

# Cisco Virtual Update

Cisco Cius

30/3-2011

Per Toft,  
[ptoft@cisco.com](mailto:ptoft@cisco.com)

Michael Lundberg,  
[mlundber@cisco.com](mailto:mlundber@cisco.com)



# Agenda

- Cius Introduction
- Hardware overview
- Android and User Experience
- Widgets and Applications
- Unified Communications
- Video
- WebEx
- Security
- Accessories
- Positioning

# Cius introduction



# Mobility - Anywhere, Anytime Access

- 802.11a/b/g/n Wi-Fi for On/Off Campus Mobility
- Video, voice, collaboration, 3<sup>rd</sup> party applications
- Seamless transition wired to wireless
- Cisco Anyconnect VPN connections
- Battery –
  - 8 hours (normal usage)
  - Replaceable
- 3G/4G data services



# High-definition Video with Cisco Cius

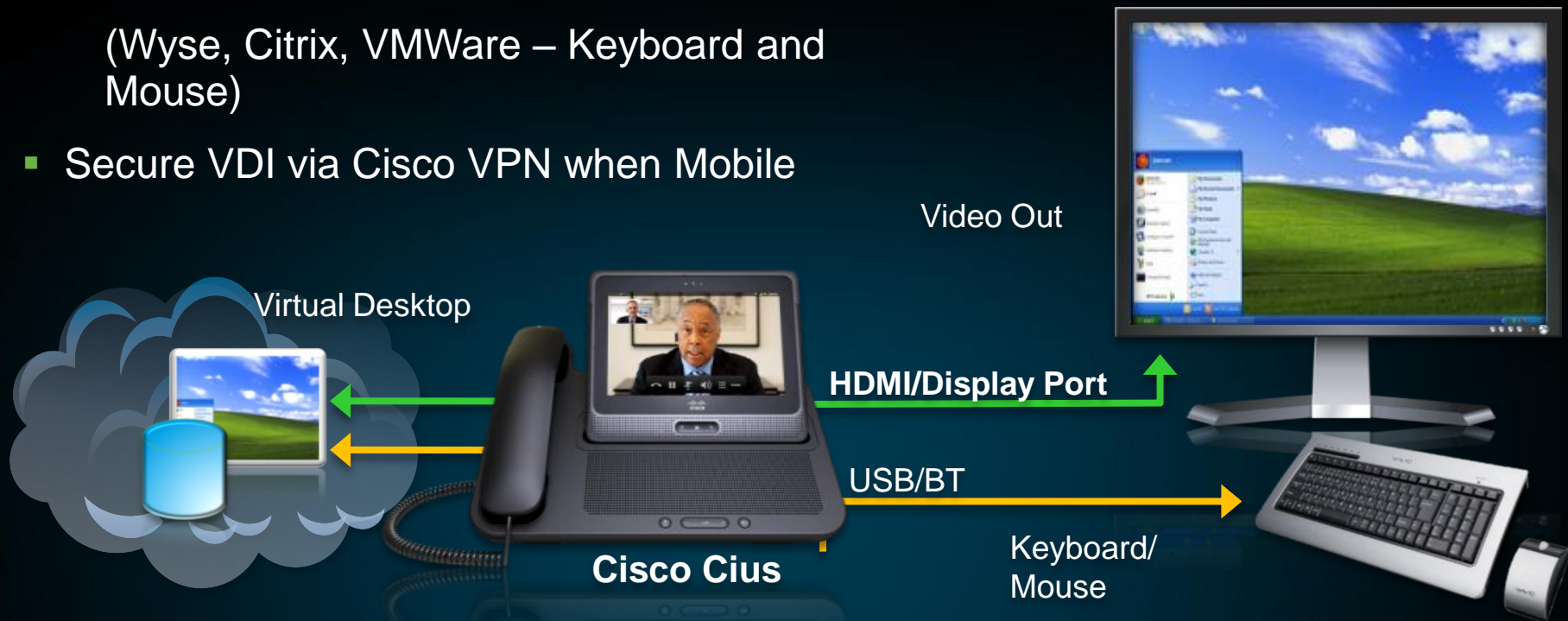
- 720p HD video 30 fps
- Video Interop (TelePresence, Tandberg, Cisco Video Endpoints)
  - Native Point to Point (CTS 1.7(3))
  - Multi Point (MXE, TP Server)
- HD Video Record (Front Camera)
- HD Media Playback
- Camera Swap (Front to Rear)
- Still and Video Capture (Rear Camera)
- Dual Displays (Mirror)





# Computing & Virtualization- Reduced TCO & Improved Productivity

- Device Computing Capabilities
  - Doc viewer, doc editor (QuickOffice)
  - Keyboard, Mouse, Monitor
- Multiple VDI Vendors - Remote PC Access and cloud computing
  - (Wyse, Citrix, VMWare – Keyboard and Mouse)
- Secure VDI via Cisco VPN when Mobile



# Bringing Together Cisco's Collaboration Suite

- Cisco Unified Communications
  - UC Manager 7.1.5 and 8.5+
- Cisco TelePresence and Endpoint Interop
  - Native PTP (Native MP – Future)
- Cisco WebEx (Integrated)
  - Meeting Center, Calendaring, Mail
- IM and Presence
  - CUP, XMPP (WebEx Cloud - Future)
- Cisco Quad
  - Virtual Teaming
- Cisco Marketplace
  - Application Management



