

INTEROPERABILITY REPORT

Cisco Webex Calling  
Multi-Tenant

Ascom IP-DECT

R11 (11.9.11)

Cloud-based Unified Communications

Gothenburg, Sweden

May 2023

**ascom**

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# Introduction

This document summarizes interoperability test results relating to the validation of Ascom's and the Partner's platforms. It also describes recommended steps and guidelines to configure these respective platforms and provides a point of contact for inquiries. The report should be used in conjunction with configuration guides from Ascom and the Partner.

## About Ascom

Ascom is a global solutions provider focused on healthcare ICT and mobile workflow solutions. The vision of Ascom is to close digital information gaps allowing for the best possible decisions – anytime and anywhere. Ascom's mission is to provide mission-critical, real-time solutions for highly mobile, ad hoc, and time-sensitive environments. Ascom uses its unique product and solutions portfolio and software architecture capabilities to devise integration and mobilization solutions that provide truly smooth, complete, and efficient workflows for healthcare as well as for industry, security, and retail sectors.

Ascom is headquartered in Baar (Switzerland), has operating businesses in 18 countries and employs around 1,300 people worldwide. Ascom registered shares (ASCN) are listed on the SIX Swiss Exchange in Zurich.

## About Cisco

Cisco (NASDAQ: CSCO) is the worldwide technology leader that has been making the Internet work since 1984. Our people, products and partners help society securely connect and seize tomorrow's digital opportunity today. Discover more at [thenetwork.cisco.com](https://thenetwork.cisco.com) and follow us on Twitter at @Cisco.

# Site Information

## Test site

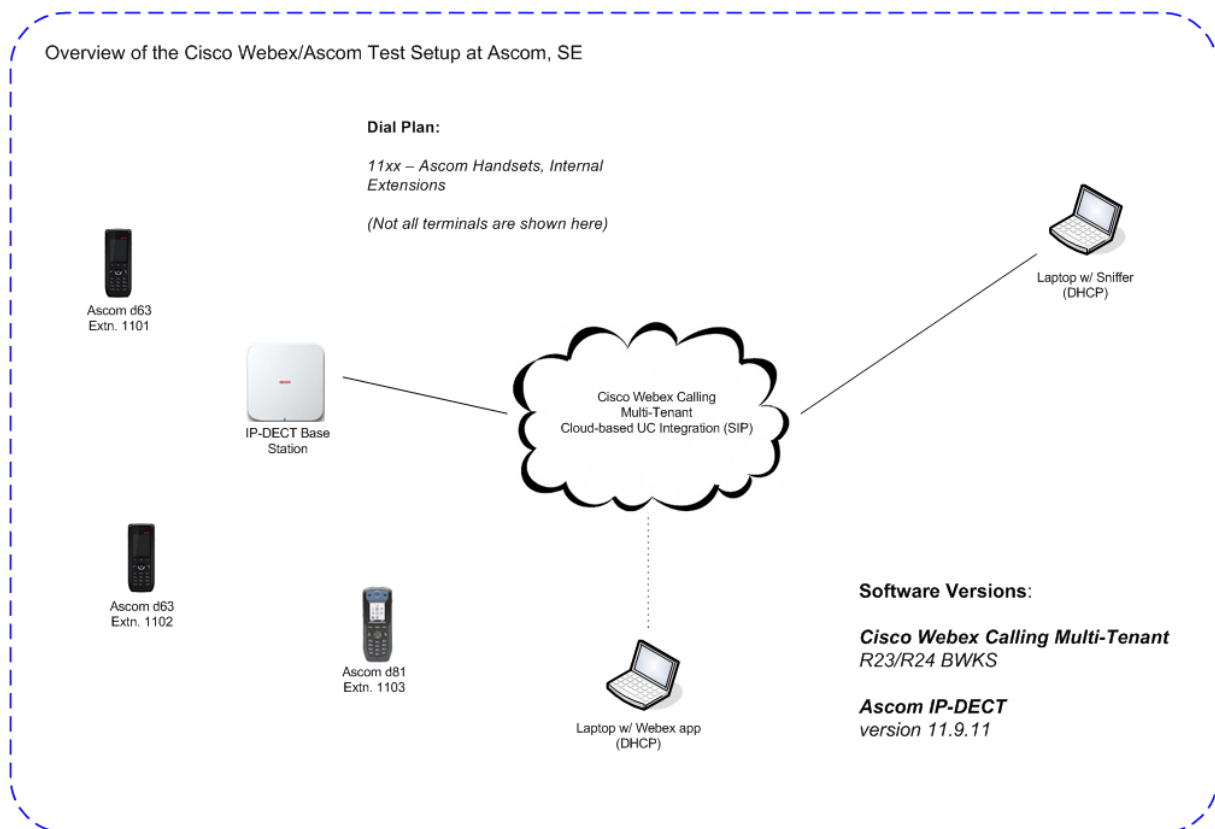
Ascom  
Gothenburg  
Sweden

## Participants

Testing was carried out in late April 2023 by Matthew Morley at Ascom's facilities in Gothenburg.

The Ascom interoperability team validated General Availability (GA) release for the Ascom IP-DECT Base Station (IPBS2/IPBS3), version 11.9.11.

## Test topology



Note: The Ascom IP-DECT Base Station was connected over a NAT router not pictured here.

# Summary

## General conclusions

Interoperability testing of Ascom IP-DECT towards Cisco Webex Calling Multi-Tenant (MT) produced, with a few exceptions, satisfactory results.

Observed issues and limitations are listed under “**Known Limitations**” on page 6.

## Compatibility information

All tests were carried out using SIP as the signaling protocol towards Cisco Webex in the “cloud”. Ascom ensures compatibility/interoperability with Cisco Webex Calling MT, given that tested releases for call control are running on the 3<sup>rd</sup> party platform. DECT handsets registered as Customer Managed Devices using the Generic SIP Phone interface.

For more information about the cloud-based Unified Communications (UC) and Collaboration solution, please contact Cisco Systems.

