

Upgrade / Downgrade Cloud-registered Endpoints on Room OS

Contents

[Introduction](#)

[Prerequisites](#)

[Requirements](#)

[Components Used](#)

[Description of the scenario](#)

[Software Upgrades for Cloud-registered endpoints](#)

[How to Downgrade a device to a previous RoomOS version](#)

[How to manually upgrade a device?](#)

[SX/MX Endpoint that is on TC Software](#)

[How to choose the correct package from software.cisco.com for an endpoint that is going to be registered to Cloud](#)

[Desk Pro Step Upgrade when Desk Pro is on CE OS versions](#)

[Related Information](#)

Introduction

This document describes cloud-registered endpoint upgrade/downgrade and analyzes two edge cases: SX/MX endpoint on TC software, Desk Pro Step Upgrade.

Prerequisites

Requirements

Cisco recommends that you have some familiarity with these topics:

- Control Hub platform
- Endpoint Registration and Administration via the Graphical User Interface (GUI) of the endpoint
- RoomOS
- Device and Software Channel management via Control Hub

Components Used

Equipment used to perform the tests and produce the results described in this document:

- Room Kit endpoint
- Codec Plus endpoint
- SX10 endpoint
- Desk Pro endpoint
- Control Hub Organization

The information in this document was created from the devices in a specific lab environment. All of the

devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Description of the scenario

The process of upgrading and downgrading a cloud-registered endpoint is described along with the caveats that can be faced.

Additionally, examples are given of some edge cases* that are rare to come by, like:

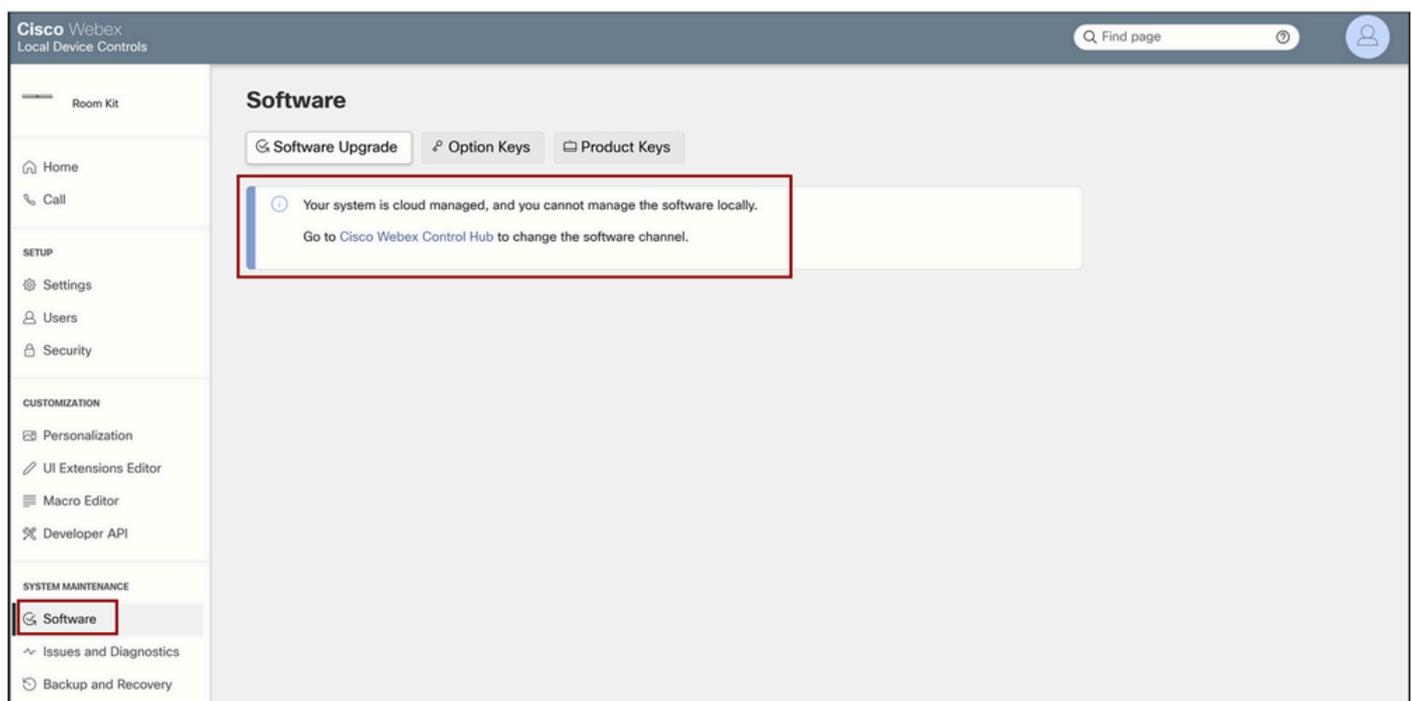
- SX/MX endpoints that are on TC software and an upgrade to Room OS is needed to register to the Cloud.
- Desk Pro Step Upgrade, in cases where Desk Pro is on older CE OS versions.

* These cases are usually seen when a new endpoint is received after RMA, and the endpoint has remained on an older version.

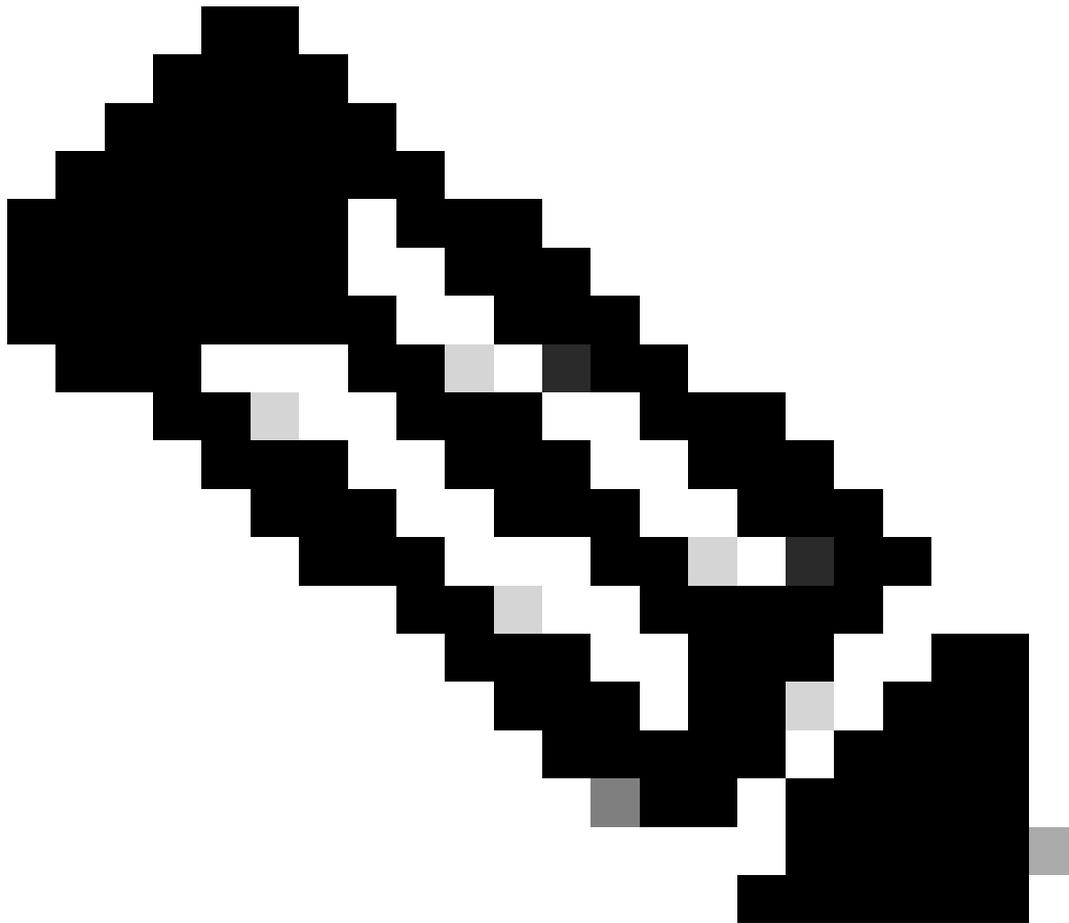
Software Upgrades for Cloud-registered endpoints

Endpoints that are already registered to the Cloud, and are shown as Online on Control Hub, are either automatically upgraded with no administrator action needed or the administrator needs to manually select the next Room OS version for the Software channel that the device is subscribed to. The article (linked [here](#)) describes how the Software channels work and how the software can be managed: [RoomOS-software-upgrades](#) .

