



Cisco IP Phone 7800 Series Release Notes for Firmware Release 12.1(1)

First Published: 2018-03-26

Last Modified: 2018-08-20

Cisco IP Phone 7800 Series Release Notes for Firmware Release 12.1(1)

These release notes support the Cisco IP Phones 7811, 7821, 7841, and 7861 running SIP Firmware Release 12.1(1).

The following table lists the Cisco Unified Communications Manager release and protocol compatibility for the Cisco IP Phones.

Table 1: Cisco IP Phones, Cisco Unified Communications Manager, and Firmware Release Compatibility

Cisco IP Phone	Protocol	Cisco Unified Communications Manager
Cisco IP Phones 7811, 7821, 7841, and 7861	SIP	Cisco Unified Communications Manager version 8.5(1) and later Cisco Unified Communications Manager DST Olsen version D or later SRST 8.0 (IOS load 15.1(1)T) and above
Cisco IP Phones 7811, 7821, 7841, and 7861	SIP	CME 10.0 (IOS load 15.3(3)M)
Cisco IP Phones 7811, 7821, 7841, and 7861		Cisco Expressway X8.7 or Cisco TelePresence Video Communication Server X8.7 (for Mobile and Remote Access)

Related Documentation

Use the following sections to obtain related information.

Cisco IP Phone 7800 Series Documentation

Refer to publications that are specific to your language, phone model, and call control system. Navigate from the following documentation URL:

<https://www.cisco.com/c/en/us/products/collaboration-endpoints/unified-ip-phone-7800-series/index.html>

Cisco Unified Communications Manager Documentation

See the *Cisco Unified Communications Manager Documentation Guide* and other publications that are specific to your Cisco Unified Communications Manager release. Navigate from the following documentation URL:

<https://www.cisco.com/c/en/us/support/unified-communications/unified-communications-manager-callmanager/tsd-products-support-series-home.html>

New and Changed Features

The following sections describe the features that are new or have changed in this release.

Features Available with the Firmware Release

The following sections describe the features available with the Firmware Release.

Cisco Headset 531 and Cisco Headset 532

The Cisco Headset 531 and Cisco Headset 532 are two standard headsets developed for Cisco IP Phones and devices. The 531 features a single earpiece, and offers lightweight comfort. The 532 features two earpieces for use in a noisy environment or busy office.

Both headsets plug into your headset port with a RJ connector.

Cisco Headset 531 and Cisco Headset 532 are supported on Cisco IP Phone 7821, 7841, and 7861 as standard headsets.

Where to Find More Information

- *Cisco IP Phone 7800 and 8800 Series Accessories Guide for Cisco Unified Communications Manager*
- *Cisco IP Phone 7800 Series User Guide for Cisco Unified Communications Manager*

G722.2 AMR-WB Support

Cisco IP Phone 7800 Series now supports the G722.2 Adaptive Multirate Wideband (AMR-WB) audio codec. This codec offers improved audio, a lower bit-rate compression, and enhanced network performance during your times of peak traffic.

Where to Find More Information

- Cisco IP Phone 7800 Series Administration Guide for Cisco Unified Communications Manager

Features Available with the Latest Cisco Unified Communications Manager Device Pack

The following sections describe features in the release which require the new firmware and the latest Cisco Unified Communications Manager Device Pack.

For information about the Cisco Unified IP Phones and the required Cisco Unified Communications Manager device packs, see the following URL:

http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/compat/devpack_comp_mtx.html

Transport Layer Security Enhancements

Administrators now have improved security over phones that act as a HTTPs server. With the parameter Disable TLS1.0 and TLS1.1 for web access, you can apply TLS1.0, TLS1.1, and TLS 1.2 mode, or just TLS 1.2 mode to any phone, or group of phones that function as a HTTPs server.

For other configurations, TLS protocols are configured on the Cisco Unified Communications Manager. As of Cisco Unified Communications Manager 12.0, there are also TLS settings configured by a CLI command. See *Release Notes for Cisco Unified Communications Manager and IM & Presence Service, Release 12.0(1)* for information about new CLI commands on Cisco Unified Communications Manager.

Disable TLS1.0 and TLS1.1 for web access is configured from the Product Specific Configuration Layout pane of your Cisco Unified Communications Manager. Install the latest device package for this feature to function.

Disable TLS1.0 and TLS1.1 is supported on Cisco Unified Communications Manager 11.5(1)SU3 and later.

