



The bridge to possible

# Cisco IP Phones, Headsets, and Webcams

The Product Updates that we all Need to Know

David Scott CCIE, Product Manager  
BRKCOL-2068

CISCO *Live!*

#CiscoLive

# Cisco Webex App

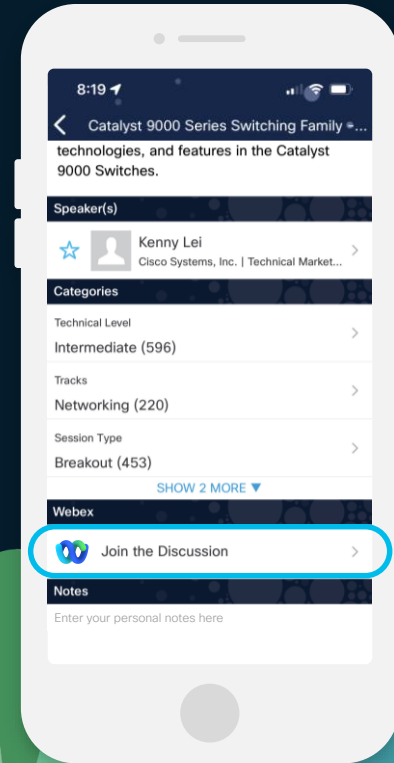
## Questions?

Use Cisco Webex App to chat with the speaker after the session

## How

- 1 Find this session in the Cisco Live Mobile App
- 2 Click “Join the Discussion”
- 3 Install the Webex App or go directly to the Webex space
- 4 Enter messages/questions in the Webex space

Webex spaces will be moderated by the speaker until June 7, 2024.

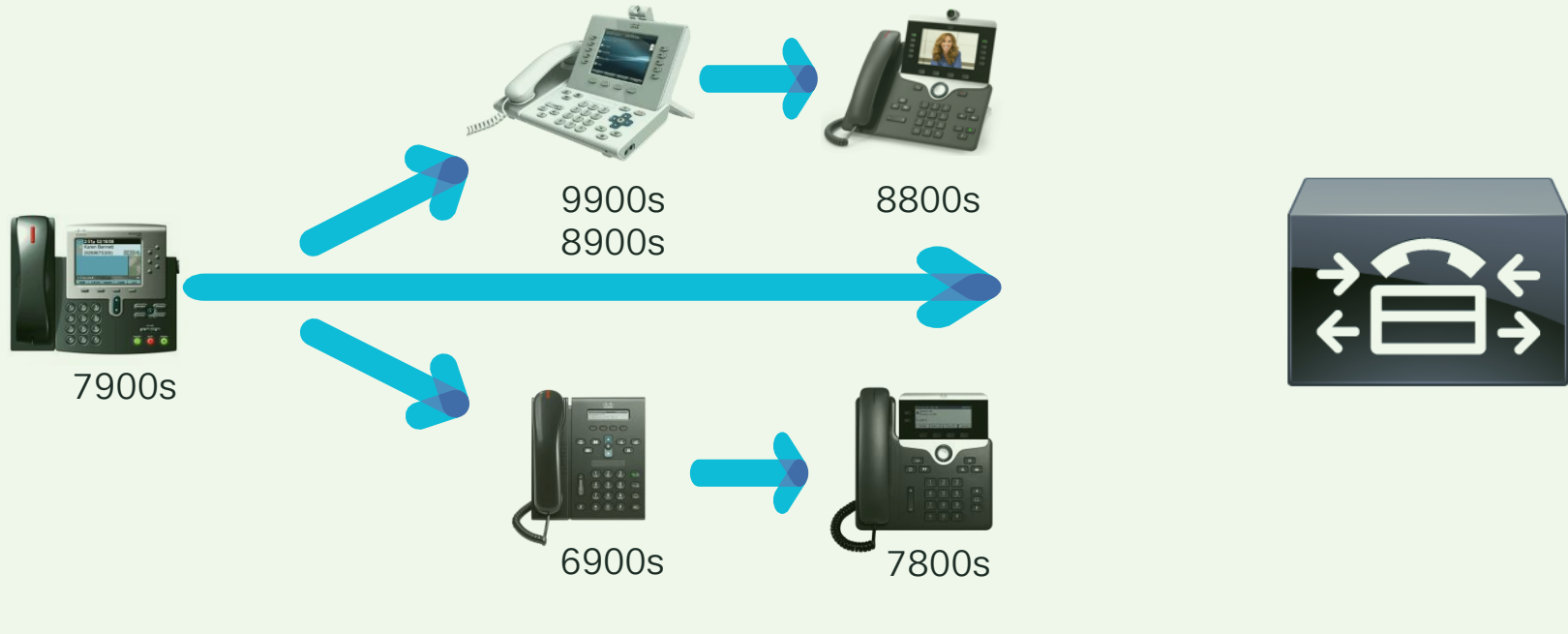




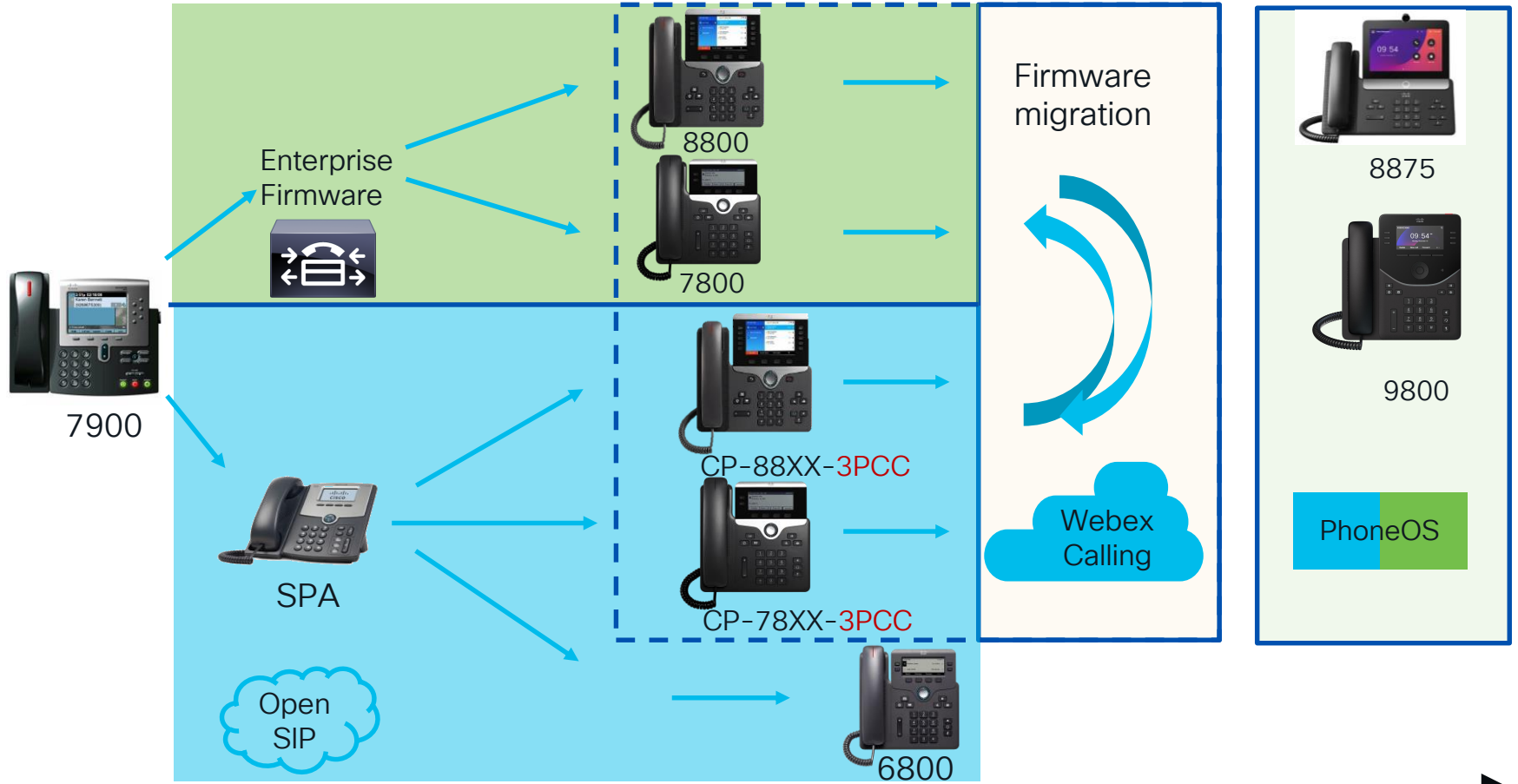
# Agenda

- Introduction
- Desk Phone 9800 Series
  - Hotdesking and Meetings
- Phone Migration
- DECT and Wireless Phones
- Cisco Headsets & Webcams

# A Brief History of Cisco IP Phones



# A Brief History of Enterprise, Multiplatform Phones, and PhoneOS



2000s

2014

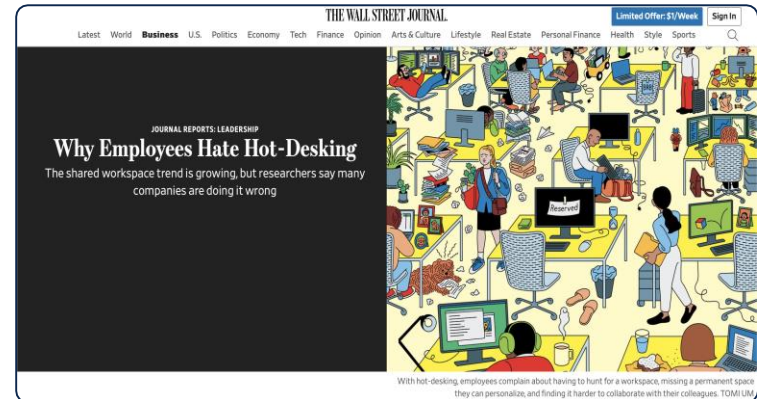
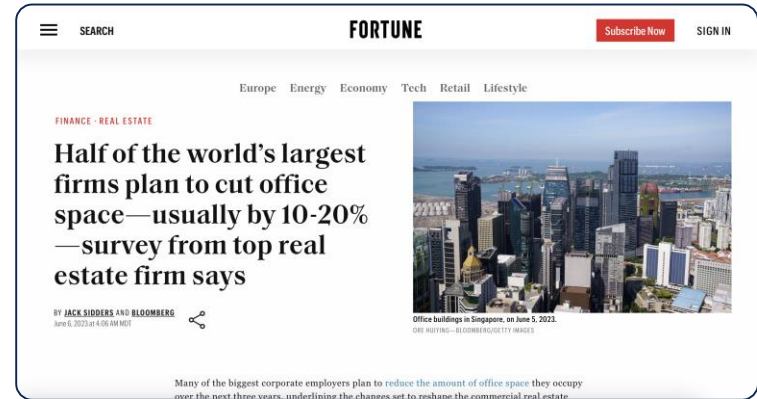
2020



- Users find the office to be lacking when compared to services at home. Tight working spaces and a less personalized environment can cause additional stress.
- Is the experience better in the office than at home?
- Does the office support team collaboration?
- How do I reserve a desk and make it mine?
- Will disconnected tech require IT support?
- Is the office building safe and secure?

# IT and facilities face desk space challenges

- Struggling with return to office
- Decreasing real estate footprints
- Facilities struggle with desk vs meeting spaces
- IT and facilities challenged to meet evolving user needs
- Lack of management capabilities, visibility, and insights
- Need plans that drive towards sustainability goals



# Companies buying disconnected tech

- ✗ Challenging installations
- ✗ No reservation
- ✗ No personalization
- ✗ Limited value to employees
- ✗ No visibility
- ✗ Not controlled centrally

CISCO *Live!*



# Over 100 Million

Today, Cisco phones are on over 100M desks...



CISCO

4083334455

July 5 10:00 AM

📶 🔋

📞 Alice Smith

Ti Lee

📞 Eric Schultz

Emma Winston

📞 Samantha Stevenson

Robert Brownhurst

📞 Jim Gold

Amy Patel

📞 Rodger Cooper

Daniel Miller

Redial

Directory

Forward

DND



1  
/ 0

2  
ABC

3  
DEF



4  
GHI

5  
JKL

6  
MNO



7  
PQRS

8  
TUV

9  
WXYZ



\*  
+

0  
\_

#



Desk Phone  
9800 Series.

More than a  
desk phone.



*CISCO Live!*

# Desk Phone 9800 Series Hardware Lineup



	DP-9841	DP-9851	DP-9861	DP-9871
Line key	4	6	10	Touch
Display	3.5" (384 x160) grayscale	3.7" (480 x 240) color	5" (800 x 480) color	5" (1280 x 720) color
Wi-Fi			Wi-Fi 5	Wi-Fi 5
Bluetooth			Bluetooth 5.2	Bluetooth 5.2
USB-A	1 USB-A	1 USB-A	1 USB-A	1 USB-A
USB-C		1 USB-C	1 USB-C	1 USB-C
KEM		1 KEM	3 KEMs	3 KEMs
Ethernet	10/100/1000	10/100/1000	10/100/1000	10/100/1000
PoE	PoE Class 2	PoE Class 3	PoE Class 3	PoE Class 3

# Cisco Desk Phone 9841

- 4 Programmable Line Keys
- 3.5" (384 x160) grayscale
- 1 USB-A
- POE – IEEE Class 2
- Front Arc LED and Top 360 LED
- Action Button
- Favorite Button



# Cisco Desk Phone 9851

- 6 Programmable Line Keys
- 3.7" (480x240) color
- 1 USB-A
- 1 USB-C
- POE – IEEE Class 3
- Front Arc LED and Top 360 LED
- Action Button
- Favorite Button
- Calendar Button
- 1 x KEM support



# Cisco Desk Phone 9861

- 10 Programmable Line Keys
- 5" (800x480) color
- 1 USB-A
- 1 USB-C
- Bluetooth 5.2
- Wi-Fi 5 (802.11ac)
- POE - IEEE Class 3
- Front Arc LED and Top 360 LED
- Action Button
- Favorite Button
- Calendar Button
- 3 x KEM support



**cisco** *Live!*

# Cisco Desk Phone 9871

- Touch Screen
- 5" (1280x720) color
- 1 USB-A
- 1 USB-C
- Bluetooth 5.2
- Wi-Fi 5 (802.11ac)
- POE - IEEE Class 3
- Front Arc LED and Top 360 LED
- Action Button
- Favorite Button
- 3 x KEM support



# Front Arc LED States

Top 360



Front Arc



State	Color
Idle	Steady 50%
In a Call	steady green
Incoming Call	Fast Blink amber
Voicemail	Heartbeat
Hotdesk Available	steady green
Hotdesk In Use	Steady 50%
Missed Call (optional)	Heartbeat



Missed Call Led Alert\*    Enabled   

<https://help.webex.com/en-us/article/r1gu0/LED-indicators-overview>

# Desk Phone 9800 Platform Support

- CUCM 12.5 is the minimum supported version of CUCM.
- **Device Packs released April 29 for CUCM 12.5/14/15.**
- Integrated support in CUCM 14 SU4 and CUCM 15 SU2.

PLATFORMS SUPPORTED	CERTIFICATIONS
Cisco Webex Calling	Interoperability Tested and Certified
Cisco Unified Communications Manager	Interoperability Tested and Certified
Webex Dedicated Instance (DI)	Interoperability Tested and Certified
Broadworks	Interoperability Tested and Certified
Asterisk	Interoperability Tested and Certified

Datasheet = <http://cs.co/9800-ds>

# Favorite Button

- Access voicemail and a quick speed dial list.
- Default “Help Desk” text can be renamed.
- Up to 10 entries are supported.



Help Desk*	Enabled	<input checked="" type="checkbox"/>
Help Desk Customize Name	Help Desk	<input type="checkbox"/>
Name 0	Help Desk	<input checked="" type="checkbox"/>
Quick Number 0	1000	<input checked="" type="checkbox"/>
Name 1	IT Department	<input checked="" type="checkbox"/>
Quick Number 1	1001	<input checked="" type="checkbox"/>
Name 2	Security	<input checked="" type="checkbox"/>
Quick Number 2	1002	<input checked="" type="checkbox"/>
Name 3		<input type="checkbox"/>
Quick Number 3		<input type="checkbox"/>

### Help Desk

1	Help Desk	1001
2	IT Department	1002
3	Front Desk	1003
4	Security	1004
5	Floor 7	1005
6	EBC - Building 10	1006

[Call](#) [Back](#)

# KEM Overview

- KEM supported on 9851, 9861, 9871.
- KEM has 20 physical line keys.
- POE support for only 1 KEM.
- Power Supply required for 2 or 3 KEMs.

	Max KEM with POE	Max KEM with Power Supply
9841	N/A	N/A
9851	1	1
9861	1	3
9871	1	3



# Power Adaptor 3 for 9841/51/61/71

For 9841/51/61/71

CP-PWR-ADPT-3



Smaller  
Size

Lower Input Power  
Consumption

Verified for Cisco  
Collaboration  
Endpoint

Clip based, compact size adaptor

Maximum 0.1W at no  
load

Also compatible with 78x1 & 7832  
(both OnPrem & MPP)  
Worldwide voltage/frequency support

EOS

CP-PWR-CUBE-3



Long power cord, big  
cube

Maximum 0.5W at no  
load

End of CY2020

# Desk Phone 9800 Series Ordering Options: Two colors, No-Radio (NR)\*, and TAA (++)



## Standard Offering

Carbon Black	First Light
DP-9841-K9=	DP-9841-L-K9=
DP-9851-K9=	DP-9851-L-K9=
DP-9861-K9=	DP-9861-L-K9=
DP-9861NR-K9=	
DP-9871-K9=	DP-9871-L-K9=
DP-9871NR-K9=	

\* All No-Radio (NR) variants do not have a rewritable NFC tag, Bluetooth, or Wi-Fi

Datasheet = <http://cs.co/9800-ds>

# CUCM – Adding the 9800 Series

- CUCM 12.5 is the minimum supported version of CUCM.
- Device Packs released April 29<sup>th</sup> for CUCM 12.5/14/15.
- Integrated support in CUCM 14 SU4 and CUCM 15 SU2.

Cisco 9841  
Cisco 9851  
Cisco 9861  
Cisco 9861NR  
Cisco 9871  
Cisco 9871NR

**Cisco Unified CM Administration**  
For Cisco Unified Communications Solutions

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device

**Add a New Phone**

Next

**Add New Phone Information**

Start by selecting the type of phone you wish to add, or [click here to add a](#)

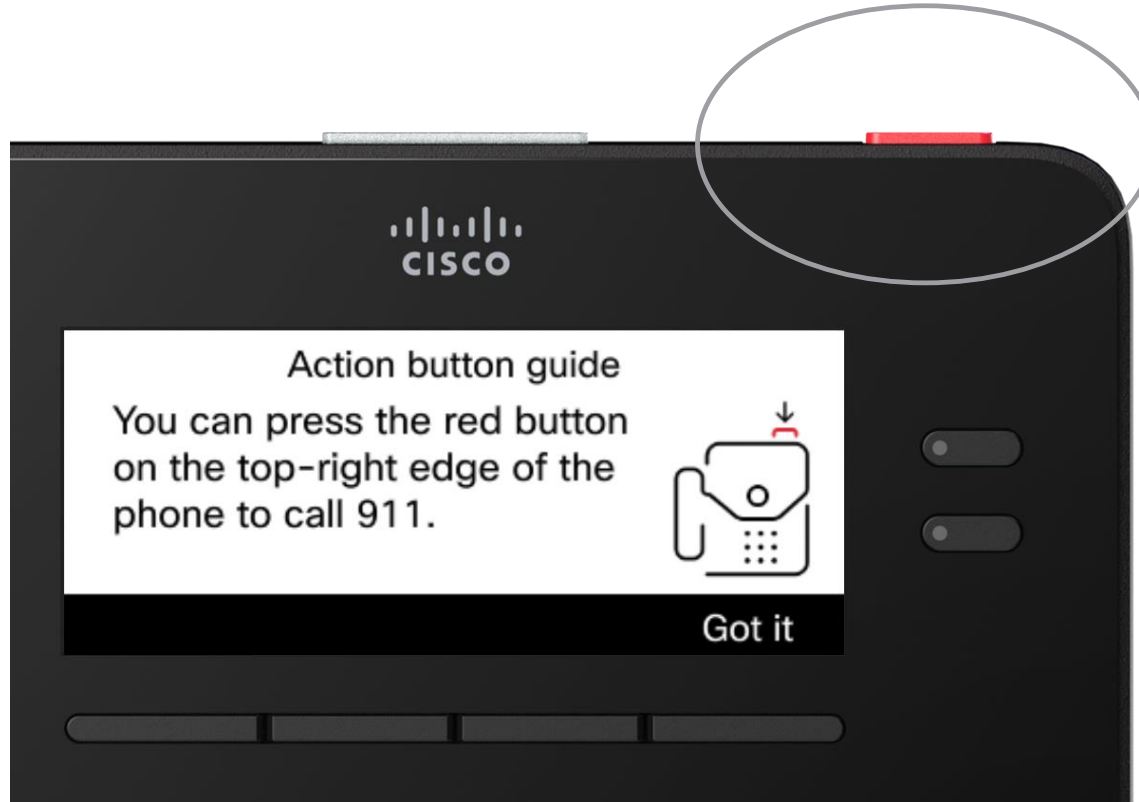
Phone Type\* -- Not Selected --

Next

\* - indicat  
\*\* - Crea

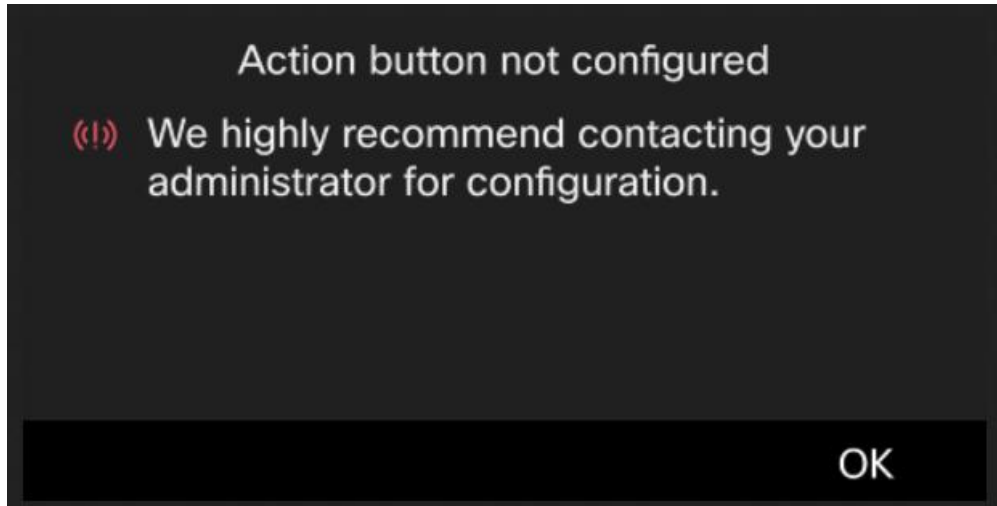
Cisco 8851NR  
Cisco 8861  
Cisco 8865  
Cisco 8865NR  
Cisco 8875  
Cisco 8875NR  
Cisco 8941  
Cisco 8945  
Cisco 8961  
Cisco 9841  
Cisco 9851  
Cisco 9861  
Cisco 9861NR  
Cisco 9871  
Cisco 9871NR  
Cisco 9951  
Cisco 9971

# Action Button – All 9800s



# Action Button - default behavior

Action Button Function*	Off	<input type="checkbox"/>
Action Button Service Destination		<input type="checkbox"/>
Service Trigger*	Single Press	<input type="checkbox"/>
Dial Out Delay*	5	<input type="checkbox"/>
Silent Emergency Call*	Disabled	<input type="checkbox"/>



# CUCM – Action Button Configuration Example

Action Button Function*	Emergency Call	<input checked="" type="checkbox"/>
Action Button Service Destination	911	<input checked="" type="checkbox"/>
Service Trigger*	Single Press	<input type="checkbox"/>
Dial Out Delay*	5	<input type="checkbox"/>
Silent Emergency Call*	Disabled	<input type="checkbox"/>

## Action button guide

You can press the red button on the top-right edge of the phone to call 911.



