

Configure Device Onboarding and Cloud Linking for Webex Edge for Devices

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Introduction

This document describes how to configure the "Webex Edge for Devices" feature to link your on-prem devices to the Cisco Webex cloud service.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Knowledge of Cisco Video Devices
- Knowledge of CUCM
- Knowledge of Control hub

Components Used

The information in this document is based on these software and hardware versions:

- Software version CE9.15 or later and Room OS
- Unified CM version 11.5(1) SU3 or 12.5(1) and later. If you have version 12.0(1), please follow the method described for Expressway-registered devices.

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.

Background Information

Please be aware that the information provided in this document has certain requirements:

- CE software that supports strong encryption is required.
- For SX and MX Series, encryption keys can be obtained upon request, except in countries where Cisco is restricted to export encryption. Please contact your Cisco licensing representative to obtain a

key.

- HTTPS connectivity is needed on devices for the Expressway Device Connector tool.
- Control Hub admin access is necessary.
- Cisco Collaboration Flex Plan is required.
- Cisco Webex Device Connector (WDC) must be utilized.
- *.identrust.com must be allowed for certificate verification.
- For Board, Desk, and Room Series devices, encryption keys are pre-installed and cannot be added later. DX70 and DX80 devices have encryption keys available by default.
- Unified CM or Expressway registration is required.

Firewall Ports and Configuration

Even though media does not pass through Webex cloud (unless Webex optimized experience is enabled), you need to enable the same firewall configurations that apply for fully cloud-registered devices. Read more about media and network requirements in the Network Requirements for Webex Services article.

Limitations

When you enable a Hybrid Calendar on a device linked via Webex Edge for Devices, it disables the TMS calendar on that device, as only one calendar source is supported at a time.

When you first link devices to Webex Edge for Devices, theyâ€™re registered as shared mode devices. After you link the devices, it is possible to associate a device with a user.

Firewall configuration: https://help.webex.com/en-us/article/WBX000028782/Network-Requirements-for-Webex-Services#id_134132

Configure

Download Cisco WDC from the Control hub and install it. Or, in order to onboard and/or link on-premises devices to the Webex cloud, download the WDC desktop application from Webex Control Hub or use one of these links:

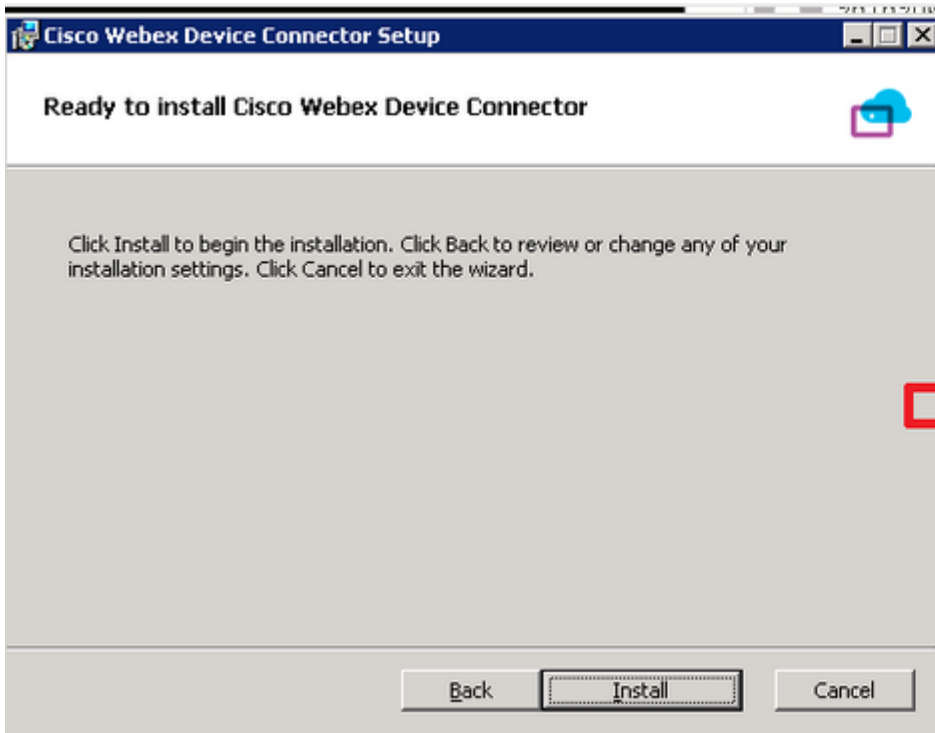
- Cisco WDC application for Mac: <https://binaries.webex.com/devicetoolbinariesuploadproductionstablemacaws/devicestool.pkg>
- Cisco WDC application for Windows: <https://binaries.webex.com/devicetoolbinariesuploadproductionstablewindowsaws/devicestool.msi>