## Interoperability overview

### Cloud-based UC Features

| High Level Functionality              | Result     | Comments   |
|---------------------------------------|------------|--|
| Basic Call, TLS 1.2 (Secure Voice)    | OK         | TLS profile set to “Strict” on the IP-DECT base station.                       |
| Wideband Audio (HD Voice)             | OK         | G 722.2 (AMR-WB) supported between later generation DECT handsets.             |
| DTMF                                  | OK         |  |
| Hold, Retrieve, Enquiry and Brokering | OK         |  |
| Music on Hold (MoH)                   | OK         |  |
| Attended Transfer                     | OK         |  |
| Blind Transfer                        | OK         |  |
| Semi-attended Transfer                | OK         |  |
| Call Forward Unconditional            | OK         |  |
| Call Forward No Reply                 | OK         |  |
| Call Forward Busy                     | OK         |  |
| Call Waiting                          | OK         |  |
| Message Waiting Indication            | Not tested | Message Waiting Indication is <u>not</u> supported as part of this integration |
| Voice Mail                            | Not tested |  |
| Do Not Disturb                        | OK         |  |
| Calling Line/Name Identification      | OK         |  |
| Connected Line/Name Identification    | OK         |  |
| Conference Call                       | OK         | Three-party conference can <u>only</u> be initiated from the Webex app.        |

### Known Limitations

| Description   | Consequence  | Workaround   | Ticket(s) raised  |
|---|--|--|---|
| Cisco Webex Calling MT requires unique MAC addresses for each Customer Managed Device.                  | Only one DECT handset per IP-DECT base station can be registered.  | Add fictitious MAC addresses derived from the MAC of the Ascom IP-DECT base station. During testing incremented by one (hex) per DECT handset. |   |
| ICE negotiation <u>not</u> supported by Cisco Webex Calling MT for Customer Managed Devices.            | One-way voice when calling from DECT to Webex app. Speech cannot be heard at DECT handset.                               | Disable ICE on the IP-DECT base station, the main caveat being termination of all RTP in the “cloud” for DECT handsets (indirect RTP).         | N/A, please see Ascom ticket ref. MRS-938 for analysis. |
| Root CA Certificate (for TLS) did not show up under “Rejected Certificates” on the IP-DECT base station | Possibly a problem related to the test environment. IP-DECT base station cannot communicate with Cisco Webex Calling MT. | Upload root CA certificate manually to the IP-DECT base station.   |   |
| Message Waiting Indication (MWI) on Ascom DECT handsets <u>not</u> supported for this integration.      |  | Notifications can be sent by Webex as email or SMS.  |   |

For additional information regarding known issues and limitations, please contact [interop@ascom.com](mailto:interop@ascom.com) or [support@ascom.com](mailto:support@ascom.com).

For detailed test results, refer to “**Appendix B: Detailed Test Records**”.

# Appendix A: Test Configurations

## Cisco Webex Calling Multi-Tenant, R23/R24 BWKS

### Cloud-based UC configuration

These screenshots serve to reflect the aspects of managing users and devices in the web-based Webex Control Hub application.

Please refer to the partner's online help and documentation for further details.

[Home -> Overview](#)

The screenshot displays the Cisco Webex Control Hub Overview dashboard. The interface includes a top navigation bar with the 'webex Control Hub' logo, a search bar, and user profile icons. A left-hand navigation menu is organized into sections: Overview (with links to Getting Started Guide, Alerts center, Analytics, Troubleshooting, and Reports), MANAGEMENT (with links to Users, Groups, Locations, Workspaces, Devices, Apps, Account, and Organization Settings), and SERVICES (with links to Updates & Migrations, Messaging, Meeting, and Calling). The main content area is titled 'Overview' and contains several key performance indicators and status cards:

- Getting Started Guide:** Shows a 25% completion rate (2 of 8 tasks completed) with a progress bar and a link to view the guide.
- Updates:** Prompts to update services to the new Webex experience, accompanied by a 'Learn more' link and an icon.
- New offers:** Announces a new offer to allow everyone in the organization to host a Webex Meeting with a Basic Meetings license, with a 'Learn more' link.
- Webex services:** A grid of service status cards, all marked 'ALL ONLINE'. Services include Webex, Calling, Meetings, Hybrid Services, Control Hub, Developer API, Room Devices, and Contact Center.
- Devices:** Displays 6 total devices with a breakdown: Online (4), Online with issues (0), Offline (0), Expired (0), and Unknown (2).
- Onboarding:** Shows 9 total users with a note that there is no CSV upload within 180 days. A donut chart indicates user status: Active (100%), Inactive (0%), Not verified (0%), and Verified (0%). It also shows 0 potential new users and offers links to 'Review' and 'Enable directory sync'.
- Hybrid services:** Shows 7 incomplete services: Calendar Google, Calendar Office 365, Calendar Exchange, Device Calling, Message, Video Mesh, and Serviceability.
- What's new:** Announces the latest 'webex +' update, stating 'The latest update is here!' and providing a 'Learn more' link. A detailed note mentions that the May update includes features like registration for webinars and Cohost capabilities.
- Quick links:** Provides direct access to 'webex Adoption Methodology' (with a 'Learn more' button), 'Admin capabilities', 'Manage subscriptions', 'Organization tasks', 'Audit log', and the 'Webex Calling Network Readiness Tool'.

Management -> Users

**Users**

Users External users External administrators

Search by name or email or Filter or All Locations 8 users Send invitations Manage users

| First / Last name | Email                          | Status | Administrator roles |
|-------------------|--------------------------------|--------|---------------------|
| admin admin       | admin.██████████               | Active | Full admin          |
| User1 d63         | ascom.myc3lab+user1.██████████ | Active |                     |
| User2 d63         | ascom.myc3lab+user2.██████████ | Active |                     |
| User3 d81         | ascom.myc3lab+user3.██████████ | Active |                     |
| User4 PC          | ascom.myc3lab+user4.██████████ | Active |                     |
| User5 App         | ascom.myc3lab+user5.██████████ | Active |                     |
| User6 iOS         | ascom.myc3lab+user6.██████████ | Active |                     |
| User7 i63         | ascom.myc3lab+user7.██████████ | Active |                     |

Note: Email addresses have been anonymized.