Where to Find More Information

- *Cisco IP Phone 7800 Series Administration Guide for Cisco Unified Communications Manager*

Installation

Installation Requirements

Before you install the firmware release, you must ensure that your Cisco Unified Communications Manager is running the latest device pack. After you install a device pack on the Cisco Unified Communications Manager servers in the cluster, you need to reboot all the servers.



Note If your Cisco Unified Communications Manager does not have the required device pack to support this firmware release, the firmware may not work correctly.

For information on the Cisco Unified Communications Manager Device Packs, see http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/compat/devpack_comp_mtx.html.

Install the Firmware Release on Cisco Unified Communications Manager

Before using the Cisco Unified IP Phone Firmware Release 12.1(1) with Cisco Unified Communications Manager, you must install the latest firmware on all Cisco Unified Communications Manager servers in the cluster.

Procedure

- Step 1** Go to the following URL:
<http://software.cisco.com/download/navigator.html?mdfid=284883944&i=rm>
- Step 2** Choose **Cisco IP Phones 7800 Series**.
- Step 3** Choose your phone model.
- Step 4** Choose **Session Initiation Protocol (SIP) Software**.

- Step 5** In the Latest Releases folder, choose **12.1(1)**.
- Step 6** Select the following firmware file, click the **Download** or **Add to cart** button, and follow the prompts:
- cmterm-78xx.12-1-1-12.k3.cop.sgn
- Note** If you added the firmware file to the cart, click the **Download Cart** link when you are ready to download the file.
- Step 7** Click the + next to the firmware file name in the Download Cart section to access additional information about this file. The hyperlink for the readme file is in the Additional Information section, which contains installation instructions for the corresponding firmware.
- Step 8** Follow the instructions in the readme file to install the firmware.
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Install the Firmware Zip Files

If a Cisco Unified Communications Manager is not available to load the installer program, the following zip files are available to load the firmware.

- cmterm-78xx.12-1-1-12.zip

Procedure

- Step 1** Go to the following URL:
- <http://software.cisco.com/download/navigator.html?mdfid=284883944&i=rm>
- Step 2** Choose **Cisco IP Phones 7800 Series**.
- Step 3** Choose your phone model.
- Step 4** Choose **Session Initiation Protocol (SIP) Software**.
- Step 5** In the Latest Releases folder, choose **12.1(1)**.
- Step 6** Download the relevant zip files.
- Step 7** Unzip the files.
- Step 8** Manually copy the unzipped files to the directory on the TFTP server. See *Cisco Unified Communications Operating System Administration Guide* for information about how to manually copy the firmware files to the server.
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Limitations and Restrictions

Manufacturing Installed Certificate Signature and SHA-256 Support

The manufacturing installed certificate(MIC) signature has been updated from SHA-128 with RSA to SHA-256 with RSA. You must update and install the new SHA-2 certificates on the Cisco Unified Communications Manager for secure mode to function. You can download the new certificate from <http://www.cisco.com/security/pki/certs/cmca2.cer>.

All applications that authenticate the phone MIC should update the MIC, including the following:

- Cisco Unified Communications Manager

- Cisco Unified Survivable Remote Site Telephony
- Cisco Secure Access Control System
- Cisco Identity Services Engine

For additional information about SHA-2 use and support, see *Security Guide for Cisco Unified Communications Manager*.

Phone Behavior During Times of Network Congestion

Anything that degrades network performance can affect phone voice and video quality, and in some cases, can cause a call to drop. Sources of network degradation can include, but are not limited to, the following activities:

- Administrative tasks, such as an internal port scan or security scan
- Attacks that occur on your network, such as a Denial of Service attack

Health-Care Environment Use

This product is not a medical device and uses an unlicensed frequency band that is susceptible to interference from other devices or equipment.

On-Hook Transfer Limitation in SIP Phones

When the Cisco Unified Communications Manager **Transfer On-Hook Enabled** field is enabled, users might report a problem with direct call transfer in SIP phones. If the user transfers the call and immediately goes on hook before they hear the ring signal, the call may drop instead of being transferred.

The user needs to hear the ring signal so that they can be sure that the call is being routed.

Ringtone Limitation During Firmware Downgrade from Release 11.0

When the phone downgrades from Firmware Release 11.0 to Firmware Release 10.3, the phone may not ring when there is an incoming call. The ringtone for the line has been deleted and must be manually set in the **Settings > Ringtone** menu.