A cloud-registered endpoint can not be locally managed and has software uploaded to it manually by using the endpoint's GUI. By navigating to the **Software** tab under the **System Maintenance** section on a cloud-registered endpoint's GUI, it shows:



Local Device Controls Software section for a cloud-registered endpoint

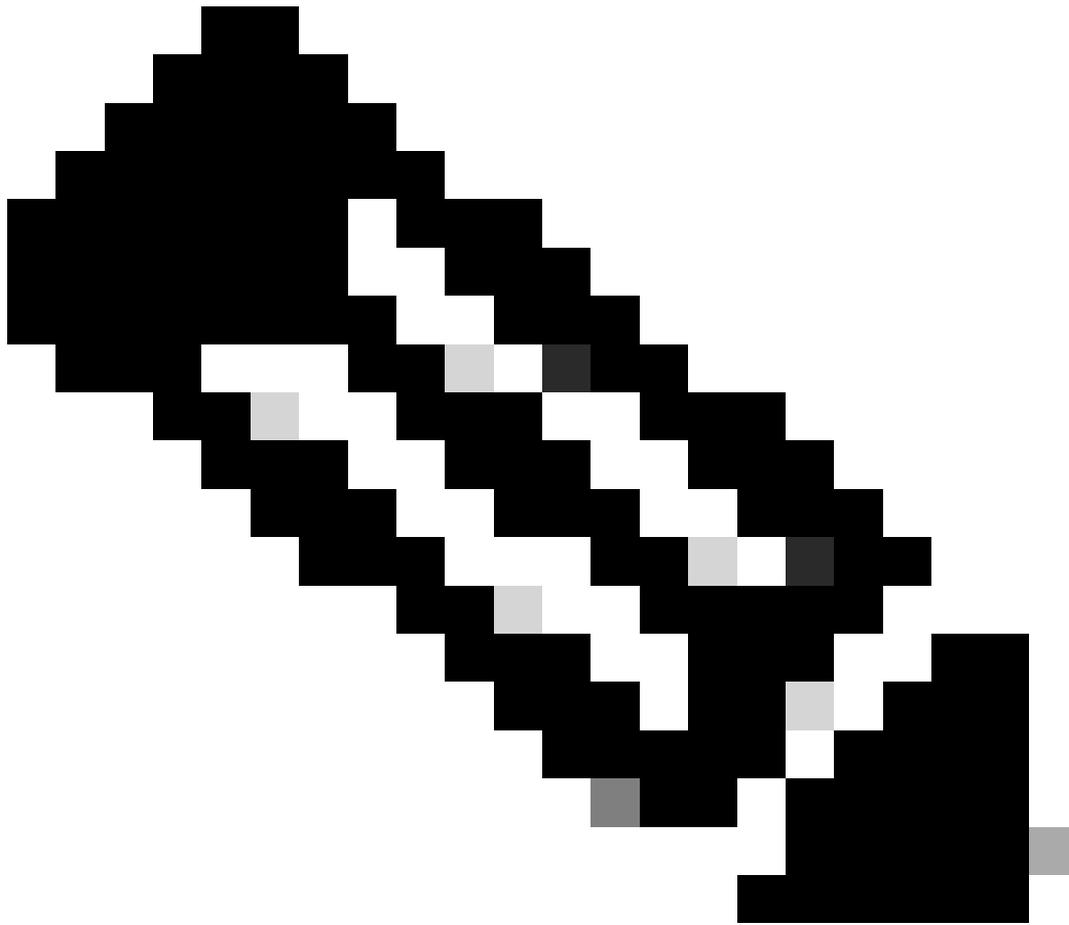


Note: To access the endpoint's GUI, enter the endpoint's IP address in a web browser and use an admin's credentials to log in. The default username is **admin** and the default password is blank, but only for an endpoint that you have just received or you have factory reset.

You need to be on the same network/VLAN as the endpoint you are trying to access, or else you can not use the device's GUI.

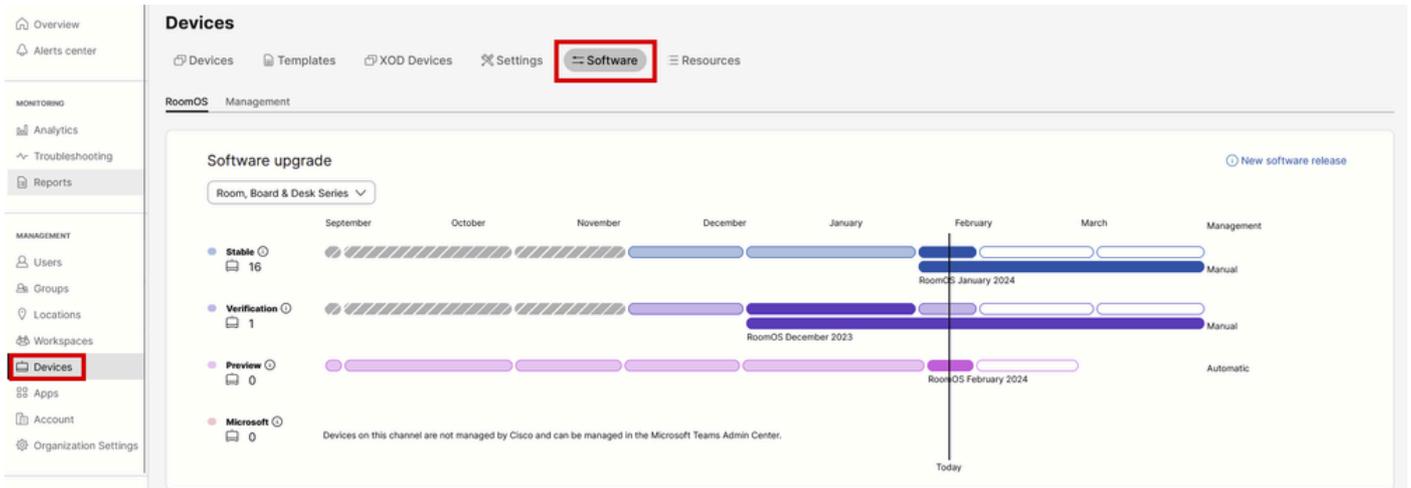
How to Downgrade a device to a previous RoomOS version

For a cloud-registered endpoint, you cannot perform a downgrade to any Room OS version that is older than 3 months. The version that you are willing to downgrade your device to, needs to be available in your Control Hub Organization's Software Channel. Your Control Hub administrator can manage which RoomOS version is available in most of the channels in your Organization.