Management -> Users -> User -> Summary

**User1 d63**

Active ascom.myc3lab+user1.██████████ Member of GBG Action

Summary General Meetings Calling Messaging Hybrid Services Devices Vidcast

**User details**

First Name: User1

Last Name: d63

Display Name: User1 d63

Primary Email \*: ascom.myc3lab+user1.██████████

Location: GBG

Preferred Email Language: English - American English (Using location settings)

Last Email Status: None

Name Labels: Status: Not enrolled | Organization Setting: Off

**Groups**

This user isn't a member of any group.

Add to Webex groups

**Licenses**

Messaging: Basic Messaging

Meeting: Basic Space Meetings

Calling: Call on Webex (1:1 call, non-PSTN) Webex Calling Professional



The screenshot shows the 'Calling' configuration page for 'User1 d63'. The interface includes a left-hand navigation menu with categories: 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, Calling, Vidcast). The main content area is titled 'User1 d63' and has tabs for Summary, General, Meetings, Calling (selected), and Messaging. An 'Action' button is in the top right.

**Numbers**

| Directory numbers ⓘ |                  |           |
|---------------------|------------------|-----------|
| Type                | Number           | Extension |
| Primary             | +4631 [redacted] | 1101      |

Below the table are links for '+', Caller ID ⓘ (User's phone number: +4631 [redacted]), and Emergency callback number ⓘ.

**Business texting** User is not eligible for texting capabilities. [Learn more.](#)

**Voicemail, fax and announcement language**

|                       |         |   |
|-----------------------|---------|---|
| Voicemail ⓘ           | Enabled | > |
| Announcement language | English | > |

**Call handling**

|                           |                                     |   |
|---------------------------|-------------------------------------|---|
| Incoming call permissions | Default settings                    | > |
| Outgoing call permissions | Default settings                    | > |
| Call forwarding ⓘ         | Not forwarding calls                | > |
| Call waiting ⓘ            | <input checked="" type="checkbox"/> | > |
| Call intercept ⓘ          | Disabled                            | > |

This is where voicemail and call handling are configured for the each user in Webex Control Hub.

Note: Telephone numbers have been anonymized.

The screenshot displays the Cisco Webex user management interface. On the left is a navigation sidebar with sections for 'MONITORING' (Analytics, Troubleshooting, Reports) and 'MANAGEMENT' (Users, Groups, Locations, Workspaces, Devices, Apps, Account, Organization Settings). The 'Users' section is selected. The main content area shows the profile for 'User1 d63', who is 'Active' and a 'Member of GBG'. Below the profile are tabs for 'Summary', 'General', 'Meetings', 'Calling', 'Messaging', 'Hybrid Services', 'Devices', and 'Vidcast'. The 'Calling' tab is active, showing the 'Caller ID' configuration. The configuration includes: 'External caller ID phone number' with radio buttons for 'Direct line: +4631 [redacted] Ext 1101' (selected) and 'Assigned number from user's location'; 'External caller ID name' with radio buttons for 'Direct line: User1 d63' (selected), 'Location external caller ID name: GBG', and 'Other external caller ID name'; 'Caller ID first name' with a text input field containing 'User1'; 'Caller ID last name' with a text input field containing 'd63'; and 'Block caller ID for received calls' with a toggle switch that is currently turned off.

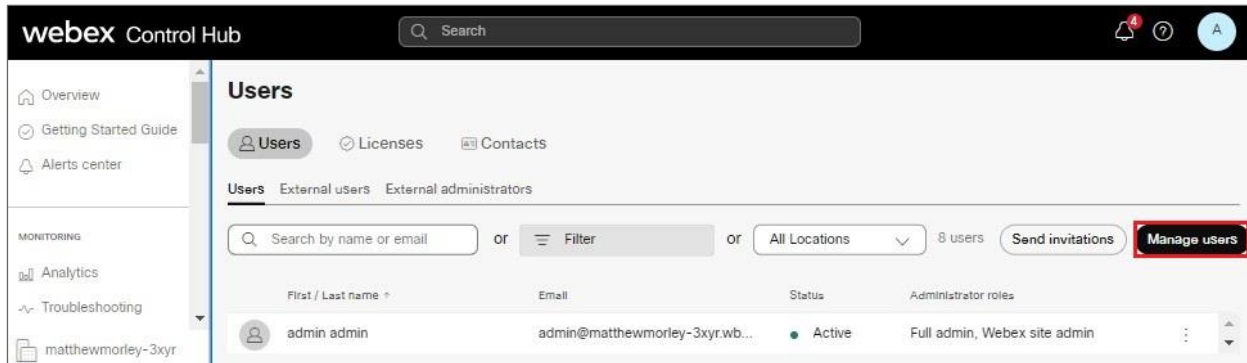
Here, the Caller ID for outgoing calls is configured.

## Provisioning a User

These screenshots provide basic guidance when adding a device to an existing user. Note that there are various approaches to provisioning users.

For further guidance, please see Cisco Webex Calling's online resources on licensing and configuration.