Connections with the PC and SW Ports

If you only have one LAN cable at your desk, you can plug your phone into the LAN with the SW port and then connect your computer into the PC port.

You can also daisy chain two phones together. Connect the PC port of the first phone to the SW port of the second phone.



Caution Do not connect the SW and PC ports into the LAN.

Language Limitation

There is no localized Keyboard Alphanumeric Text Entry (KATE) support for the following Asian locales:

- Chinese (China)
- Chinese (Hong Kong)

- Chinese (Taiwan)
- Japanese (Japan)
- Korean (Korea Republic)

The default English (United States) KATE is presented to the user instead.

For example, the phone screen will show text in Korean, but the **2** key on the keypad will display **a b c 2**
A B C.

Caveats

View Caveats

You can search for caveats using the Cisco Bug Search.

Known caveats (bugs) are graded according to severity level, and can be either open or resolved.

Before you begin

To view caveats, you need the following items:

- Internet connection
- Web browser
- Cisco.com user ID and password

Procedure

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- Step 1** Perform one of the following actions:
- Use this URL for all caveats: [https://bst.cloudapps.cisco.com/bugsearch/search?kw=&pf=prdNm&pfVal=284883944&rls=12.1\(1\),12.1\(1.*\)&sb=anfr&svr=3nH&bt=custV](https://bst.cloudapps.cisco.com/bugsearch/search?kw=&pf=prdNm&pfVal=284883944&rls=12.1(1),12.1(1.*)&sb=anfr&svr=3nH&bt=custV)
 - Use this URL for all open caveats: [https://bst.cloudapps.cisco.com/bugsearch/search?kw=&pf=prdNm&pfVal=284883944&rls=12.1\(1\)&sb=afr&sts=open&svr=3nH&bt=custV](https://bst.cloudapps.cisco.com/bugsearch/search?kw=&pf=prdNm&pfVal=284883944&rls=12.1(1)&sb=afr&sts=open&svr=3nH&bt=custV)
 - Use this URL for all resolved caveats: [https://bst.cloudapps.cisco.com/bugsearch/search?kw=&pf=prdNm&pfVal=284883944&rls=12.1\(1\),12.1\(1.*\)&sb=fr&sts=fd&svr=3nH&bt=custV](https://bst.cloudapps.cisco.com/bugsearch/search?kw=&pf=prdNm&pfVal=284883944&rls=12.1(1),12.1(1.*)&sb=fr&sts=fd&svr=3nH&bt=custV)
- Step 2** When prompted, log in with your Cisco.com user ID and password.
- Step 3** (Optional) Enter the bug ID number in the Search for field, then press **Enter**.
-

Open Caveats

The following table lists severity 1, 2, and 3 defects that are open for the Cisco IP Phone 7800 Series for Firmware Release 12.1(1).

For more information about an individual defect, access the Bug Search toolkit and search for the defect using the Identifier. You must be a registered Cisco.com user to access this online information.

Because defect status continually changes, the table reflects a snapshot of the defects that were open at the time this report was compiled. For an updated view of open defects, access Bug Toolkit as described in [Access Cisco Bug Search, on page 8](#).

Table 2: Open Caveats for 12.1(1)

Identifier	Description
CSCvh50751	Sometimes phone will play "pop" "pop" noise after do factory reset/power cycle to the phone
CSCvh58919	Phone placed or received calls will delay during the DNS query at the first time on SRST
CSCvi26356	7811 when Blind transferring to a busy destination

Resolved Caveats

The following table lists severity 1, 2, and 3 defects that are resolved for the Cisco IP Phone 7800 Series for Firmware Release 12.1(1).

For more information about an individual defect, access the Bug Search toolkit and search for the defect using the Identifier. You must be a registered Cisco.com user to access this online information.

Because defect status continually changes, the table reflects a snapshot of the defects that were open at the time this report was compiled. For an updated view of open defects, access Bug Toolkit as described in [Access Cisco Bug Search, on page 8](#).