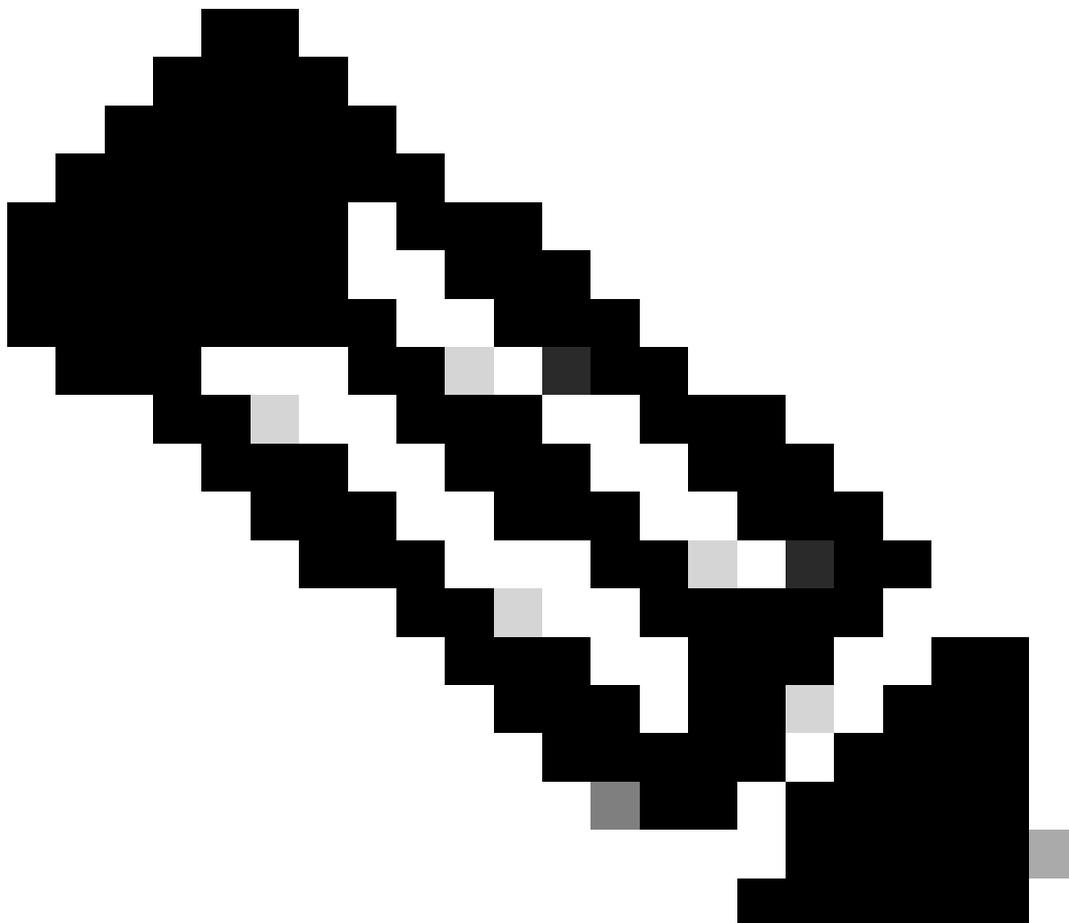


Note: You can not affect the Preview channel in your Control Hub Organization, because it is always at the newest available software version for you to always be able to test the latest RoomOS version.

To move a Software channel to a previous OS version, navigate to the **Devices** tab under the **Management** section. Then select the **Software** tab:



Device's Software section in Control Hub



Note: You have access to the last 3 RoomOS versions published. Once you move one of the channels to a previous or upcoming software version, all the endpoints assigned to that channel that are currently online are going to upgrade either immediately or at night-time, depending on what you choose. The same happens when you move an endpoint to a different software channel that has

a different RoomOs version than the one the endpoint is currently running on. Because of this, it is suggested that you do not move your stable software channel into previous versions. All the endpoints on the stable channel are affected. You can perform your testing with downgrading on the verification channel. However, all devices currently assigned to the verification channel are going to be affected. Plan accordingly.

Then, scroll down and choose the option to **Manage Software** next to your verification channel:



The screenshot shows the 'Verification' section in the Control Hub interface. It is divided into three main columns: 'Software version', 'Devices', and a 'Manage software' button. The 'Software version' column lists 'RoomOS December 2023' as the release, 'RoomOS 11.11.1.9 282feae77e4' as the version, and 'December 11, 2023' as the last updated date. The 'Devices' column shows '1 /18 devices' with a status breakdown: 0 Updated, 1 Update pending, 1 Offline, and 0 Not supported. The 'Manage software' button is highlighted with a red box. Below the main content, there are expandable sections for 'Release Versions' and 'Changes'.

Software version	Devices
RoomOS December 2023 Release	1 /18 devices
RoomOS 11.11.1.9 282feae77e4 Version	0 Updated
December 11, 2023 Last updated	1 Update pending
- Expiry date	1 Offline
1449/1.0.96.2023111001 Teams App	0 Not supported

Verification Software Channel in Control Hub

Choose the previous Room OS version that you prefer, along with the time that you would like the downgrade to happen, and click **Save**.

Manage software release

- Automatic software upgrade
- Manually select software
- RoomOS January 2024
Supported platforms:  
- RoomOS December 2023
Supported platforms:  
- RoomOS November 2023
 Software version expires in 13 day(s).
Supported platforms:  

Time of upgrade

- Upgrade night-time ⓘ
- Upgrade now ⓘ

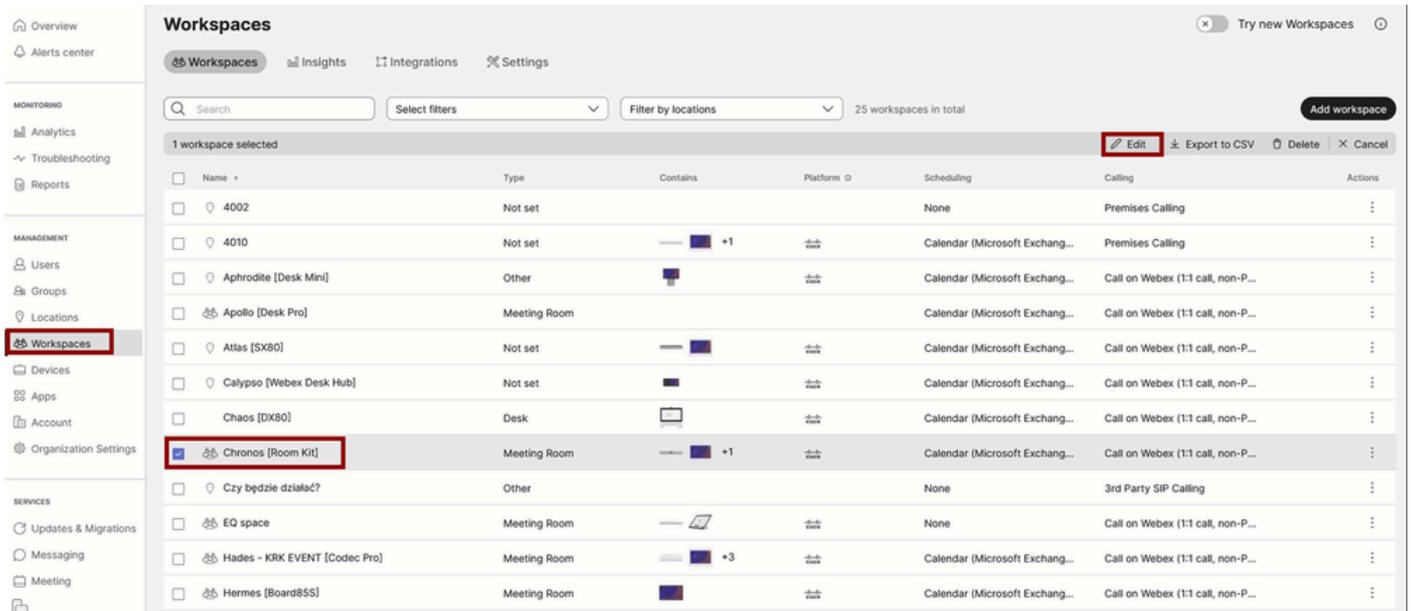
Verification Channel	1/18  Devices
RoomOS December 2023 Release	RoomOS 11.11.1.9 282feae77e4 Version
Microsoft, Cisco Supported platforms	- Expiry date
1449/1.0.96.2023111001 Teams app	