From the user view in <https://admin.webex.com>, navigate to Devices and select Resources in order to find a link to the Device Connector tool.

The screenshot shows the Cisco Webex Control Hub interface. On the left is a navigation sidebar with sections: Overview, Getting Started Guide, Alerts center, MONITORING (Analytics, Troubleshooting, Reports), MANAGEMENT (Users, Groups, Locations, Workspaces, **Devices**, Apps, Account, Organization Settings), and SERVICES (Updates & Migrations, Messaging, Meeting, Postings, vikeduttademo). The main content area is titled 'Devices' and has a sub-menu with 'Devices', 'Templates', 'Settings', 'Software', 'My alerts', and 'Resources'. The 'Resources' sub-menu is highlighted. Below the sub-menu are three cards: 'Cloud Onboarding allows you to bulk register Cisco Webex devices to the cloud.' with a 'View Documentation' link; 'Webex Edge for Devices brings Webex cloud features and functionality to on-premises registered video devices.' with a 'View Documentation' link; and 'Cisco Webex Device Connector' which is highlighted with a red box. This card contains a description: 'This tool allows you to onboard multiple devices to the Webex cloud or to add Webex cloud capabilities to your on-premises devices via Webex Edge for Devices.' and two buttons: 'Download' and 'Get Access Code'. Below the card are 'Links' for 'Cisco Webex Devices' and 'Cisco Webex For Developers'.

Install the WDC Device connector on the machine (Windows or Mac).

The image shows a sequence of three screenshots from the Cisco Webex Device Connector Setup wizard, connected by red arrows indicating the flow. The first screenshot is the 'Welcome to the Cisco Webex Device Connector Setup Wizard' screen, which includes the Cisco logo and a 'Next' button. The second screenshot is the 'End-User License Agreement' screen, which displays the license terms and has a checked box for 'I accept the terms in the License Agreement' and a 'Next' button. The third screenshot is the 'Destination' screen, which shows the installation path 'C:\Program Files' and a 'Change...' button.




After you have installed the Device Connector tool, you need to log in to the Webex device connector with the Control Hub username and password.



Select **I want cloud features for my on-premises registered devices** and click **Link devices registered with Cisco Unified Communications Manager** as shown in the image.


What would you like help with?



I want to register multiple devices to the cloud

Cloud Onboarding allows you to register multiple Cisco collaboration devices to the cloud

[Documentation](#)



I want cloud features for my on-premises registered devices

Webex Edge for Devices adds Webex cloud capabilities while keeping your current on premises call flows

[Documentation](#)



I want to a
clo

Hybrid Calling
provides U
capabilitie

Read the requirement green box and select to pull devices from CUCM.

Configure Webex Edge for Devices



Webex Edge for Devices adds Webex cloud capabilities while keeping your current on premises call flows

For device linking, we require CE 9.14.5 or later with strong encryption to be installed on the device. For devices registered to Unified CM, you also need to install the latest Device Package.



Link devices registered with Cisco Unified Communications Manager



Link devices using CSV or Cisco TMS Overview Export files

[See how to prepare your file](#)

Enter the Host, Username (Standard AXL API Access username), and Password for your Unified CM and click **Connect** . If you have Unified CM with publicly signed certificates, ensure those are valid or click **Proceed without certificate validation**.