Table 3: Resolved Caveats for 12.1(1)

Identifier	Description
CSCve70173:	Phone cannot end call by speaker button after phone login EMCC to make a call and then logout
CSCvf99694	The "Settings" and "Favorites" softkey can display but not work in 7811 with CUCM_12.0
CSCvg92940	78XX: sdump stops logging after a while
CSCvh27731	Memory leak when inter operate with UCCX
CSCvf70819	IP phone decline when NoVoicemail is configured results in Service Not Available message
CSCvf84416	78xx Java out of memory causes phones to reset
CSCvg65640	7821 phone displays a blank page after logging in to EM
CSCvg69127	78XX IP phone logs are not archived
CSCvg77031	78xx stuck on Cisco logo after upgrade from 10.3.1 to 12.0.1
CSCvg81235	Pressed digits disappear when getting an incoming call until another digit is pressed

Identifier	Description
CSCvg91780	CP-7800 one way audio by RTP sequence number reset
CSCvg97127	Phone sends DHCP Discover frame in bound state after DHCP failure
CSCvh53666	CP7841 using french canadian locale have issues with line when calls arrive w/"Formation" Caller-ID
CSCvh66567	7821 user may miss hearing the first word
CSCvh78167	78xx: "Logged in" message is shown for a split second
CSCvh78564	78xx recording does not work when button assigned with service URL is pressed directly
CSCvh78823	Phone stays in the input digit screen until it receives "180 Ringing" response
CSCvg91780	CP-7800 one way audio by RTP sequence number reset

Access Cisco Bug Search

Known problems (bugs) are graded according to severity level. These release notes contain descriptions of the following:

- All severity level 1 or 2 bugs
- Significant severity level 3 bugs

You can search for problems by using Cisco Bug Search.

Before you begin

To access Cisco Bug Search, you need the following items:

- Internet connection
- Web browser
- Cisco.com user ID and password

Procedure

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- Step 1** To access Cisco Bug Search, go to:
<https://tools.cisco.com/bugsearch>
- Step 2** Log in with your Cisco.com user ID and password.
- Step 3** To look for information about a specific problem, enter the bug ID number in the Search for field, then press **Enter**.
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Cisco Unified Communication Manager Public Keys

To improve software integrity protection, new public keys are used to sign cop files for Cisco Unified Communications Manager Release 10.0.1 and later. These cop files have “k3” in their name. To install a k3 cop file on a pre-10.0.1 Cisco Unified Communications Manager, consult the README for the `ciscoem.version3-keys.cop.sgn` to determine if this additional cop file must first be installed on your specific Cisco Unified Communications Manager version. If these keys are not present and are required, you will see the error “The selected file is not valid” when you try to install the software package.

Unified Communications Manager Endpoints Locale Installer

By default, Cisco IP Phones are set up for the English (United States) locale. To use the Cisco IP Phones in other locales, you must install the locale-specific version of the Unified Communications Manager Endpoints Locale Installer on every Cisco Unified Communications Manager server in the cluster. The Locale Installer installs the latest translated text for the phone user interface and country-specific phone tones on your system so that they are available for the Cisco IP Phones.

To access the Locale Installer required for a release, access <https://software.cisco.com/download/navigator.html?mdfid=286037605&flowid=46245>, navigate to your phone model, and select the Unified Communications Manager Endpoints Locale Installer link.

For more information, see the documentation for your particular Cisco Unified Communications Manager release.



Note The latest Locale Installer may not be immediately available; continue to check the website for updates.

Cisco IP Phone Documentation Updates on Cisco Unified Communications Manager

The Cisco Unified Communications Manager Self Care Portal (Release 10.0 and later) and User Options web pages (Release 9.1 and earlier) provide links to the IP Phone user guides in PDF format. These user guides are stored on the Cisco Unified Communications Manager and are up to date when the Cisco Unified Communications Manager release is first made available to customers.

After a Cisco Unified Communications Manager release, subsequent updates to the user guides appear only on the Cisco website. The phone firmware release notes contain the applicable documentation URLs. In the web pages, updated documents display “Updated” beside the document link.



Note The Cisco Unified Communications Manager Device Packages and the Unified Communications Manager Endpoints Locale Installer do not update the English user guides on the Cisco Unified Communications Manager.

You and your users should check the Cisco website for updated user guides and download the PDF files. You can also make the files available to your users on your company website.



Tip You may want to bookmark the web pages for the phone models that are deployed in your company and send these URLs to your users.

Cisco IP Phone Firmware Support Policy

For information on the support policy for phones, see <https://cisco.com/go/phonefirmwaresupport>.

Documentation, Service Requests, and Additional Information

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/c/en/us/td/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

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- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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