

Smart Call Home Quick Start Configuration Guide for Cisco Integrated Services Routers®

Smart Call Home offers proactive diagnostics and real-time alerts on select Cisco devices, which provides higher network availability and increased operational efficiency. Smart Call Home is a secure connected service of Cisco SMARTnet™ for Cisco ISR's.

This document provides information to configure and register a Cisco ISR for Smart Call Home using four 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 Cisco ISR to Cisco](#)
2. [HTTP from the Cisco ISR to a Transport Gateway \(TG\) - HTTPS transport to Cisco](#)
3. [Email from the Cisco ISR 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 that require an aggregation point or a proxy for connection to the internet.

Requirements for Smart Call Home:

- IOS version 15.1(1) T is the minimum version required to support Call Home.
- On Cisco ISR4000 series, IOS XE 3.13 is the minimum version required to support Call Home
- A CCO ID associated with an appropriate Cisco SMARTnet Service contract for your company.
- Cisco SMARTnet Service for the device to be registered.
- An image with cryptographic support is required to encrypt messages on the Cisco ISR for HTTPS transport.

Resources for Smart Call Home:

[Configuring Smart Call Home on ISR 4000 series](#)

[Call-Home ISR configuration guide](#)

[Smart Call Home Support Forum](#)

[Smart Call Home User Guide](#)

Call Home Configuration - HTTPS to Cisco

The following is a sample configuration showing the minimum steps required to configure Call Home on a Cisco ISR to communicate securely with the Smart Call Home System using HTTPS and a command to start the registration process. All commands are in blue.

1. **Enable Call Home** - In global configuration mode enter the service call-home command to activate the call-home feature and enter the call-home configuration command to enter call-home configuration mode.

```
ISR#configure terminal
ISR(config)#service call-home
ISR(config)#call-home
```

2. **Configure the mandatory contact email address** -

```
ISR(cfg-call-home)#contact-email-addr username@domain-name
```

3. **Activate the default CiscoTAC-1 Profile and set the transport option to HTTP-**

```
ISR(cfg-call-home)#profile CiscoTAC-1
ISR(cfg-call-home-profile)#active
ISR(cfg-call-home-profile)#destination transport-method http
```

4. **Install a security certificate** - Copy the Cisco server certificate from [Smart Call home User Guide, Chapter 6](#).



There are numerous ISR and IOS versions for the ISR device, and due to this there are two versions of the revocation-check command. Which revocation-check command to use is dependent upon the ISR and IOS version. The following items are the two versions of the command:

```
revocation-check crl none
revocation-check none
```

In most cases the revocation-check none command will work, if it does not work then use the revocation-check crl none command. Configure a trust-point and enroll the certificate via the terminal using copy and paste when prompted.

```
ISR(config)#crypto pki trustpoint cisco
ISR(ca-trustpoint)#enroll terminal
ISR(ca-trustpoint)#revocation-check none
ISR(ca-trustpoint)#exit
ISR(config)#crypto pki authenticate cisco

Enter the base 64 encoded CA certificate.
End with a blank line or the word "quit" on a line by itself
[paste the certificate here and accept it]

% Do you accept this certificate? [yes/no]: yes
Trustpoint CA certificate accepted.
% Certificate successfully imported
```

5. **Exit and Save the configuration** -

```
ISR(config)#end
ISR#copy running-config startup-config
```

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

```
ISR#call-home send alert-group inventory profile CiscoTAC-1
Sending inventory info call-home message ...
Please wait. This may take some time ...
```

7. **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 Cisco ISR to use HTTP to send 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. All commands are in blue.

1. **Enable Call Home** - In global configuration mode enter the service call-home command to activate the call-home feature and enter the call-home configuration command to enter call-home configuration mode.

```
ISR#configure terminal
ISR(config)#service call-home
ISR(config)#call-home
```

2. **Configure the mandatory contact email address** -

```
ISR(cfg-call-home)#contact-email-addr username@domain-name
```

3. **De-activate the default CiscoTAC-1 Profile if it is active** -

```
ISR(cfg-call-home)#profile CiscoTAC-1
ISR(cfg-call-home-profile)#no active
```

4. **Configure a user profile** - The profile's alert-group subscriptions will be similar to the default CiscoTAC-1 profile with the destination HTTP transport-method and with a destination HTTP address provided by the Transport Gateway (Refer to [Configure the HTTP Server](#) section).

```
ISR(cfg-call-home-profile)#profile Your_profile_name
ISR(cfg-call-home-profile)#active
ISR(cfg-call-home-profile)#destination transport-method http
ISR(cfg-call-home-profile)#destination address http http://url_from_TG
ISR(cfg-call-home-profile)#subscribe-to-alert-group environment severity minor
ISR(cfg-call-home-profile)#subscribe-to-alert-group syslog severity major pattern ".*"
ISR(cfg-call-home-profile)#subscribe-to-alert-group configuration periodic monthly 23 15:00
ISR(cfg-call-home-profile)#subscribe-to-alert-group inventory periodic monthly 23 15:00
```

5. **Exit and Save the configuration** -

```
ISR(cfg-call-home-profile)#end
ISR#copy running-config startup-config
```

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

```
ISR#call-home send alert-group inventory profile Your_profile_name
Sending inventory info call-home message ...
Please wait. This may take some time ...
```

7. **Receive the 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 Cisco ISR to send Email 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. All commands are in blue.

1. **Enable Call Home** - In global configuration mode enter the service call-home command to activate the call-home feature and enter the call-home configuration command to enter call-home configuration mode.

```
ISR#configure terminal
ISR(config)#service call-home
ISR(config)#call-home
```

2. **Configure the mandatory contact email address** -

```
ISR(cfg-call-home)#contact-email-addr username@domain-name
```

3. **Configure the mandatory email server information** - The mail-server address is an IP address or domain-name of a SMTP server that Call Home will send email messages to.

```
ISR(cfg-call-home)#mail-server <address> priority <server_priority_number>
ISR(cfg-call-home)# transport email from person@company.com
ISR(cfg-call-home)# transport email reply-to person@company.com
```

4. **De-activate the default CiscoTAC-1 Profile if it is active** -

```
ISR(cfg-call-home)#profile CiscoTAC-1
ISR(cfg-call-home-profile)#no active
```

5. **Configure a user profile** - The profile's alert-group subscriptions will be similar to the default CiscoTAC-1 profile with the destination email transport-method and with a destination email address which is for the email account used by the Transport Gateway.

```
ISR(cfg-call-home-profile)#profile Your_profile_name
ISR(cfg-call-home-profile)#active
ISR(cfg-call-home-profile)#destination transport-method email
ISR(cfg-call-home-profile)#destination address email account for TG@yourCompany.com
ISR(cfg-call-home-profile)#subscribe-to-alert-group environment severity minor
ISR(cfg-call-home-profile)#subscribe-to-alert-group syslog severity major pattern ".*"
ISR(cfg-call-home-profile)#subscribe-to-alert-group configuration periodic monthly 23
15:00
ISR(cfg-call-home-profile)#subscribe-to-alert-group inventory periodic monthly 23 15:00
```

6. **Exit and Save the configuration** -

```
ISR(cfg-call-home-profile)#end
ISR#copy running-config startup-config
```

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

```
ISR#call-home send alert-group inventory profile Your_profile_name
Sending inventory info call-home message ...
Please wait. This may take some time ...
```

8. **Receive the 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 User Guide](#) for information on how to install the downloaded code then configure and register the Transport Gateway.