Got it

## Emergency call

Calling 911 in 5 seconds.

Call now

Cancel

\* Service trigger can be set to Single Press, Long Press, or Press 3 times.

# Webex Calling - Action Button Configuration Example

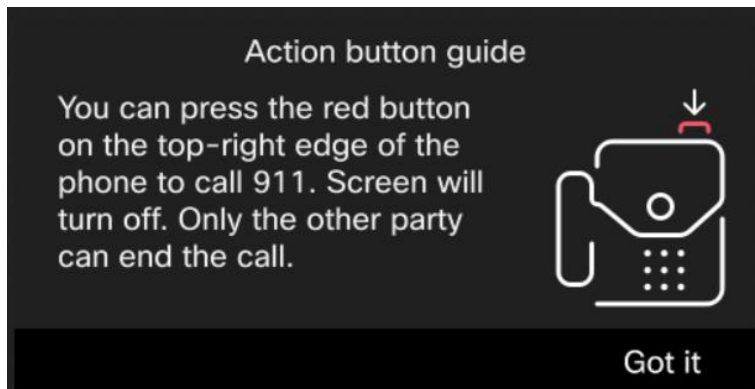
Action Button Function	Action Button Function		
	Supported device types	Configuration value	Default ⓘ
	Cisco 9841	Emergency Call <input type="button" value="v"/>	<input checked="" type="checkbox"/> Factory ⓘ Off

Action Button Service Destination	Action Button Service Destination		
	Supported device types	Configuration value	Default ⓘ
	Cisco 9841	810 <input type="button" value="x"/>	<input checked="" type="checkbox"/> Factory ⓘ Empty
		0 - 1024 characters	

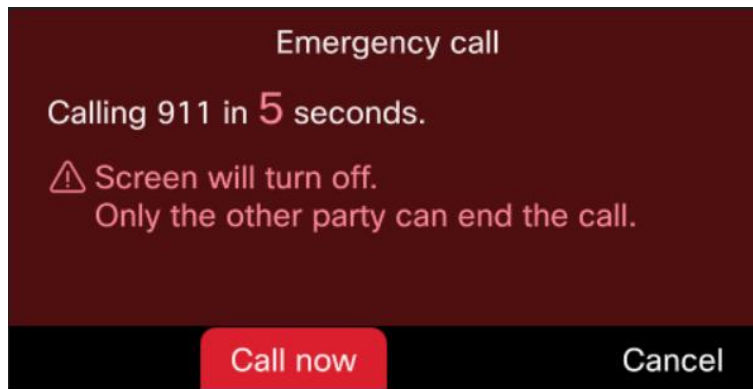
# Silent Emergency Call Configuration

- This configuration allows the phone to dial a specified number and when pressed:
  - The screen goes dark.
  - No audio is heard. No dial tone. No ringtone.
  - Keypad, speaker, and mute are locked.
  - Remote party must hang up to end call.



CUCM configuration example

Action Button Service Destination	911	<input checked="" type="checkbox"/>
Service Trigger*	Single Press	<input type="checkbox"/>
Dial Out Delay*	5	<input type="checkbox"/>
Silent Emergency Call*	Enabled	<input checked="" type="checkbox"/>



Webex Calling configuration

Supported device types	Configuration value	Default ⓘ
Cisco 9841	Enabled	<input checked="" type="checkbox"/> Factory ⓘ Disabled

# Ecosystem Partners & Cisco Demo Toolbox

## Singlewire

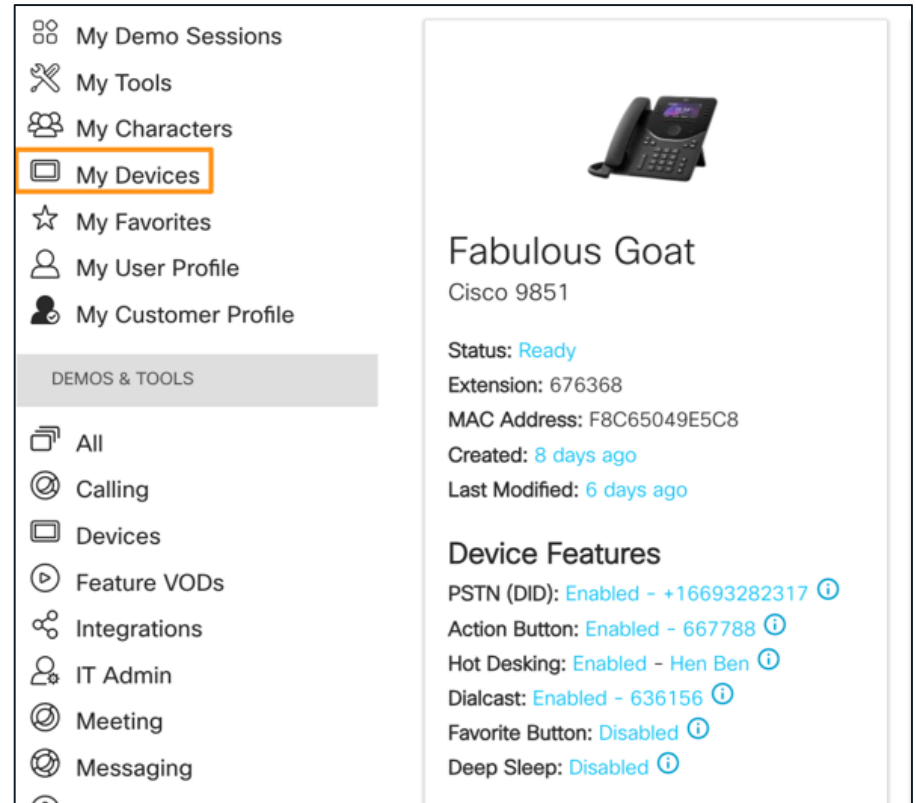
<https://www.singlewire.com/blog/cisco-desk-phone-9800-series-support-informacast>

## RedSky Demo Toolbox available

<https://demotoolbox.cat-dcloud.com/demo/demo-redsky-integration-for-webex-calling>

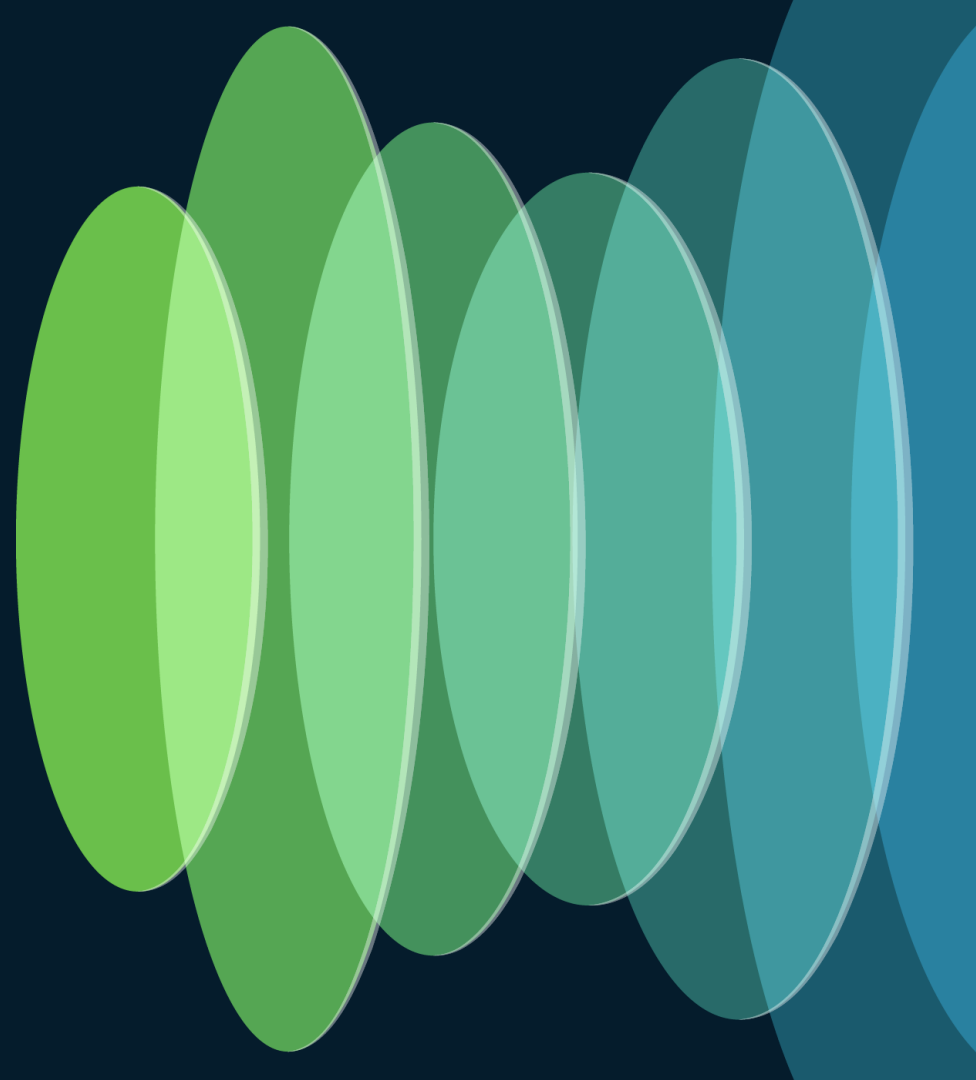
## Demo Toolbox 9800 Support

<https://demotoolbox.cat-dcloud.com/devices?tab=ip-phone>



The screenshot displays the Cisco Demo Toolbox interface. On the left is a sidebar menu with the following items: My Demo Sessions, My Tools, My Characters, My Devices (highlighted with an orange box), My Favorites, My User Profile, and My Customer Profile. Below these is a section titled 'DEMOS & TOOLS' containing: All, Calling, Devices, Feature VODs, Integrations, IT Admin, Meeting, and Messaging. The main content area on the right shows a device card for 'Fabulous Goat', a Cisco 9851. It includes a photo of the phone, the name 'Fabulous Goat', and the model 'Cisco 9851'. The status is 'Ready'. Other details include Extension: 676368, MAC Address: F8C65049E5C8, Created: 8 days ago, and Last Modified: 6 days ago. A 'Device Features' section lists: PSTN (DID): Enabled - +16693282317 ⓘ, Action Button: Enabled - 667788 ⓘ, Hot Desking: Enabled - Hen Ben ⓘ, Dialcast: Enabled - 636156 ⓘ, Favorite Button: Disabled ⓘ, and Deep Sleep: Disabled ⓘ.

# Hotdesking and Meetings



# QR Code Hotdesking on the 9800 Series

- Scan QR Code with smartphone
- Meetings appear once you Hotdesk into phone
- Easy to sign out
  - Use Phone UI
  - Use Webex app
  - Allow booking window expiration

9841



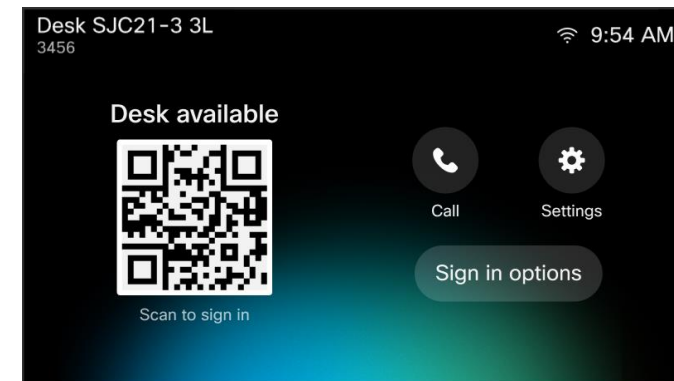
9851



9861



9871

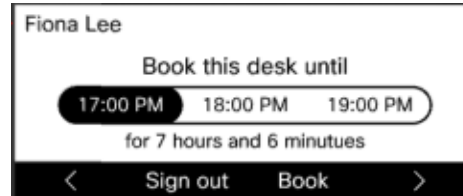


[https://help.webex.com/en-us/article/np9ml9b/Sign-in-to-a-shared-phone-\(Hot-Desking\)](https://help.webex.com/en-us/article/np9ml9b/Sign-in-to-a-shared-phone-(Hot-Desking))

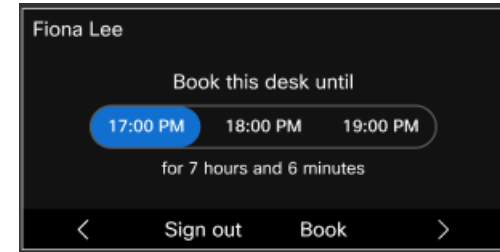
# Hotdesk Booking Duration on the 9800 Series

- Booking window allows you to specify booking duration.
- End user can accept the default or adjust the time.

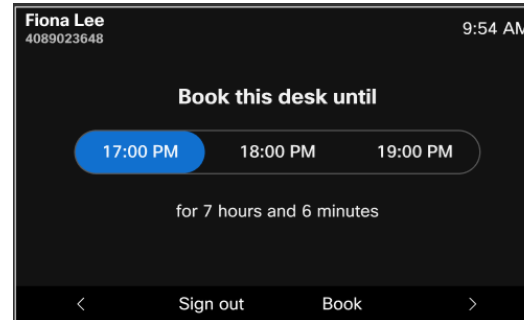
## 9841



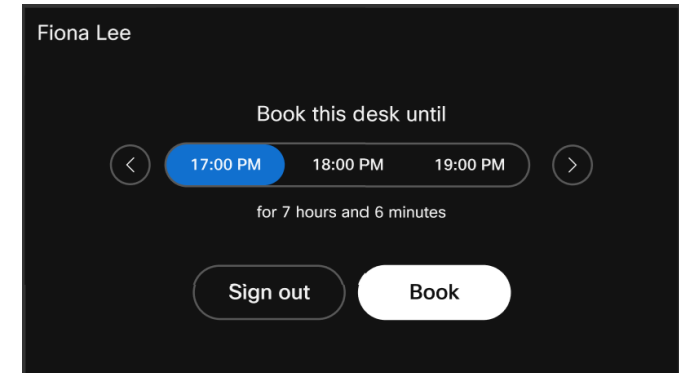
## 9851



## 9861



## 9871



# QR Code Hotdesking – Admin Workflow

**Add workspace**

Workspace details show usage, settings, and environmental status for that physical space to help you make the most of the use and cost of your space.

**1**

Name  
What do you want to name the Workspace?  
Hotdesk 1

Type  
What type best describes the Workspace?  
Desk

Capacity  
How many people is the Workspace suitable for?  
e.g. 4

Location  
Where is the Workspace located?  
Cisco Live US 2024

Types of Workspaces  
Workspaces come in different shapes and sizes, defining what types of workspace you are adding will help us deliver insights into adoption and usage, in the future defaults for certain types may exist.

Desk  
Individual | 1 capacity

Cancel Next

**Add workspace**

What kind of device do you want to set up in this workspace?

**2**

Cisco Room and Desk device  
Cisco Room Kit, Bar, Board or Desk series

Cisco Desk Phone  
Cisco Desk Phone 9800 series

Cisco phone, ATA, or 3rd party device  
e.g. Cisco 8845, 8865, 8800 and Analog Telephone Adapter ports

Previous Add device later

**Add workspace**

Select the device model and activation method.

Select device  
Cisco 9871

How would you like to setup this device?  
 By Activation Code  
 By MAC Address

Enter MAC address

Can't find a MAC address on a device? [Locate MAC address](#)

Previous Next

**Add workspace**

Which services are needed in this Workspace?

**4**

Calling  
 Cisco Webex Calling  
 Calling features with additional PSTN service provided through Webex.

Scheduling  
 None  
 No scheduling service.  
 Calendar  
 Calendar service enables One Button To Push for this Workspace.  
 Hot Desking  
 Enable hot desking to allow users to sign in and book any shared Webex Desk device with their Webex identity.

Previous Next

**Add workspace**

Assign numbers

Choose from the available phone numbers and extensions in the drop-down lists. These will become the primary line which you can use to reach this workspace.

Location \*  
Demonstration location

Workspace	Phone Number *	Extension *	Calling Plan
Hotdesk 1	None		

Previous Save

# Front Arc LED States with Hotdesking

State	Color
Idle	Steady 50%
In a Call	steady green
Incoming Call	Fast Blink amber
Voicemail	Heartbeat
Hotdesk Available	steady green
Hotdesk Reserved *	steady red
Hotdesk In Use	Steady 50%



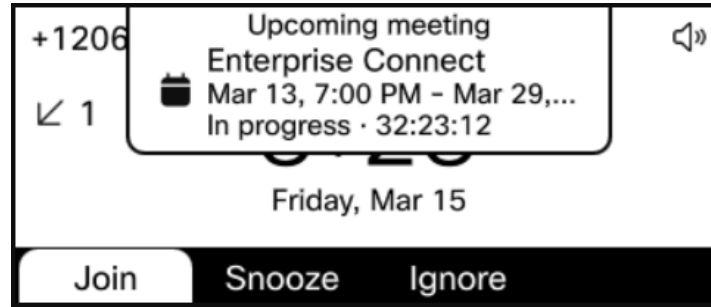
\* Roadmap Item



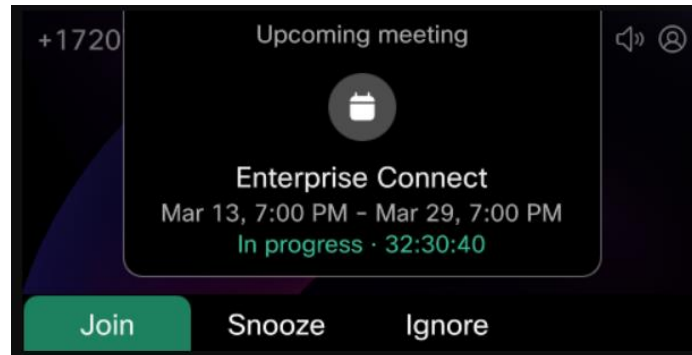
<https://help.webex.com/en-us/article/r1gu0/LED-indicators-overview>

# Intuitive One Button to Push Meetings

9841



9851

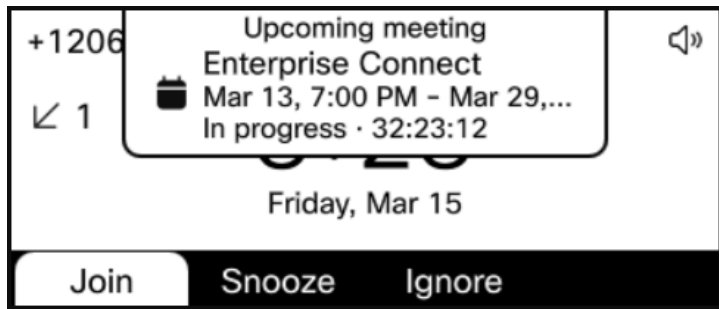


- Appears on Home Screen 5 minutes before the meeting join time
- Press Join to enter meeting
- Press Snooze for the meeting invite to disappear for 5 minutes
- Press Ignore to permanently dismiss

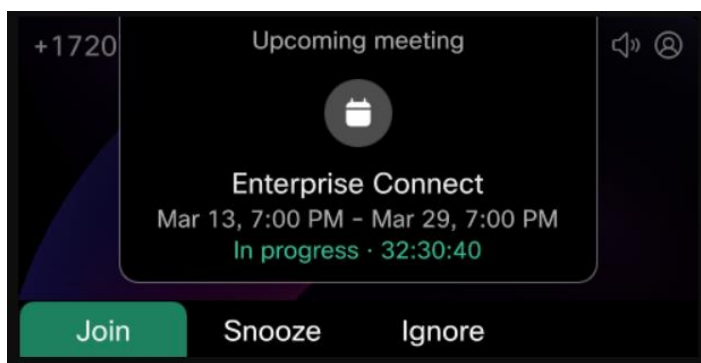
- Access from home screen
- All of today's meetings appear at-a-glance
- Press green join button when ready to enter
- Overlapping meetings supported
- Synchronizes with Hybrid Calendar