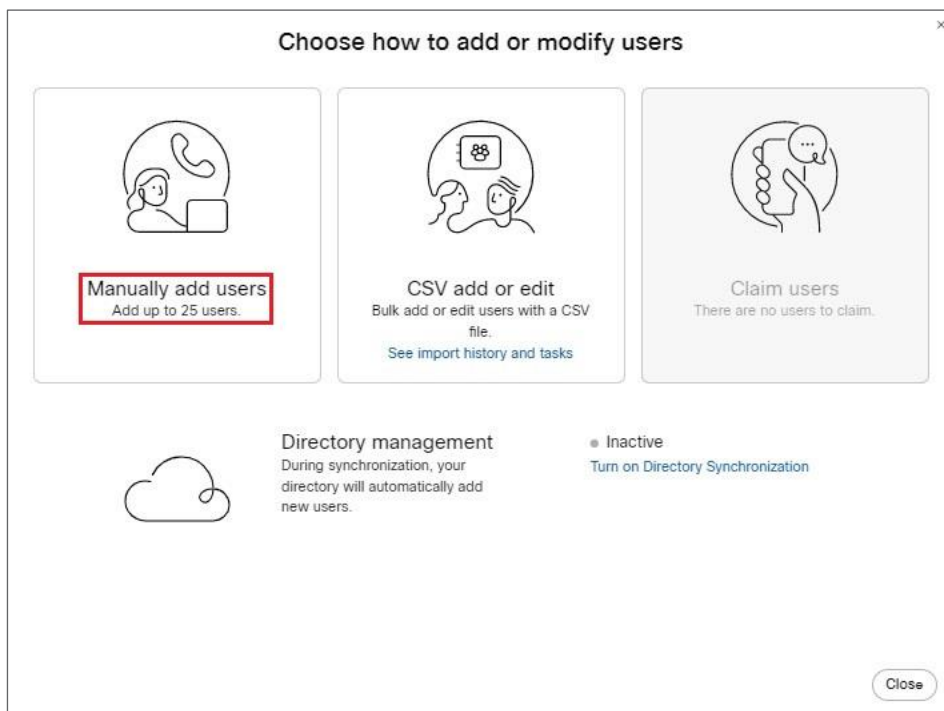
Management -> Users -> Manage Users



Management -> Users -> Manage Users -> Manually Add Users

Run through all the steps of the wizard.

Select "Manually add users".



Add users and then select “Next”.

The screenshot shows the 'Manually add users' wizard at Step 1: Basic information. The progress bar at the top indicates three steps: Basic information (selected), Assign licenses, and Review. Under 'Step 1: Basic information', there are two radio button options: 'Names and Email address' (selected) and 'Email address'. A warning message states: 'You cannot add existing users in your organization or users that already have a Webex account. [Learn more](#)'. Below this are input fields for 'First name', 'Last name', and 'Email address', followed by a '+' button. A list of added users is shown with one entry: 'User 10 d63 ascom.myc3lab+user10 [redacted] x'. Below the list is a text area for 'Enter user emails separated by commas' and a 'Clear All' button. At the bottom right, a 'Next' button is highlighted with a red box.

Run through the rest of the wizard to review licenses, assign phone numbers and extensions, and then confirm by selecting “Add Users”.

The screenshot shows the 'Manually add users' wizard at Step 4: Review. The progress bar at the top indicates four steps: Basic information, Assign licenses, Assign numbers, and Review (selected). Under 'Step 4: Review', a message states: 'You've enabled Auto-Assign. Users will be assigned the following licenses automatically'. Below this is a table for 'Added user(1)'.

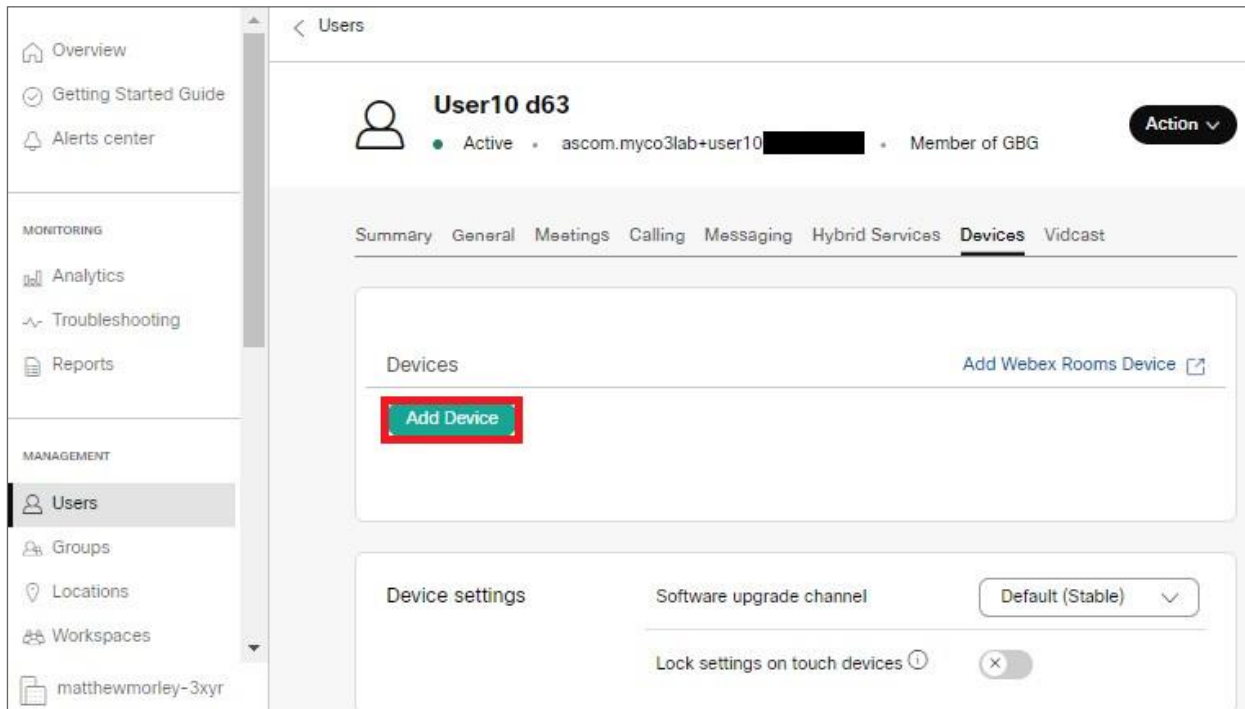
| Email address   | First name | Last name | Phone Number     | Extension |
|-----------------|------------|-----------|------------------|-----------|
| ascom.myc3la... | User 10    | d63       | +4631 [redacted] | 1110      |

Below the table is a section for 'Assigned licenses' with three rows: 'Messaging' (Basic Messaging), 'Meeting' (Basic Space Meetings), and 'Calling' (Call on Webex (1:1 call, non-PSTN) Webex Calling Professional). At the bottom right, there are 'Previous' and 'Add users' buttons, with the 'Add users' button highlighted by a red box.