Cancel

Save

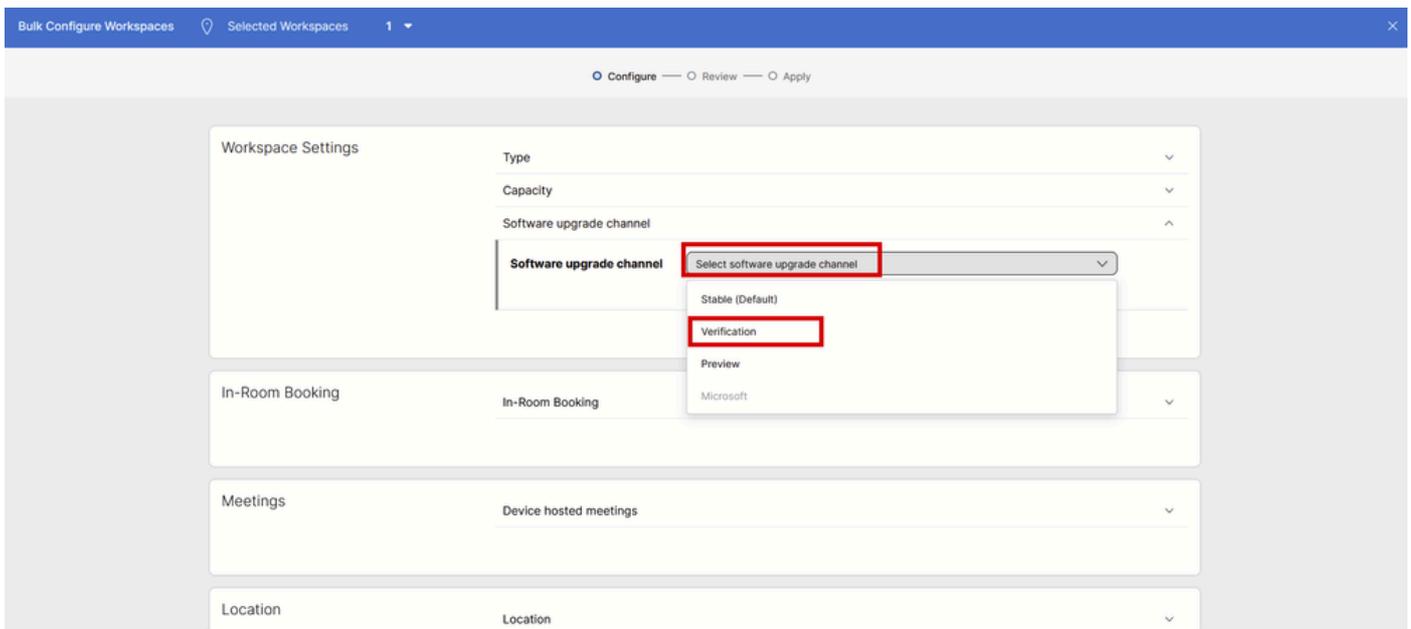
Software Management pop-up

Once this is performed, navigate to **Workspace** and select the workspace to which your device belongs. Then click **Edit**:



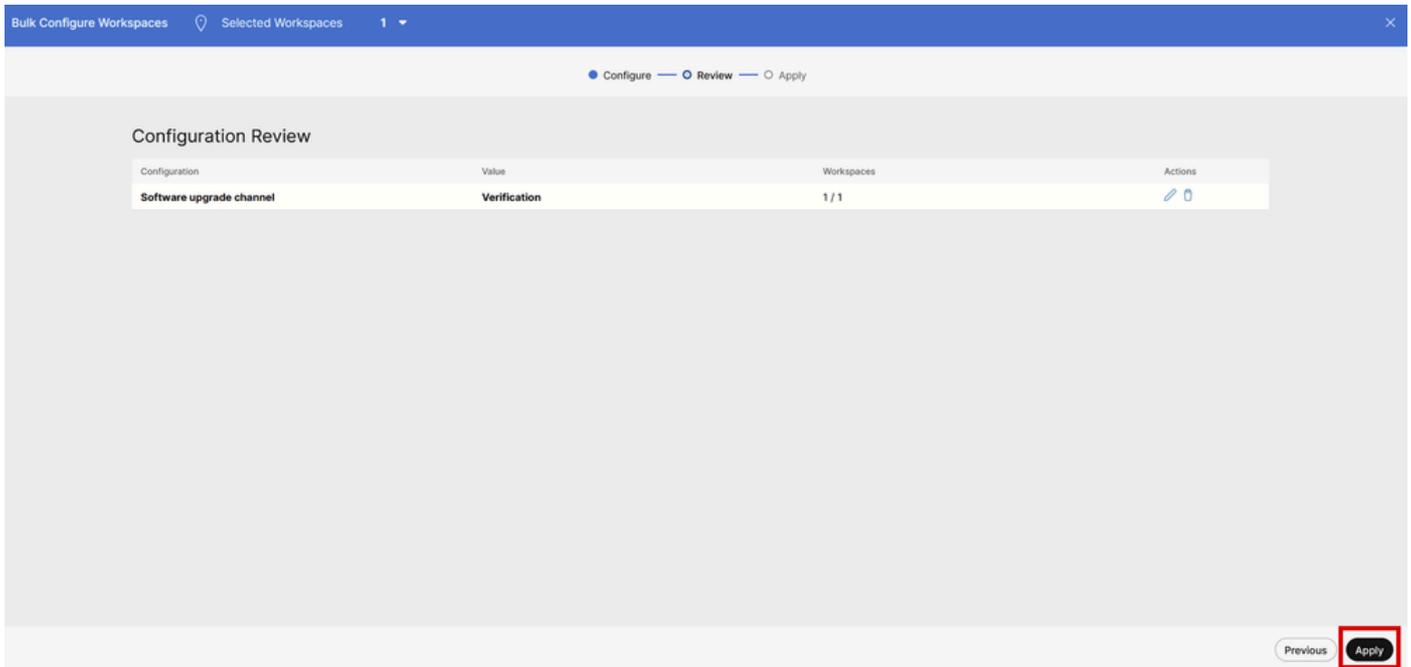
Workspaces section in Control Hub

On the window that opens, click **Select Software Upgrade Channel** and choose **Verification Channel**.



Workspace Bulk Configuration Wizard - Configuration section

Then, click **Next** at the bottom of the screen and **Apply** on the **Configuration Preview** report:



Workspace Bulk Configuration Wizard - Review section

The downgrade of the device is going to happen either immediately or during the night. Once the endpoint is downgraded, there is a message mentioning that the firmware on the peripherals is not compatible with the endpoint OS. This message is visible on the GUI of the endpoint and/or on the endpoint screen. This is expected to happen as your endpoint realizes that its peripherals are on "future" firmware versions, not yet released. Then, the peripherals are downgraded to a compatible firmware version that matches your current RoomOS version. Your device is ready to be used on this downgraded version once the downgrade of the peripherals is also completed.

How to manually upgrade a device?

In cases where you need to upgrade an endpoint (not currently registered to the cloud) to a newer version of Room OS to be able to register the device in the cloud, the update can not happen automatically. You need to perform an update manually from the GUI of the device. This means that the device must already be connected to the network and you can access the device via HTTP. This allows you to access the device via the GUI.

To perform a manual update navigate to the **Maintenance** tab and then click on **Software Upgrade**:

