



# Cisco IP Phone 7821, 7841, and 7861 Firmware Release 10.2(1)

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## Introduction

These release notes support the Cisco IP Phones 7811, 7821, 7841, and 7861 running SIP Firmware Release 10.3(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

## 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 Cisco Unified Communications Manager release. Navigate from the following documentation URL:

<http://www.cisco.com/c/en/us/support/collaboration-endpoints/unified-ip-phone-7800-series/tsd-products-support-general-information.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:

<http://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.

**Note**

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Some features may require the installation of a Cisco Unified Communications Manager Device Package. Failure to install the Device Package before the phone firmware upgrade may render the phones unusable.

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## Features Available with Firmware Release

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

### CiscoSans 2.0 Latin Font Support

The Cisco Sans 2.0 Latin Font Support feature improves Call Display by introducing the CiscoSans 2.0 font for all Latin characters.

There is no administrator impact with this feature.

This feature is supported on the following SIP phones:

- Cisco IP Phone 7821
- Cisco IP Phone 7841
- Cisco IP Phone 7861

**Where to Find More Information**

*Cisco IP Phone 7821, 7841, and 7861 User Guide for Cisco Unified Communications Manager 10.0 (SIP)*

**Improve Caller Name and Number Display**

The Improve Caller Name and Number Display feature improves the display of caller names and numbers. If the Caller Name is unknown then the Caller Number is now displayed instead of Unknown.

This feature is supported on the following SIP phones:

- Cisco IP Phone 7821
- Cisco IP Phone 7841
- Cisco IP Phone 7861

**Where to Find More Information**

*Cisco IP Phone 7821, 7841, and 7861 User Guide for Cisco Unified Communications Manager 10.0 (SIP)*

**Line Display Enhancement**

The Line Display Enhancement feature improves Call Display by removing the central dividing line when it is not required.

This feature is supported on Cisco IP Phone 7841 (SIP).

**Where to Find More Information**

*Cisco IP Phone 7821, 7841, and 7861 User Guide for Cisco Unified Communications Manager 10.0 (SIP)*

**Multilevel Precedence and Preemption Icon**

The Multilevel Precedence and Preemption (MLPP) Icon feature enables the user to make and receive urgent or critical calls in some specialized environments such as military or government offices.

No administrator action is required.

This feature is supported on the following SIP phones:

- Cisco IP Phone 7821
- Cisco IP Phone 7841
- Cisco IP Phone 7861

**Where to Find More Information**

*Cisco IP Phone 7821, 7841, and 7861 User Guide for Cisco Unified Communications Manager 10.0 (SIP)*

**Pause in Speed Dial**

The Pause in Speed Dial feature enables users to set up the speed dial feature to reach destinations that require a Forced Authorization Code (FAC), Client Matter Code (CMC), dialing pauses, and additional digits (such

as a user extension, a meeting access code, or a voicemail password) without manual intervention. When the user presses the speed dial, the phone establishes the call to the specified DN and sends the specified FAC, CMC, and DTMF digits to the destination with dialing pauses inserted.

To include dialing pauses in the speed dial, the user must specify a comma (,) in the speed dial string. Each comma indicates a pause of 2 seconds. The comma also acts as a delimiter between destination digits, the FAC, CMC, and additional DTMF digits. The comma as delimiter is useful in the following cases:

- Differentiates overlapping dial patterns (for example 9.xxx from 9.xxxxx)
- Differentiates overlapping FAC or CMC (for example, 8787 from 87879)
- Identifies the destination number when using variable-length dial patterns (for example 9.!)

Be aware of the following requirements when you include FAC and CMC in the speed dial string:

- FAC must always precede CMC in the speed dial string.
- A speed dial label is required for speed dials containing FAC and DTMF digits.
- Only one comma is allowed between FAC and CMC digits in the string.

For any additional DTMF digits specified after the FAC and CMC, the phone dials these additional digits (with pauses) after the call is connected.

This feature is supported on the following SIP phones:

- Cisco IP Phone 7821
- Cisco IP Phone 7841
- Cisco IP Phone 7861

#### **Where to Find More Information**

*Cisco IP Phone 7821, 7841, and 7861 Administration Guide for Cisco Unified Communications Manager 10.0 (SIP)*

## **Show Duration for Call History**

The Show Call Duration for Call History feature displays the time duration of placed and received calls in the Call History details.

No administrator or user action is required.

This feature is supported on the following SIP phones:

- Cisco IP Phone 7821
- Cisco IP Phone 7841
- Cisco IP Phone 7861

#### **Where to Find More Information**

*Cisco IP Phone 7821, 7841, and 7861 User Guide for Cisco Unified Communications Manager 10.0 (SIP)*

# Features Available with 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](http://www.cisco.com/c/en/us/td/docs/voice_ip_comm/cucm/compat/devpack_comp_mtx.html)

## Extension Mobility Size Safe and Feature Safe

The Extension Mobility Size Safe and Feature Safe feature offers a greater choice in phone button template. With Feature Safe, your phone can use any phone button template that has the same number of line buttons that the phone model supports. With Size Safe, your phone can use any phone button template that is configured on your system.

This feature is supported on the following SIP phones:

- Cisco IP Phone 7821
- Cisco IP Phone 7841
- Cisco IP Phone 7861

### Where to Find More Information

*Cisco IP Phone 7821, 7841, and 7861 User Guide for Cisco Unified Communications Manager 10.0 (SIP)*

## Outbound Rollover

The Outbound Rollover feature allows users to make a call when the number of calls for a line exceeds the maximum number of calls (MNC).

