

Smart Call Home Quick Start Configuration Guide for Cisco Nexus[®] 7000 Series Switches

Cisco[®] 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 Nexus 7000.

This document provides the minimum steps to configure and register a Nexus 7000 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 Nexus 7000 to Cisco](#)
2. [Email transport from the Nexus 7000 to Cisco](#)
3. [HTTP from the Nexus 7000 to a Transport Gateway \(TG\) - HTTPS transport to Cisco](#)
4. [Email from the Nexus 7000 to a Transport Gateway \(TG\) - HTTPS transport to Cisco](#)

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

Requirements for Smart Call Home:

- NX-OS version 4.0(1) or greater for the email transport option and 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:

[Configuring Smart Call Home](#)

[Smart Call Home Support Forum](#)

[Smart Call Home Cisco.com](#)

[Smart Call Home User Guide](#)

[Cisco Nexus 7000 Series NX-OS Configuration Guides, All Available Releases](#)

[Smart Call Home Server Certificate for HTTPS](#)

Call Home Configuration - HTTPS to Cisco

The following is a sample configuration showing the minimum steps required to configure Call Home on a Nexus 7000 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.

```
NX-7000#config t
NX-7000 (config)#snmp-server contact sys-contact
```

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

```
NX-7000 (config)#callhome
NX-7000 (config-callhome)#email-contact email-address
NX-7000 (config-callhome)#phone-contact +1-000-000-0000
NX-7000 (config-callhome)#streetaddress a-street-address
NX-7000 (config-callhome)#enable
```

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

```
NX-7000 (config-callhome)#destination-profile CiscoTAC-1 transport-method http
NX-7000 (config-callhome)#destination-profile CiscoTAC-1 http
https://tools.cisco.com/its/service/odce/services/DDCEService
```

4. **Specify VRF for Callhome messages - If the VRF to be used is not the default, and then set the VRF using the transport http configuration command. It is critical that DNS look-ups are enabled and working in the specified VRF.**-

```
NX-7000 (config-callhome)# transport http use-vrf vrf-name
```

5. **Set the periodic inventory interval to 30 days** -

```
NX-7000 (config-callhome)#periodic-inventory notification interval 30
```

6. **Install a security certificate**

Copy the Cisco Server Certificate from the [Smart Call home User Guide, Chapter 6](#). 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.

```
NX-7000 (config)#crypto ca trustpoint cisco
NX-7000 (config-trustpoint)#enroll terminal
NX-7000 (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
```


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

```
NX-7000 (config)#end
NX-7000#copy running-config startup-config
```

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

```
NX-7000#callhome test inventory
trying to send test callhome inventory message
successfully sent test callhome inventory message
```

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

 When CFS is enabled for Call Home, commit is required to activate the changes to the Callhome configuration. When CFS is disabled, commit results in an error that can be ignored.

Commit changes and Exit Callhome configuration mode

```
NX-7000 (config-callhome) #commit
NX-7000 (config-callhome) #exit
```

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 Nexus 7000 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.

```
NX-7000#config t
NX-7000 (config) #snmp-server contact sys-contact
```

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

```
NX-7000 (config) #callhome
NX-7000 (config-callhome) #email-contact email-address
NX-7000 (config-callhome) #phone-contact +1-000-000-0000
NX-7000 (config-callhome) #streetaddress a-street-address
```

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

```
NX-7000 (config-callhome) #transport email smtp-server ip-address port 25 use-vrf vrf-name
NX-7000 (config-callhome) #transport email from email-address
```

4. **Set the destination profile CiscoTAC-1 email-address to callhome@cisco.com** -

```
NX-7000 (config-callhome) #destination-profile CiscoTAC-1 email-addr callhome@cisco.com
```


5. **Set the periodic inventory interval to 30 days** -

```
NX-7000 (config-callhome) #periodic-inventory notification interval 30
```

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

```
NX-7000#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.

 When CFS is enabled for Call Home, commit is required to activate the changes to the Callhome configuration. When CFS is disabled, commit results in an error that can be ignored.

Enable callhome, Commit, Exit and Save the configuration

```
NX-7000 (config-callhome) #enable
NX-7000 (config-callhome) #commit
NX-7000 (config-callhome) #end
NX-7000#copy running-config startup-config
```

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 Nexus 7000 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.

```
NX-7000#config t
NX-7000(config)#snmp-server contact sys-contact
```

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

```
NX-7000 (config)#callhome
NX-7000 (config-callhome)#email-contact email-address
NX-7000 (config-callhome)#phone-contact +1-000-000-0000
NX-7000 (config-callhome)#streetaddress a-street-address
```

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).

```
NX-7000 (config-callhome)#destination-profile CiscoTAC-1 transport-method http
NX-7000 (config-callhome)#destination-profile CiscoTAC-1 http http://url-from-TG
```

4. **Specify VRF for Callhome messages** - If the VRF to be used is not the default, then set the VRF using the `transport http configuration` command. It is critical that DNS look-ups are enabled and working in the specified VRF.

```
NX-7000 (config-callhome)# transport http use-vrf vrf-name
```


5. **Set the periodic inventory interval to 30 days -**

```
NX-7000 (config-callhome)#periodic-inventory notification interval 30
```

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

```
NX-7000#callhome test inventory
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.

 When CFS is enabled for Call Home, commit is required to activate the changes to the Callhome configuration. When CFS is disabled, commit results in an error that can be ignored.

Enable callhome, Commit, Exit and Save the configuration

```
NX-7000 (config-callhome)#enable
NX-7000 (config-callhome)#commit
NX-7000 (config-callhome)#end
NX-7000#copy running-config startup-config
```

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 Nexus 7000 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.

```
NX-7000#config t
NX-7000(config)#snmp-server contact sys-contact
```

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

```
NX-7000 (config)#callhome
NX-7000 (config-callhome)#email-contact email-address
NX-7000 (config-callhome)#phone-contact +1-000-000-0000
NX-7000 (config-callhome)#streetaddress a-street-address
```

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

```
NX-7000 (config-callhome)#transport email smtp-server ip-address port 25 use-vrf vrf-name
NX-7000 (config-callhome)#transport email from email-address
```

4. **Set the destination profile CiscoTAC-1 email-address to an email address for the account that the Transport Gateway will be accessing -**

```
NX-7000 (config-callhome)#destination-profile CiscoTAC-1 email-addr email-address
```


5. **Set the periodic inventory interval to 30 days -**

```
NX-7000 (config-callhome)#periodic-inventory notification interval 30
```

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

```
NX-7000#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 the registration for Smart Call home.

 When CFS is enabled for Call Home, commit is required to activate the changes to the Callhome configuration. When CFS is disabled, commit results in an error that can be ignored.

Enable callhome, Exit and Save the configuration

```
NX-7000 (config-callhome)#enable
NX-7000 (config-callhome)#commit
NX-7000 (config-callhome)#end
NX-7000#copy running-config startup-config
```

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.