# OBTP - Desk Phone 9800 Series

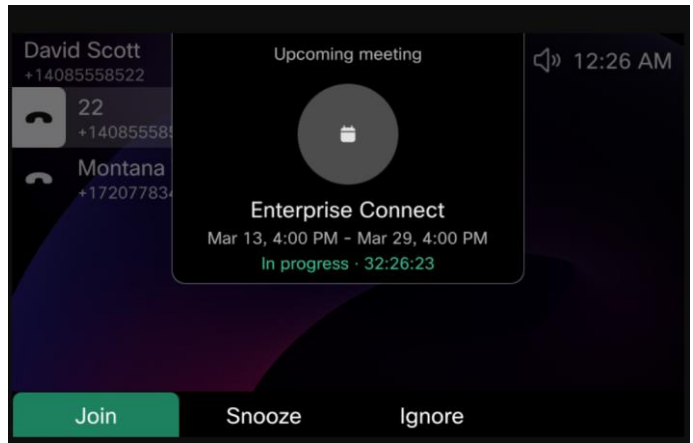
9841



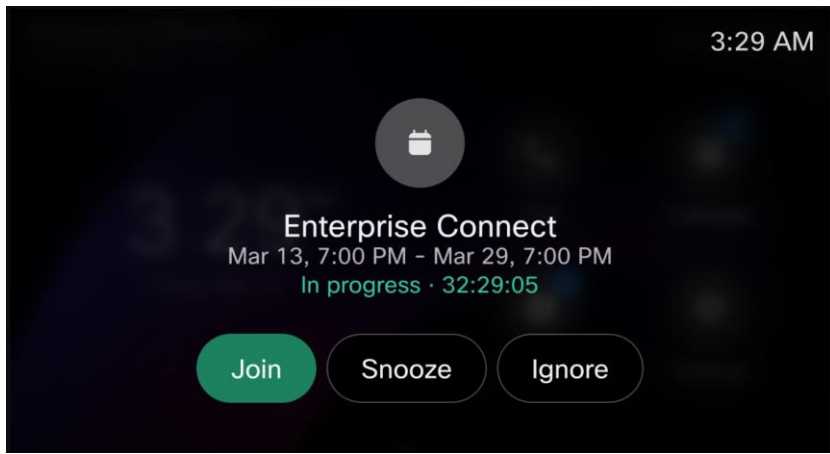
9851



9861

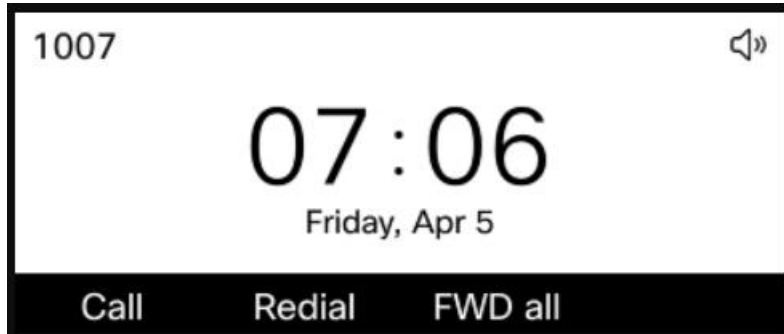


9871

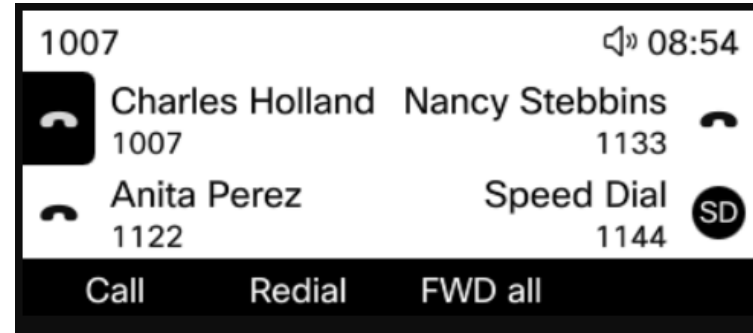


# Single Line & Multi Line

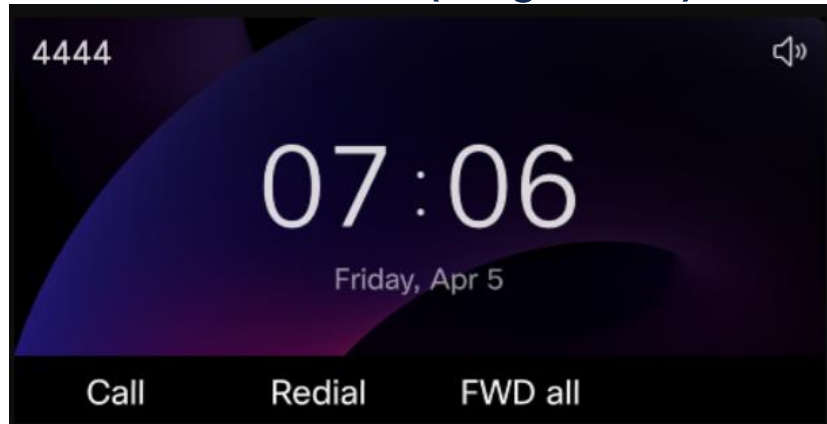
## 9841 (Single Line)



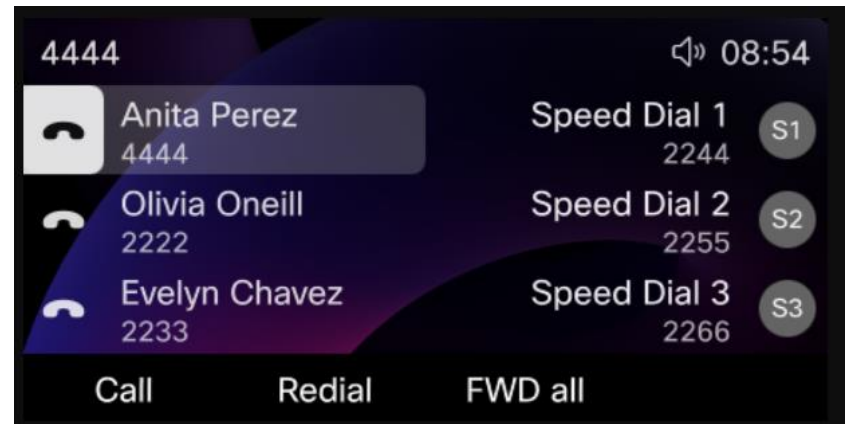
## 9841 (Multi Line)



## 9851 (Single Line)

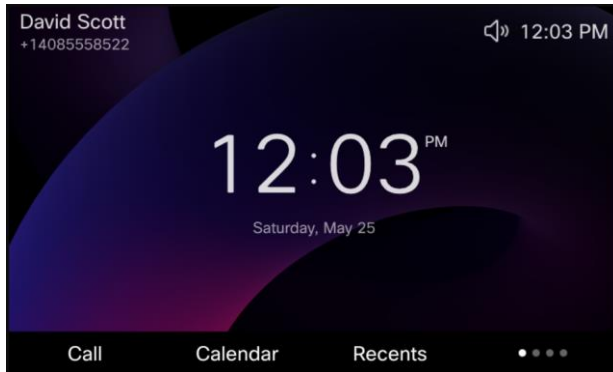


## 9851 (Multi Line)

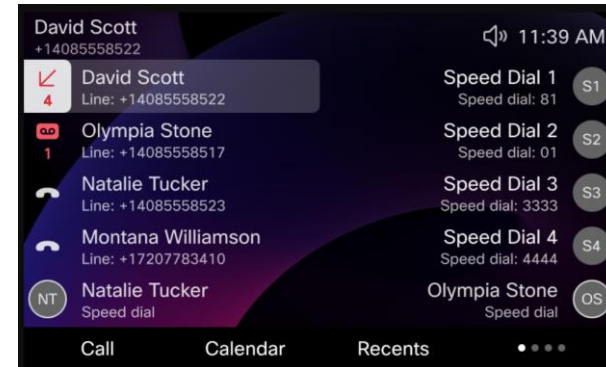


# Single Line & Multi Line

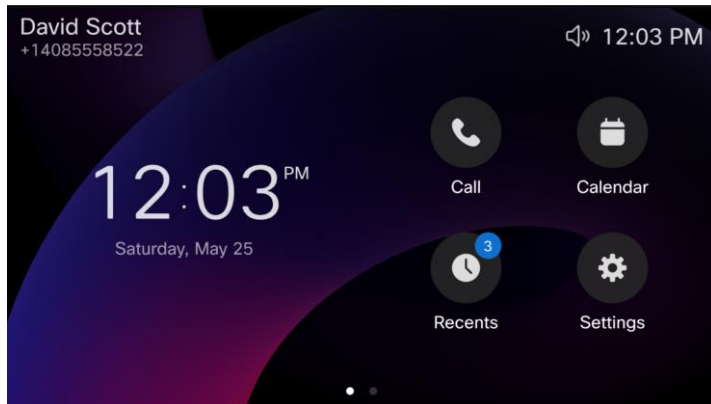
## 9861 (Single Line)



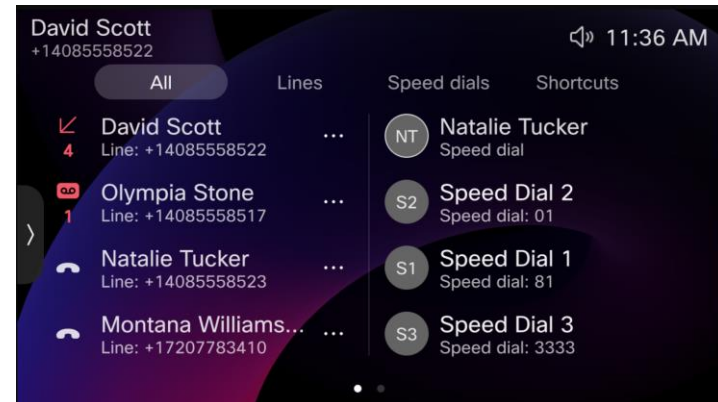
## 9861 (Multi Line)



## 9871 (Single Line)



## 9871 (Multi Line)



# Noise Removal

- Filter out dogs, lawn mowers, background noise
- All processing done on the phone itself, data does **not** go to cloud
- Works with handset or speaker phone
- Can be administratively enabled or disabled
- 9800 & 8875 with either cloud or on-premises

9841

Smart audio

- 1 Neutral
- 2 Noise removal ✓
- 3 Optimize for my voice

Apply Back

9851

Smart audio

- 1 Neutral
- 2 Noise removal ✓
- 3 Optimize for my voice

Apply Back

# Audio Intelligence – Smart Audio

9861/9871

## 1. Noise Removal for Microphone Audio:

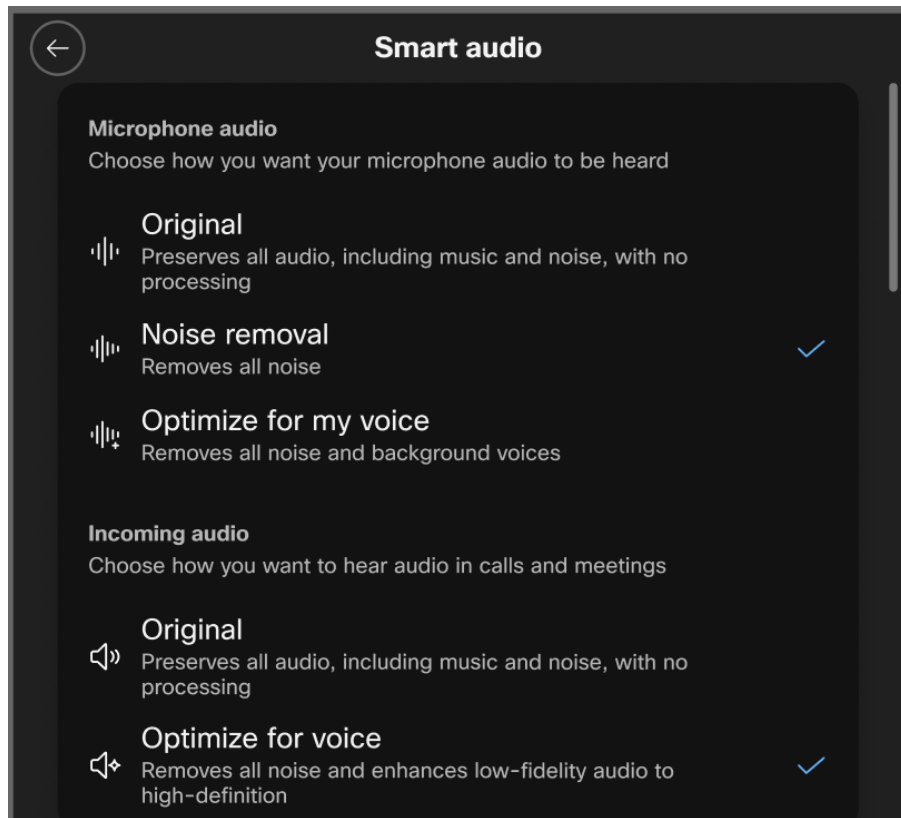
Enhance the in-call experience for the remote caller to remove the background noise from the phone microphone.

- **Noise Removal:** Removes all noise.
- **Optimize for my voice:** Removes all noise and background speech voices.

## 2. Enhanced Incoming audio

### Optimize for voice:

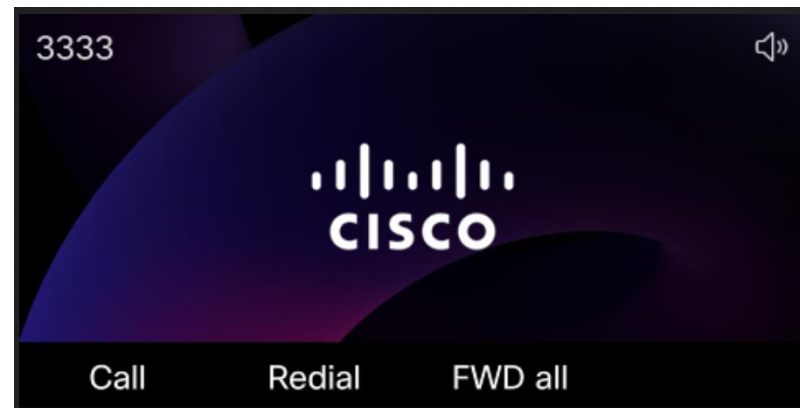
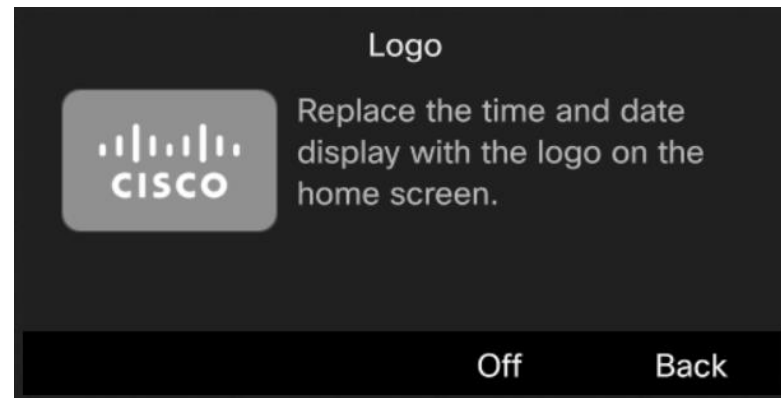
- Enhance the in-call experience for the remote caller to remove the background noise from remote caller's side.
- Enhance the in-call experience for PSTN calls. Converts narrowband audio to wideband audio.



# 9851/61/71 Custom Wallpaper & Logo

- Logo is new in PhoneOS and **not** the same as wallpaper!
- Logo and custom wallpaper are mutually exclusive. They use different source PNGs.
- A List.xml file is required on CUCM.
- The admin can remotely push the logo and custom wallpaper.

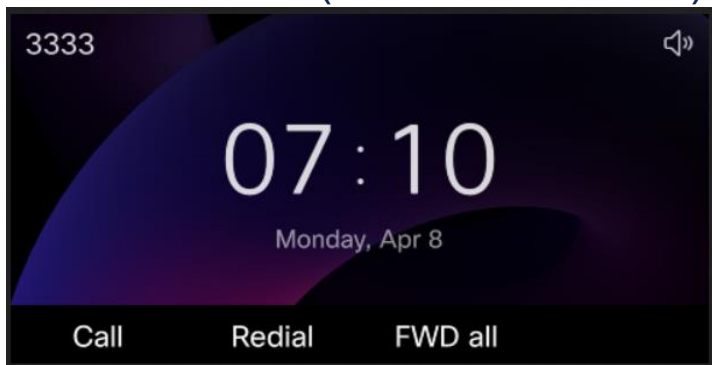
Dimension	Wallpaper	Logo
9841	N/A	N/A
9851	480x240	190x125
9861	800x480	380x250
9871	1280x720	494x325



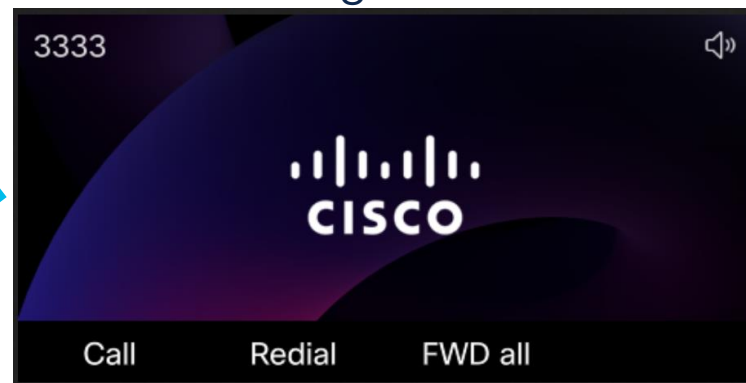
# 9851/61/71 Custom Logo Configuration

- Upload List.xml into CUCM TFTP folder Desktop/DP-9851 or Desktop/DP-9861 or Desktop/DP-9871
- Upload custom logo must be in PNG format. Transparent logo recommended!

## Clock View (Default on 9851)



## Custom Logo on 9851



### Note:

- Logo can be 100% custom. Cisco logo shown is just an example.
- The 9800 differs from other Cisco phones in that the path substitutes the Product ID instead of the resolution in List.xml. For example, "DP-9851".
- Custom logo only supported on 9851 and 9861 with no PLKs configured beyond line 1

```
<CiscolPPhoneImageList version="1.0">
<ImageItem Name="logo"
Image="TFTP:Desktops/DP-9851/logo.png"/>
</CiscolPPhoneImageList>
```

# 9851/9861/9871 Custom Wallpaper & Logo

## Root element

CiscoIPPhoneImageList

## Each image item

Name: Label displayed on the phone.

Image: Image path.

Thumbnail: Image path.

Theme: dark or light.

Note: The 9800 differs from other Cisco phones in that the path substitutes the Product ID instead of the resolution in List.xml. For example, "DP-9851".

```
<CiscoIPPhoneImageList version="1.0">
```

```

<ImageItem Name="9851"
Image="TFTP:Desktops/DP-9851/wallpaper-9851.png"
Thumbnail="TFTP:Desktops/DP-9851/thumbnail-9851.png"
Theme = "dark" />

<ImageItem Name="9851b"
Image="TFTP:Desktops/DP-9851/wallpaper-9851b.png"
Thumbnail="TFTP:Desktops/DP-9851/thumbnail-9851b.png"
Theme = "dark" />

<ImageItem Name="logo"
Image="TFTP:Desktops/DP-9851/logo.png"/>

</CiscoIPPhoneImageList>

```

## Root element

Change this number every time you modify the content inside the List.xml. Otherwise, the change will not take effect.

## Logo item

Image identified as a logo instead of wallpaper.

For KEM custom wallpaper, place the PNG in the directory Desktops/480x800x24 and file name must be identical to the phone wallpaper name.

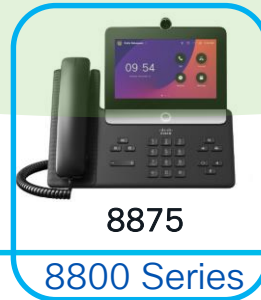
PhoneOS Wallpaper & Logo Tutorial  
<https://www.youtube.com/watch?v=khFcmaH0Fns>

# PhoneOS

A single operating system for better experiences, streamlined management.

- A single operating system that drives user -supporting features faster across the portfolio
- Unmatched management and analytics
- Unparalleled security
- Same user experiences from meeting room to huddle space to desk.





Enterprise Firmware

MPP Firmware

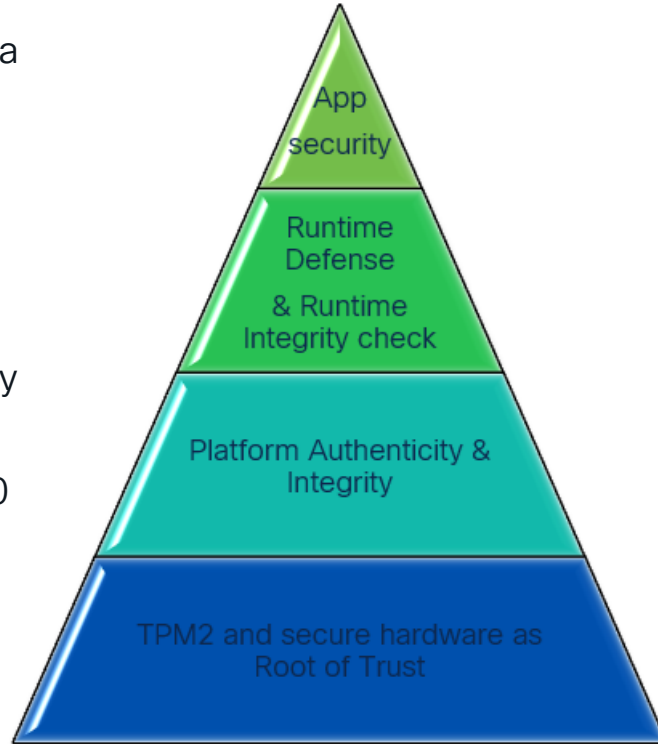
# Desk Phone 9800 Series Security



\* 9800 Security Technical Paper coming soon!

# 9800 Security At-a-Glance

- Desk Phone 9800 has a layered approach to security.
- The hardware is designed to provide Root-of-Trust that serves as foundation upon which the security of the system is built.
- PhoneOS with TPM 2.0 module supports Secure Unique Device Identifier (SUDI), platform authenticity & integrity validation.



TPM 2.0 helps mitigate:

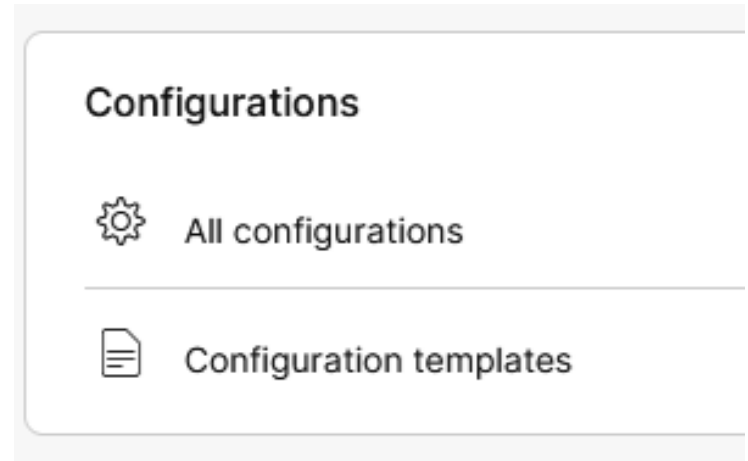
- Hardware tampering
- Hardware spoofing
- Counterfeit hardware
- Unsecure data storage
- Unsecure communication
- Secure Boot
- TPM used with TLS 1.3

# Enhanced Configuration in Webex Calling

- Available for 9800 Series

## New Control Hub device settings experience:

- Consistent and unified admin experience from RoomOS to PhoneOS
- Easier provisioning
- Scalable deployment
- Easier Bulk Move/Add/Changes
- Rapid feature velocity



# Enhanced Configuration

Available for 9800 Series

## Main categories:

1. Lines
2. Phone
3. Regional
4. SIP
5. Software
6. System
7. User

Lines	Line[1] Call Feature Settings Missed Call Notification	▼
	Line[2] Call Feature Settings Missed Call Notification	▼
	Line[3] Call Feature Settings Missed Call Notification	▼
	Line[4] Call Feature Settings Missed Call Notification	▼
	Line[5] Call Feature Settings Missed Call Notification	▼
	Line[6] Call Feature Settings Missed Call Notification	▼
Phone	Action Button	>
	Call History	▼
	Help Desk	>
	Line Key Settings Call Appearances Per Line	▼
	Office Hours	>
	Peer Firmware Sharing	▼
	Programmable Softkeys	>
	Webex	>
	XSI Phone Service	>
Regional	Control Timer Values	>
	Phone Language	▼
SIP	ICE	▼
	User Preferred Offhook Timer	▼
Software	Upgrade Channel	▼
System	IEEE802X	▼
	Optional Network Configuration	>
	USB Settings	>
	VLAN Settings	>
	Web Access	▼
User	Audio Volume	>
	Noise Removal	▼
	Screen Appearance	▼
	Supplementary Services	>

# Enhanced Configuration – Device Level

Available for 9800 Series

A wide variety of phone features allows you to configure new features such as:

- Action button
- Features button quick speed dials
- Office hours
- Phone Language
- Software Upgrade Channel
- USB Enable/Disable
- Noise Removal
- Programmable softkeys
- And more!