CISCO Cisco Spark Codec Plus

Home Call Control Setup Security Maintenance Integration admin

System Information

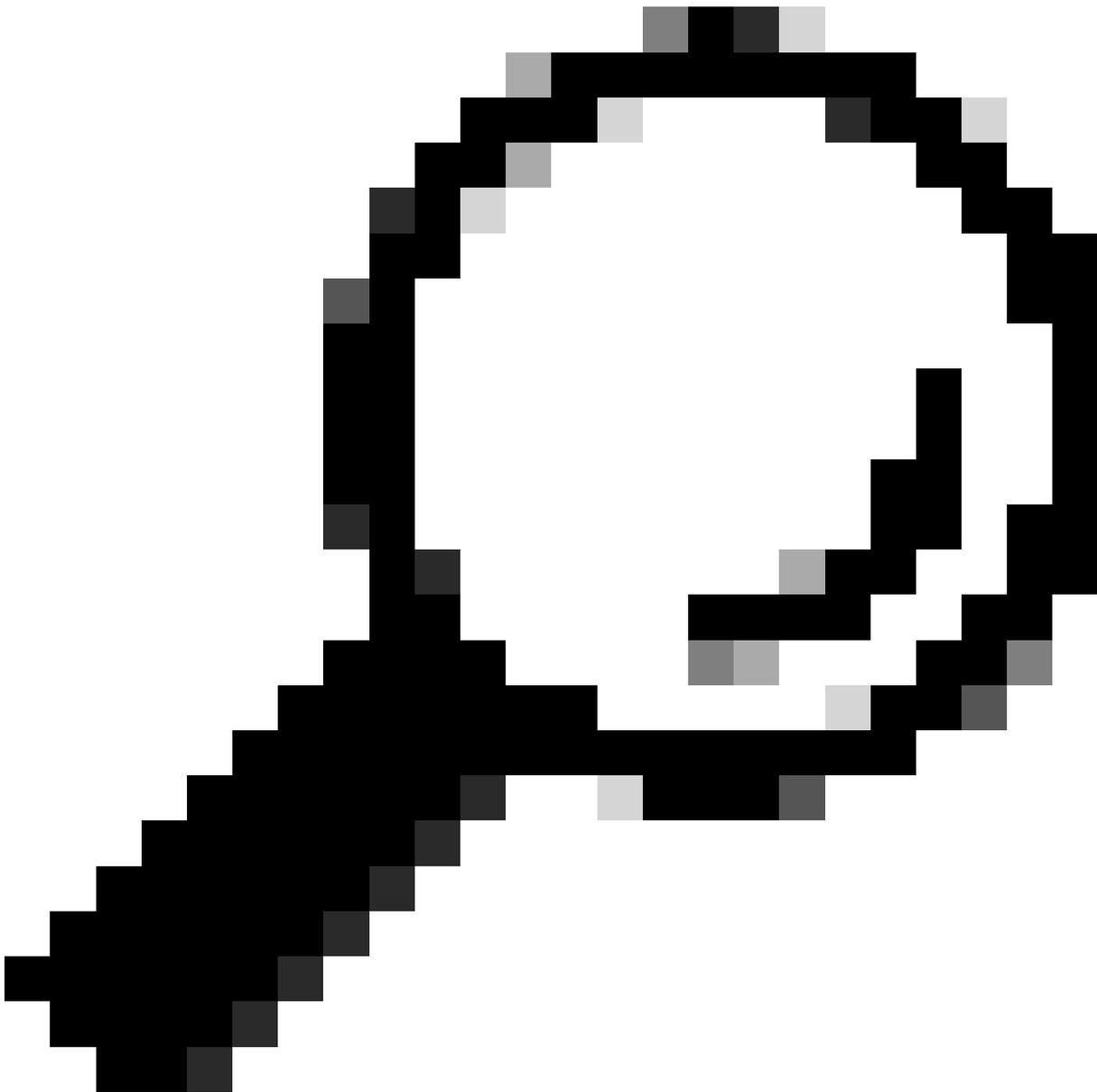
Issues with your system. See [Diagnostics](#) for more info.

General

Product:	Cisco Spark Codec Plus	Inactive
System time:	19:23	-
Browser time:	15:23	-
Last boot:	today at 15:00	-
Serial number:		
Software version:	ce 9.4.0 62bc0aa4505 2018-06-14	
Installed options:	Encryption	
	MultiSite	
	RemoteMonitoring	Status Inactive
		Proxy -
System name:		
IPv4:		
IPv6:	-	
MAC address:		
Temperature:	Normal	

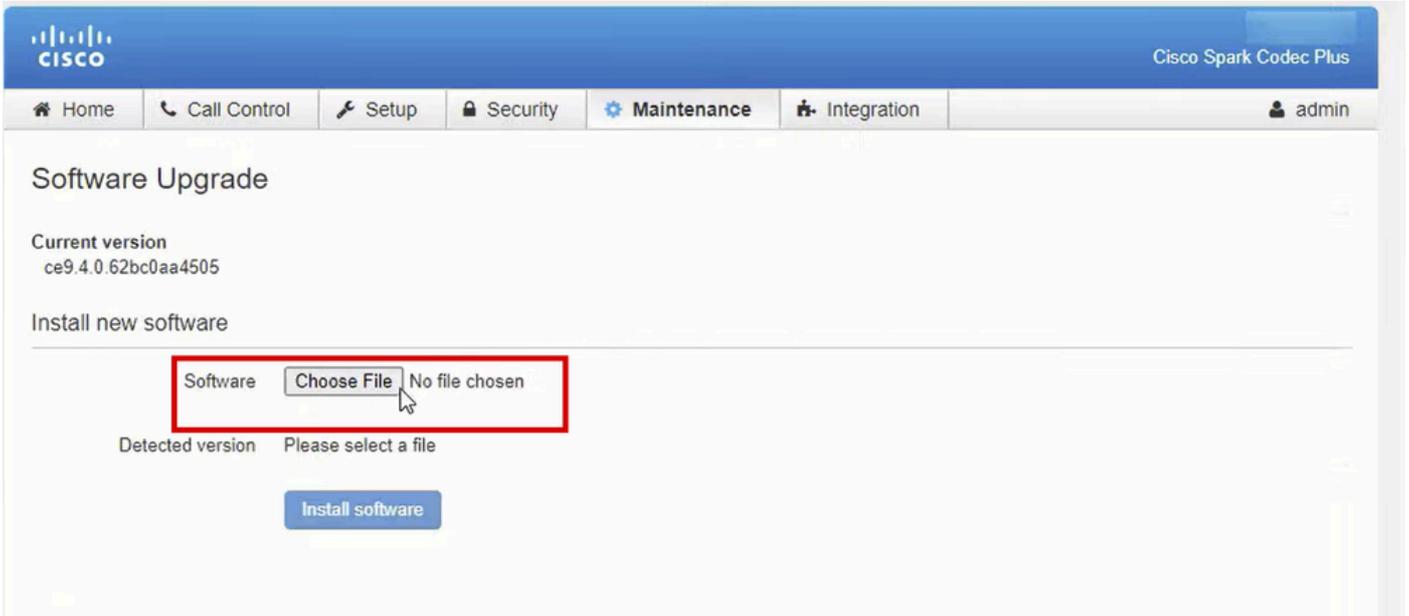
- Diagnostics
- System Logs
- Call Logs
- User Interface Screenshots
- Software Upgrade**
- Option Keys
- Backup and Restore
- System Recovery
- Restart

