#crypto ca authenticate cisco
input (cut & paste) CA certificate (chain) in PEM format;
end the input with a line containing only END OF INPUT :
```

```
[paste the certificate here and accept it ]
```

```
Do you accept this certificate? [yes/no]: yes
```

6. **Exit configuration mode and save the configuration** -

```
MDS-9000 (config)#end
MDS-9000#copy running-config startup-config
```

7. **Send a Call Home Inventory message to start the registration process** -

```
MDS-9000#callhome test inventory
trying to send test callhome inventory message
successfully sent test callhome inventorymessage
```

Receive an email from Cisco and follow the link to complete registration for Smart Call home.

Call Home Configuration - Email to Smart Call Home

The following is a sample configuration showing the minimum steps required to configure Call Home on a MDS 9000 to communicate using email with the Smart Call Home System and a command to start the registration process.

1. **Set the system contact** - In global configuration mode enter the mandatory system contact using the `snmp-server contact` command.

```
MDS-9000#config t
MDS-9000 (config)#snmp-server contact sys-contact
```

2. **Configure the mandatory contact information (phone number, email address, & street address) -**

```
MDS-9000 (config)#callhome
MDS-9000 (config-callhome)#email-contact email-address
MDS-9000 (config-callhome)#phone-contact +1-000-000-0000
MDS-9000 (config-callhome)#streetaddress a-street-address
```

3. **Configure the mandatory email server information and reply-to and from email addresses** - The server address is an IPv4 address, IPv6 address or domain-name of a SMTP server that Call Home will send email messages to. An optional port number (default = 25) may also be configured.

```
MDS-9000 (config-callhome)#transport email smtp-server ip-address port 25
MDS-9000 (config-callhome)#transport email reply-to email-address
MDS-9000 (config-callhome)#transport email from email-address
```

4. **Set the destination profile's email-address to callhome@cisco.com -**

```
MDS-9000 (config-callhome)#destination-profile XML-dest email-addr callhome@cisco.com
```

5. **Enable periodic inventory and set the interval -**

```
MDS-9000 (config-callhome)#periodic-inventory notification
MDS-9000 (config-callhome)#periodic-inventory notification interval 30
```

6. **Enable callhome, Exit and Save the configuration -**

```
MDS-9000 (config-callhome)#enable
MDS-9000 (config-callhome)#end
MDS-9000#copy running-config startup-config
```

7. **Send a Call Home Inventory message to start the registration process -**

```
MDS-9000#callhome test inventory
trying to send test callhome inventory message
successfully sent test callhome inventorymessage
```

Receive an email from Cisco and follow the link to complete registration for Smart Call home.

Call Home Configuration - HTTP to Transport Gateway and HTTPS to Cisco

The following is a sample configuration showing the minimum steps required to configure Call Home on a MDS 9000 to use HTTP to send Call Home messages to a Transport Gateway (TG) and a command to start the registration process. The TG will use HTTPS to communicate with the Smart Call Home System. This assumes that the [Transport Gateway software](#) has been installed, configured and registered with Smart Call Home.

1. **Set the system contact** - In global configuration mode enter the mandatory system contact using the `snmp-server contact` command.

```
MDS-9000#config t
MDS-9000(config)#snmp-server contact sys-contact
```

2. **Configure the mandatory contact information (phone number, email address, & street address) and enable Callhome** -

```
MDS-9000(config)#callhome
MDS-9000(config-callhome)#email-contact email-address
MDS-9000(config-callhome)#phone-contact +1-000-000-0000
MDS-9000(config-callhome)#streetaddress a-street-address
MDS-9000(config-callhome)#enable
```

3. **Set the destination profile CiscoTAC-1's transport method and address** - The destination HTTP address is provided by the Transport Gateway (Refer to [Configure the HTTP Server](#) section).

```
MDS-9000(config-callhome)#destination-profile CiscoTAC-1 transport-method http
MDS-9000(config-callhome)#destination-profile CiscoTAC-1 http http://url-from-TG
```

4. **Enable periodic inventory, set interval and Exit Callhome configuration mode** -

```
MDS-9000(config-callhome)#periodic-inventory notification
MDS-9000(config-callhome)#periodic-inventory notification interval 30
MDS-9000(config-callhome)#exit
```

5. **Exit configuration mode and save the configuration** -

```
MDS-9000(config)#end
MDS-9000#copy running-config startup-config
```

6. **Send a Call Home Inventory message to start the registration process** -

```
MDS-9000#callhome test inventory
trying to send test callhome inventory message
successfully sent test callhome inventorymessage
```

Receive an email from Cisco and follow the link to complete registration for Smart Call home.

Call Home Configuration - Email to Transport Gateway and HTTPS to Cisco

The following is a sample configuration showing the minimum steps required to configure Call Home on a MDS 9000 to communicate via a Transport Gateway with the Smart Call Home System using HTTPS and a command to start the registration process. The TG will use HTTPS to communicate with the Smart Call Home System. This assumes that the [Transport Gateway software](#) has been installed, configured and registered with Smart Call Home.

1. **Set the system contact** - In global configuration mode enter the mandatory system contact using the `snmp-server contact` command.

```
MDS-9000#config t
MDS-9000 (config)#snmp-server contact sys-contact
```

2. **Configure the mandatory contact information (phone number, email address, & street address) -**

```
MDS-9000 (config)#callhome
MDS-9000 (config-callhome)#email-contact email-address
MDS-9000 (config-callhome)#phone-contact +1-000-000-0000
MDS-9000 (config-callhome)#streetaddress a-street-address
```

3. **Configure the mandatory email server information and reply-to and from email addresses** - The server address is an IPv4 address, IPv6 address or domain-name of a SMTP server that Call Home will send email messages to. An optional port number (default = 25) may also be configured.

```
MDS-9000 (config-callhome)#transport email smtp-server ip-address port 25
MDS-9000 (config-callhome)#transport email reply-to email-address
MDS-9000 (config-callhome)#transport email from email-address
```

4. **Set the destination profile's email-address to an email address for the account that the Transport Gateway will be accessing -**

```
MDS-9000 (config-callhome)#destination-profile XML-dest email-addr email-address
```

5. **Enable periodic inventory and set interval -**

```
MDS-9000 (config-callhome)#periodic-inventory notification
MDS-9000 (config-callhome)#periodic-inventory notification interval 30
```

6. **Enable callhome, Exit and Save the configuration -**

```
MDS-9000 (config-callhome)#enable
MDS-9000 (config-callhome)#end
MDS-9000#copy running-config startup-config
```

7. **Send a Call Home Inventory message to start the registration process -**

```
MDS-9000#callhome test inventory
trying to send test callhome inventory message
successfully sent test callhome inventorymessage
```

Receive an email from Cisco and follow the link to complete registration for Smart Call home.

Downloading Cisco Transport Gateway Software

To download Cisco Transport Gateway software, go to the [Download Software](#) web page. On that page the Related Information section on the right lists the different OS versions (Linux, Solaris, Windows) of Transport Gateway software. Find the correct OS version of Transport Gateway software in the list and then click either **Download Now** or **Add to cart**.

After you have downloaded the correct OS version of Transport Gateway software, then refer to the [Transport Gateway Installation/Configuration/Registration sections of the Smart Call Home Users' Guide](#) for information on how to install the downloaded code then configure and register the Transport Gateway.