The Device Connector retrieves the name and description of the Unified CM configured devices. The Contact Info Name becomes the name for the Workspace the device is connected to. If there is no Contact Info Name set, the System Unit Name or MAC address is used.

Configure Webex Edge for Devices

Connect to Cisco Unified Communications Manager

Host *

10.10...: 0.38

Username (Standard AXL API Access) *

appuser

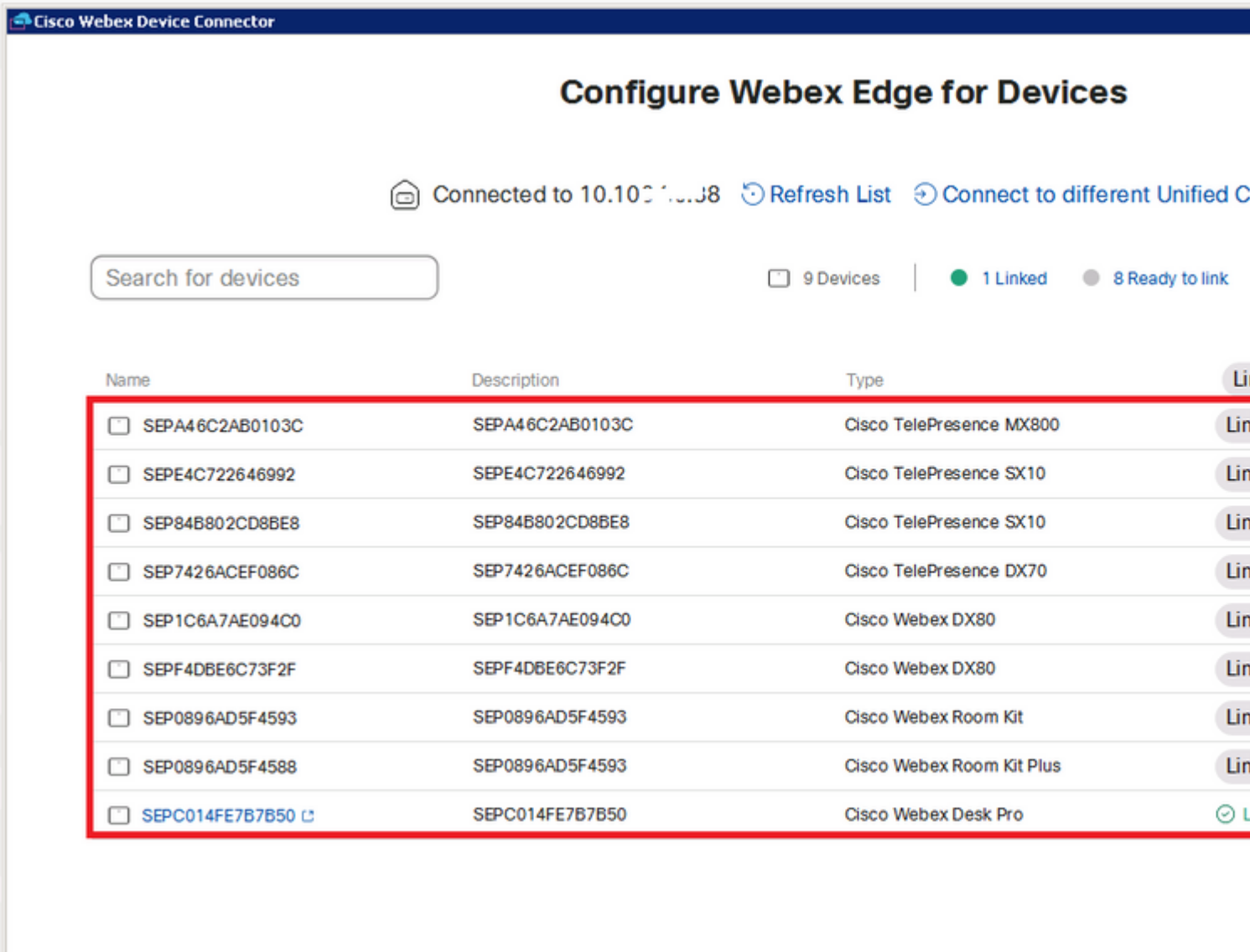
Password *

●●●●●●●●

Connect without certificate validation

Failed to connect to Unified CM: The certificate validation failed. We recommend that you add your own certificate to the directory C:\Users\Administrator\.webexdeviceconnector\certs in Base-64 encoded X.509 (.CER) format. Alternatively, you can proceed without validation.

After you connect to CUCM, all device info is now pulled by the Webex device connector from CUCM and ready to be linked.



Click **Link All** in order to link all of the listed devices. To link an individual device, click the **Link** button next to it.

Device Connector sends the device information to your Webex organization, and the Webex Identity Service creates activation codes for all devices. Unified CM applies the activation code to the devices and the devices link to your Webex organization.

When the device is linked to Cisco Webex cloud services, you can click the device name to open the device page directly in Control Hub.

If the device says **Link Pending**, it is not linked yet. The activation code is provisioned from Unified CM. The system attempts to link to the device for 7 days until the activation code expires. If the device is available at that time, it gets linked.