This feature is supported on the following SIP phones:

- Cisco IP Phone 7821
- Cisco IP Phone 7841
- Cisco IP Phone 7861

### Where to Find More Information

*Cisco IP Phone 7821, 7841, and 7861 User Guide for Cisco Unified Communications Manager 10.0 (SIP)*

## Serviceability for SIP Endpoints

The Serviceability for SIP Endpoints feature provides a quick and easy way for administrators to capture debug information from the Cisco IP Phones. With this feature, administrators can:

- Remotely run debug commands on a phone or group of phones without logging into each device separately.
- Collect the phone log without logging into each phone separately.
- Troubleshoot phones by using multiple debug categories with the **debugsh** (debug telephony) command

With this feature, administrators set the following parameters in the **Device > Device settings > Common Phone Profile, System > Enterprise Phone Configuration** or **Device > Phone** window:

- Log Profile - values: Preset (default), Default, Telephony
- Remote Log - values: Disable (default), Enable
- Log Server - IP address (IPv4 or IPv6 address)

The Log Server address can include a port number.

- The format for IPv4 Log Server is: address:<port>@@base=<0-7>;pfs=<0-1>.
- The format for IPv6 Log Server is: address:<port>@@base=<0-7>;pfs=<0-1>.

This feature is supported on the following SIP phones:

- Cisco IP Phone 7821
- Cisco IP Phone 7841
- Cisco IP Phone 7861

#### Where to Find More Information

*Cisco IP Phone 7821, 7841, and 7861 Administration Guide for Cisco Unified Communications Manager 10.0 (SIP)*

## Installation

### Install Firmware on Cisco Unified Communications Manager

Before using the Cisco Unified IP Phone Firmware Release 10.2(1) with Cisco Unified Communications Manager, you must install the latest firmware on all Cisco Unified Communications Manager servers in the cluster.

#### Procedure

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- Step 1** Go to the following URL:  
<http://software.cisco.com/download/navigator.html?mdfid=284883944&i=rm>

- Step 2** Depending on your phone model, choose **Cisco IP Phones 7800 Series**.
- Step 3** Choose your phone type.
- Step 4** Choose **Session Initiation Protocol (SIP) Software**.
- Step 5** In the Latest Releases folder, choose **10.2(1)**.
- Step 6** Select one of the following firmware files, click the **Download** or **Add to cart** button, and follow the prompts:
- cmterm-78xx.10-2-1-12.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 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.10-2-1-12\_REL.zip

### Procedure

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- 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 type.
- Step 4** Choose **Session Initiation Protocol (SIP) Software**.
- Step 5** In the Latest Releases folder, choose **10.2(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

## Phone Behavior During Times of Network Congestion

Anything that degrades network performance can affect Cisco IP 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

To reduce or eliminate any adverse effects to the phones, schedule administrative network tasks during a time when the phones are not being used or exclude the phones from testing.

## 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:

- To find all caveats for this release, use this URL: [https://tools.cisco.com/bugsearch/search?kw=\\*&pf=prdNm&pfVal=284883944&rls=10.2\(1\)&sb=anfr&srtBy=byRel&bt=CustV](https://tools.cisco.com/bugsearch/search?kw=*&pf=prdNm&pfVal=284883944&rls=10.2(1)&sb=anfr&srtBy=byRel&bt=CustV)
- To find all open caveats for this release, use this URL: [https://tools.cisco.com/bugsearch/search?kw=\\*&pf=prdNm&pfVal=284883944&rls=10.2\(1\)&sb=af&srtBy=byRel&bt=custV](https://tools.cisco.com/bugsearch/search?kw=*&pf=prdNm&pfVal=284883944&rls=10.2(1)&sb=af&srtBy=byRel&bt=custV)
- To find all resolved caveats for this release, use this URL: [https://tools.cisco.com/bugsearch/search?kw=\\*&pf=prdNm&pfVal=284883944&rls=10.2\(1\)&sb=fr&srtBy=byRel&bt=custV](https://tools.cisco.com/bugsearch/search?kw=*&pf=prdNm&pfVal=284883944&rls=10.2(1)&sb=fr&srtBy=byRel&bt=custV)

**Step 2** When prompted, 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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## Resolved Caveats

The following table lists severity 1, 2, and 3 defects that are resolved for the Cisco IP Phones for Firmware Release 10.2(1) at the time that this document was originally published.

To view individual bugs or to view the updated list, follow the instructions in [View Caveats, on page 8](#).

**Table 2: Resolved Caveats for Firmware Release 10.2(1)**

Identifier	Headline
CSCuj16464	Monitoring phone not send RTCP
CSCun37850	phone will dial out to the speed dial number after press CFA
CSCun45165	Call is dropped unexpectedly after pressing resume softkey

## 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 <http://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 “Locale Installer” section in the *Cisco Unified Communications Operating System Administration Guide*.



**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**

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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.

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

**Tip**

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

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## Cisco IP Phone Firmware Support Policy

For information on the support policy for Cisco IP Phones, see <http://www.cisco.com/c/en/us/support/docs/collaboration-endpoints/unified-ip-phone-7900-series/116684-technote-iphone-00.html>.

## 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>

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