# Hardware overview

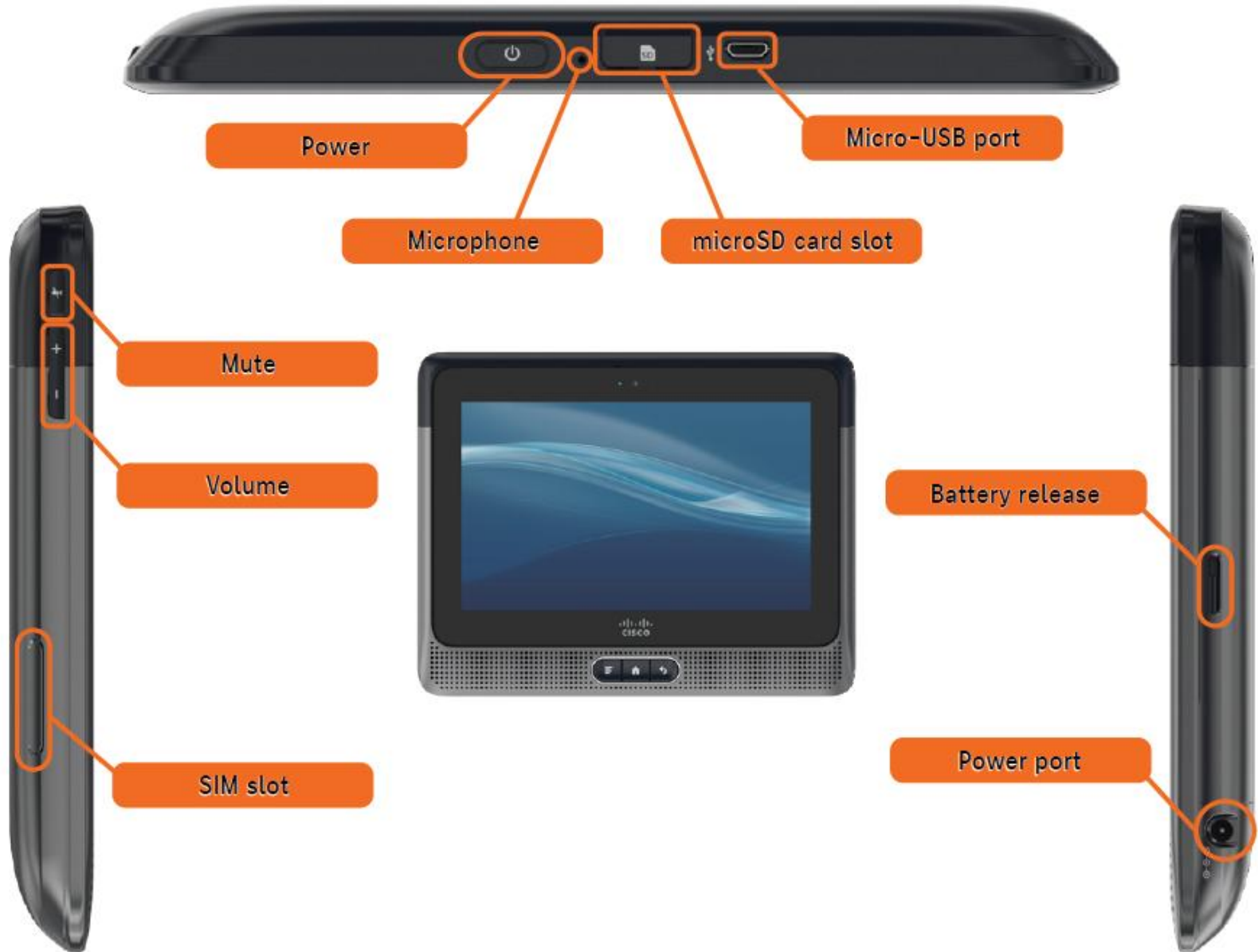




## Front



Top



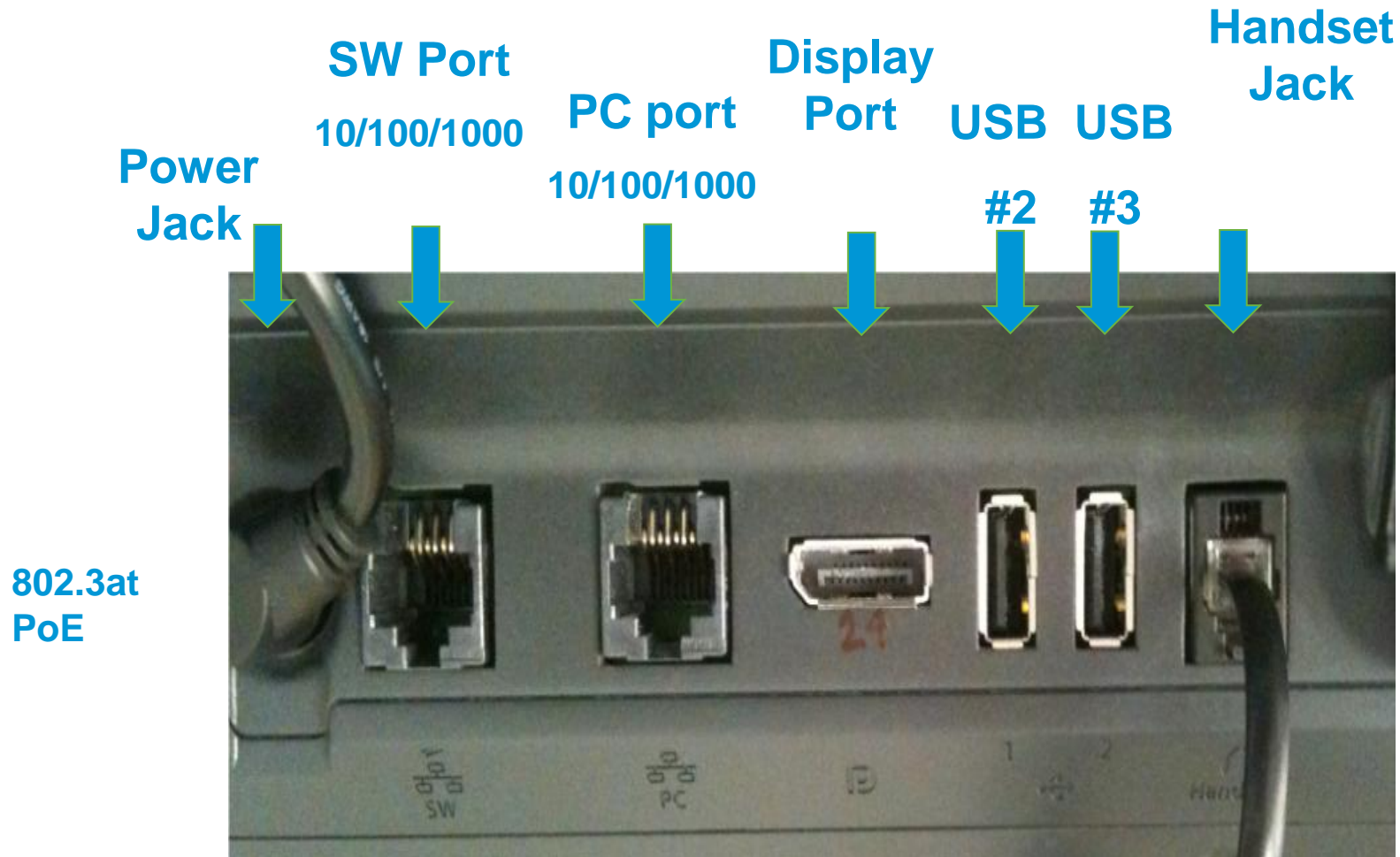
Back



# Cius in Media Station



# Bottom of Media