Phone		
	Action Button	>
	Call History	∨
	Help Desk	>
	Line Key Settings Call Appearances Per Line	∨
	Office Hours	>
	Peer Firmware Sharing	∨
	Programmable Softkeys	>
	Webex	>
	XSI Phone Service	>

# Office Hours for 9800

- Replaces old “Days Display Not Active”.
- Integrates with the new Deep Sleep configuration.

## CUCM (Old)

The screenshot shows the old CUCM configuration interface for Office Hours. It is crossed out with a large red 'X'. The settings include:

- Days Display Not Active: Sunday, Monday, Tuesday (checkboxes are present)
- Display On Time: 07:30 (checkbox is present)
- Display On Duration: 10:30 (checkbox is present)
- Display Idle Timeout: 01:00 (checkbox is present)
- Display On When Incoming Call\*: Enabled (checkbox is present)

## CUCM (New)

The screenshot shows the new CUCM configuration interface for Office Hours. The settings include:

- Enable Office Hours (checkbox is present)
- Work Days: Sunday, Monday, Tuesday (checkboxes are present)
- Working Hours Start: 07:00 (checkbox is present)
- Working Hours End: 19:00 (checkbox is present)
- Display Off Idle Timeout\*: 5 (checkbox is present)

## CUCM and Webex Calling

- Completely new in Webex Calling.
- Turn backlight off outside office hours.

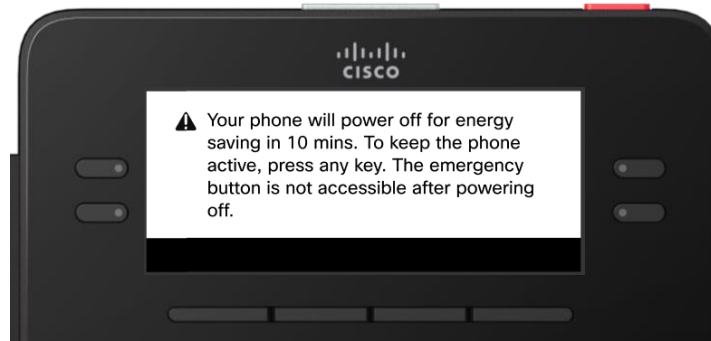
## Webex Calling (New)

The screenshot shows the new Webex Calling configuration interface for Office Hours. The settings include:

- Enabled: Enabled (dropdown menu)
- Outside Office Hours: Deep Sleep (dropdown menu)
- Display Off Idle Timeout: Display Off Idle Timeout (dropdown menu)
- Work Days: Work Days (dropdown menu)
- Working Hours: End (dropdown menu)
- Start (dropdown menu)

# Deep Sleep for 9800

- Works with any network switch.
- Powers down to less than 1 Watt.
- Leverages 'Office Hours' configuration.
- End user wakes by pressing illuminated navigation button.



## CUCM

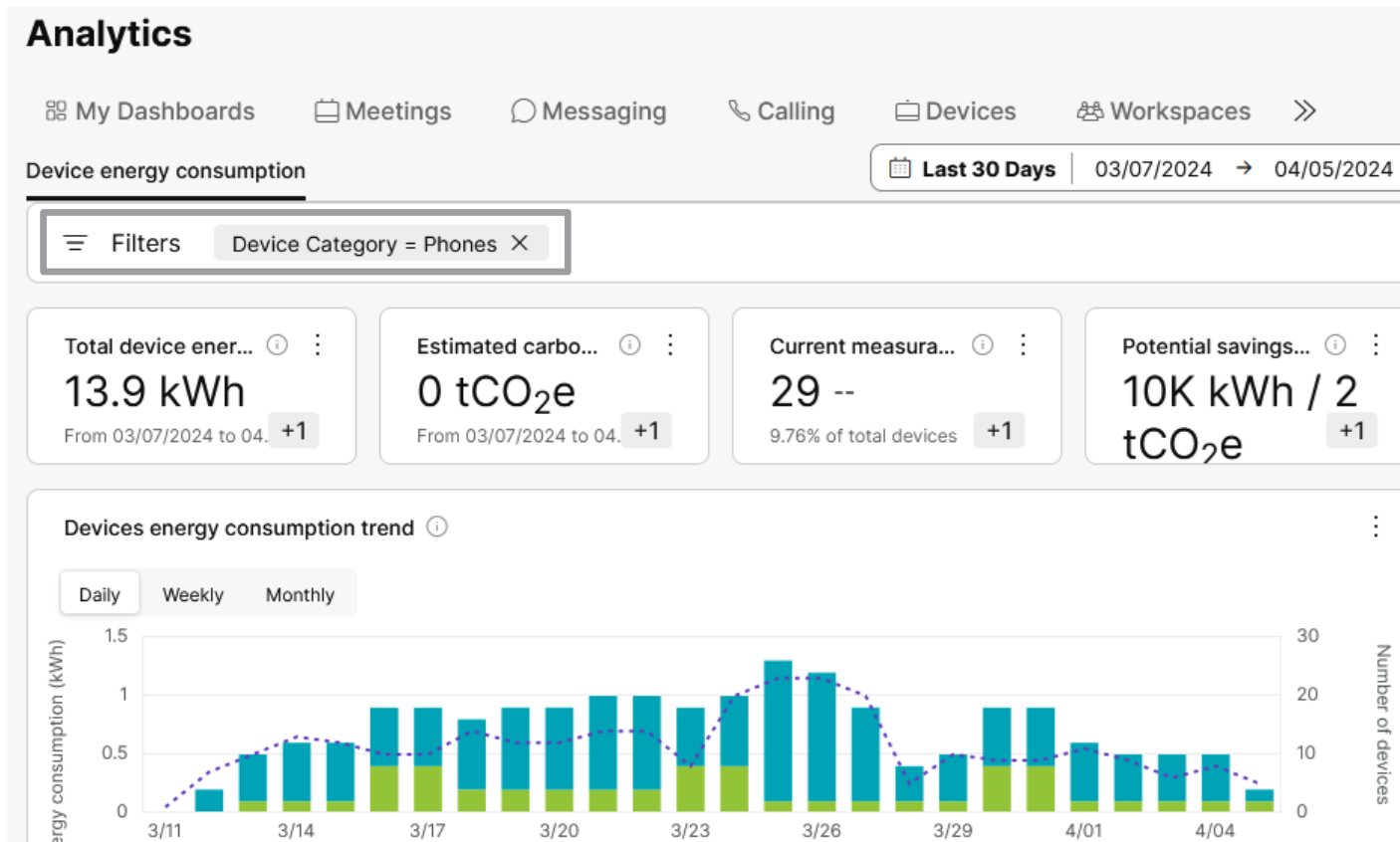
<input checked="" type="checkbox"/> Enable Office Hours		<input type="checkbox"/>
Work Days	Sunday Monday Tuesday	<input type="checkbox"/>
Working Hours Start	07:00	<input type="checkbox"/>
Working Hours End	19:00	<input type="checkbox"/>
Display Off Idle Timeout*	5	<input type="checkbox"/>
Deep Sleep*	Disabled	<input type="checkbox"/>
Enter Deep Sleep After Working Hour End*	60	<input type="checkbox"/>
Wakeup From Deep Sleep Before Working Hour Start*	60	<input type="checkbox"/>
Deep Sleep Idle Timeout*	30	<input type="checkbox"/>
<input type="checkbox"/> Enable Deep Sleep Audible Alert		<input type="checkbox"/>

## Webex Calling

Deep Sleep Enabled	Deep Sleep Enabled
Deep Sleep Time For Workdays	Phone Off Time After Working Hour End Phone On Time Before Working Hour Start
Enable Audible Alert	Enable Audible Alert
Idle Timeout	Idle Timeout

\* Phone cannot place or receive calls while in Deep Sleep

# Carbon Emissions Insights for 9800 Series



# Deep Sleep & Power over Ethernet

CDP Power Budget Reservation - Max Power Requested via CDP

Desk Phone 9841  
(IEEE Class 2)



Desk Phone 9851  
(IEEE Class 3)



Desk Phone 9861  
(IEEE Class 3)



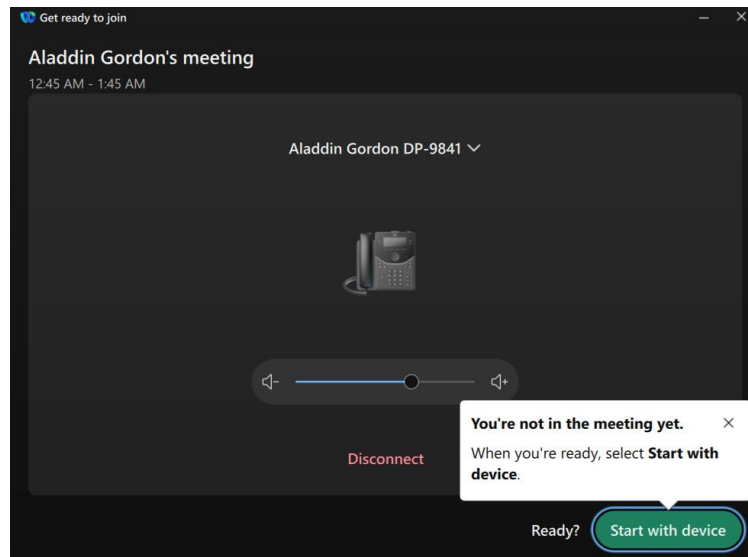
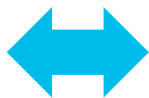
Desk Phone 9871  
(IEEE Class 3)



CDP	6.6 Watts	12.5 Watts	13.1 Watts	13.1 Watts
Idle	2.00w	2.73w	4.18w	3.93w
Display off	1.95w	2.69w	3.26w	3.16
Deep Sleep	.61w	.69w	.79w	.8w

# Companion Mode for 9800 Series

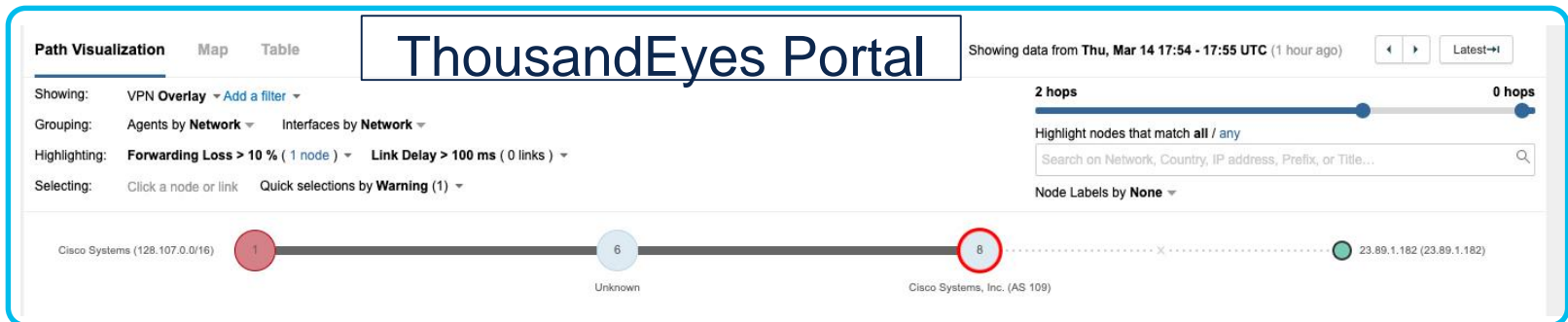
- Push OBTP button on **Webex app**.
- “Start with device” for hands free join.
- Voice goes to phone, video/sharing goes to Webex app on laptop.



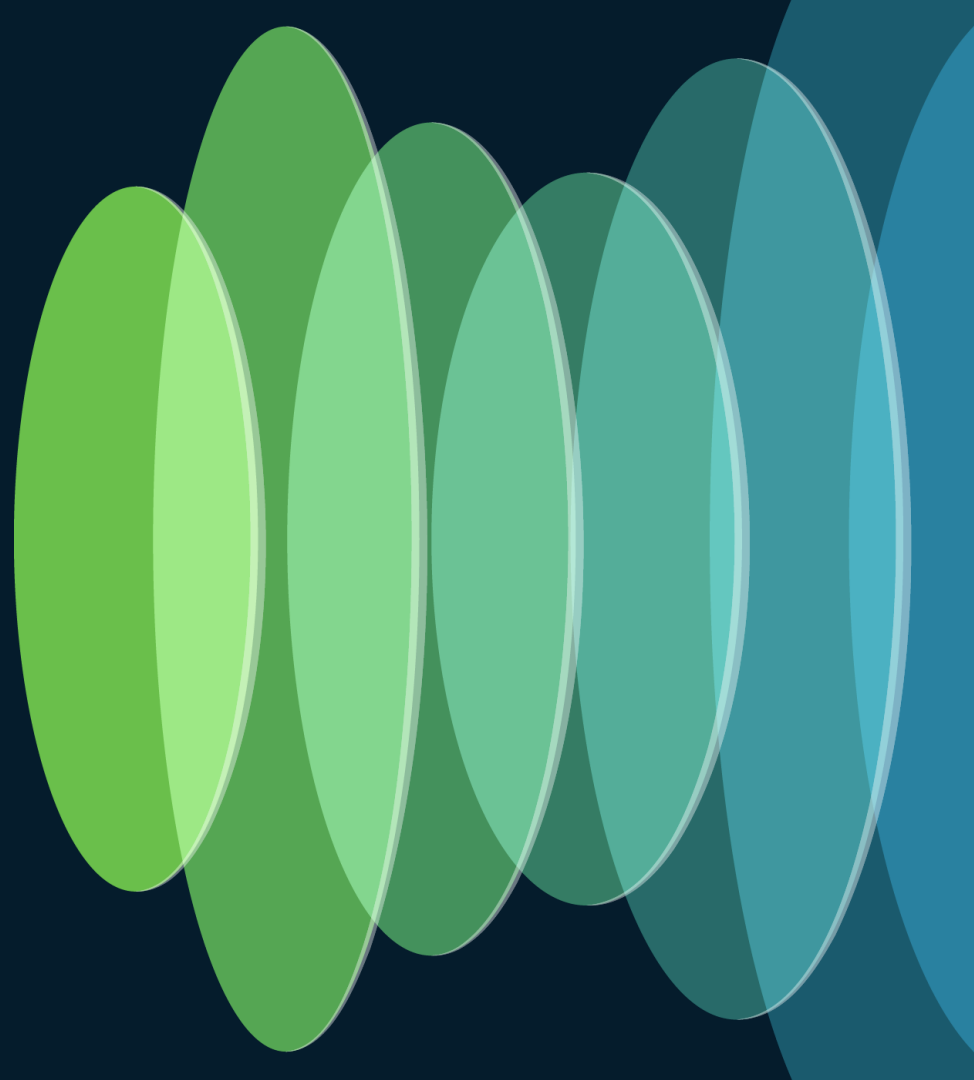
# Thousand Eyes Integration

Troubleshoot faster with hop-by-hop network path provided by ThousandEyes.

- WxC: 9861 & 9871 beta available.
- See Omer Ilyas BRKCOL-2071 tomorrow at 8AM.



# 8875, Enterprise Firmware, and MPP



# Hotdesking on the 8800 Series

Available now on 8875 and on 8811/41/45/51/61/65

- Scan QR Code with smartphone
- Meetings appear once you Hotdesk into phone
- Easy to sign out
  - Use Phone UI
  - Use Webex app
  - Allow booking window expiration
- Demonstration:

<https://youtu.be/63sPBirLEb8>

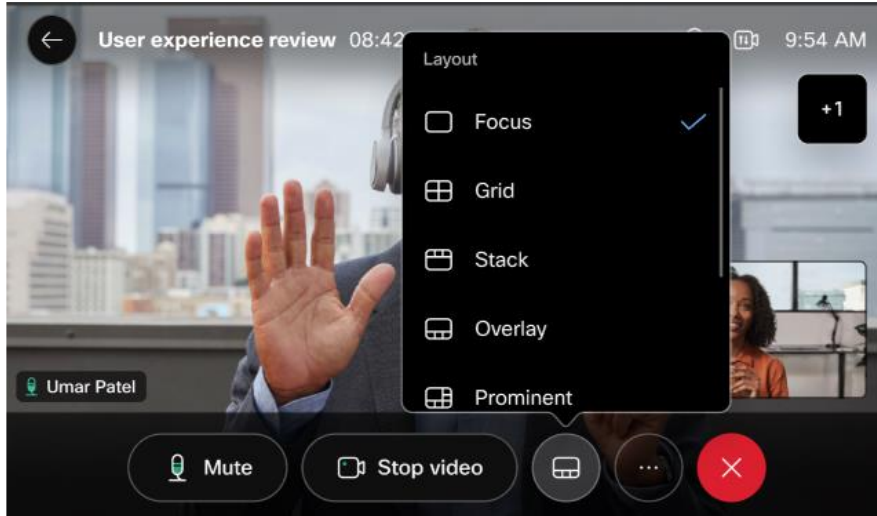
CISCO *Live!*



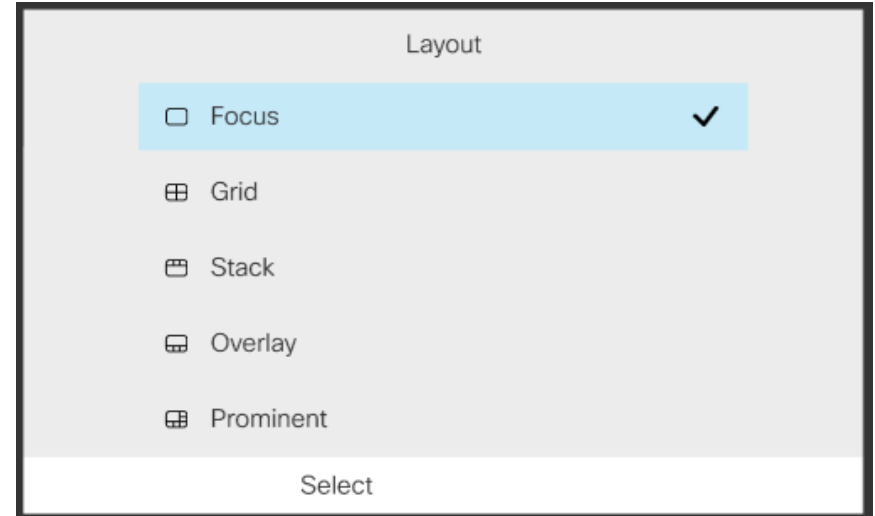
# Video Layouts

- This enhancement aligns the 8875 and MPP with the RoomOS layout experience.

8875

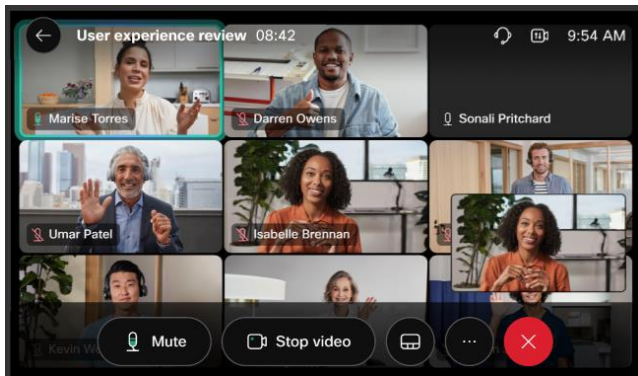


8845/8865



# Video Layouts

## Grid



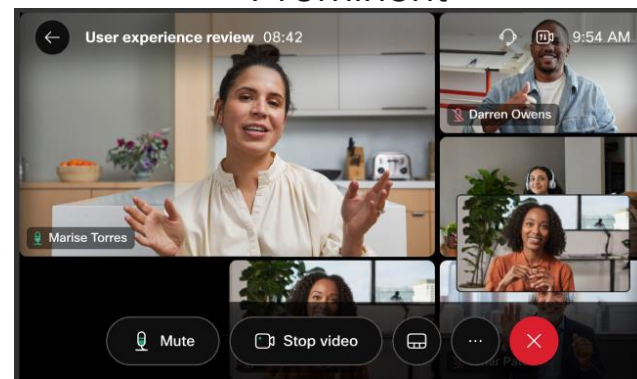
## Stack



## Overlay

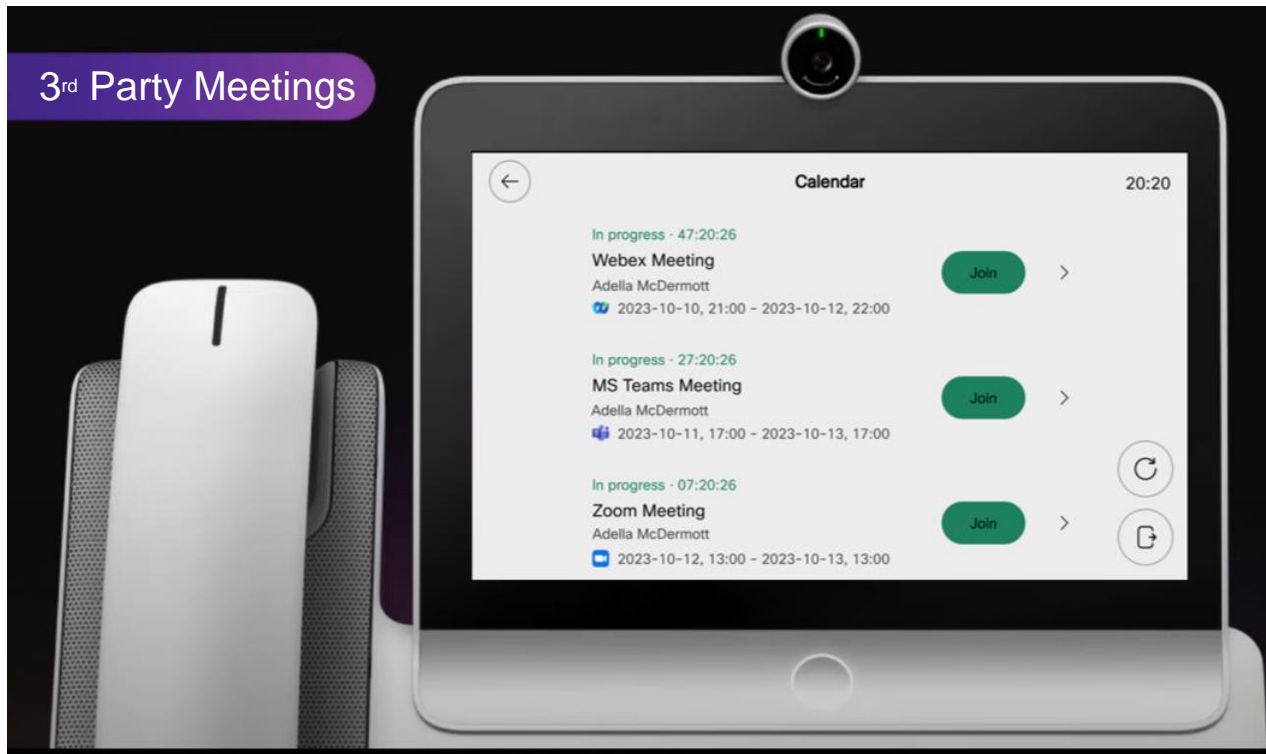


## Prominent



# 8875 OBTP

- 8875 registered to CUCM or Webex Dedicated Instance now has the option retrieve calendars via Microsoft O365
- 8875 can recognize the SIP URI for meetings and present a green join button
- Supported meetings may include Webex, Microsoft Teams\*, and Zoom\*
- For more information, contact your Cisco representative and reference:  
<http://cs.co/demo-8875>



\* MS Teams requires the meeting host to have a CVI license. Zoom meetings require host to have a Zoom CRC license or Zoom SIP integration enabled.