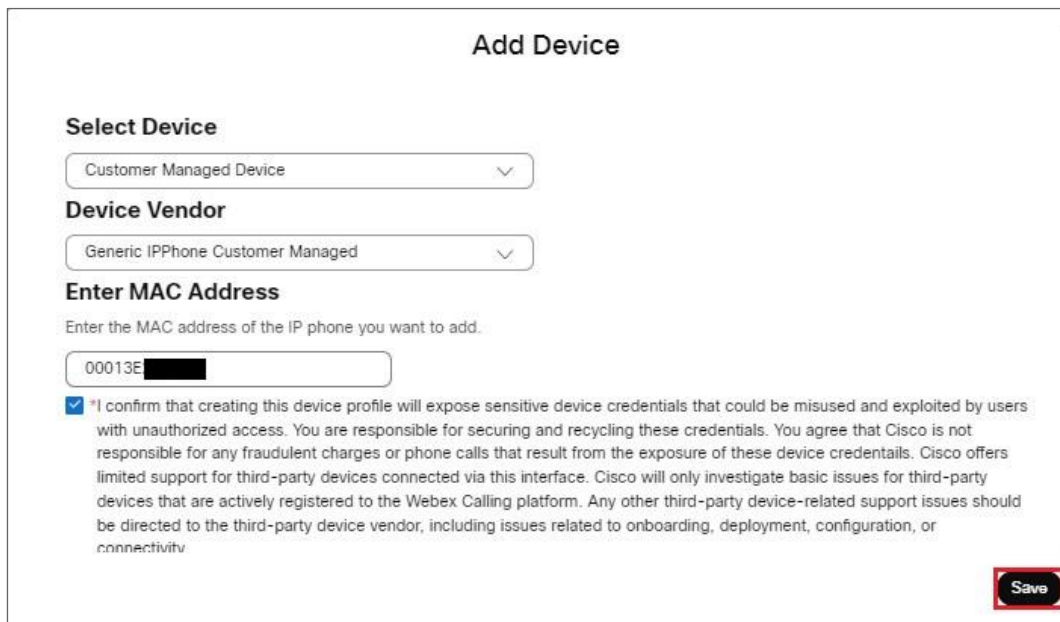
Note: Email addresses need to be verified.

Management -> Users -> User -> Devices

For the users from the previous step, select “Add Device” under Devices.




First select “Customer Managed Device” and “Generic IPPhone Customer Managed” from respective drop-down menus. Then enter a fictitious MAC address derived from the MAC of the Ascom IP-DECT base station, acknowledge the disclaimer, and click “Save”.



Lastly, record all SIP registration details and credentials for future use. See example on the next page.

Device details below correspond to the DECT user example in the next section: "Ascom IP-DECT, v. 11.9.11".

### Add Device



Device Successfully Added

|  |  |
|--|--|
| <b>Details</b>                           |  |
| Workspace Name                           | SIP Username   |
| User1                                    | 1101   |
| Device Vendor                            | SIP Password   |
| Generic IPPhone Customer Managed         | <span style="background-color: black; color: black;">XXXXXXXXXX</span>   |
| Line ID <small>⌵</small>                 | <small>⚠ Enter this password into the device to link it. As needed, record this password, since it will never be visible again. The administrator is responsible for maintaining and securing these credentials.</small> |
| atipzes3o9@98303641.us10.bclid.webex.com |  |
| Outbound Proxy                           | <a href="#">⬇ Download credentials as .csv</a>   |
| fr11.hosted-eu10.bclid.webex.com         | <a href="#">📄 Configuration documentation</a>  |
| MAC address                              |  |
| 00013E26F8A0                             |  |

Close

Note: It is recommended to copy/paste passwords into a text file to have them handy when adding DECT users.

These details for each DECT user/subscriber are required when configuring the Ascom IP-DECT Base Station:

| Cisco Webex Calling              | Ascom IP-DECT                |
|----------------------------------|------------------------------|
| Line ID <u>after</u> the @ sign  | Domain                       |
| Outbound Proxy                   | Proxy                        |
| Line ID <u>before</u> the @ sign | Name                         |
| SIP Username                     | Number <u>and</u> Auth. Name |
| SIP Password                     | Password                     |

# Ascom IP-DECT, v. 11.9.11

## IP-DECT Base Station Configuration

IP configuration is found under **LAN > IP4**.

The screenshot shows the 'IP-DECT Base Station' configuration interface. The 'IP4' tab is selected under the 'LAN' section. The 'Active Settings' are displayed as follows:

| Setting         | Value                    | Active Settings |
|-----------------|--------------------------|-----------------|
| IP Address      | 192.168.██               | 192.168.██      |
| Network Mask    | 255.255.255.0            | 255.255.255.0   |
| Default Gateway | 192.168.██               | 192.168.██      |
| DNS Server      | 8.8.8.8                  | 8.8.8.8         |
| Alt. DNS Server | 192.168.██               | 192.168.██      |
| Check ARP       | <input type="checkbox"/> |                 |

Below the active settings, there is a section for 'Static IP Routes' with columns for 'Network Destination', 'Network Mask', and 'Gateway', each with an empty input field. 'OK' and 'Cancel' buttons are at the bottom.

Add an NTP server under **General > NTP**.

The screenshot shows the 'IP-DECT Base Station' configuration interface with the 'NTP' tab selected under the 'General' section. The 'Active Settings' are displayed as follows:

| Setting          | Value                                  | Active Settings                |
|------------------|--|--------------------------------|
| Time Server      | pool.ntp.org                           | pool.ntp.org                   |
| Alt. Time Server |  |                                |
| Interval [min]   | 60                                     | 60                             |
| Timezone         | Europe - Central European Time (UTC+1) |                                |
| String           | CET-1CEST-2,M3.5.0/2,M10.5.0/3         | CET-1CEST-2,M3.5.0/2,M10.5.0/3 |
| Current Server   | pool.ntp.org -> 194.58.205.148         |                                |
| Last Sync        | 14.05.2023 14:48                       |                                |

'OK' and 'Cancel' buttons are at the bottom.

It is recommended to set the TLS profile to "Strict" in **IP4 > TLS**.

The screenshot shows the 'IP-DECT Base Station' configuration interface with the 'TLS' tab selected under the 'IP4' section. The 'Profile' is set to 'strict' in a dropdown menu. 'OK' and 'Cancel' buttons are at the bottom.