Station

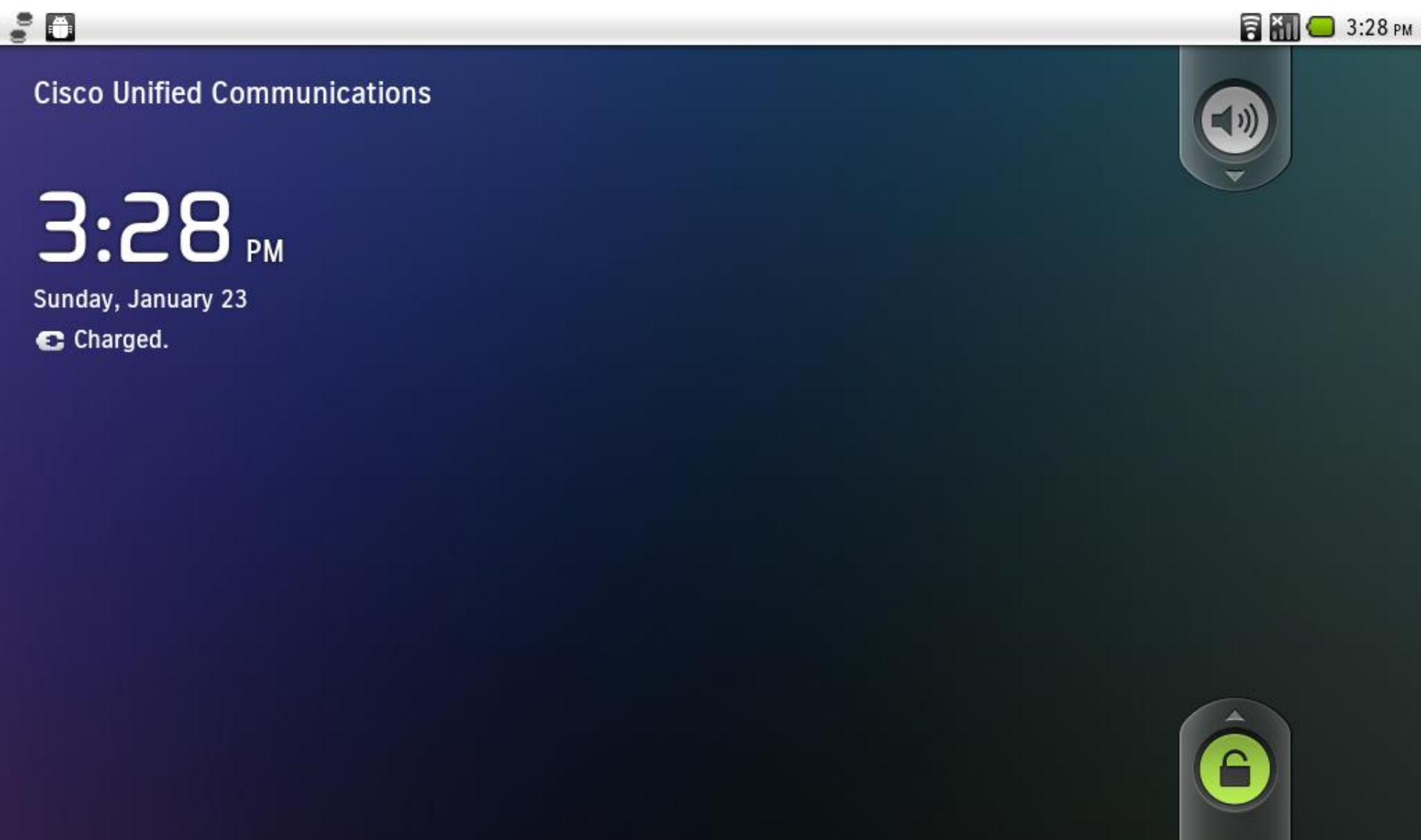


# Android Introduction





## Locked Home Screen



# Cisco Home Screen



See all your apps.  
Touch the Launcher icon.