# 8875 Zoom-in

- When content is received by a remote participant, the user can pinch and zoom or double tap to zoom in
- This works on-premise or registered to Webex Calling

## Double Tap

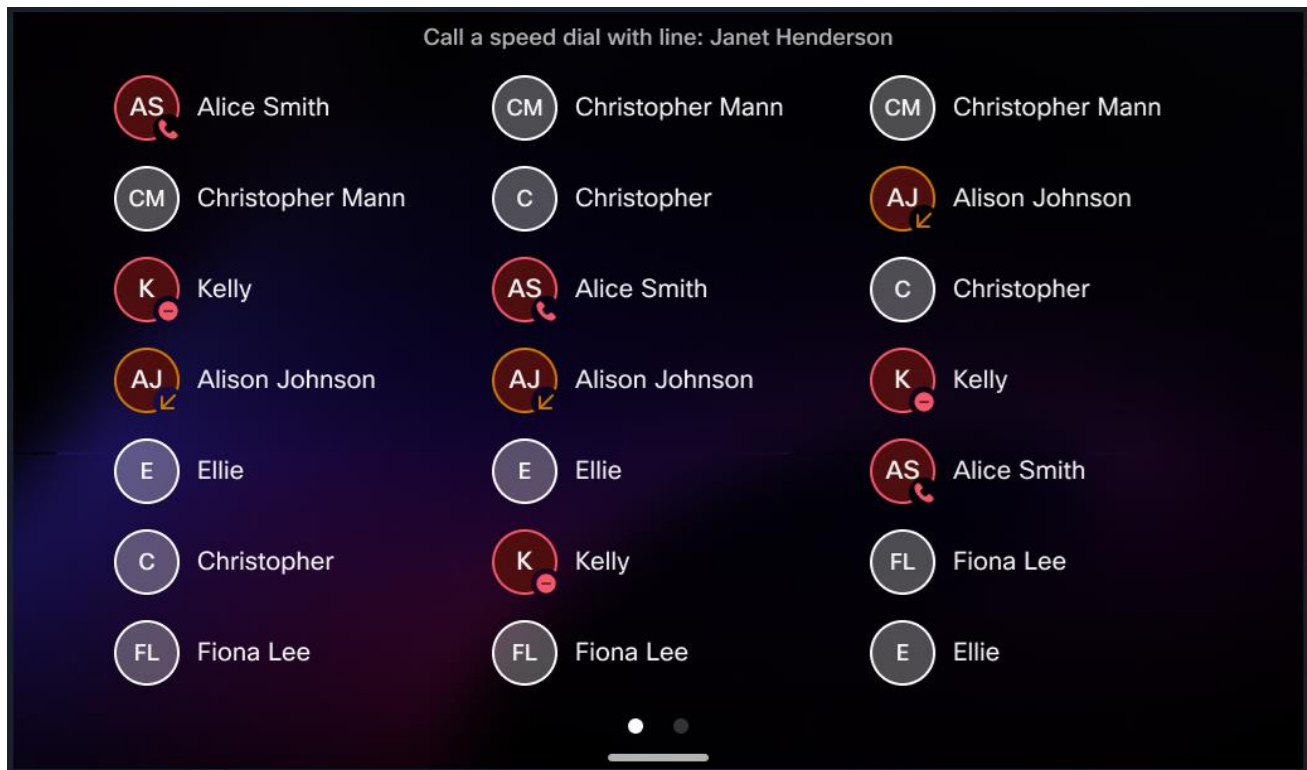


## Pinch & Zoom



# Swipe Down for Speed Dial

- Access Speed Dials by swiping down from the top of the touch screen
- Scroll horizontally to access more
- BLF status will indicate if they are in a call or on DND
- Up to 108 speed dials supported on CUCM



# Kiosk Mode on 8875

- Perfect solution for retail, banks, and similar environments
- End user taps icon to call a desired service
- To configure, on CUCM set the IDLE URL parameter on the 8875 device page to a custom XML file located on a web server
- Set the IDLE timer to 1 second

*CISCO Live!*

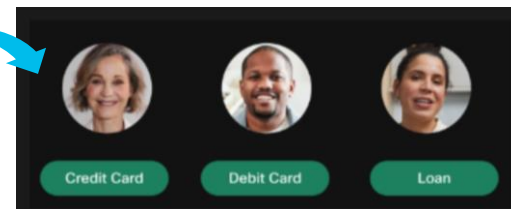


# Kiosk Mode on 8875 - XML file sample

## CUCM IDLE URL PARAMETER

Idle	<a href="http://10.0.0.10/Kiosk1.xml">http://10.0.0.10/Kiosk1.xml</a>
Idle Timer (seconds)	1

## Custom PNG



- **URL** pointing to a PNG file that end users will click on
- **Menu Item** for an individual click to call entry
- **Dial String** to call remote party
- **Touch Area** are coordinates in X and Y axis

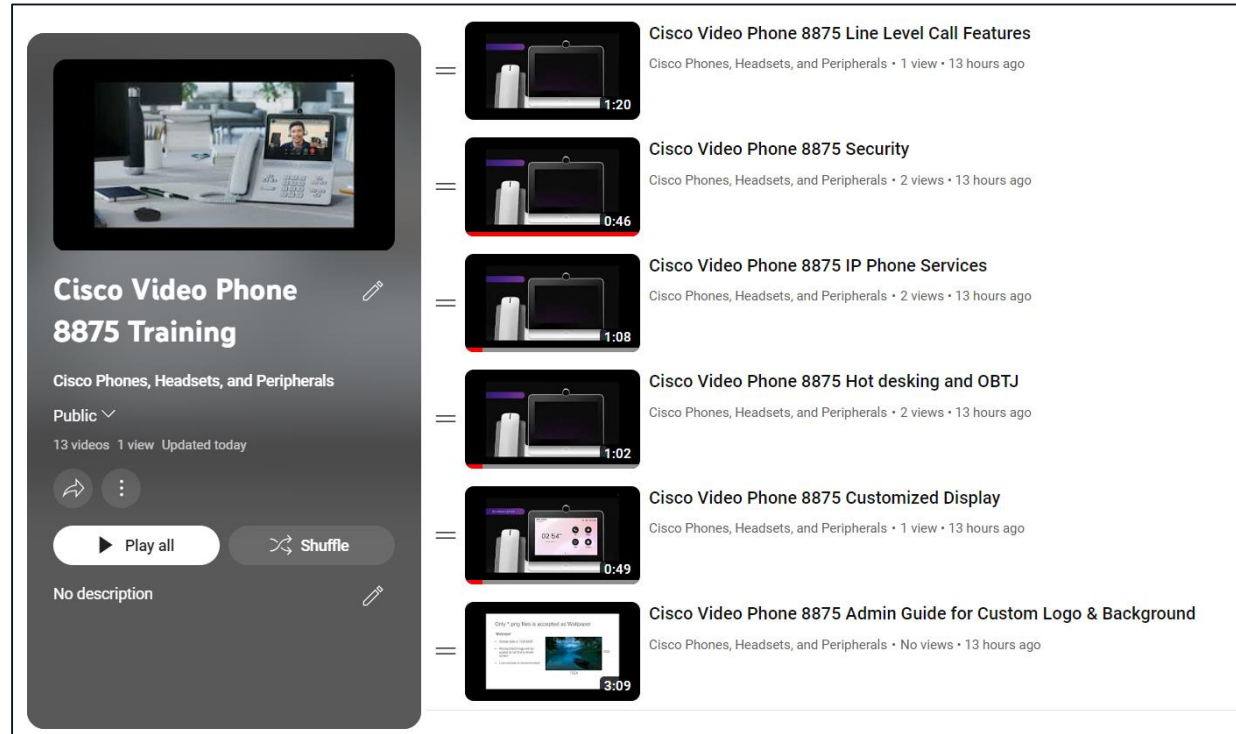
```

<CiscolPPhoneGraphicFileMenu>
  <Title>Welcome</Title>
  <LocationX>-1</LocationX>
  <LocationY>-1</LocationY>
  <URL>http://10.0.0.10/callList.png</URL>
  <MenuItem>
    <Name>Employee1</Name>
    <URL>Dial:1080</URL>
    <TouchArea X1="10" Y1="110" X2="105" Y2="140"/>
  </MenuItem>
  <MenuItem>
    <Name>Employee2</Name>
    <URL>Dial:1081</URL>
    <TouchArea X1="135" Y1="110" X2="238" Y2="140"/>
  </MenuItem>
  <MenuItem>
    <Name>Employee3</Name>
    <URL>Dial:1084</URL>
    <TouchArea X1="272" Y1="110" X2="372" Y2="140"/>
  </MenuItem>
</CiscolPPhoneGraphicFileMenu>

```

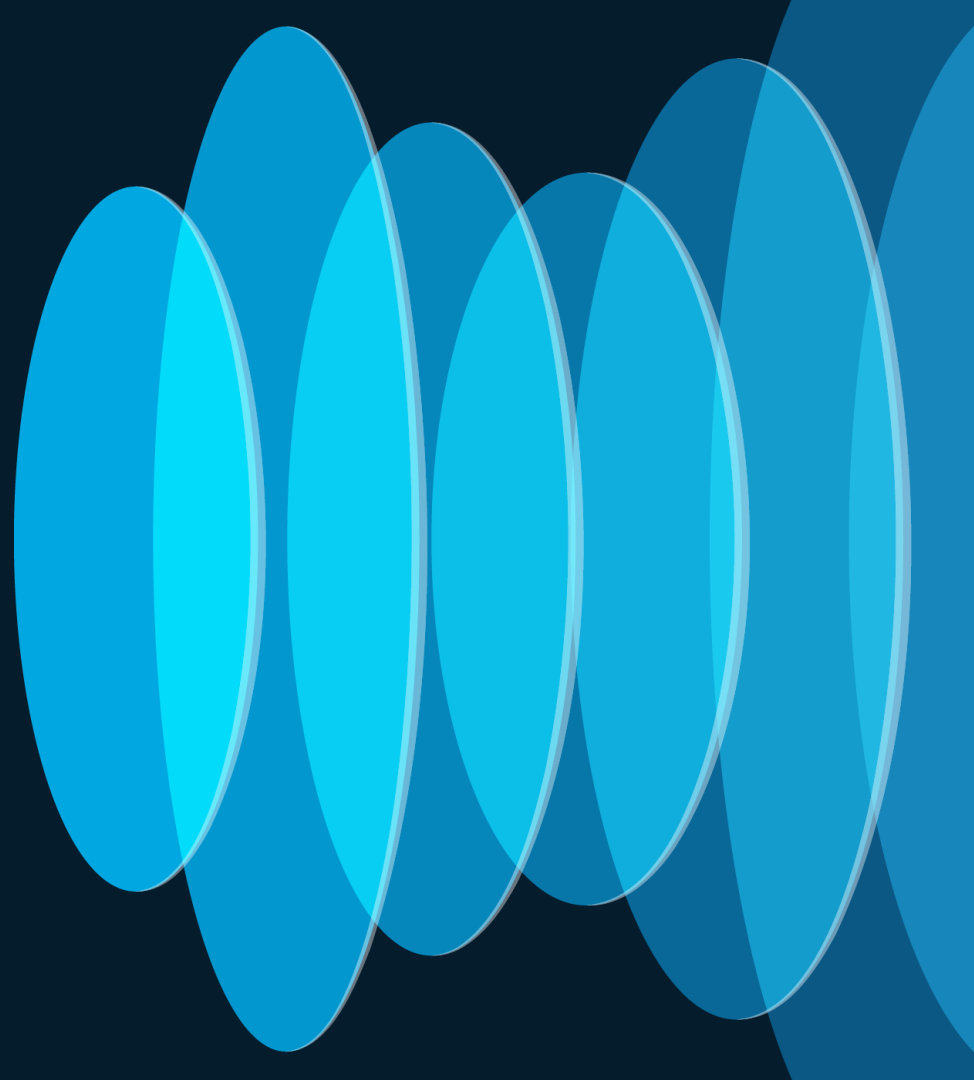
# 8875 Training Resources

- Useful for End Users or Admins
- <http://cs.co/8875Tutorial>
- Over a dozen videos
- Walk-through for many features
- Admin specific content:
  - How the boot sequence works
  - How to create custom wallpapers



The image shows a YouTube playlist interface for 'Cisco Video Phone 8875 Training'. The main video player shows a desk setup with a Cisco 8875 phone and a laptop. Below the player, the playlist title is 'Cisco Video Phone 8875 Training' with a pencil icon for editing. The channel name is 'Cisco Phones, Headsets, and Peripherals', and the video is set to 'Public'. It shows 13 videos in the playlist, with 1 view and updated today. There are buttons for 'Play all' and 'Shuffle'. Below that, it says 'No description'. To the right, a list of six video thumbnails is shown, each with a title, channel name, view count, and time ago. The videos are: 1. 'Cisco Video Phone 8875 Line Level Call Features' (1:20, 1 view, 13 hours ago); 2. 'Cisco Video Phone 8875 Security' (0:46, 2 views, 13 hours ago); 3. 'Cisco Video Phone 8875 IP Phone Services' (1:08, 2 views, 13 hours ago); 4. 'Cisco Video Phone 8875 Hot desking and OBTJ' (1:02, 2 views, 13 hours ago); 5. 'Cisco Video Phone 8875 Customized Display' (0:49, 1 view, 13 hours ago); 6. 'Cisco Video Phone 8875 Admin Guide for Custom Logo & Background' (3:09, No views, 13 hours ago).

# Phone Migration

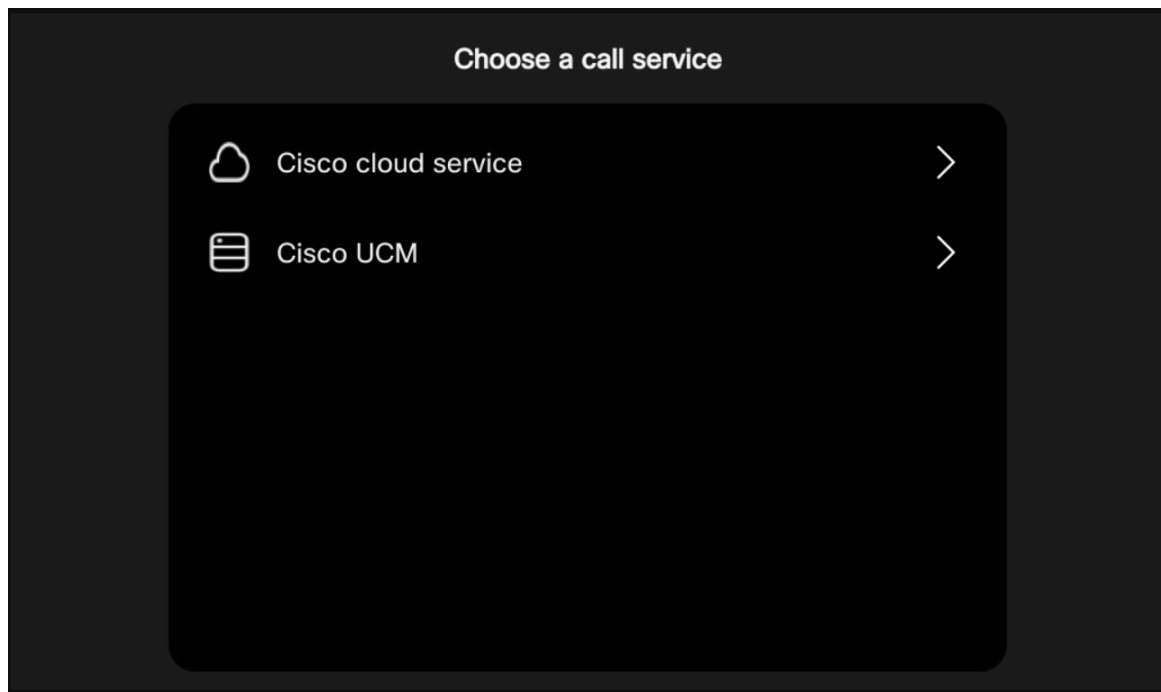


# Migration to the Cloud

1. PhoneOS – Factory Reset
2. Enterprise to MPP
3. CUCM: Phone Migration Service, Self-Provisioning IVR, or CM Admin Interface

# Simplified Provisioning Out of the Box (8875/9800)

- PhoneOS can register to CUCM or the cloud after a factory reset.
- An initial setup screen may appear if the phone detects CUCM using DHCP Option 150.
- The setup screen is bypassed if the phone is already provisioned in the Cisco cloud.

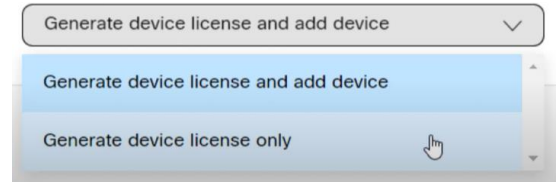


Video <https://www.youtube.com/watch?v=Ej5gC4xOqkA>

# Firmware Migration – Five Key Enhancements

## 1. Generate Migration Licenses First, Migrate Later

- Decouple license generation from end user provisioning. Only phone model and MAC address required.



## 2. Auto trigger firmware migration with Cloud Connected UC

CCUC automates process:

- Tells CUCM to perform minimum Enterprise firmware 14.1.1 update & perform migration

Auto-migration in progress

Auto-migration complete

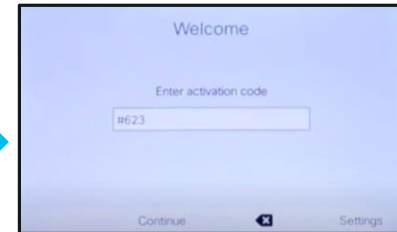
## 3. Use “Add device” UI wizard to generate license

- Use the classic “add device” in Control Hub to auto generate a license
- You must use MAC address for this to work

## 4. Migrate back to enterprise firmware – without a license!

- If you have already migrated to MPP, you can easily enter key sequence to roll back

#M2E or #623 →



## 5. Activation codes for migrated phones

- Device can be factory reset and a new activation code works for users in that org.
- Cross-org does not work unless you restart process.

# Firmware Migration Summary

1. YouTube Playlist: 30 minutes of Step-by-Step



<http://cs.co/mpp-migration-2023>

2. Watch Joe Martini's session **BRKCOL-2064**:

- Migrating IP phones from Unified Communications Manager (on-premises) to Webex Calling (cloud) by a TAC engineer - BRKCOL-2064

3. Visit [upgrade.cisco.com](http://upgrade.cisco.com) for additional details

An easy, intuitive Cisco IP phone migration that minimizes the complexity, cost, and time for professional services and is an integrated solution in CUCM.



Before

After

- 1 Unplug a deprecated/faulty phone from the network
- 2 Plug-in a replacement phone
- 3 Enter Primary DN, (optionally) PIN or authorization code on the new phone
- 4 New phone with all the settings from the old phone is provisioned

# Three CUCM Tools to Migrate Phones

## CUCM 12.5 SU3, CUCM 14, CUCM 15

	Phone migration service (non-IVR)	Self-provisioning IVR	CM administration interface
End user or administrator driven phone migration	End user driven (Self-service)	End user driven (Self-service)	Administrator driven
Auto-registration required	No	Yes	No
Migration steps	<ol style="list-style-type: none"> <li>1. Plug-in new phone to the network</li> <li>2. Key in primary extension and PIN</li> </ol>	<ol style="list-style-type: none"> <li>1. Auto register a new phone</li> <li>2. Dial self-provisioning IVR number and follow voice prompts</li> </ol>	<ol style="list-style-type: none"> <li>1. Sign in to CM Administration interface</li> <li>2. Choose "Migrate Phone" option in Phone Configuration page of old phone</li> <li>3. Enter phone type (model &amp; protocol) and MAC address of the new phone</li> </ol>
Administrator involvement	Low	Medium	High

# Phone Migration Service (non-IVR)

## CUCM 12.5 SU3, CUCM 14, CUCM 15

- How it works:
  - Phone Migration Service is always available and cannot be started/stopped.
  - Auto-registration **MUST** be disabled.
  - DHCP Option must advertise the IP address of the CUCM to the phone.
  - Self Provisioning IVR service is NOT used, but its authentication settings is used.
    - End user can replace their own phone.
    - Admin can replace on behalf of end user.
    - PIN enabled by default but can be disabled.



# Phone Migration Service (non-IVR) CUCM 12.5 SU3, CUCM 14, CUCM 15

Self Provisioning IVR service is NOT used, but its settings page is used for non-IVR authentication

- End user can replace their phone with user PIN
- Admin can replace for end user with admin PIN
- Admin can select no authentication (no PIN)

## No Authentication Required

In this mode, authentication is disabled during device self-provisioning. The administrator or end user can enter a user ID or self-provisioning ID into an endpoint and the endpoint will associate to the users account. This mode is not recommended for day-to-day operation.

## Allow End User PIN (default)

**Self-Provisioning**

Save

**Status**

- Status: Self-Provisioning IVR service is turned off.
- Status: Auto-Registration feature is turned off.