Home section of the GUI of an endpoint on CE 9.4 OS version

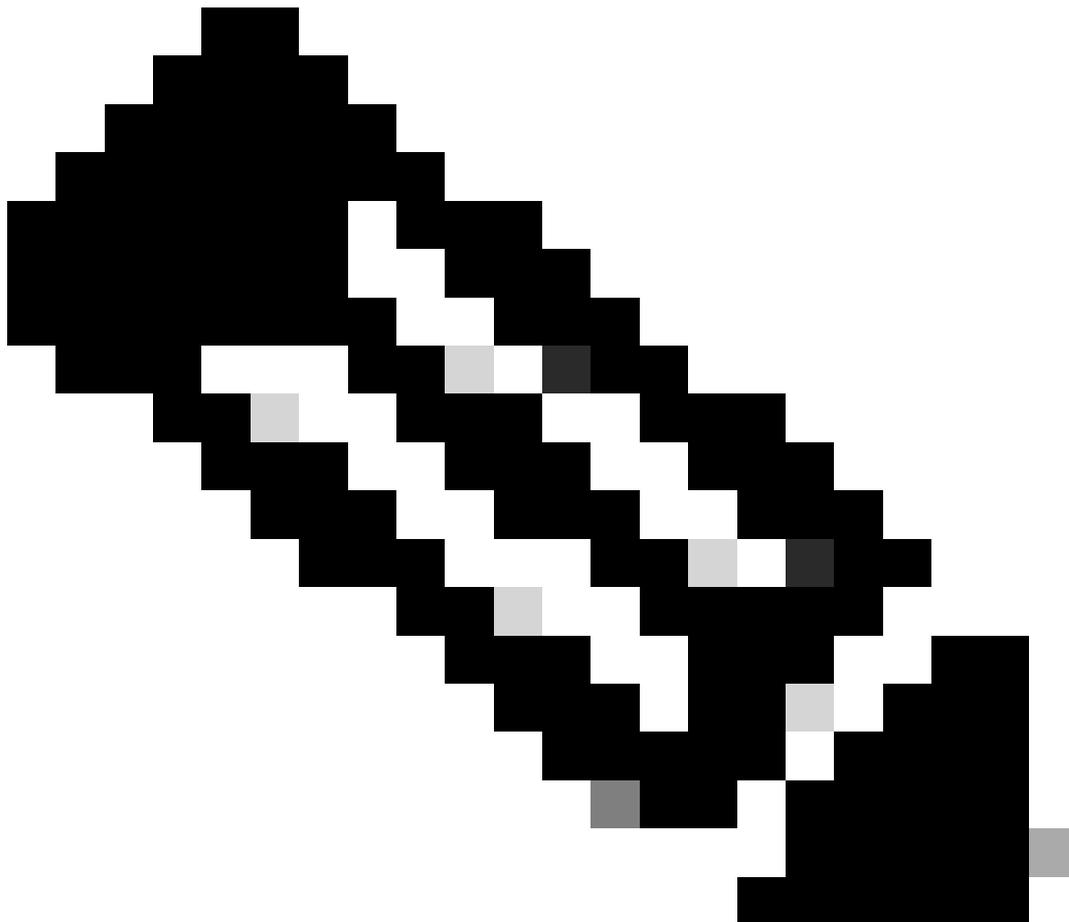


Tip: The endpoint used for the previous example is on CE version 9.4 OS. Depending on the OS version that your endpoint is on, the navigation through the menu and the naming of the elements on the GUI are going to differ.

Once you navigate to the software upgrade section, locate the option to upgrade the endpoint by choosing a software file locally from your machine and uploading it. At this stage, download the software installation package from software.cisco.com. Upload it and click **Install software**:

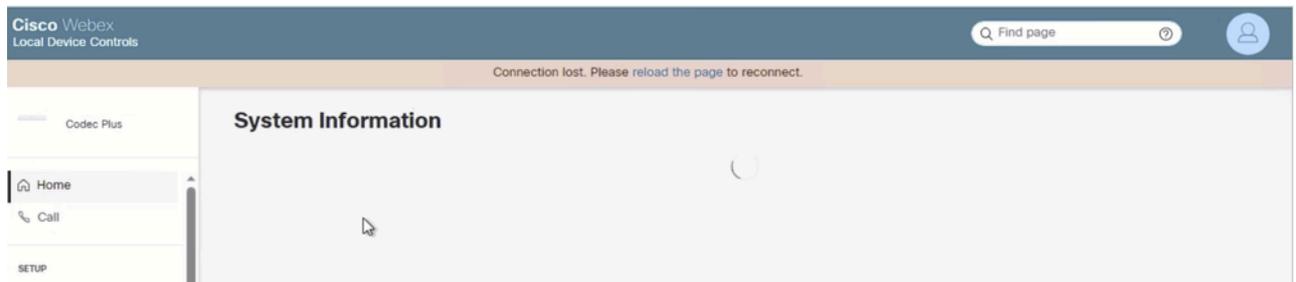


Software Upgrade section of the GUI of an endpoint on CE 9.4 OS version



Note: If you can ping the device, it does not necessarily mean that the device can be reached via

HTTP and you can successfully have access to the GUI. Ping is sending ICMP traffic to the endpoint. GUI is accessed over HTTP. There is a chance that the device is pingable but when reaching out to the GUI of the device, you are not able to navigate through the menu and see this message:



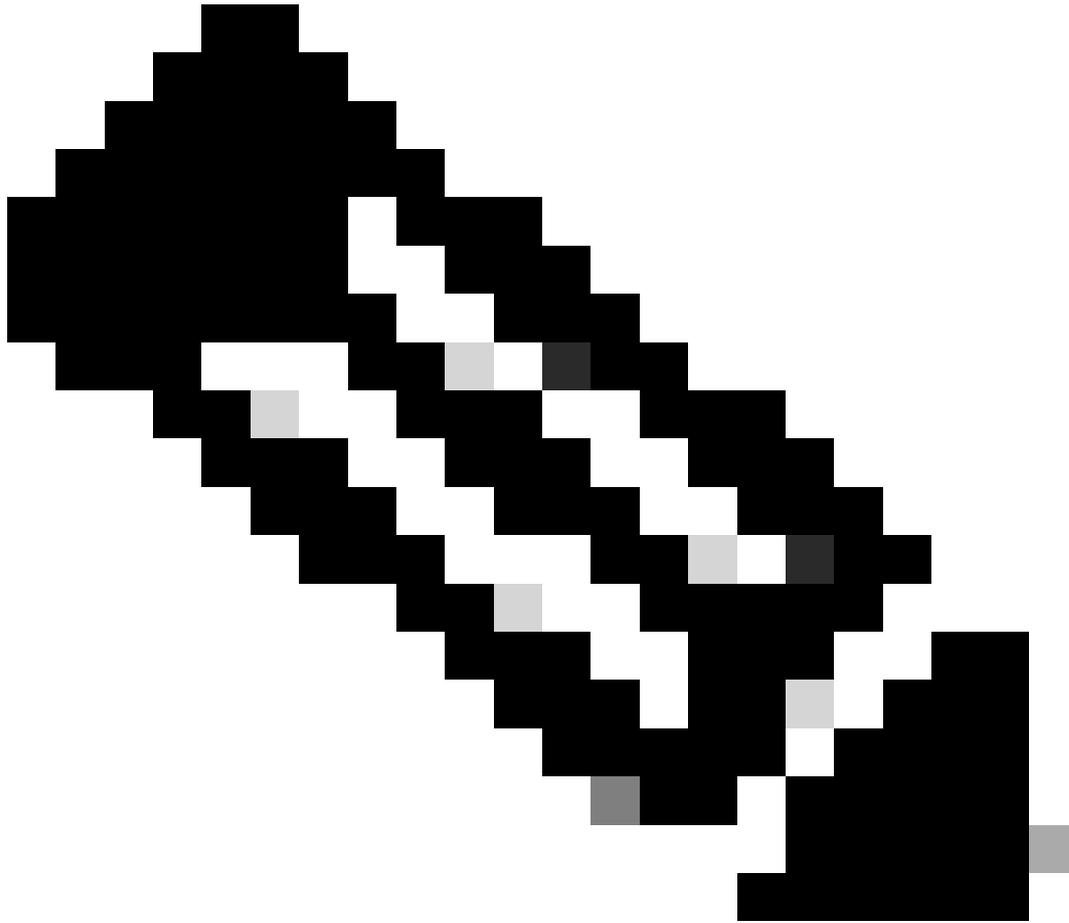
Connection lost banner on endpoint GUI

In this scenario, it is useful to check once more the network configuration of the device. The proxy settings set in the device's environment can affect and block HTTP from reaching the device.

SX/MX Endpoint that is on TC Software

There are some rare cases in which you receive an SX-series or MX-series endpoint that is still on TC OS version and would like to upgrade it to the newest CE version that supports Cloud Registration. In such cases, intermediate upgrades to older OS versions need to be done before the upgrade to CE is successful.

You need to navigate to software.cisco.com and locate the software package that corresponds to the endpoint that you are trying to update.



Note: If you are trying to upgrade SX10 to the latest CE version, select the appropriate package for SX10. You cannot use a software package listed under SX20. Although endpoints can be similar, each one has its own software release, which you must choose. Software packages under the SX20 endpoint cannot be downloaded and used to upgrade SX10. Installation is going to fail because the type of the endpoint does not match the OS installation file you are trying to use.

As an example, an SX10 device that is on TC.3.14 OS version can not be updated to CE9.15.15.4.

We are going to see the error “The Installation Failed: Installation failed” if you try to directly perform an upgrade to CE9.15.15.4.