1 of 6



Apps

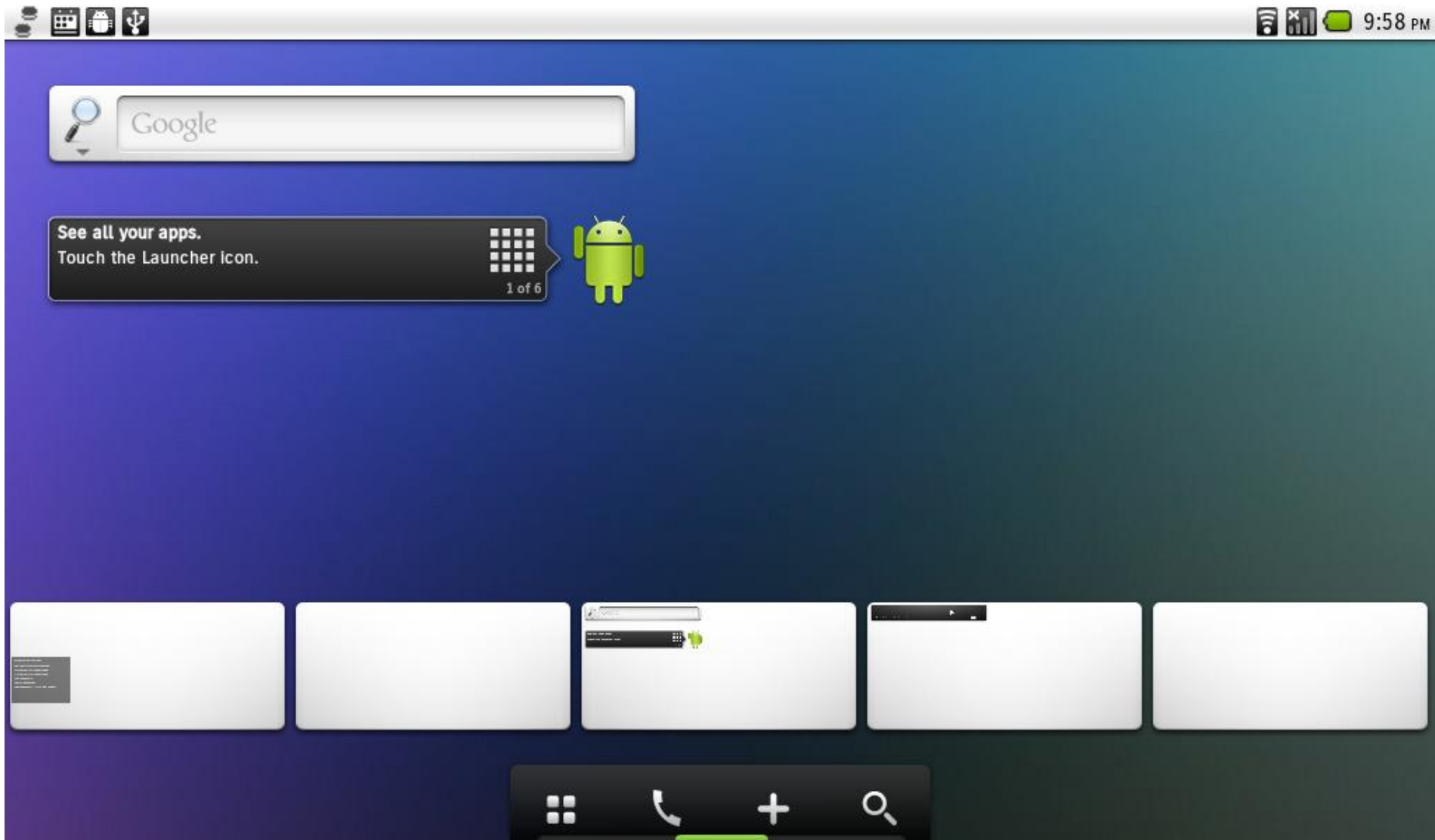
Phone

Add

Search

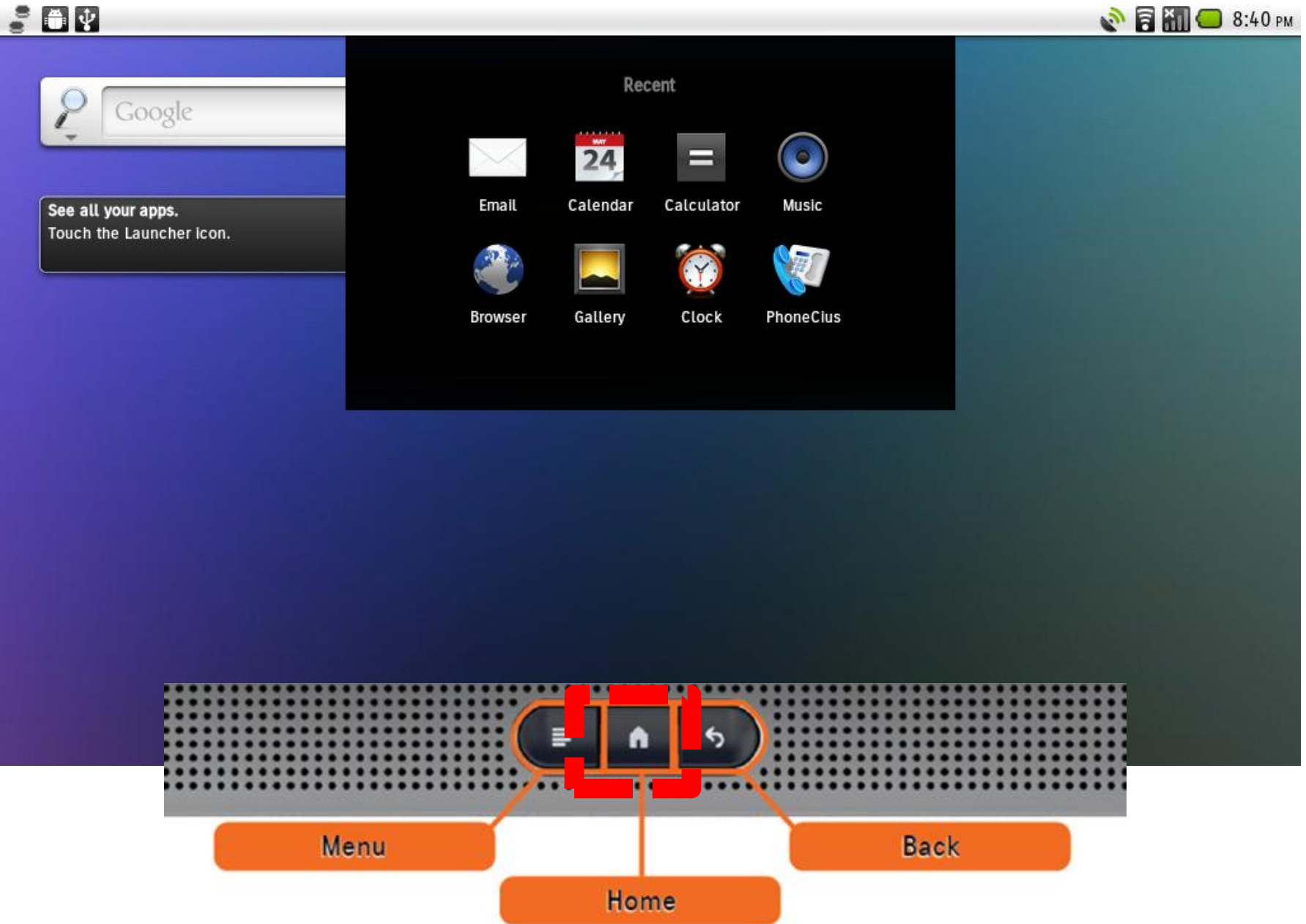


## Cisco Cius has 5 Home Screens

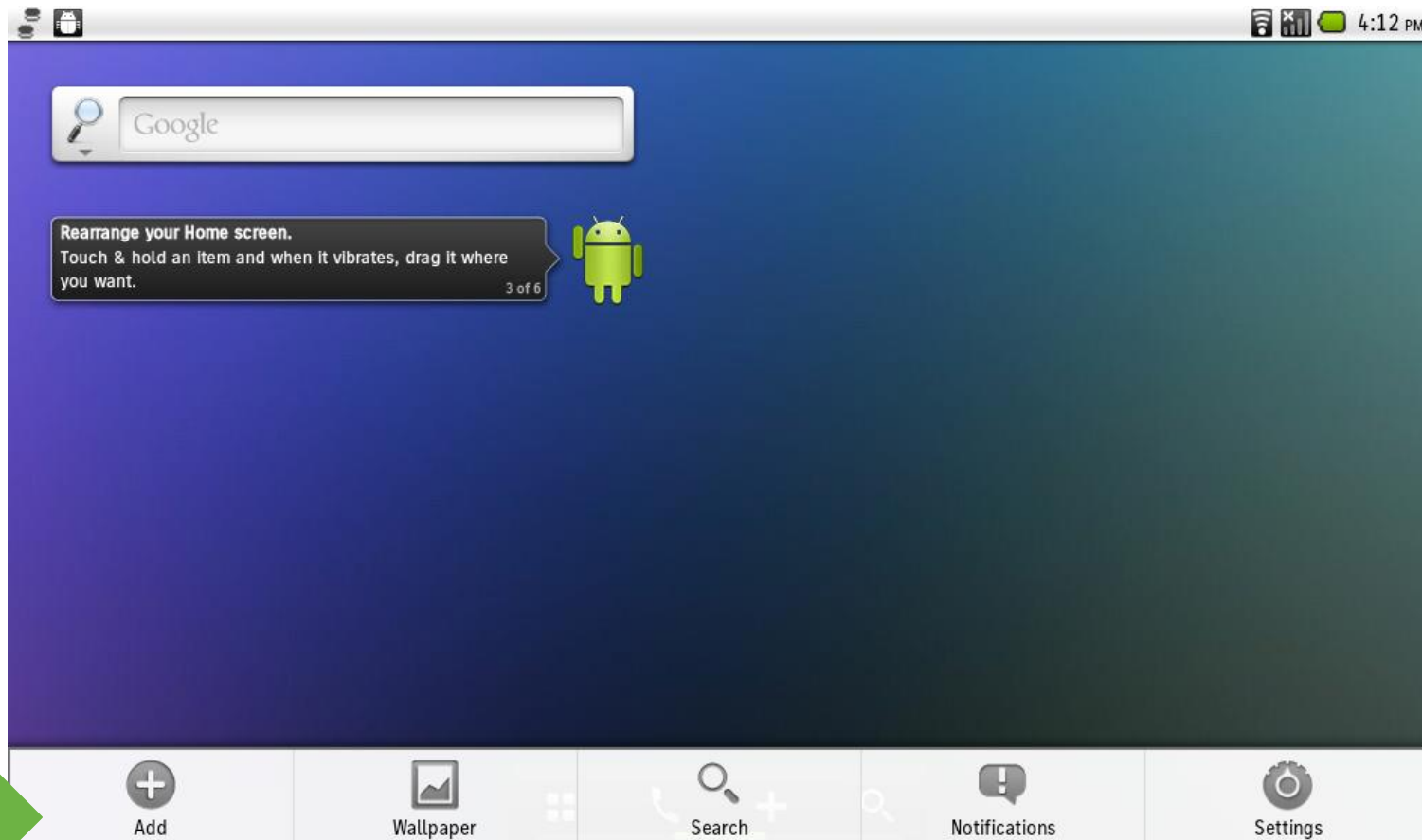


Long Press the Apps key to show the Home Screen overview

## Multitasking – Long Press the Home Button for “Alt Tab” functionality

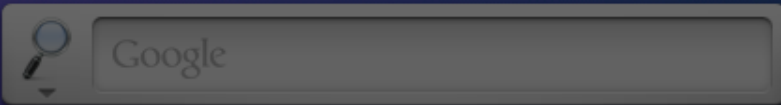


## Press Menu to Additional Options That Are Context Specific

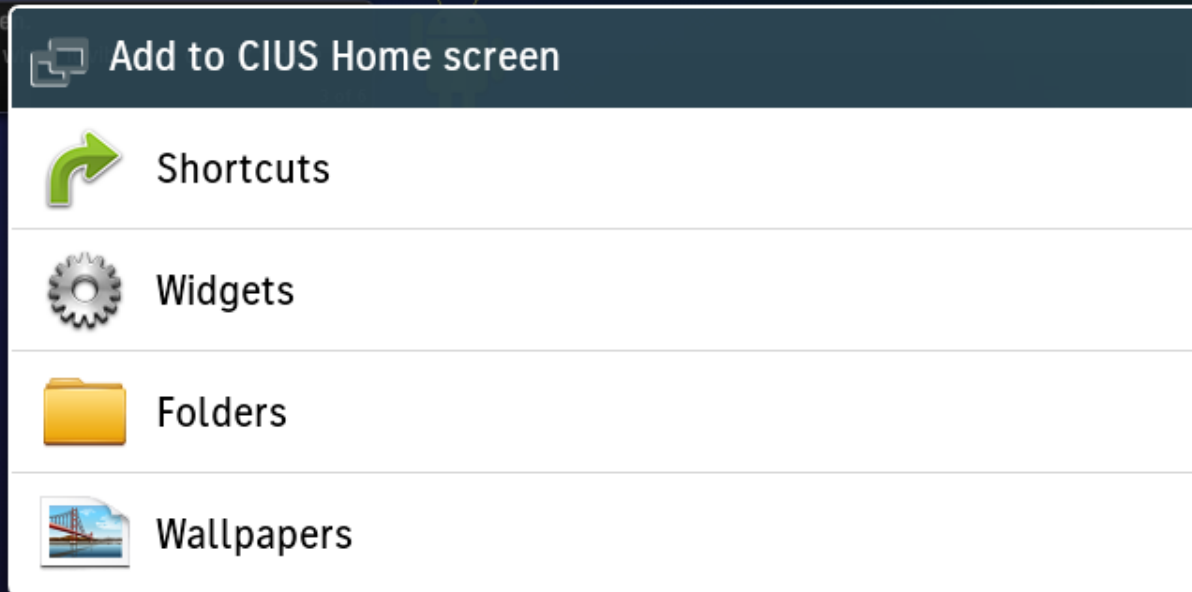


## Three ways to “Add” to home screen

4:12 PM




Rearrange your Home screen  
Touch & hold an item and  
you want.