**Authentication Mode**

- Require Authentication  
In this mode, users may use their password or PIN to authenticate and provision devices based on the
  - Allow authentication for users only(via Password/PIN)
  - Allow authentication for users(via Password/PIN) and Administrators(via Authentication Code)  
Authentication Code

## Allow End User PIN and Admin PIN

**Self-Provisioning**

Save

**Status**

- Status: Self-Provisioning IVR service is turned off.
- Status: Auto-Registration feature is turned off.

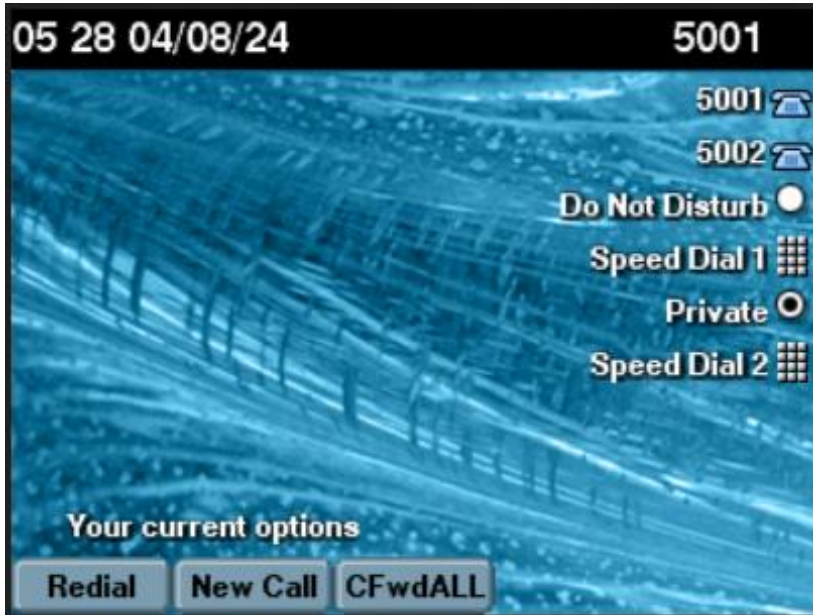
**Authentication Mode**

- Require Authentication  
In this mode, users may use their password or PIN to authenticate and provision devices based on the
  - Allow authentication for users only(via Password/PIN)
  - Allow authentication for users(via Password/PIN) and Administrators(via Authentication Code)  
Authentication Code

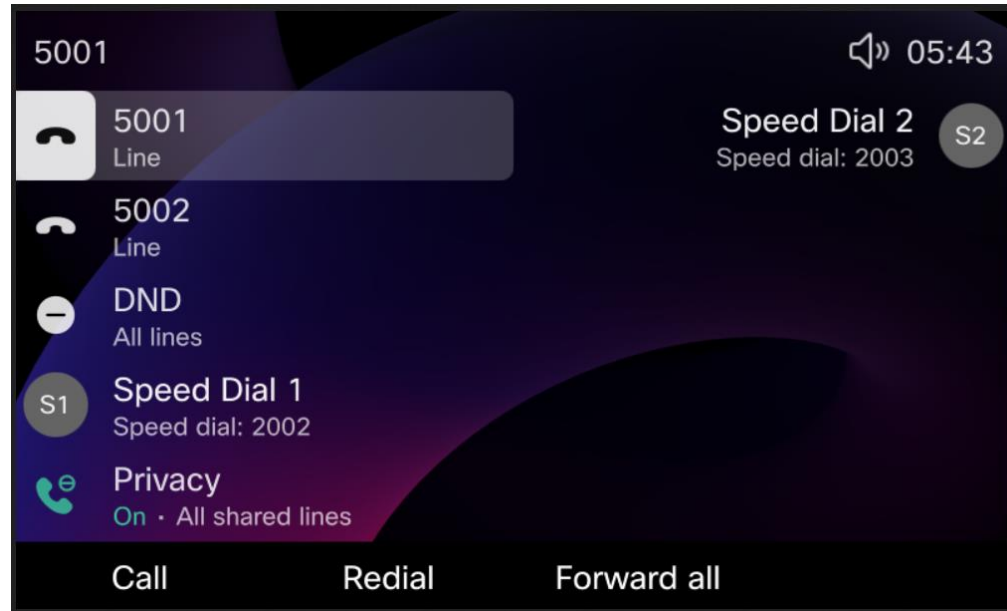
# Phone Migration Example: 7900 to 9861

CUCM 12.5 SU3, CUCM 14, CUCM 15

7975



9861



\*Phone will move to Session Line Mode by default

# Self-provisioning IVR

## CUCM 12.5 SU3, CUCM 14, CUCM 15

	Phone migration service (non-IVR)	Self-provisioning IVR	CM administration interface
End user or administrator driven phone migration	End user driven (Self-service)	End user driven (Self-service)	Administrator driven
Auto-registration required	No	Yes	No
Migration steps	<ol style="list-style-type: none"> <li>1. Plug-in new phone to the network</li> <li>2. Key in primary extension and PIN</li> </ol>	<ol style="list-style-type: none"> <li>1. Auto register a new phone</li> <li>2. Dial self-provisioning IVR number and follow voice prompts</li> </ol>	<ol style="list-style-type: none"> <li>1. Sign in to CM Administration interface</li> <li>2. Choose "Migrate Phone" option in Phone Configuration page of old phone</li> <li>3. Enter phone type (model &amp; protocol) and MAC address of the new phone</li> </ol>
Administrator involvement	Low	Medium	High

# Self-provisioning IVR Process

## CUCM 12.5 SU3, CUCM 14, CUCM 15

### End User Procedure

**Step 1** Dial the extension that is assigned to the Self-Provisioning IVR from a new Cisco IP Phone or device.

**Step 2** Press **2** for phone replacement option.

**Step 3** Enter the primary extension number of your phone followed by the pound key (#).

**Step 4** Enter the end user PIN followed by the pound key (#).

Migration starts after a successful authentication. Following the migration, the phone restarts with the same configuration settings.

### Admin Procedure

- Enable Auto-registration. Enable Self-Provisioning IVR service and Cisco CTI Manager service.
- End users must already have a primary extension.
- End users must be associated to a user profile or feature group template that includes a universal line template, universal device template and which has Self-Provisioning enabled.
- Ensure that the right “CTI Route Point” and “Application User” configurations are selected.

# CUCM Administration Interface

## CUCM 12.5 SU3, CUCM 14, CUCM 15

	Phone migration service (non-IVR)	Self-provisioning IVR	CM administration interface
End user or administrator driven phone migration	End user driven (Self-service)	End user driven (Self-service)	Administrator driven
Auto-registration required	No	Yes	No
Migration steps	<ol style="list-style-type: none"> <li>1. Plug-in new phone to the network</li> <li>2. Key in primary extension and PIN</li> </ol>	<ol style="list-style-type: none"> <li>1. Auto register a new phone</li> <li>2. Dial self-provisioning IVR number and follow voice prompts</li> </ol>	<ol style="list-style-type: none"> <li>1. Sign in to CM Administration interface</li> <li>2. Choose "Migrate Phone" option in Phone Configuration page of old phone</li> <li>3. Enter phone type (model &amp; protocol) and MAC address of the new phone</li> </ol>
Administrator involvement	Low	Medium	High

# CUCM Administration Interface

## CUCM 12.5 SU3, CUCM 14, CUCM 15

System ▾ Call Routing ▾ Media Resources ▾ Advanced Features ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

### Phone Configuration

Related Links: Back To Find/List ▾ Go

Save Delete Copy Reset Apply Config Add New

1

**Status**  
Status: Ready

**Association**  
Modify Button Items

1	7719 Line [1] - 1000 (no partition)
2	7719 Line [2] - 2001 (no partition)
3	Do Not Disturb

**Phone Type**  
Product Type: Cisco 7975  
Device Protocol: SCCP

**Real-time Device Status**  
Registration: Unregistered

### Phone Migration

Save

2

**Phone Migration Information**

MAC Address\* A4004E068B0E

Description 9851

Migrate Using

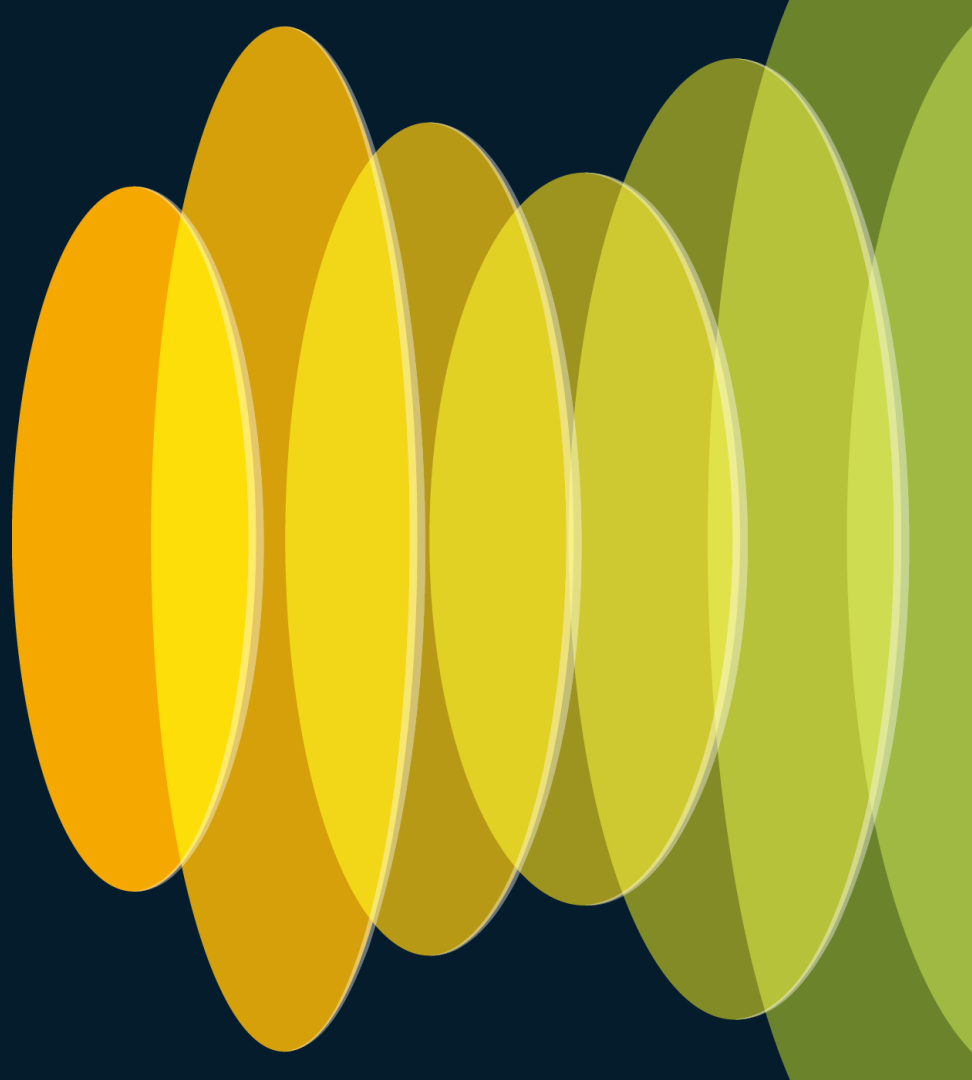
Phone Template \*

Phone Type (and Protocol) \*

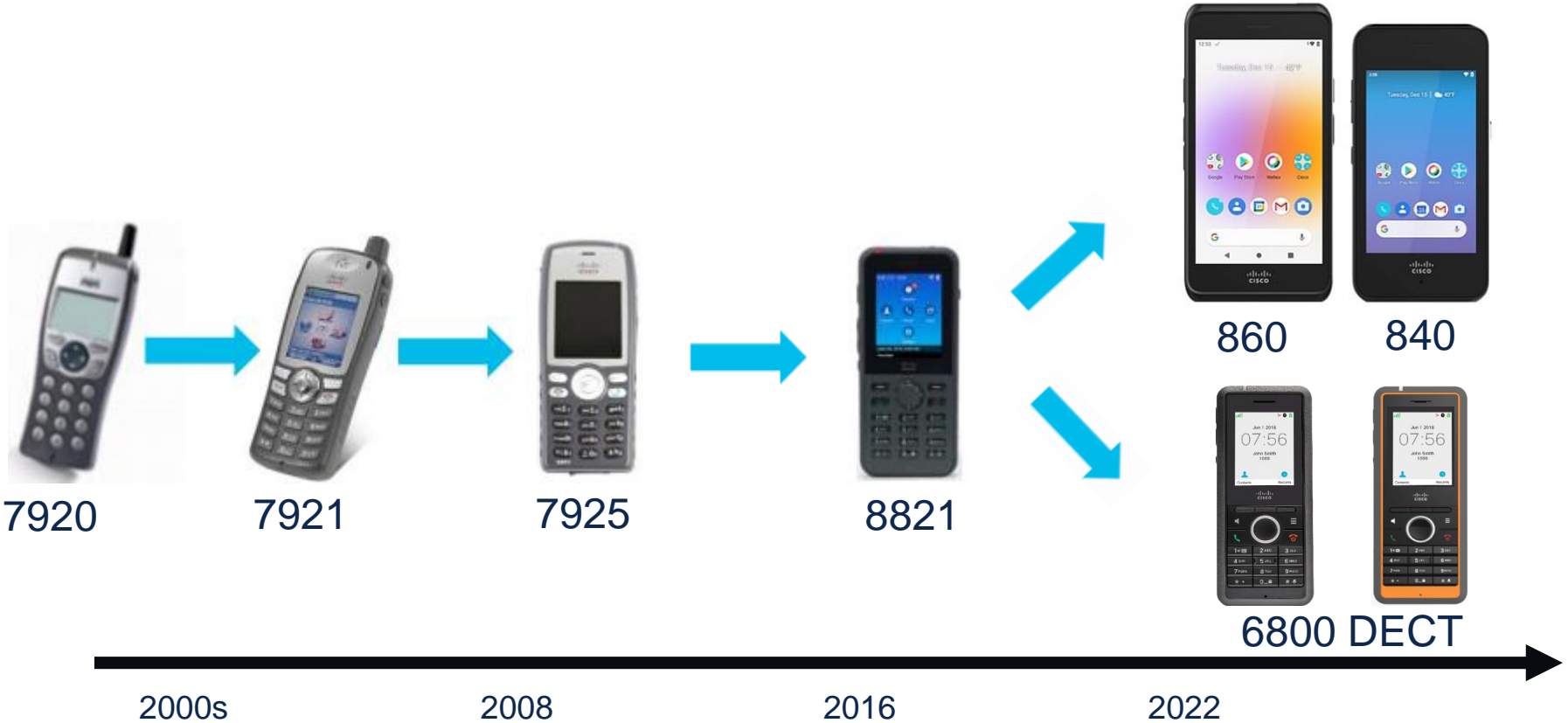
-- Not Selected --

Cisco 9851

Cisco IP DECT  
6800 series or  
Wireless  
840/860?



# A Brief History of Cisco Wireless IP Phones



# Cisco Wireless Phones

## Cisco Wireless Phone 840

IP65 ruggedized, water and dust resistant

4" Dragontail™ glass touch screen

8MP rear camera, 5MP front camera



## Cisco Wireless Phone 860

IP68 ruggedized, waterproof and dustproof

5.2" Gorilla® glass touch screen

13MP rear camera, 8MP front camera

Hot swappable battery for 100% up-time



Version 1.10(1)  
September 2023

- InformaCast XML Support
- Hoteling login (WxC)
- Japanese-localized applications
- UX Improvements
- Security updates
- Bug Fixes

Version 1.10(2)  
March 2024

- Imprivata Certification
- Call Monitoring (InformaCast support)
- PNG Wallpaper support

Version 1.10(3)  
June 2024

- Hard Button Call Answer/End
- Hard Button Flashlight On/Off

Android 10 OS

Google Play Store

Webex app installed

CUCM Registration

EMM/MDM Control

802.11 Wi-Fi

Scanner HW Option

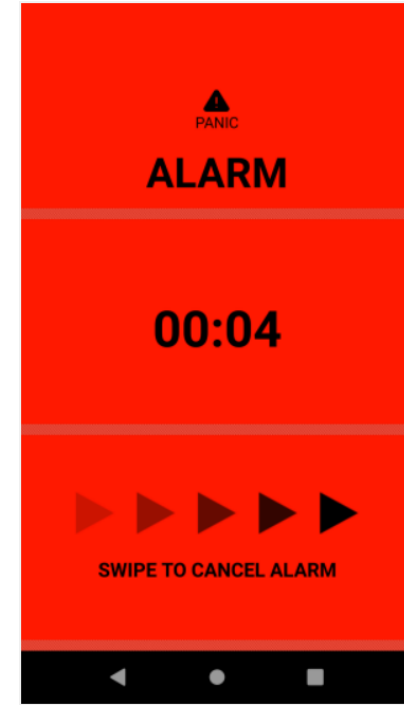
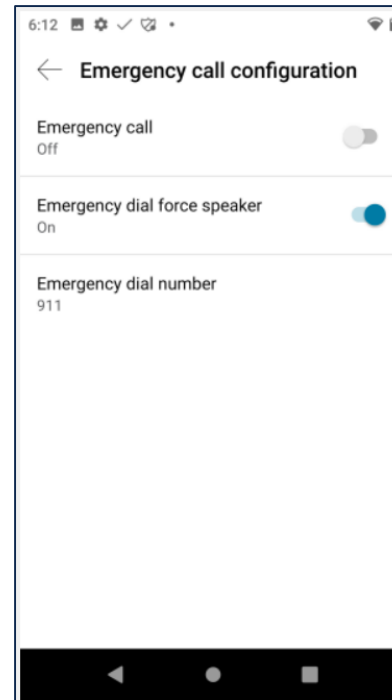
Optional charging station

Customizable buttons

Vertical Applications

# Emergency (Panic Button)

- Emergency button is the amber button on top right side of the device
- By default, this programmable button is set as an Emergency button. If configured, the button sends an emergency panic alert.
- Related settings include motion sensor, panic button, emergency call and tone configuration.
- These can be configured by selecting the three dots in the upper right-hand corner in the Emergency app.



# 840 Accessories



Holster Clip (840S)



Holster Clip (840)



Barcode Scan Gun



Desktop Charger



Battery Multi-Charger



Phone Multi-Charger

# 860 Accessories



Phone/Battery Desktop Charger

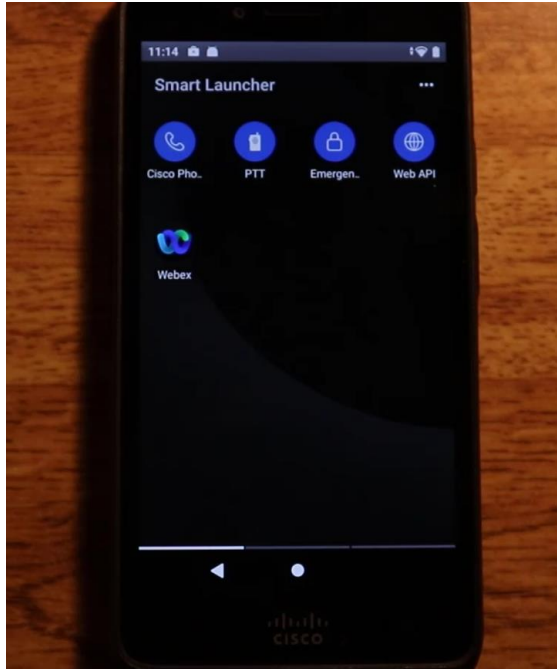


Phone/Battery Multi-Charger

# EMM Alternative – configure.cisco.com

Video Demonstration -> <http://cs.co/emma-demo>

## Multiple Apps

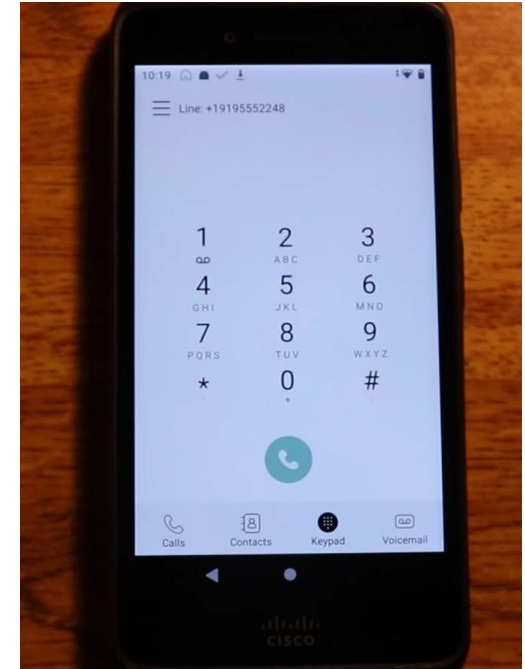


Default applications that can be hidden or unhidden from the Smart Launcher



Phone app cannot be minimized or closed by end user

## Phone Only Mode



# EMM Alternative – configure.cisco.com

Video Demonstration -> <http://cs.co/emma-demo>

- Step #1. Generate QR code and create customized package  
 Step #2. Upload JSON file to CUCM TFTP server(s). Restart TFTP Service.  
 Step #3. Populate the name of the file into the 840/860 device page.  
 Step #4. Populate the contents of key.txt into the field

Note: No data is stored in the cloud

1. Read EMMA documentation <http://cs.co/emma-doc>
2. Understand EMMA at <https://configure.cisco.com>
  - Determine what apps you want to display
  - Or if you want 'phone only mode'
  - EMMA cannot push apps: it can hide/unhide apps

Enterprise Mobility Management (EMM) Alternative Configuration

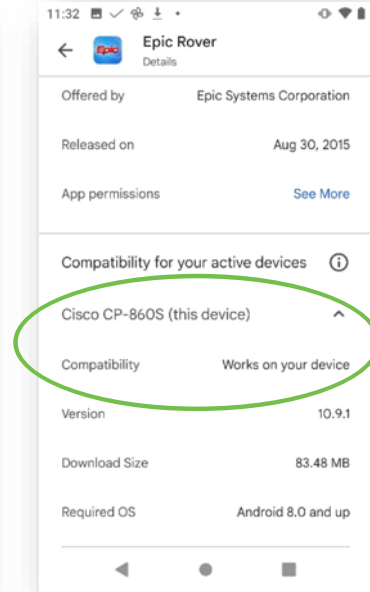
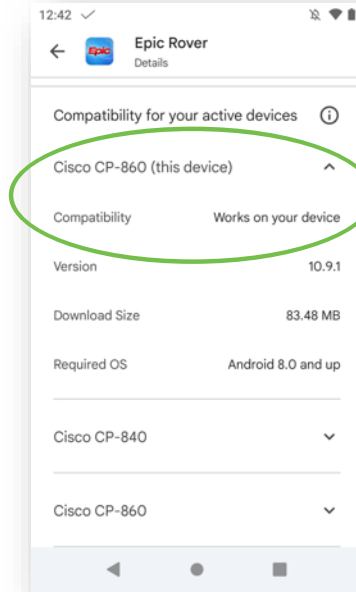
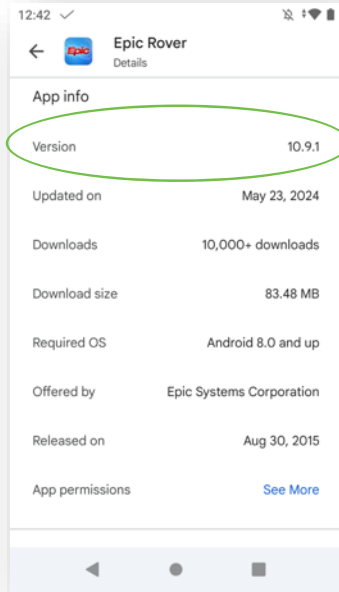
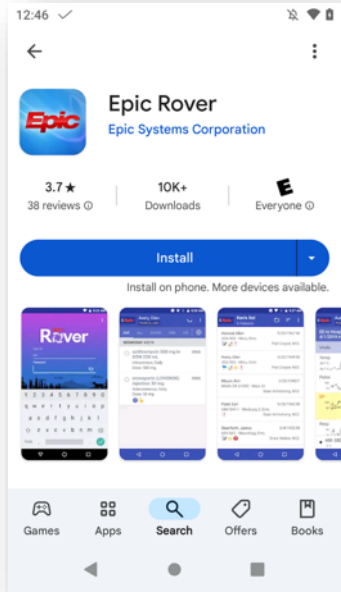
Enterprise Mobility Management (EMM) Alternative Configuration Encryption Key

CP8x0\_config\_6-7-2023.json.enc

.....