Note: This profile enforces TLS version 1.2.

When using a NAT router, configure TCP keepalives by going to **IP4 > Settings**.

The screenshot shows the configuration page for an IP-DECT Base Station. The left sidebar contains a navigation menu with categories like General, LAN, IP4, IP6, LDAP, DECT, Unite, Services, and Advanced. The main content area is titled 'IP-DECT Base Station' and has tabs for Settings, Routing, TLS, STUN, and ARP. The 'Settings' tab is active. Under 'TCP Settings', the 'TCP Keepalive' field is highlighted with a red box and contains the value '30'. Other settings include 'ToS Priority - RTP Data' and 'ToS Priority - VoIP Signalling' both set to '0x68', and 'Port Ranges' with 'First UDP-RTP Port' at 16384, 'Number of Ports' at 16384, and 'Last UDP-RTP Port' at 32767. There are 'OK' and 'Cancel' buttons at the bottom.

The recommended TCP Keepalive interval is between 20 to 30 seconds.



SIP/TLS settings are found under **DECT > Master**.

### IP-DECT Base Station

| Configuration          | System   | Suppl. Serv. | Master | Crypto Master | Mobility Master | Radio | Radio config |
|------------------------|--|--------------|--------|---------------|-----------------|-------|--------------|
| <b>General</b>         | IP-PBX   |              |        |               |                 |       |              |
| <b>LAN</b>             | Protocol <span style="float: right;">SIP/TLS <input type="button" value="v"/></span>             |              |        |               |                 |       |              |
| <b>IP4</b>             | Proxy <span style="float: right;">fr11.hosted-eu10.bcid.webex.com</span>                         |              |        |               |                 |       |              |
| <b>IP6</b>             | Alt. Proxy <span style="float: right;"><input type="text"/></span>                               |              |        |               |                 |       |              |
| <b>LDAP</b>            | Alt. Proxy <span style="float: right;"><input type="text"/></span>                               |              |        |               |                 |       |              |
| <b>DECT</b>            | Alt. Proxy <span style="float: right;"><input type="text"/></span>                               |              |        |               |                 |       |              |
| <b>Unite</b>           | Domain <span style="float: right;">98303641.us10.bcid.webex</span>                               |              |        |               |                 |       |              |
| <b>Services</b>        | Max. Internal Number Length <span style="float: right;">4</span>                                 |              |        |               |                 |       |              |
| <b>Advanced</b>        | International CPN Prefix <span style="float: right;"><input type="text"/></span>                 |              |        |               |                 |       |              |
| <b>Administration</b>  | Registration with system password <input type="checkbox"/>                                       |              |        |               |                 |       |              |
| <b>Users</b>           | Enbloc Dialing <input checked="" type="checkbox"/>   |              |        |               |                 |       |              |
| <b>Device Overview</b> | Enable Enbloc Send-Key <input type="checkbox"/>  |              |        |               |                 |       |              |
| <b>DECT Sync</b>       | Send Inband DTMF <input type="checkbox"/>  |              |        |               |                 |       |              |
| <b>Traffic</b>         | Allow DTMF Through RTP <input checked="" type="checkbox"/>                                       |              |        |               |                 |       |              |
| <b>Gateway</b>         | Short Disconnect Tone <input type="checkbox"/>   |              |        |               |                 |       |              |
| <b>Backup</b>          | Treat rejected calls as <span style="float: right;">Busy <input type="button" value="v"/></span> |              |        |               |                 |       |              |
| <b>Update</b>          | Configured With Local GK <input type="checkbox"/>  |              |        |               |                 |       |              |
| <b>Diagnostics</b>     | SIP Interoperability Settings  |              |        |               |                 |       |              |
| <b>Reset</b>           | Registration Time-To-Live <span style="float: right;">120 [sec]</span>                           |              |        |               |                 |       |              |
|                        | Subscription Time-To-Live <span style="float: right;">120 [sec]</span>                           |              |        |               |                 |       |              |
|                        | STUN server <span style="float: right;"><input type="text"/></span>                              |              |        |               |                 |       |              |
|                        | Hold Signalling <span style="float: right;">inactive <input type="button" value="v"/></span>     |              |        |               |                 |       |              |
|                        | Hold Before Transfer <input type="checkbox"/>  |              |        |               |                 |       |              |
|                        | Accept Inbound Calls Not Routed Via Home Proxy <input type="checkbox"/>                          |              |        |               |                 |       |              |
|                        | Register With Number <input type="checkbox"/>  |              |        |               |                 |       |              |

Configure SRTP and codec settings by going to **DECT > System**.