(Long press  
the desktop)

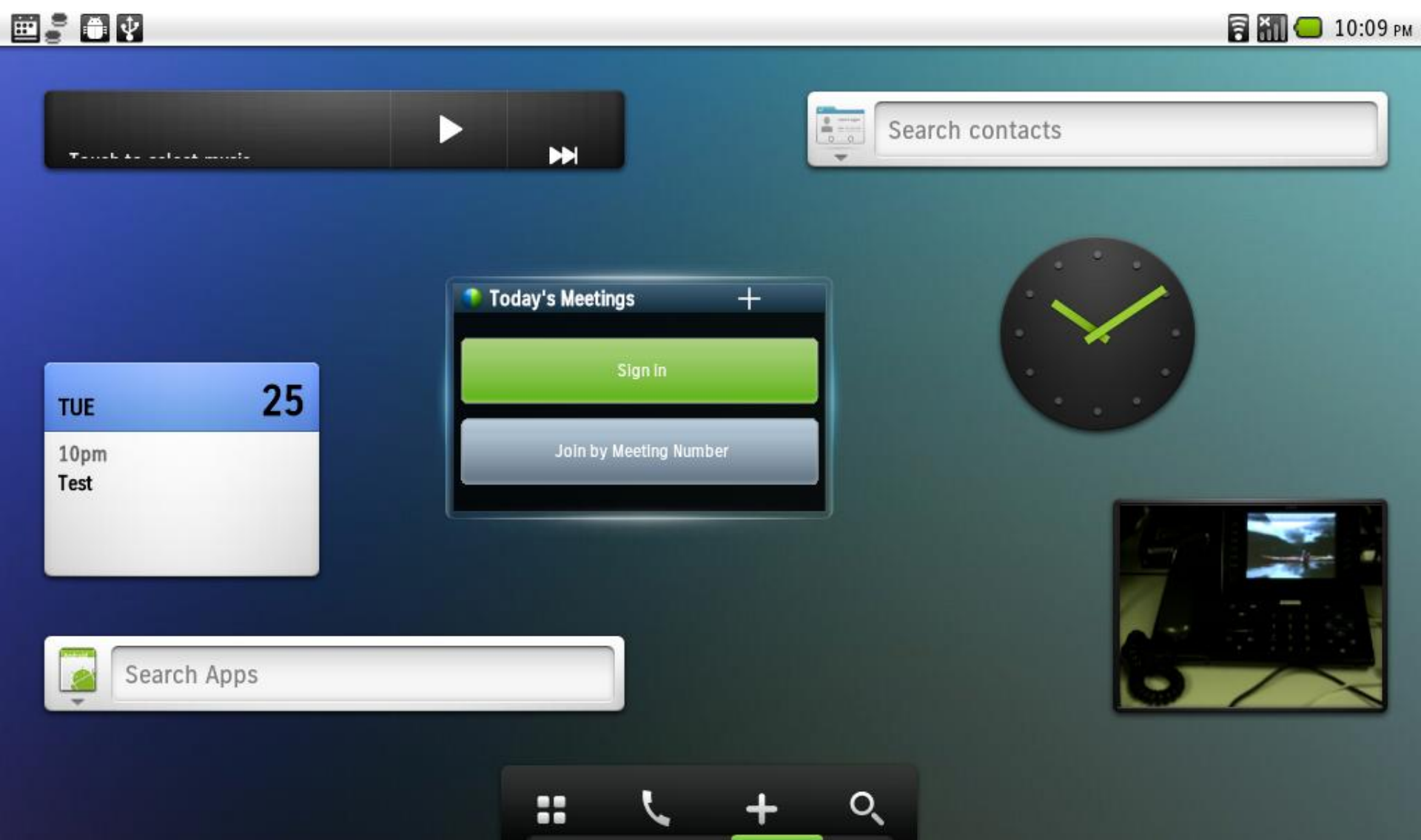


## Add a Widget

 Choose widget

-  Analog clock
-  Calendar
-  Cisco Quad
-  Cisco WebEx Meetings
-  ConMan Widget
-  Facebook
-  Home screen tips
-  Music

# Widgets, Widgets, Widgets!



## Pull Down Bar Shows Status

January 23, 2011

3:57 PM



Rearrange your Home screen.

Touch & hold an item and when it vibrates you want.

Cisco Unified Communications

Clear

Ongoing



**Telephone service is unavailable**

Connect to a network to enable telephone service.

3:56 PM



**USB debugging connected**

Select to disable USB debugging.