Endpoint-Specific Configuration:

The endpoint can be Registered and Provisioned via CUCM as shown in these images.

10.10...
Desk Pro

Home

Call

SETUP

Settings

Users

Security

Search...

Phonebook

Provisioning

Proximity

RoomAnalytics

RoomPreset

Security

SIP

Status / SIP

Proxy 1

Address

Status

Registration 1

Reason

Status

URI

Status / Provisioning

Discovered

None

NextRetry

Reason

Server

10.127.204.106

Status

Provisioned

WebexCalling Status

Idle

Configuration / Provisioning

CUCM CallManagementRecords CallDiagnostics ⓘ Enabled ▾

LoginName ⓘ

appadmin

Mode ⓘ

CUCM ▾

Password ⓘ

●●●

TlsVerify ⓘ

Off ▾

WebexEdge ⓘ

On ▾

ExternalManager

Address ⓘ

10.127.1.1

cucm IP address

AlternateAddress ⓘ

Domain ⓘ

Path ⓘ

Protocol ⓘ

HTTP ▾

Once you are ready to link devices. Click on [Link devices](#). If devices are linked successfully, the status of Devices on the Webex device Connector changes to [Linked](#) in green.

SEPC014FE7B7B50

SEPC014FE7B7B50

Cisco Webex Desk Pro

On Endpoint, post edge connection is made to the Control hub as shown in the image.

10.101.234.136
Desk Pro

- Home
- Call
- SETUP
 - Settings
 - Users
 - Security
- CUSTOMIZATION
 - Personalization
 - UI Extensions Editor

System Information

General

10.101.234.136
IPv4

C0:14:FE:7B:7B:50
MAC Address

-
IPv6

FOC2427NF4L
Serial Number

Ethernet
Active Interface

Normal
Temperature

9988777@10.127.234.136
SIP URI

Issues

I am flying on Cloud

Provisioning

Cisco UCM
Provisioning Model

Webex Edge for Desktop
Registered

How to upgrade Webex Device Connector?

Your Webex Device Connector receives a push software upgrade from the cloud. If you get notified, it is recommended to upgrade the connector.