### IP-DECT Base Station

| Configuration          | System  | Suppl. Serv. | Master | Crypto Master | Mobility Master | Radio | Radio config |
|------------------------|---|--------------|--------|---------------|-----------------|-------|--------------|
| <b>General</b>         | System Name <span style="float: right;">DECT3</span>  |              |        |               |                 |       |              |
| <b>LAN</b>             | Password <span style="float: right;">*****</span>   |              |        |               |                 |       |              |
| <b>IP4</b>             | Confirm Password <span style="float: right;">*****</span>   |              |        |               |                 |       |              |
| <b>IP6</b>             | Subscriptions <span style="float: right;">With System AC <input type="button" value="v"/></span>  |              |        |               |                 |       |              |
| <b>LDAP</b>            | Authentication Code <span style="float: right;">9999</span>   |              |        |               |                 |       |              |
| <b>DECT</b>            | Tones <span style="float: right;">EUROPE-PBX <input type="button" value="v"/></span>  |              |        |               |                 |       |              |
| <b>Unite</b>           | Default Language <span style="float: right;">English <input type="button" value="v"/></span>  |              |        |               |                 |       |              |
| <b>Services</b>        | Frequency <span style="float: right;">1880-1900 MHz (Europe) <input type="button" value="v"/></span>  |              |        |               |                 |       |              |
| <b>Advanced</b>        | Enabled Carriers <span style="float: right;">9 8 7 6 5 4 3 2 1 0</span>   |              |        |               |                 |       |              |
| <b>Administration</b>  | <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> |              |        |               |                 |       |              |
| <b>Users</b>           | Local R-Key Handling <input checked="" type="checkbox"/>  |              |        |               |                 |       |              |
| <b>Device Overview</b> | No Transfer on Hangup <input checked="" type="checkbox"/>   |              |        |               |                 |       |              |
| <b>DECT Sync</b>       | <b>No On-Hold Display</b> <input checked="" type="checkbox"/>   |              |        |               |                 |       |              |
| <b>Traffic</b>         | Display Original Called <input type="checkbox"/>  |              |        |               |                 |       |              |
| <b>Gateway</b>         | Early Encryption <input type="checkbox"/>   |              |        |               |                 |       |              |
| <b>Backup</b>          | RFP Location <input type="checkbox"/>   |              |        |               |                 |       |              |
| <b>Update</b>          | Unite Data Channel <input type="checkbox"/>   |              |        |               |                 |       |              |
| <b>Diagnostics</b>     | <b>Disable ICE</b> <input checked="" type="checkbox"/>  |              |        |               |                 |       |              |
| <b>Reset</b>           | Codec <span style="float: right;">G722.2/G711A <input type="button" value="v"/></span> Frame (ms) <span style="float: right;">20</span> Exclusive <input type="checkbox"/> SC <input type="checkbox"/>  |              |        |               |                 |       |              |
|                        | Secure RTP Key Exchange <span style="float: right;">SDS <input type="button" value="v"/></span>   |              |        |               |                 |       |              |
|                        | Secure RTP Cipher <span style="float: right;">AES128/80 <input type="button" value="v"/></span>   |              |        |               |                 |       |              |
|                        | Unencrypted SRTP <input checked="" type="checkbox"/>  |              |        |               |                 |       |              |
|                        | <input type="button" value="OK"/> <input type="button" value="Cancel"/>   |              |        |               |                 |       |              |

Ensure that “No On-Hold Display” and “Disable ICE” are checked.

Note: The actual codec used during a call is dependent on negotiation between endpoints.

The root CA certificate needs to be trusted under **General > Certificates**.

**IP-DECT Base Station**

Configuration: Info Admin NTP Kerberos **Certificates** License EULA

Trust List

| Subject   | Issuer                             | Not Before | Not After  | Download |
|---|------------------------------------|------------|------------|----------|
| <input type="checkbox"/> Thawte EV RSA CA 2018          | DigiCert High Assurance EV Root CA | 06.11.2017 | 06.11.2027 | PEM DER  |
| <input type="checkbox"/> IdenTrust Commercial Root CA 1 | IdenTrust Commercial Root CA 1     | 16.01.2014 | 16.01.2034 | PEM DER  |

Remove Clear

Download All

Password:  File:  No file chosen

Note: This action is a requirement for registration of SIP endpoints.

Advanced VoIP Configuration

Advanced VoIP settings are found under **Advanced > SIP**.

**IP-DECT Base Station**

Configuration: **SIP** Certificates SIP Responses

Add Instance ID To The User Registration With The IP-PBX  SIP  TSIP  SIPS

IP-PBX Supports Redirection Of Registration When Registered To Alternative Proxy  SIP  TSIP  SIPS

Use Local Contact Port As Source Port For TCP/TLS Connections  SIP  TSIP  SIPS

Prefer P-Asserted-Identity As Calling Party Identity  SIP  TSIP  SIPS

Do Not Send Identity Header  SIP  TSIP  SIPS

Use SBC for NAT traversal  SIP  TSIP  SIPS

No Server Certificate Subject Check For TLS Connections  SIP  TSIP  SIPS

No Server Certificate Trust Check For TLS Connections  SIP  TSIP  SIPS

Accept Hold Signaling Using Remote Media Address 0.0.0.0  SIP  TSIP  SIPS

Remove SRTP Lifetime in SDP  SIP  TSIP  SIPS

Allow Multiple Codecs in Answer SDP  SIP  TSIP  SIPS

Send Early Progress Response  SIP  TSIP  SIPS

Ignore Retry-After in Registration Responses  SIP  TSIP  SIPS

Use STUN for NAT Traversal with TCP/TLS  SIP  TSIP  SIPS

No Validation of Request URI  SIP  TSIP  SIPS

Note: All settings require reset

User Configuration

User details and settings can be found under **Users > Users**.

The screenshot shows the 'IP-DECT Base Station' configuration interface. The 'Users' tab is active, displaying a list of users and an 'Edit User' dialog box for 'd63 1101'.

**User Administrators:**  
 Long Name Name  
 User Administrators: 0

**Users:**

| Long Name | Name       | No   |
|-----------|------------|------|
| d63 1101  | atipzes3o9 | 1101 |
| d63 1102  | t78e3iozq9 | 1102 |
| d81 1103  | p4oh1dh9fs | 1103 |

Users: 3, Registrations: 3

**Edit User - Google Chrome**  
 Not secure | 192.168. [redacted] /session/GW-DECT/mod\_cmd\_login.x...  
 User type:  
 User  
 User Administrator

Long Name: d63 1101  
 Display Name: d63 1101  
 Name: atipzes3o9  
 Number: 1101  
 Auth. Name: 1101 (SIP only)  
 Password: [redacted]  
 Confirm Password: [redacted]  
 IPEI / IPDI: 110550389538  
 Idle Display: d63 1101  
 Auth. Code: [redacted]  
 Feature Status:  
 Call Waiting On: [redacted]

Buttons: OK, Apply, Delete, Unsubs., Logout, Cancel

Note: Names and numbers for each respective subscriber correspond to the Line ID's and extensions in Webex Control Hub. Refer to the table on page 14.

Verify user registrations under the same tab.

The screenshot shows the 'IP-DECT Base Station' configuration interface with the 'Users' tab active. It displays a detailed table of user registrations.