Notifications



**AnyConnect VPN**

Disconnected

3:56 PM

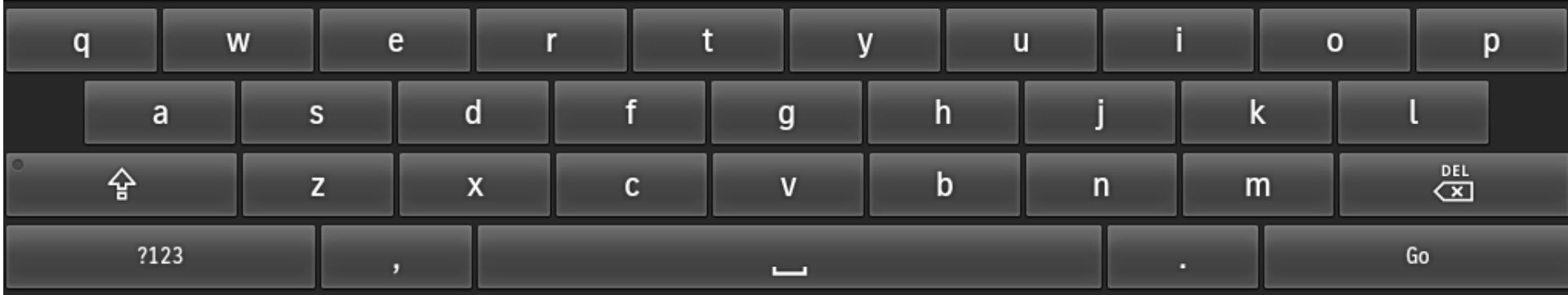


# Search

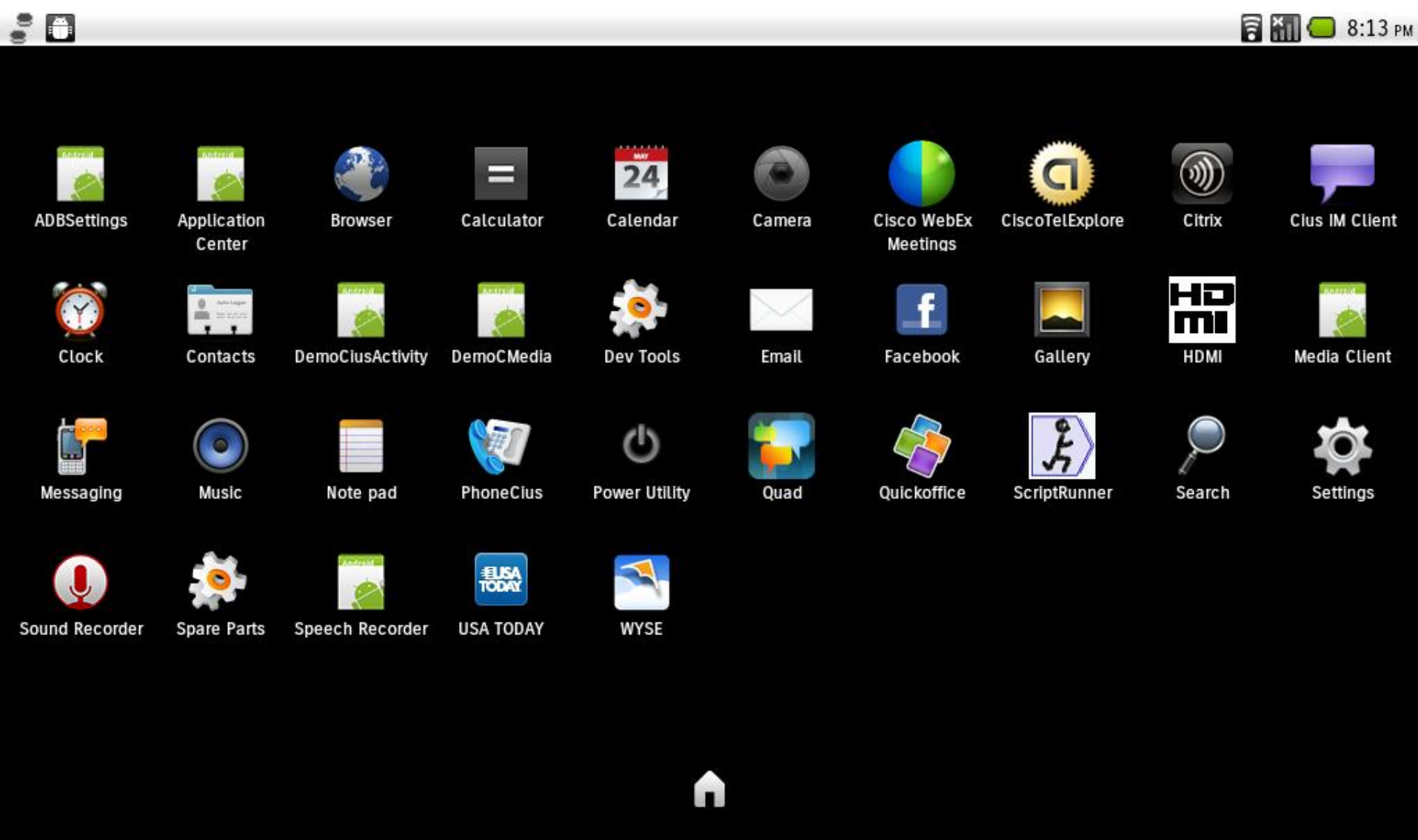


scrum

- scrum
- scrum methodology
- scrum alliance
- scrumworks
- scrum master certification
- scrumptious



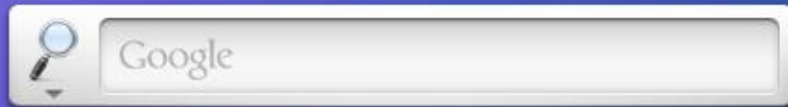
# Applications – You get here by pressing ->



# Hold Down an App to Have it Appear on the Home Page



3:31 PM



**Rearrange your Home screen.**

Touch & hold an item and when it vibrates, drag it where you want.

3 of 6



CiscoQuad





# Calendar



Calendar interface showing a timeline view for Friday, Jan 14, 2011, and Wednesday, January 5, 2011.

**Friday, Jan 14, 2011**

- 9 am: Calendar Scrum quick meet, Conf. Room 3d. [Start](#) Updated: Calendar Scrum quick meet, Conf. Room 3d. [Join](#)
- 11: Stopby to talk to Denis, Boca office
- 12 pm: Gym time!, Golds gym. [Start](#) Updated: Gym time!, Golds gym. [Join](#)