You need to first proceed with an upgrade to the intermediate OS version TC.3.21, seen below:

Software Download

Downloads Home / Collaboration Endpoints / TelePresence Integration Solutions / TelePresence SX Series / TelePresence SX10 Quick Set / TelePresence Software - TC7.3.21

Search...
Expand All Collapse All
Latest Release
CE9.15.17.4
TC7.3.21
All Release
9.15
CE9.15.17.4
CE9.15.16.5
CE9.15.15.4

TelePresence SX10 Quick Set

Release **TC7.3.21**
My Notifications
Related Links and Documentation
Release Notes for TC7.3.21

File Information	Release Date	Size	
Software for SX10 for CUCM cmterm-s52030tc7_3_21.k3.cop.sgn Advisories	13-Mar-2020	219.25 MB	↓ 🛒 📄
Software for SX10 s52030tc7_3_21.pkg Advisories	13-Mar-2020	220.46 MB	↓ 🛒 📄

SX10 TC 7.3.21 Software Package

Once you have downloaded and successfully installed TC7.3.21, upgrade the endpoint to the latest CE version available which at the moment of writing this article is CE9.15.17.4:

Search...
Expand All Collapse All
Latest Release
CE9.15.17.4
TC7.3.21
All Release
9.15
CE9.15.17.4
CE9.15.16.5
CE9.15.15.4
7
TC7.3.21
TC7.3.20
Deferred Release
9.15
9
8

TelePresence SX10 Quick Set

Release **CE9.15.17.4**
My Notifications
Related Links and Documentation
Release Notes for CE9.15.17.4

File Information	Release Date	Size	
Collaboration Endpoint Software bundle for all SX Series, MX Series, DX70 and DX80 for CUCM cmterm-ce9_15_17_4.k3.cop.sgn Advisories	21-Mar-2023	1404.99 MB	↓ 🛒 📄
Collaboration Endpoint Software bundle for all SX Series, MX Series, DX70 and DX80 for Unified CM 14 and above cmterm-ce9_15_17_4.k4.cop.sha512 Advisories	21-Mar-2023	1404.99 MB	↓ 🛒 📄
Collaboration Endpoint Software for SX10 for CUCM cmterm-s52030ce9_15_17_4.k3.cop.sgn Advisories	21-Mar-2023	320.32 MB	↓ 🛒 📄
Collaboration Endpoint Software for SX10 for Unified CM 14 and above cmterm-s52030ce9_15_17_4.k4.cop.sha512 Advisories	20-Mar-2023	320.32 MB	↓ 🛒 📄
Collaboration Endpoint Software for SX10 s52030ce9_15_17_4.pkg Advisories	21-Mar-2023	322.22 MB	↓ 🛒 📄

SX10 CE9.15.17.4 Software Package

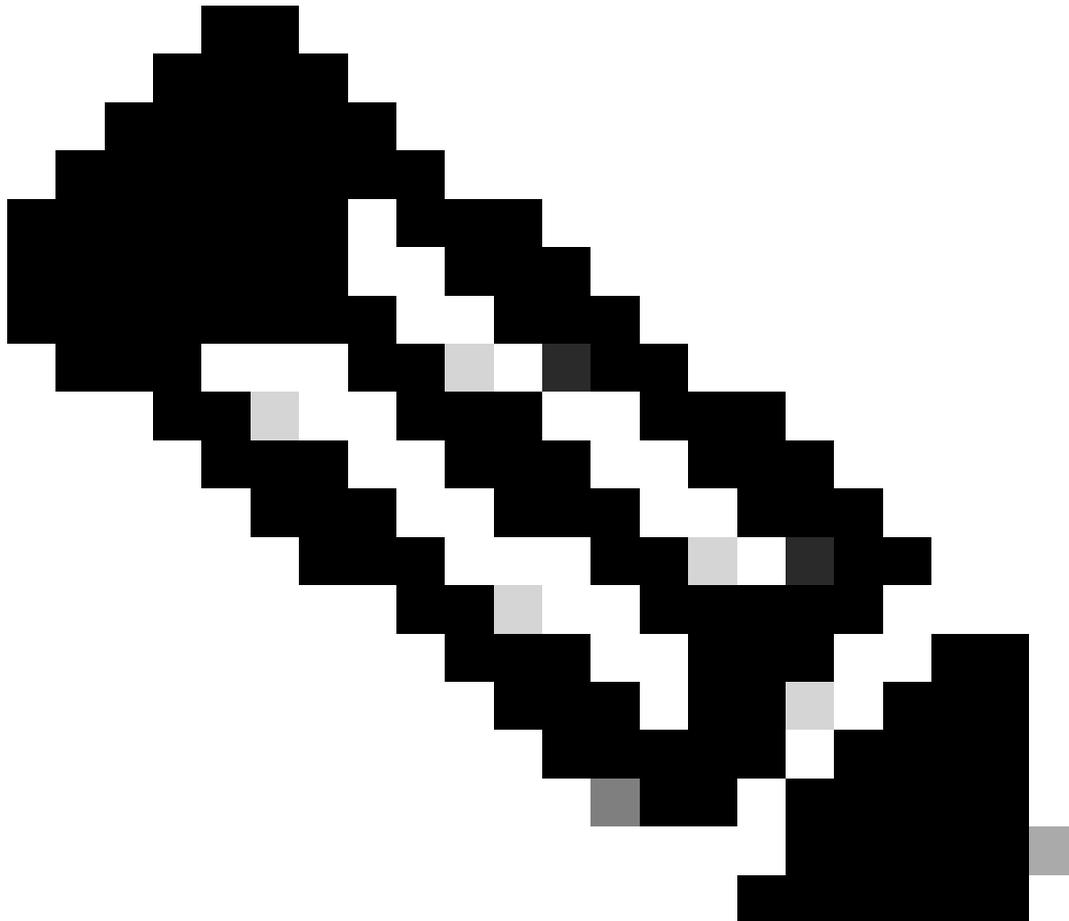
The preceding two software versions need to be installed via the GUI of the device. You must install both versions back to back. There is no reason to leave an endpoint at version TC7.3.21, as it is quite old and it must be used as a step upgrade to the newer OS versions.

How to choose the correct package from software.cisco.com for an endpoint that is going to be registered to Cloud

In the preceding pictures, the software file selected in the red color rectangle has the .pkg filename extension. The software packages listed under each of the software versions for each endpoint are not identical. The package description along with the package name can be used to help you choose the

appropriate package that you must use to upgrade your endpoint to the desired OS version.

All packages that mention they can be used for CUCM or Unified CM must be avoided for endpoints that you are willing to fully register to the cloud. Additionally, packages that have the ending *.sha512* in their name, cannot be used for any upgrade that is performed through the GUI of the endpoint. Packages containing *.cop* in their name are used for on-prem deployments and must not be used for an endpoint that is going to be fully cloud-registered.



Note: For upgrades to the latest RoomOS 11 versions, all available upgrade packages have the extension *.sha512*. There has been a change for the Room OS 11 leading to *xx.k3.cop.sgn* packages being deprecated. If an upgrade to RoomOS 11 is needed, then the appropriate *.sha512* package needs to be used for updates done from the GUI of the endpoint. Details explaining this change can be found at this link: [Software files have changed - specific upgrade paths are applicable](#) .

For example for the Room Kit endpoint, upgrade to the latest RoomOS 11 version, the package shown in the picture must be used for a manual upgrade through the endpoint's GUI:

Room Kit

Release RoomOS 11.9.2.4

[My Notifications](#)

Related Links and Documentation

[Release Notes for RoomOS 11.9.2.4](#)

File Information	Release Date	Size	
RoomOS software bundle for all supported Cisco Room Series, Board Series and Desk Series for use with Unified CM only  cmterm-ce11_9_2_4.k4.cop.sha512 Advisories	09-Nov-2023	2600.44 MB	↓ 🛒
RoomOS software for Cisco Room Kit, Room Kit Mini, Room Kit Plus, Room 55, Room 55 Dual, Cisco Room 70 and Cisco Board 55/55S, Board 70/70S, Board 85S for Unified CM and local upgrade  cmterm-s53200ce11_9_2_4.k4.cop.sha512 Advisories	09-Nov-2023	1603.40 MB	↓ 🛒

Room Kit RoomOS 11.9.2.4 Software Package

Notice the description of the selected file in this picture. It mentions "local upgrade", which means that the package can be used to upgrade the endpoint through the GUI.