\* If you do not see EMM fields on CUCM, it is because the latest QED installer is required.

# Cisco 860S and 860 Epic Rover Support



\* Epic Rover now supported on Cisco 860 with 10.9.1 app version

# Cisco Wireless Phones Key Resources

## Wireless Phone Overviews

- Technical Overview: Hardware  
<http://cs.co/wireless-phone-overview>
- Technical Overview2: Core Telephony  
<http://cs.co/wireless-phone-overview2>

## Core Documentation

- Wireless LAN Deployment  
<http://cs.co/webex-wireless-dg>



## Free EMM Alternative

- Video  
<http://cs.co/emma-demo>
- Tool URL  
<https://configure.cisco.com>

## MDM 840/860 Tutorials

- Microsoft Intune  
<https://youtu.be/i5NcAGJI3e4>
- VMWARE Workspace  
<https://youtu.be/23jC15zInlc>
- Meraki SM  
<https://youtu.be/ysmW6bcOjT0&t=863s>

Android 10 OS  
Google Play Store

Webex app installed  
CUCM Registration

EMM/MDM Control  
802.11 Wi-Fi

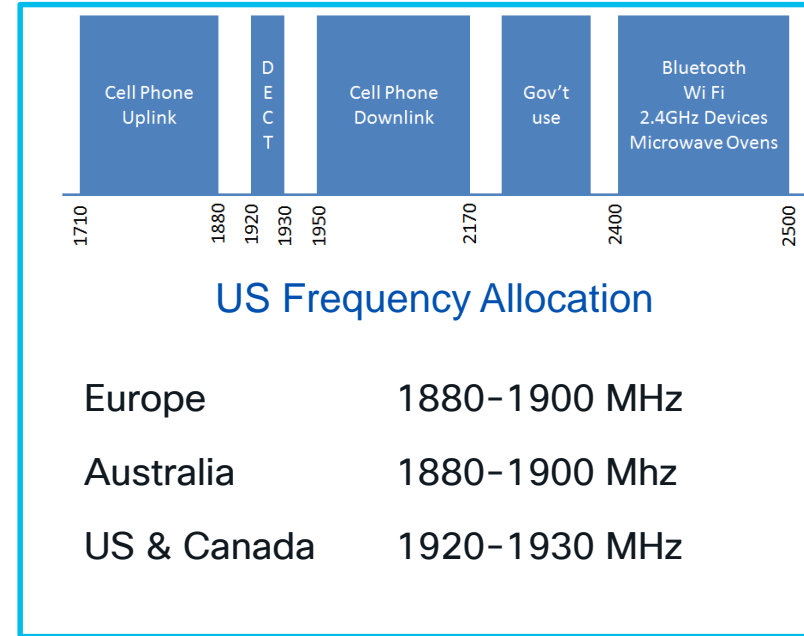
Scanner HW Option  
Optional charging station

Customizable buttons  
Vertical Applications

# DECT & Wi-Fi Frequencies and Channels

## Digital Enhanced Cordless Telecommunications

- DECT is free from typical interferences of Wi-Fi and Bluetooth
- Designed for Voice and Range (50m/300m), not for data (speed)
- Has bandwidth for 10 channels, which allows 10 narrow band or 5 wide band voice traffic



Type	Wi-Fi (840/860)	DECT 6800
Frequency	2.4 GHz or 5 GHz	1.9 GHz

# 6800 DECT Wireless Phone



6823



6825 + Cradle



6825 Ruggedized



110 Base Station  
Single-cell



Repeater



210 Base Station  
Multi-cell

## DECT Models

- Value 6823 – Phone, cradle, 3.5mm jack (not shown)
- Premium 6825 – above plus Bluetooth and slightly larger screen than 6823, Emergency button
- Ruggedized 6825 – 6825 spec but IP65 rated dust and water protection

## Single-Cell Mode

- DECT 110 & 210 Base Station:
- Up to 30 SIP Registrations
  - Up to 10 Concurrent Calls

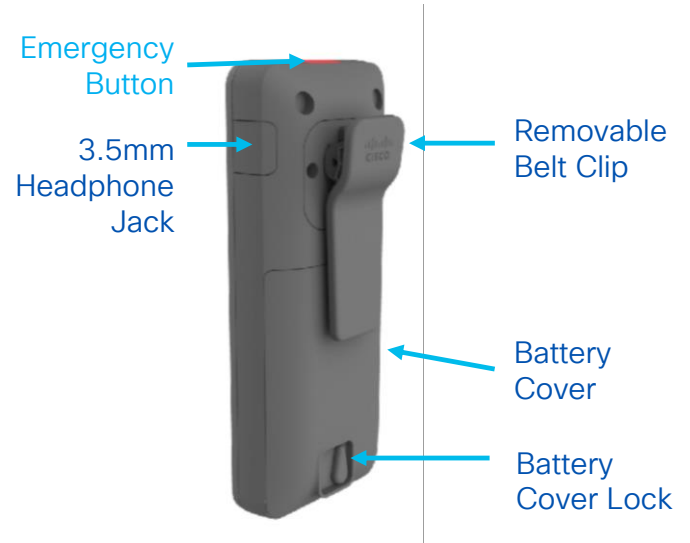
## Multi-Cell Mode

- DECT 210 Multi-Cell Base Station with 250 Base Stations Deployed:
- Up to 1000 SIP Registrations
  - Up to 2000 Concurrent Calls

# Tour of the Cisco IP DECT 6825 Handset



Only in 6825 Handset  
6823 Handset has rubberized keypad



# Comparing Multi-Cell and Single Cell DECT

Multi-Cell System		Single Cell System
Buildings, Retail, Factories, Etc.	<b>Ideal For</b>	Small Office, Home Office
Start Small, Pay As You Grow	<b>Investment Protection</b>	Start Small, Replace Infrastructure
Slight Premium	<b>Cost</b>	Entry Level Pricing
Up to 1,000 Phones	<b>Capacity</b>	8-10 Phones Max (Typically)
Add Basestations, extend Range and Capacity	<b>Expansion</b>	Add Repeaters to Extend Range, Repeaters limit capacity
Seamless handoff between basestations in the system	<b>Mobility, Roaming</b>	Roam within range of basestation and repeaters

## MPP 6800 series - DECT Deployment Guide

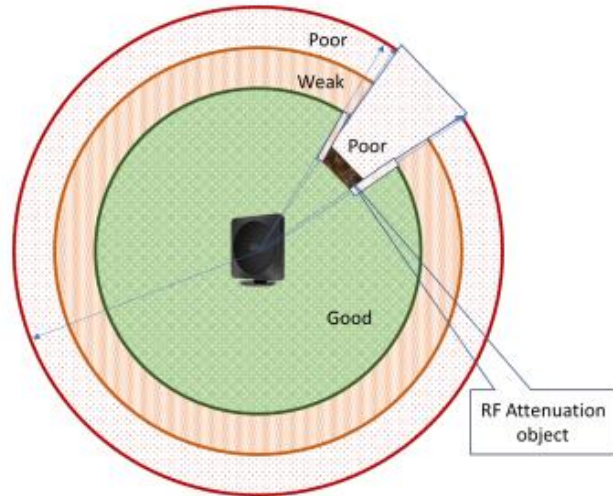
[https://www.cisco.com/c/dam/en/us/td/docs/voice\\_ip\\_comm/cuipph/MPP/6800-DECT/deployment/CiscoDECT6800DeploymentGuide.pdf](https://www.cisco.com/c/dam/en/us/td/docs/voice_ip_comm/cuipph/MPP/6800-DECT/deployment/CiscoDECT6800DeploymentGuide.pdf)

# DECT Network Planning

## Radio Coverage Planning

### Base Station Location

- Center of the coverage area
- RF Attenuation objects



### Site survey tool

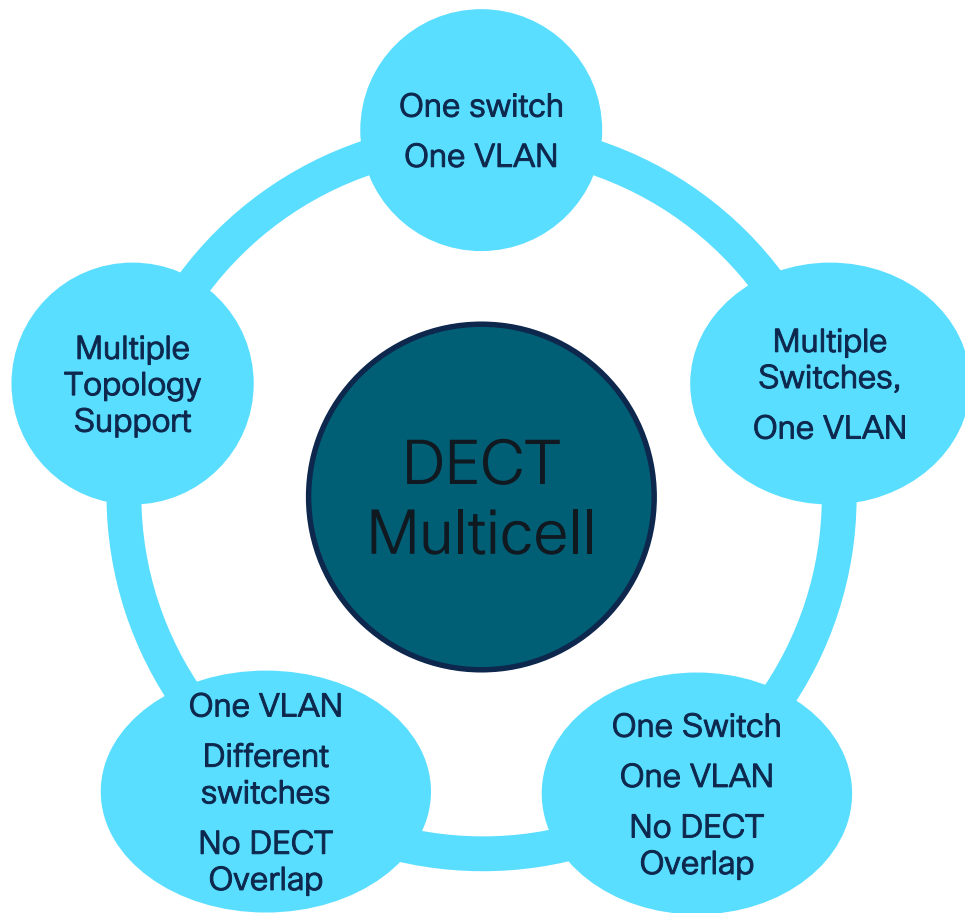
- Can be invoked anytime in handset
- Clear line of site increases signal strength

Good	Poor	Weak
IP Search 	IP Search 	IP Search 
Name: Warehouse A-1 MAC: 00:08:7B:16:D7:4E IP: 169.254.82.108 RFPI: 13:29:72:12:00 RSSI: 024 dBm Status: Strong	Name: Warehouse A-1 MAC: 00:08:7B:16:D7:4E IP: 169.254.82.108 RFPI: 13:29:72:12:00 RSSI: 024 dBm Status: Poor	Name: MAC: 00:08:7B:16:D7:4E IP: 169.254.82.108 RFPI: 13:29:72:12:00 RSSI: 024 dBm Status: Weak

# Local Area Network Topology

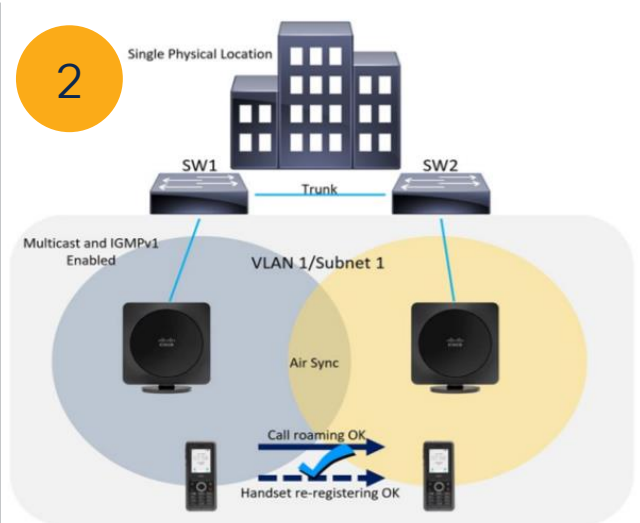
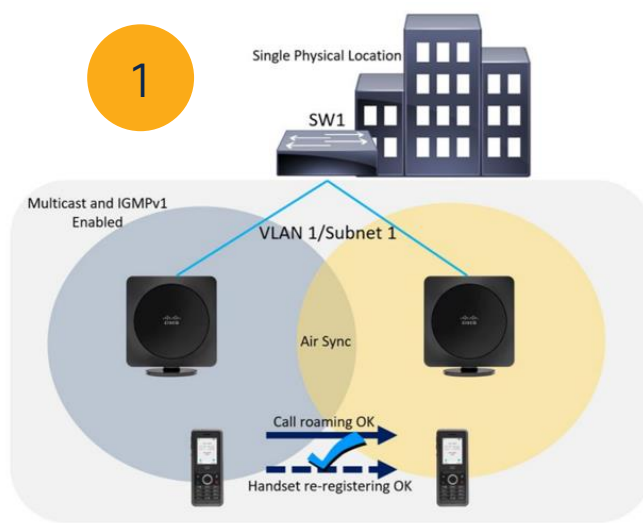
- DECT Multicell can be formed in different types of Network topology
- Key is to make sure Multicast works right
- Switch configuration is right
- DECT Multicell multiple topology support

DECT Deployment Guide  
<http://cs.co/dect-dg>



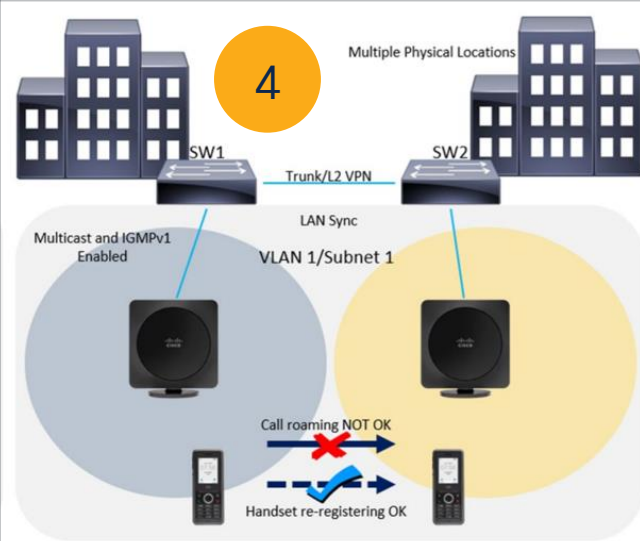
# Scenario 1 & 2

- Multicell is formed.
- DECT lock done over air.
- Handsets can register to secondary base.
- Handsets can roam from one base to another.
- Handsets can roam from one base to another in a call.



# Scenario 3 & 4

- Multicell is formed.
- DECT lock done over LAN.
- Handsets can register to any base.
- Handsets can re-register from one base to another.
- Handsets are NOT able to roam while in a call.



# Manage DECT Network

- Cisco DECT Network solution eliminates the need for additional device manager on-premises.

The screenshot shows the Cisco Calling interface for a DECT Network. The top navigation bar includes 'Numbers', 'Locations', 'Call Routing', 'Features', 'PSTN', 'Service Settings', and 'Client Settings'. The main header displays 'RaviHome DECT Network' and 'Cisco DBS210'. The 'Details' section on the left contains a 'Chain ID' field with the value '1672537580' circled in blue, and a 'Location' field with the value 'WXCSIVARSMARSC1S1'. The 'Configurations' section on the right includes 'Handset Access Code' (set to '1234' with 'Default Access Code' selected), 'Handset Display Name' (set to '1-Ravi'), and summary statistics for 'Base Stations' and 'Handsets'.

The 'Handset Status' dialog box displays the following information:

- Handset display name: 1-Ravi
- Base Station: D4789B5256F0
- Line 1**
  - Status: Registered
  - Last Registration: Nov 01, 2023 3:24 PM CST
- Line 2**
  - Status: Registered
  - Last Registration: Nov 01, 2023 3:25 PM CST

An 'Ok' button is located at the bottom right of the dialog.

# Firmware Release 5.1(2) for 6800 Series IP DECT

Delivers customer requested features to the 6800 series IP DECT devices:

- Cisco IP DECT Phone on CUCM
- Configuration Changes Logging
- Configuration Changes Reporting
- EDOS Profile Supports all XML Parameters
- Stateful Firewall to Control Inbound Ethernet Traffic
- Voice-VLAN support (Network-Related Information Extraction using CDP/LLDP)



# Which to deploy? Considerations

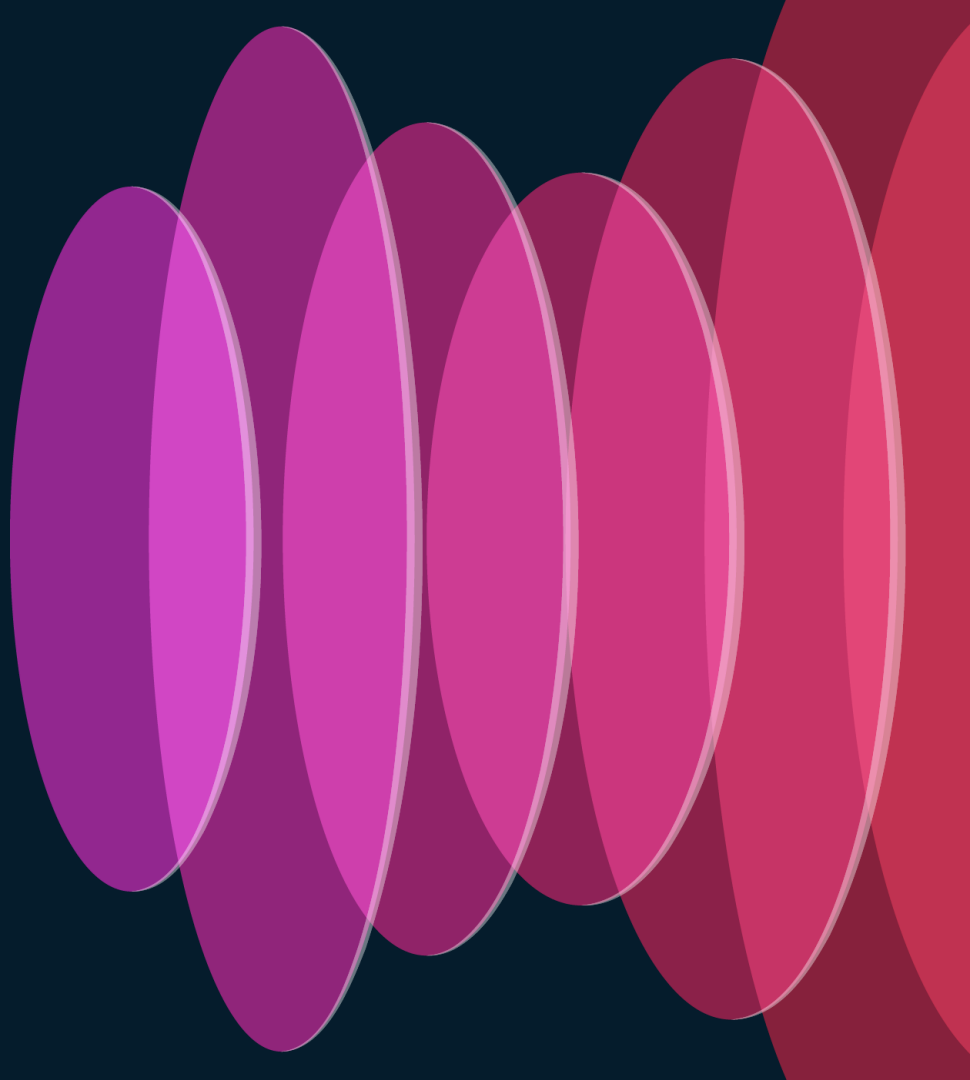
## 6800 DECT

- DECT overlay network
- Different Site Survey
- 3<sup>rd</sup> Party SIP Endpoint on CUCM
  - No AP base tracking
  - Out of band firmware upgrade
- Simple calling scenarios
- No 3<sup>rd</sup> party applications
- Push to Talk (all or nothing)

## Cisco Wireless 840/860

- Leverages existing converged Wireless network
- Use Case: Application support, messaging, Healthcare
- Integrated with CUCM
  - Extension Mobility
  - Firmware Upgrades
- 3<sup>rd</sup> Party App support / Barcode
- Power bank chargers
- Built-in-Bridge recording

# Cisco Headsets and Webcams



# Find the perfect peripherals

Integrated with Webex app and Cisco devices.

Microsoft Teams certified versions.

Dedicated Headset and Camera apps

Manage & view insights on your fleet of peripherals in Webex Control Hub

## 900 Series

Executive Bluetooth® Wireless headsets with premium audio



Bang & Olufsen Cisco 980



Bang & Olufsen Cisco 950

## 700 Series

Work everywhere with Bluetooth® wireless headsets for hybrid work featuring intelligent noise removal



Headset 730

Updated ergonomics!