Configure Webex Edge for Devices

Connected to 10.127.234.136 Refresh List Connect to different Unified

Search for devices

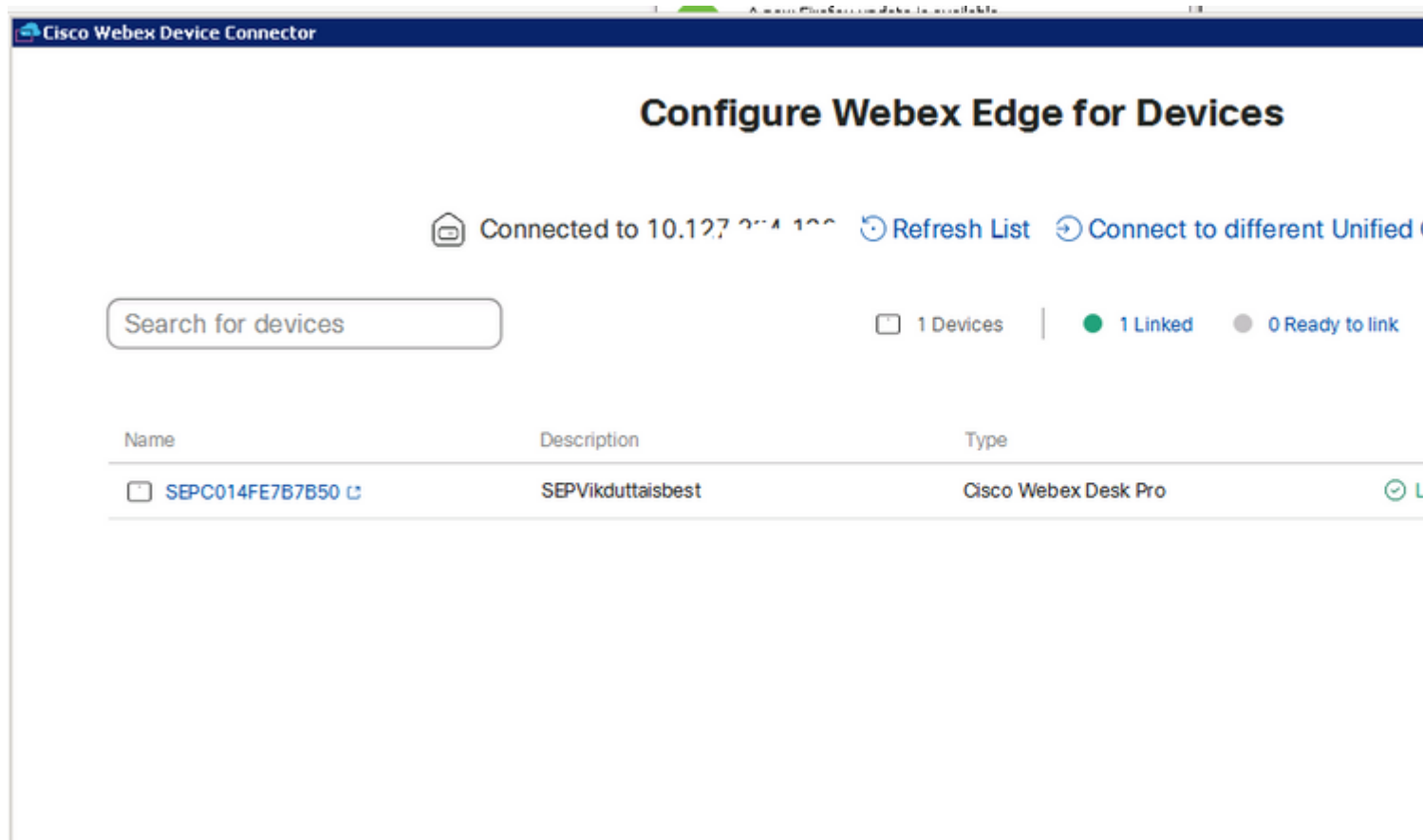
1 Devices | 1 Linked | 0 Ready to link

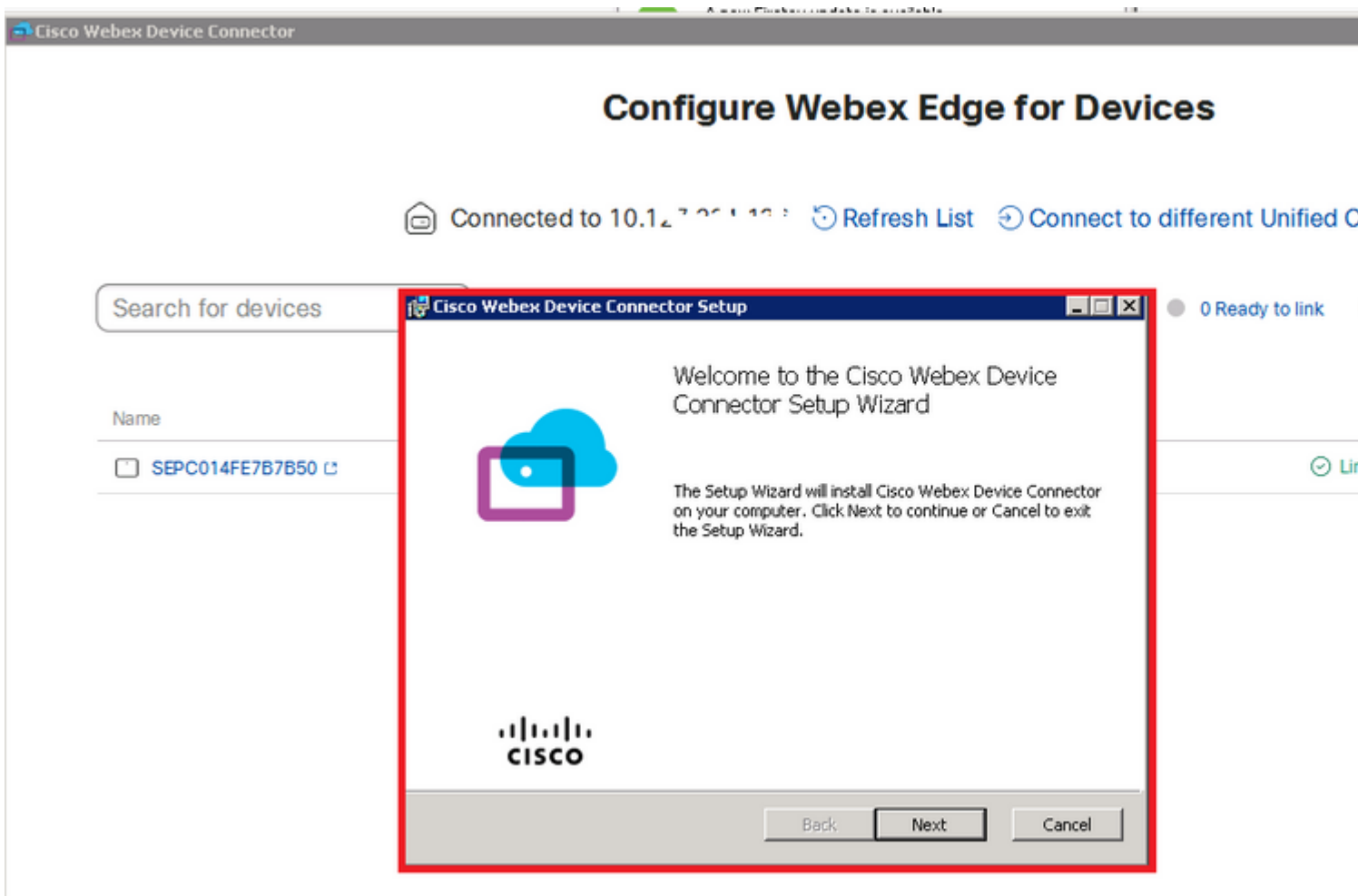
Name	Description	Type
SEPC014FE7B7B50	SEPVikduttaiasbest	Cisco Webex Desk Pro

Click on Update and the download starts. After the download is finished, you need to install the new connector again. Select Link devices registered on CUCM. Post that, insert CUCM IP/username/Password to pull

all devices (as done previously in this doc).

The connector has now been upgraded successfully as shown in the image.





Verify

There is currently no verification procedure available for this configuration.

Troubleshoot

There is currently no specific troubleshooting information available for this configuration.