Desk Pro Step Upgrade when Desk Pro is on CE OS versions

There is a chance that you receive a Desk Pro endpoint from an RMA that is on a CE OS version. In such a scenario, you need to perform a Step Upgrade before you can upgrade the endpoint to the latest Room OS version and register it to the Cloud.

- Log in to software.cisco.com and then navigate to Desk Pro software. You can use this link to directly access it: [here](#)
- Locate the CE9.15.6 StepUpgrade.
- Download the package containing the step upgrade shown in the picture below.
- Manually install it using the GUI of the device.

Software Download

[Downloads Home](#) / [Collaboration Endpoints](#) / [Collaboration Desk Endpoints](#) / [Desk Series](#) / [Desk Pro](#) / [TelePresence Software- CE9.15.6 StepUpgrade](#)

Search...

[Expand All](#) [Collapse All](#)

Latest Release

- RoomOS 11.5.4.6
- RoomOS 11.9.2.4
- RoomOS 10.19.5.6
- CE9.15.6 StepUpgrade**

All Release

- 10.19
- 9.15
- 11.9
- 11.5

Desk Pro

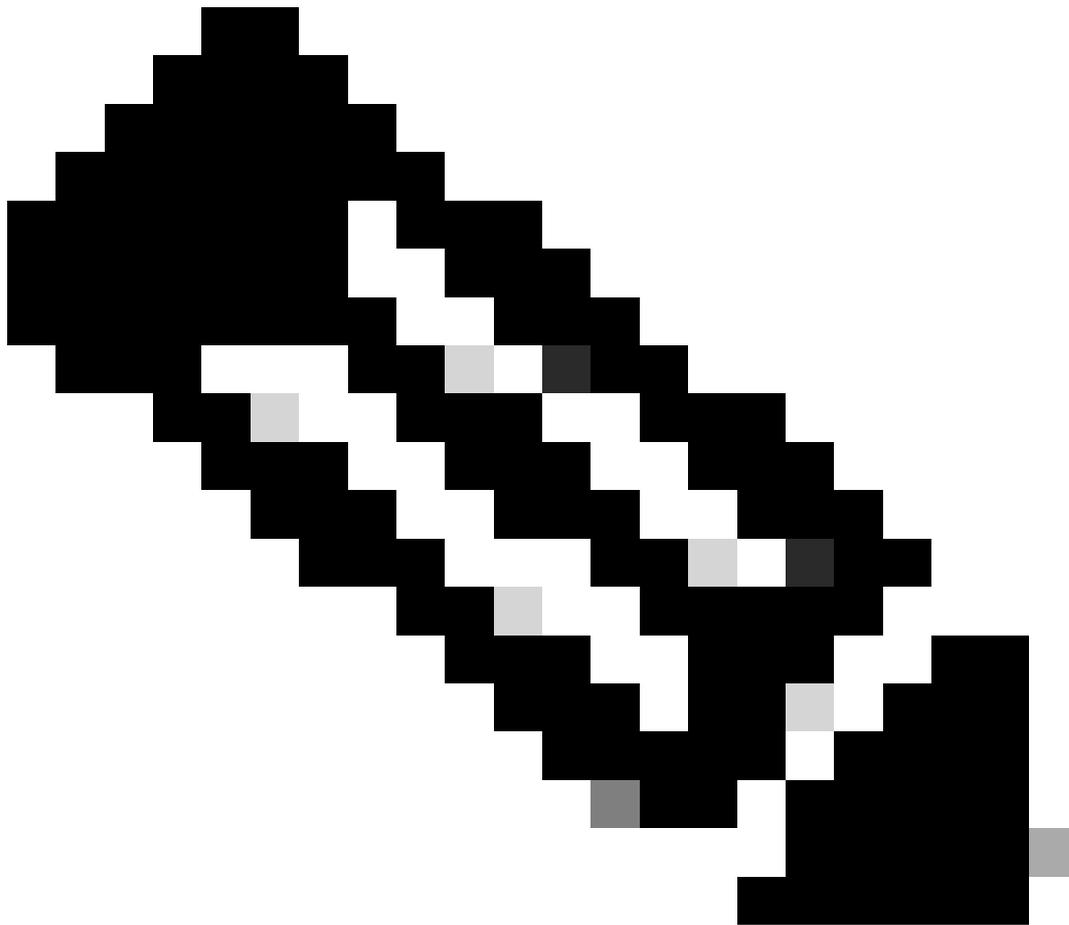
Release CE9.15.6 StepUpgrade

[My Notifications](#)

Related Links and Documentation
[Release Notes for CE9.15.6 StepUpgrade](#)

 Note: This is step upgrade software only. Do NOT download and install this software unless doing a step upgrade. Step upgrade software can only be used to go from one software build to another! This software download is for upgrades from CE9.9.0/9.8.1 and below to a later version. Please see the CE9 release notes for further details.

File Information	Release Date	Size	
Step Upgrade Collaboration Endpoint Software for Cisco Webex Room Kit Pro, Cisco Webex Room 70 G2 and Cisco Webex Desk Pro from CE9.9.0/CE9.8.1 (and below) to later releases. Upgrade Video: https://video.cisco.com/detail/video/6274513704001  s53300ce9.15.6-step-upgrade.pkg	10-Sep-2021	753.22 MB	↓ 🛒



Note: The device must not remain and be used in the CE9.15.6 StepUpgrade OS version. This OS version is offered only as a means to overcome some software limitations with older CE versions, like the limitation that prevents an upgrade from an installation file that exceeds 1GB in size. On CE9.15.6 OS version the device is not able to perform calls or register to the Cloud. Upgrade the device to RoomOS 10.19.5.6 immediately.

After the installation is complete, proceed by downloading and installing RoomOS 10.19.5.6. Upgrade steps remain the same as previously. The available upgrade packages are:

Software Download

Downloads Home / Collaboration Endpoints / Collaboration Desk Endpoints / Desk Series / Desk Pro / TelePresence Software- RoomOS 10.19.5.6

Expand All Collapse All

Latest Release

- RoomOS 11.5.4.6
- RoomOS 11.9.2.4
- RoomOS 10.19.5.6**
- CE9.15.6 StepUpgrade

All Release

- 10.19
- 9.15
- 11.9
- 11.5

Deferred Release

- 10.19
- 10.15
- 10.11
- 9.15

Desk Pro

Release RoomOS 10.19.5.6

[My Notifications](#)

Related Links and Documentation
[Release Notes for RoomOS 10.19.5.6](#)

File Information	Release Date	Size	
RoomOS software bundle for all Cisco Webex Room Series, Board Series, Desk Limited Edition and Desk Pro cmterm-ce10_19_5_6.k3.cop.sgn	17-Mar-2023	3119.25 MB	
RoomOS software bundle for all Cisco Webex Room Series, Board Series, Desk Limited Edition and Desk Pro for Unified CM 14 and above cmterm-ce10_19_5_6.k4.cop.sha512	17-Mar-2023	3119.25 MB	
RoomOS software for Cisco Webex Room Kit Pro, Codec Pro, Cisco Webex Room 70 G2, Cisco Webex Desk Pro, Desk Limited Edition cmterm-s53300ce10_19_5_6.k3.cop.sgn	17-Mar-2023	1573.48 MB	
RoomOS software for Cisco Webex Room Kit Pro, Codec Pro, Cisco Webex Room 70 G2, Cisco Webex Desk Pro, Desk Limited Edition for Unified CM 14 and above cmterm-s53300ce10_19_5_6.k4.cop.sha512	17-Mar-2023	1573.48 MB	

Desk Pro RoomOS 10.19.5.6 Software Package

Use the highlighted package with the **.cop.sgn** extension which is approximately 1.5GB in size. Then you can register your device to the Cloud. After registration is complete, the endpoint is automatically updated to the latest version or you can choose to manually upgrade the endpoint from the GUI to the latest Room OS version.

Related Information

- [RoomOS Software Upgrade Channels in Control Hub](#)
- [RoomOS Documentation](#)
- [RoomOS Release Notes Documentation](#)
- [Software packages for all Endpoints](#)