720 Series



## 500 Series

Professional wired and wireless headsets for everyday calling and contact center applications



560 Series



530 Series



520 Series

## 300 Series

Professional value line with convenient controls



320 Series



## Desk Camera

Intelligent USB webcams for use on external displays / tripods



Desk Camera 4K



Desk Camera 1080p

# Cisco Headset 320 Series: Wired

- Mono or stereo wearing options
- Flexible Connectivity: RJ9, USB-A, and optional USB-C adapter
- Easy set-up & designed for all day comfort
- In-line controller featuring dedicated Webex or Microsoft Teams button
- Outstanding audio and noise reduction
- Integrated headset management and analytics
- Webex and Microsoft Teams certified models



## Connectivity

- Fixed RJ or USB-A cable
- Optional USB-C adapter
- RJ (Cisco phones only)

# Cisco Headset 521/522 and 531/532





**521/522**  
Connector:



521/522 includes a 3.5mm connector and includes an in-line USB adapter

- Wired Headsets
- Single and Dual Ear Piece Models
- Busy Indication
  - On-ear and on controller
- Powerful Noise Reduction
  - Excellent in open offices

## USB indicator

Incoming Call	Blinking Green	
Active Call	Steady Green	
Muted Call	Steady Green	
	Steady Red	



**531/532**  
Connector Options:



USB



RJ-9:  
for non-USB Cisco Phones

# Cisco Headset 560 Series: wireless (DECT)

- Mono or stereo wearing options
- DECT 6.0 with AES-128 encryption
- Mobility up to 300 feet from the base
- Easy set-up and tuning
- On-ear busy indicator light
- Outstanding audio and noise reduction
- Integrated headset management and analytics



- For 560 DECT deployments, **please** read the deployment guide <http://cs.co/dect> or video walk-through here: <http://cs.co/dect-video>

# Cisco 720 Series: wireless (Bluetooth®)

- Wireless via Bluetooth® 5.0 or USB HD Adapter
- Mono or stereo wearing options
- Microphone boom featuring flip to mute feature
- Up to 23 hours talk time
- AI powered Voice Activated Microphones
- Integrated Webex or MSFT Teams Button
- Designed for all day comfort
- Enterprise grade hardware & software security
- 3 simultaneous connections (2 Bluetooth + 1 wired USB)
- Integrated headset management and analytics
- Webex and Microsoft Teams certified models with premium microphones for open office



# Cisco Headset 730: wireless (Bluetooth®)



reddot winner 2020



Platinum



Carbon Black

Focus on what matters at home, the office and the journey between.

- Wireless via Bluetooth® 5.0 or USB HD Adapter
- Sleek boomless microphone design
- On-ear buttons for easy call and music control
- Active Noise Cancellation
- AI powered Voice Activated Microphones
- Smart sensor for contextual movements
- Integrated presence LED light
- 20+ hour battery life
- Enterprise grade hardware & software security
- 3 simultaneous connections (2 Bluetooth + 1 wired USB)
- Integrated headset management and analytics
- Cisco Bluetooth® Headset Deployment Guide

Updated ergonomics for enhanced comfort!





Shipping October 2023

<https://www.cisco.com/c/en/us/products/collateral/collaboration-endpoints/headset-700-series/bluetooth-deployment.html>



# Bang & Olufsen Cisco 950: wireless (Bluetooth®)

True wireless earbuds designed for professionals.





## Take great audio anywhere

-  Bluetooth 5.2
-  Adaptive active noise cancellation and transparency mode
-  Immerse yourself in B&O legendary sound
-  Six built-in microphones for crystal clear communications





## All-day comfort

-  Tailored fit with 4 sizes of silicon tips or COMPLY™ memory foam tips
-  Stereo or mono use on left or right earbud

## User centric experiences

-  Only earbuds optimized for Webex app and Cisco devices with on-ear call controls over native BT
-  Touch or motion controls to easily navigate calls and music
-  In-ear voice or tone notifications
-  Customize settings in the B&O mobile app

## Peace of mind for IT

-  Enterprise grade hardware and software security
-  Centralized inventory management in Control Hub
-  Built to last with premium materials including aluminum and tempered glass
-  Certified for Webex and Microsoft Teams

**CISCO** Live!



## Expert Tips – 950 MSFT Teams model & certification

- Specialized software to enable integrations into MSFT Teams
- Certified MSFT Teams experience requires Cisco USB Adapter connection
- Cisco USB Adapter is included in box & pre-paired\*
- MSFT Teams cert badge on the giftbox. No MSFT logo on earbuds or case.
- Backwards compatible with Webex & Cisco Devices

# Bang & Olufsen Cisco 980: wireless (Bluetooth®)

Black Anthracite




First Light



Designed for life. Perfected for business.

- Lightweight structure with authentic, premium materials
- Immersive experience with high end acoustics and audio
- Adaptive Active Noise Cancellation and transparency mode
- Seamless connectivity with Bluetooth® 5.1 and two active connections
- All day use with 24 hours battery life
- Enterprise grade software and hardware security
- Integrated with Webex app and devices
- Cisco management and analytics
- Integrated headset management and analytics

# The Cisco Desk Camera Series

 Cisco Desk Camera 1080p



1080p Full HD Video



Autofocus

 Cisco Desk Camera 4K



4K Ultra HD Video



Best overview



Facial recognition for Windows Hello



Adjust image and field of view



Built-in Privacy shutter



Great light performance



Cisco Desk Camera App



Microphones with noise reduction



Multiple mounting options



# Frontline Workers + Desk Cam 4k + iPad

- Ideal for use cases where physical space is limited
  - Enterprise workers who want an elevated camera
  - Technicians / mechanics
  - Remote education
- Camera can be mounted to a tripod or selfie stick
- Works with iPad + Webex
- Dual purpose use - more ROI from Web Camera



# Cisco – Single Management Platform

Cisco Headset and Desk Cameras are managed IT Assets like all other devices on the Cisco platform

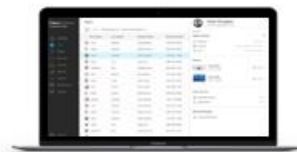
## Centralized Management: Headsets, Phones & Video

### CUCM Web Interface



CUCM headset management demo  
<http://cs.co/headset-management>

### Control Hub



Control Hub headset management demo  
<http://cs.co/headset-ch-2023>



## End User Management: Configure, Customize, Upgrade

### Webex App



### Cisco Accessory Hub app



### 700 and 900 Series Mobile Apps





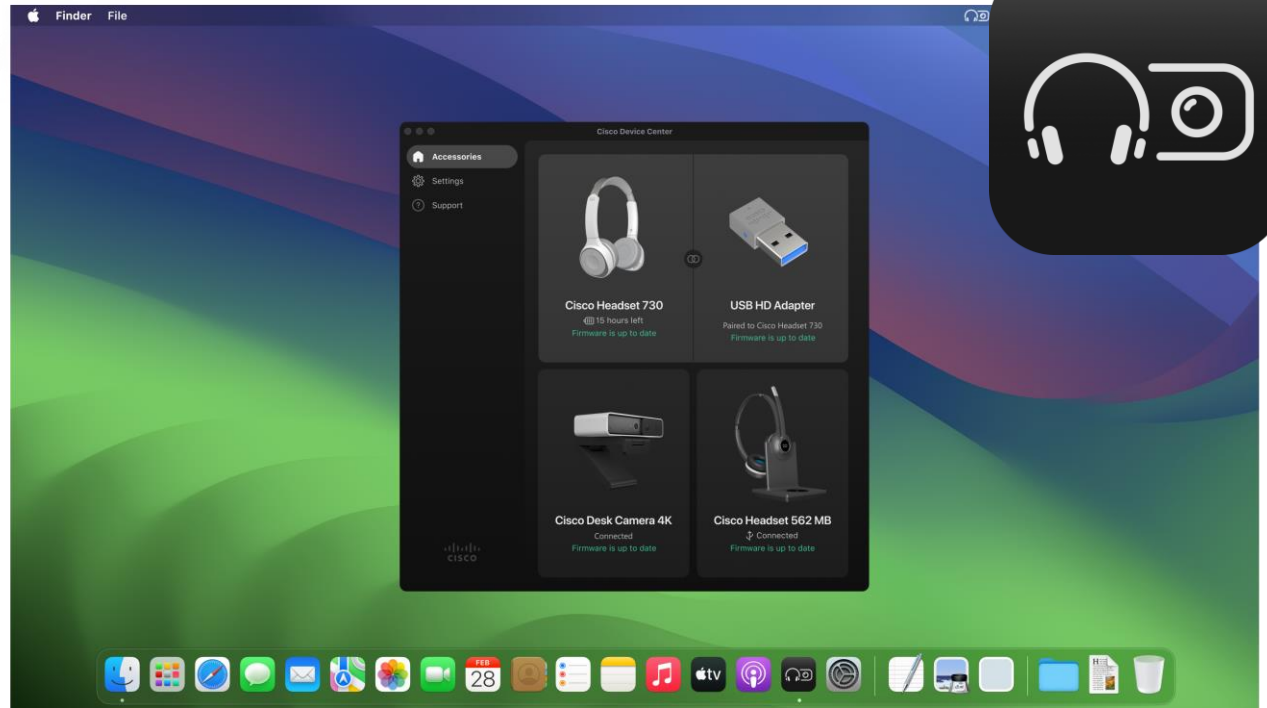
# Cisco Accessory Hub

Desktop application providing end users the ability to configure, customize, and upgrade their Cisco Headset or Desk Camera.

Available on Windows & Mac.

Devices supported:

- ✓ Headset 320 Series
- ✓ Headset 520 Series
- ✓ Headset 530 Series
- ✓ Headset 560 Series
- ✓ Headset 720 Series
- ✓ Headset 730
- ✓ USB HD Adapter
- ✓ Desk Camera 4K
- ✓ Desk Camera 1080p



Download for free via Chrome browser: <https://upgrade.cisco.com/accessories>

**CISCO** Live!

# References

- Getting started with the 9800 Series  
<https://help.webex.com/en-us/article/29odsb/Get-started-with-Cisco-Desk-Phone-9800-Series>
- Headset Compatibility Guide  
<http://cs.co/headset-guide>
- Webex Wireless Phone 840 and 860 Wireless LAN Deployment Guide  
<http://cs.co/webex-wireless-dg>
- Cisco Headset 560 DECT Deployment Guide:  
<http://cs.co/dect>
- Cisco Headset 700 Series Bluetooth Deployment Guide:  
<https://www.cisco.com/c/en/us/products/collateral/collaboration-endpoints/headset-700-series/bluetooth-deployment.html>
- Cisco Phone Services XML documentation:  
[https://www.cisco.com/en/US/docs/voice\\_ip\\_comm/cuipph/all\\_models/xsi/9\\_1\\_1/xsidevguide911.pdf](https://www.cisco.com/en/US/docs/voice_ip_comm/cuipph/all_models/xsi/9_1_1/xsidevguide911.pdf)

# Call to Action

- Understand and evaluate the Desk Phone 9800
- Understand how to customize or lock down the Cisco Wireless Phone
- Know when and how to deploy Cisco 6800 DECT series
- Understand Cisco Headsets and Desk Cameras

# Complete Your Session Evaluations



Complete a minimum of 4 session surveys and the Overall Event Survey to be entered in a drawing to **win 1 of 5 full conference passes** to Cisco Live 2025.

---



**Earn 100 points** per survey completed and compete on the Cisco Live Challenge leaderboard.

---



Level up and earn **exclusive prizes!**

---



Complete your surveys in the **Cisco Live mobile app.**

# Continue your education

- Visit the Cisco Showcase for related demos
- Book your one-on-one Meet the Engineer meeting
- Attend the interactive education with DevNet, Capture the Flag, and Walk-in Labs
- Visit the On-Demand Library for more sessions at [www.CiscoLive.com/on-demand](https://www.CiscoLive.com/on-demand)



The bridge to possible

# Thank you

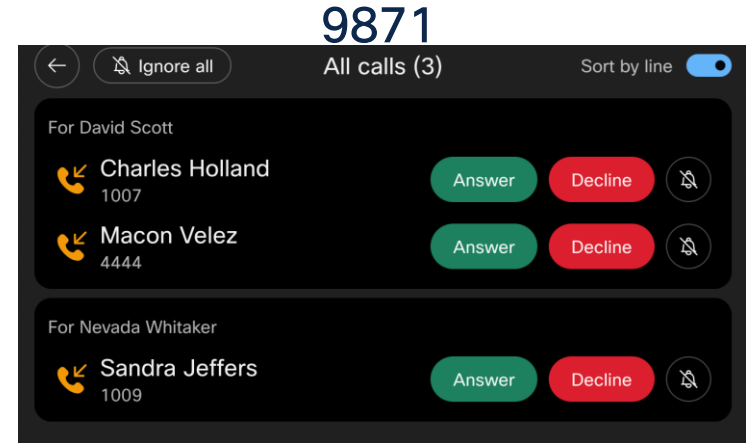
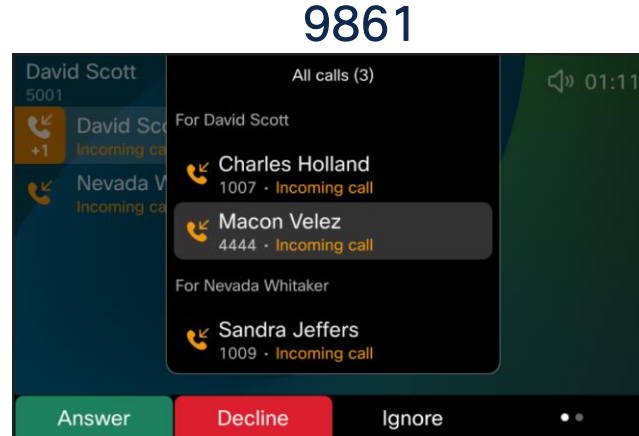
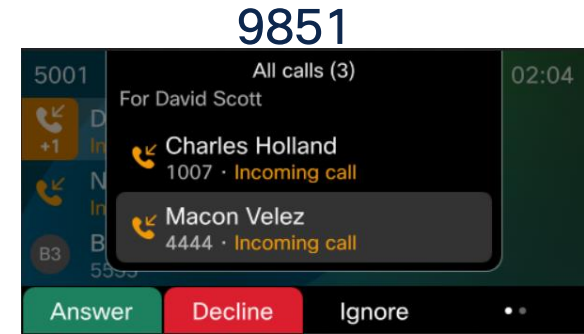
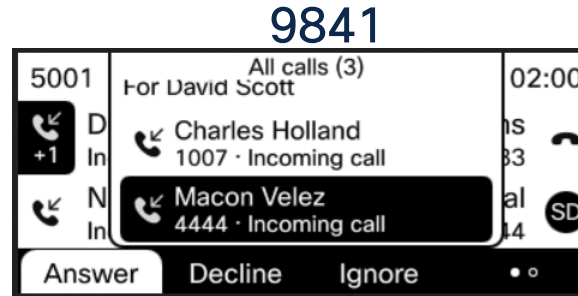
CISCO *Live!*

#CiscoLive

# Appendix

# PhoneOS Multi-Line Enhancement

- PhoneOS simplifies the multi-line experience by sorting calls by line.
- This enhancement simplifies the user experience in a busy or high-volume call environment.
- To enable, toggle “Group On” softkey on 9841/51/61 or “Sort by line” on the 9871.



# Kiosk Mode on 8875 - Directory

- Directory or menu structure
- End user taps an icon to bring up a new menu or image
- Useful to represent a list of items to then click to call



# XML Sample Application - 8800 Series

```
<CiscoIPPhoneIconFileMenu>
  <Title>Emergency Contacts</Title>
  <IconItem>
    <Index>1</Index>
    <URL>Resource:Icon.Headset</URL>
  </IconItem>
  <IconItem>
    <Index>4</Index>
    <URL>Resource:Icon.SecureCall</URL>
  </IconItem>
  <IconItem>
    <Index>6</Index>
    <URL>Resource:Icon.Speaker</URL>
  </IconItem>
  <IconItem>
    <Index>9</Index>
    <URL>http://10.0.0.10/red.png</URL>
  </IconItem>
</CiscoIPPhoneIconFileMenu>
```

FILE CONTINUED

```
<MenuItem>
  <Name>Emergency Call</Name>
  <IconIndex>9</IconIndex>
  <URL>Dial:911</URL>
</MenuItem>
<MenuItem>
  <Name>Building security</Name>
  <IconIndex>4</IconIndex>
  <URL>Dial:1000</URL>
</MenuItem>
<MenuItem>
  <Name>First Aid</Name>
  <IconIndex>6</IconIndex>
  <URL>Dial:1000</URL>
</MenuItem>
<MenuItem>
  <Name>Help Desk</Name>
  <IconIndex>1</IconIndex>
  <URL>Dial:1000</URL>
</MenuItem>
</CiscoIPPhoneIconFileMenu>
```

## IP Phone Service

### IP Phone Services Configuration

Save Delete Update Subscriptions Add New

#### Status

Status: Ready

#### Service Information

Service Name\* CiscoIPPhoneIconFileMenu  
 Service Description  
 Service URL\* http://10.0.0.10/CiscoIPPhoneIconFileMenu.xml  
 Secure-Service URL  
 Service Category\* XML Service  
 Service Type\* Standard IP Phone Service  
 Service Vendor  
 Service Version  
 Enable

#### Subscribed Services

 [CiscoIPPhoneIconFileMenu](#)

#### Service URL Settings on base Phone

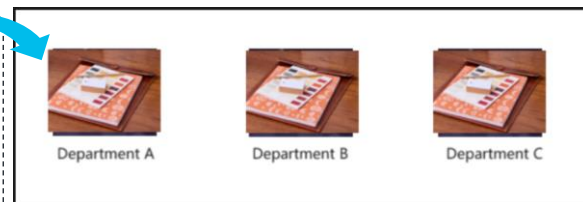
Button Service	Label
1	CiscoIPPhoneIconFileMenu Emergency Menu

# Kiosk Mode –Directory – XML file sample

## CUCM IDLE URL PARAMETER

Idle	<a href="http://10.0.0.10/Kiosk1.xml">http://10.0.0.10/Kiosk1.xml</a>
Idle Timer (seconds)	1

## Custom PNG



- **URL** pointing to a PNG file that end users will click on
- **Menu Item** for an individual click to call entry
- **Dial String** to call remote party
- **Touch Area** are coordinates in X and Y axis

```

<CiscolPPhoneGraphicFileMenu>
  <Title>Welcome</Title>
  <LocationX>- 1</LocationX>
  <LocationY>- 1</LocationY>
  <URL>http://10.0.0.10/department.png</URL>
  <MenuItem>
    <Name>Employee1</Name>
    <URL>http://10.0.0.10/department1.xml</URL>
    <TouchArea X1="40" Y1="35" X2="150" Y2="130"/>
  </MenuItem>
  <MenuItem>
    <Name>Employee2</Name>
    <URL>Dial:1081</URL>
    <TouchArea X1="243" Y1="35" X2="350" Y2="130"/>
  </MenuItem>
  <MenuItem>
    <Name>Employee3</Name>
    <URL>Dial:1084</URL>
    <TouchArea X1="435" Y1="35" X2="540" Y2="130"/>
  </MenuItem>
</CiscolPPhoneGraphicFileMenu>
  
```

# Kiosk Mode on 8875 - Language Portal

- Language portal
- End user taps a language to bring up a new menu in the localized language or to dial an interpreter
- Useful for organizations that require translation services



# Kiosk Mode -Language- XML file sample

## CUCM IDLE URL PARAMETER

Idle	<input type="text" value="http://10.0.0.10/Kiosk1.xml"/>
Idle Timer (seconds)	<input type="text" value="1"/>

## Custom PNG

Nederlands (NL)	中文 (ZH)	日本語 (JA)
Português (PT)	Français (FR)	Italiano (IT)
English (EN)	Deutsch (DE)	Español (ES)

- **URL** pointing to a PNG file that end users will click on
- **Menu Item** for an individual click to call entry
- **Dial String** to call remote party
- **Touch Area** are coordinates in X and Y axis

```

<CiscoIPPhoneGraphicFileMenu>
  <Title>Welcome</Title>
  <LocationX>- 1</LocationX>
  <LocationY>- 1</LocationY>
  <URL>http://10.0.0.10/language.png</URL>
  <MenuItem>
    <Name>Language1</Name>
    <URL>Dial:1080</URL>
    <TouchArea X1="38" Y1="10" X2="172" Y2="54"/>
  </MenuItem>
  <MenuItem>
    <Name>Language2</Name>
    <URL>http://10.0.0.10/Portugues.xml</URL>
    <TouchArea X1="38" Y1="64" X2="172" Y2="125"/>
  </MenuItem>
  <MenuItem>
    <Name>Language3</Name>
    <URL>http://10.0.0.10/English.xml</URL>
    <TouchArea X1="38" Y1="132" X2="172" Y2="184"/>
  </MenuItem>

```

# Kiosk Mode – Language (continued)

- **URL** pointing to a PNG file that end users will click on
- **Menu Item** for an individual click to call entry
- **Dial String** to call remote party
- **Touch Area** are coordinates in X and Y axis

```

<MenuItem>
  <Name>Language4</Name>
  <URL>Dial:1084</URL>
  <TouchArea X1="228" Y1="10" X2="586" Y2="54"/>
</MenuItem>
<MenuItem>
  <Name>Language5</Name>
  <URL>Dial:1085</URL>
  <TouchArea X1="228" Y1="64" X2="586" Y2="125"/>
</MenuItem>
<MenuItem>
  <Name>Language6</Name>
  <URL>Dial:1086</URL>
  <TouchArea X1="228" Y1="132" X2="586" Y2="184"/>
</MenuItem>
<MenuItem>
  <Name>Language7</Name>
  <URL>Dial:1087</URL>
  <TouchArea X1="425" Y1="10" X2="586" Y2="54"/>
</MenuItem>
<MenuItem>
  <Name>Language8</Name>
  <URL>Dial:1088</URL>
  <TouchArea X1="425" Y1="64" X2="586" Y2="125"/>
</MenuItem>
<MenuItem>
  <Name>Language9</Name>
  <URL>Dial:1089</URL>
  <TouchArea X1="425" Y1="132" X2="586" Y2="184"/>
</MenuItem>
</CiscoIPPhoneGraphicFileMenu>

```

## Custom PNG

Nederlands (NL)	中文 (ZH)	日本語 (JA)
Português (PT)	Français (FR)	Italiano (IT)
English (EN)	Deutsch (DE)	Español (ES)

# 6800 DECT on CUCM Architecture

- The 6800 DECT is a self-contained DECT system. However, it requires a Third-Party SIP registrar for VoIP registration.
- CUCM has no visibility into DECT operations. You **must** configure DBS for TCP (not UDP).
- The DBS converts DECT to IPv4.
- DBS-210 MAC address should NOT be used. Each 6825 is a separate 3<sup>rd</sup> party SIP endpoint (advanced) on CUCM. Why? There are issues when you have DBS-210 MAC address on CUCM:
  - If primary line (handset #1) powers off, the second, third, fourth, etc, handsets go unregistered.
  - Max of 8 lines support on 3<sup>rd</sup> party advanced.
- MAC address in CUCM is arbitrary and can be any value other than DBS.