**User Administrators:**  
 Long Name Name  
 User Administrators: 0

**Users:**

| Long Name | Name       | No   | Fty | Display  | IPEI / IPDI  | AC            | Prod    | SW                  | EE | Registration |
|-----------|------------|------|-----|----------|--------------|---------------|---------|---------------------|----|--------------|
| d63 1101  | atipzes3o9 | 1101 | +   | d63 1101 | 110550389538 | d63-Talker    | 2.12.39 | 185.115. [redacted] |    |              |
| d63 1102  | t78e3iozq9 | 1102 | +   | d63 1102 | 110550389613 | d63-Talker    | 2.12.39 | 185.115. [redacted] |    |              |
| d81 1103  | p4oh1dh9fs | 1103 | +   | d81 1103 | 002020909367 | d81-Messenger | 4.12.1  | 185.115. [redacted] |    |              |

Users: 3, Registrations: 3

Note: Unsuccessful registrations will be marked as "FAILED".

Configuration of Supplementary Services

Enable Supplementary Services under **DECT > Suppl. Serv.**

### IP-DECT Base Station

| Configuration          | System  | Suppl. Serv.  | Master                            | Crypto Master | Mobility Master | Radio | Radio config                        |
|------------------------|---|---|-----------------------------------|---------------|-----------------|-------|-------------------------------------|
| <b>General</b>         | <input checked="" type="checkbox"/> Enable Supplementary Services |   |                                   |               |                 |       |                                     |
| <b>LAN</b>             |   |   |                                   |               |                 |       |                                     |
| <b>IP4</b>             |   |   |                                   |               |                 |       |                                     |
| <b>IP6</b>             |   |   |                                   |               |                 |       |                                     |
| <b>LDAP</b>            |   |   |                                   |               |                 |       |                                     |
| <b>DECT</b>            |   |   |                                   |               |                 |       |                                     |
| <b>Unite</b>           |   |   |                                   |               |                 |       |                                     |
| <b>Services</b>        |   |   |                                   |               |                 |       |                                     |
| <b>Advanced</b>        |   |   |                                   |               |                 |       |                                     |
| <b>Administration</b>  |   |   |                                   |               |                 |       |                                     |
| <b>Users</b>           |   |   |                                   |               |                 |       |                                     |
| <b>Device Overview</b> |   |   |                                   |               |                 |       |                                     |
| <b>DECT Sync</b>       |   |   |                                   |               |                 |       |                                     |
| <b>Traffic</b>         |   |   |                                   |               |                 |       |                                     |
| <b>Gateway</b>         |   |   |                                   |               |                 |       |                                     |
| <b>Backup</b>          |   |   |                                   |               |                 |       |                                     |
| <b>Update</b>          |   |   |                                   |               |                 |       |                                     |
| <b>Diagnostics</b>     |   |   |                                   |               |                 |       |                                     |
| <b>Reset</b>           |   |   |                                   |               |                 |       |                                     |
|                        |   | <b>Activate</b>   | <b>Deactivate</b>                 |               |                 |       | <b>Disable</b>                      |
|                        | Call Forwarding Unconditional                                     | <input type="text" value="*21*\$#"/>                                    | <input type="text" value="#21#"/> |               |                 |       | <input type="checkbox"/>            |
|                        | Call Forwarding Busy  | <input type="text" value="*67*\$#"/>                                    | <input type="text" value="#67#"/> |               |                 |       | <input type="checkbox"/>            |
|                        | Call Forwarding No Reply  | <input type="text" value="*61*\$#"/>                                    | <input type="text" value="#61#"/> |               |                 |       | <input type="checkbox"/>            |
|                        | Do Not Disturb  | <input type="text" value="*42#"/>                                       | <input type="text" value="#42#"/> |               |                 |       | <input type="checkbox"/>            |
|                        | Call Waiting  | <input type="text" value="*43#"/>                                       | <input type="text" value="#43#"/> |               |                 |       | <input type="checkbox"/>            |
|                        | Call Completion   | <input type="text" value="."/>  | <input type="text" value="."/>    |               |                 |       | <input checked="" type="checkbox"/> |
|                        | Call Park   | <input type="text" value="."/>  | <input type="text" value="."/>    |               |                 |       | <input checked="" type="checkbox"/> |
|                        | Interception  | <input type="text" value="."/>  | <input type="text" value="."/>    |               |                 |       | <input checked="" type="checkbox"/> |
|                        | Call Service URI  | <input type="text" value="."/>  |                                   |               |                 |       | <input checked="" type="checkbox"/> |
|                        | Call Service URI (Argument)                                       | <input type="text" value="."/>  |                                   |               |                 |       | <input checked="" type="checkbox"/> |
|                        | Soft key  | <input type="text" value="."/>  |                                   |               |                 |       | <input checked="" type="checkbox"/> |
|                        | Logout User   | <input type="text" value="."/>  |                                   |               |                 |       | <input checked="" type="checkbox"/> |
|                        | Clear Local Setting   | <input type="text" value="*00#"/>                                       |                                   |               |                 |       | <input type="checkbox"/>            |
|                        | MWI Mode  | <input type="text" value="Off"/>  |                                   |               |                 |       |                                     |
|                        | Local Clear of MWI  | <input type="text" value="."/>  |                                   |               |                 |       |                                     |
|                        | External Idle Display   |   |                                   |               |                 |       | <input type="checkbox"/>            |
|                        |   | <input type="button" value="OK"/> <input type="button" value="Cancel"/> |                                   |               |                 |       |                                     |

Note: Message Waiting Indication (MWI) is not supported.

These settings were used in the test environment. For further information about Ascom IP-DECT settings, please refer to our documentation.

# Appendix B: Detailed Test Records

|              |     |
|--------------|-----|
| Pass         | 32  |
| Fail         | 0   |
| Comments     | 16  |
| Not verified | 64  |
| <b>Total</b> | 112 |

Please see attached Excel file for detailed test results.

Refer to the test specification for steps related to each test case.  
Partners can request the test specification from [interop@ascom.com](mailto:interop@ascom.com).

## Document History

| Rev  | Date       | Author | Description                            |
|------|------------|--------|--|
| PA1  | 2023-05-09 | SEMW   | Initial draft.                         |
| PA2  | 2023-05-15 | SEMW   | Draft version for internal review.     |
| PA3  | 2023-05-24 | SEMW   | Updated version after internal review. |
| RevA | 2023-05-29 | SEMW   | Final version.                         |
|      |            |        |  |