**Wednesday, January 5, 2011**

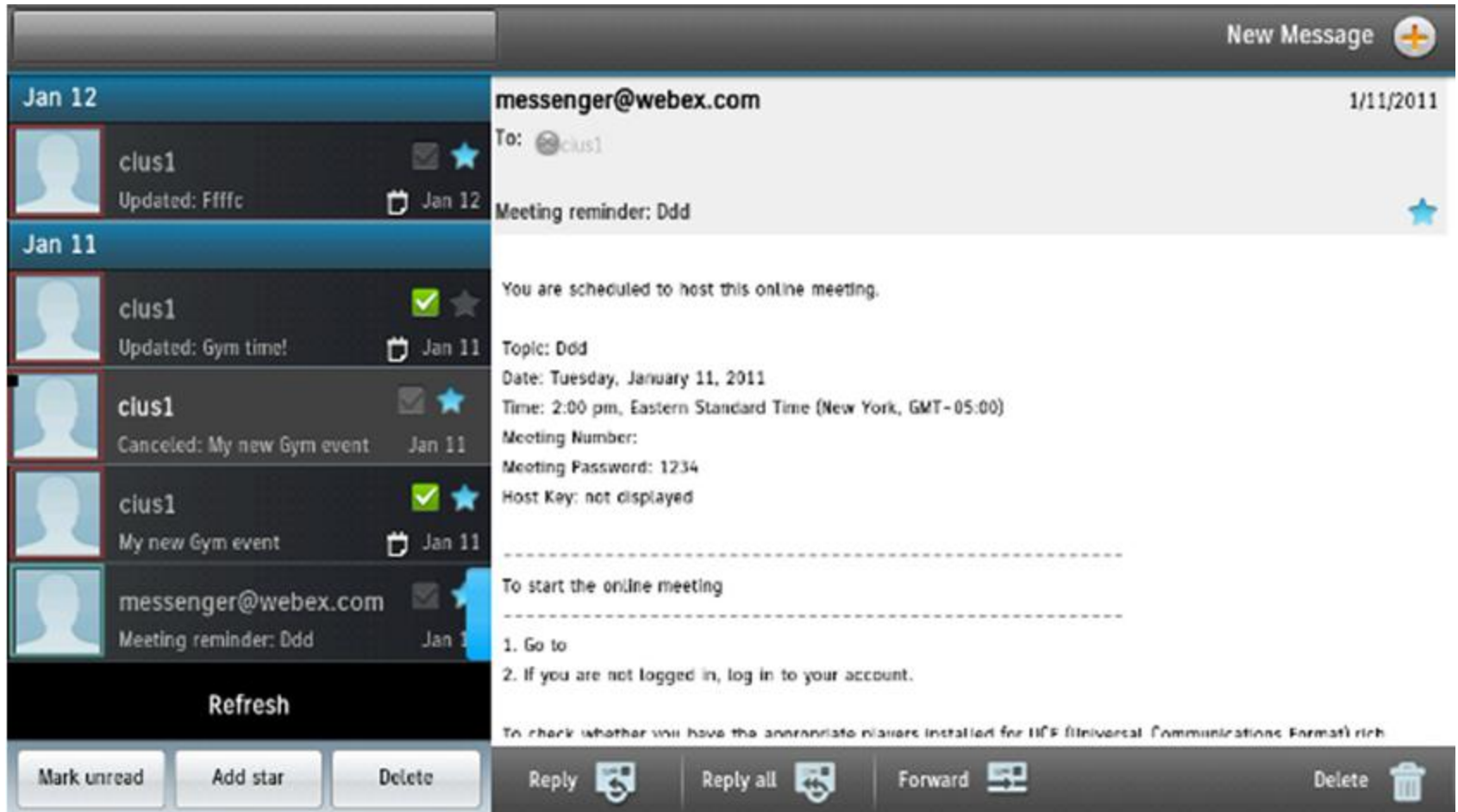
- Canceled: Test  
7:00pm - 8:00pm  
Test
- Canceled: Test  
7:00pm - 8:00pm  
Tsst

**Thursday, January 6, 2011**

- Newest  
1:00am - 2:00am  
Cubes
- Test webex sched from clus5 to clus1 at 11pm  
5:00am - 6:00am  
Here
- Test De6014  
3:00pm - 4:00pm  
Boca
- Another test to verify DE6014

Synchronization with Exchange.  
Join WebEx meeting directly from meeting invite.

# Email



Clients supports Exchange, IMAP, POP3  
A client for Lotus Notes is available at Android Marketplace

# Voice & Video User Experience





8:30 PM

Janet Smith  
In Office

5

Edward Molina  
In Office

7

Do Not Disturb

Phone

- Name  
9876543210 2:56 PM
- Name  
9876543210 2:56 PM
- Name  
9876543210 2:56 PM
- Name  
9876543210 2:56 PM
- Name  
9876543210 2:56 PM
- Name  
9876543210 2:56 PM

Enter Name or Number

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
* +	0	#

Call







## Lines & Features

 Janet Smith  
In Office  













 Edward Molina  
In Office  




**Do Not Disturb**

Phone    

8:30 PM

	 Name 9876543210 2:56 PM
	 Name 9876543210 2:56 PM
	 Name 9876543210 2:56 PM
	 Name 9876543210 2:56 PM
	 Name 9876543210 2:56 PM
	 Name 9876543210 2:56 PM

Enter Name or Number 

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
* +	0	#

Call





Main Content

8:30 PM

Janet Smith  
In Office

5

Edward Molina  
In Office

7

Do Not Disturb

Phone

Navigation icons: Refresh, Contacts, Star

	<div>Name</div> <div>9876543210</div>	2:56 PM
	<div>Name</div> <div>9876543210</div>	2:56 PM
	<div>Name</div> <div>9876543210</div>	2:56 PM
	<div>Name</div> <div>9876543210</div>	2:56 PM
	<div>Name</div> <div>9876543210</div>	2:56 PM
	<div>Name</div> <div>9876543210</div>	2:56 PM

Enter Name or Number

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
* +	0	#

Call







Apps

8:30 PM

Janet Smith  
In Office

5

Edward Molina  
In Office

7

Do Not Disturb

Phone

Voicemail

Contacts

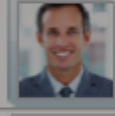
Star



Name  
9876543210 2:56 PM



Name  
9876543210 2:56 PM



Name  
9876543210 2:56 PM



Name  
9876543210 2:56 PM



Name  
9876543210 2:56 PM



Name  
9876543210 2:56 PM

Enter Name or Number

1

2 ABC

3 DEF

4 GHI

5 JKL

6 MNO

7 PQRS

8 TUV

9 WXYZ

\* +


0

#


Call




Phone, Idle




Janet Smith  
In Office




5




Edward Molina  
In Office




7




Do Not Disturb




Phone




Recents




Contacts




Favorites







Name


9876543210

2:56 PM







Name


9876543210

2:56 PM







Name


9876543210

2:56 PM







Name


9876543210

2:56 PM







Name


9876543210

2:56 PM







Name

9876543210

2:56 PM



1

2 ABC

3 DEF

4 GHI

5 JKL

6 MNO

7 PQRS

8 TUV

9 WXYZ

\* +

0

#

Call

Recents List

Keypad

CISCO



3G 8:30 PM

**Janet Smith**  
In Office



**Edward Molina**  
In Office




**Do Not Disturb**



Contacts



**Frank Johnson**

 Mobile



**Call Mobile**

4085967789



**Call Office**

5104452341



**Email 1**

frank.johnson@corporation.com



**IM**

johnson345





8:30 PM

**Janet Smith**  
In Office

5

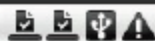
**Edward Molina**  
In Office

7

**Do Not Disturb**

Favorites			
	<b>James Baron</b> 76543		
	<b>Kristina Chung</b> 76542		
	<b>Frank Johnson</b> 76541		
	<b>Rob McNamara</b> 76540		
	<b>Sandy Raynor</b> 76539		
	<b>Surya Chavan</b> 75313		





8:30 PM

Janet Smith  
In Office

5





Edward Molina  
In Office

7

Do Not Disturb

Phone

Navigation icons: back, forward, search, star

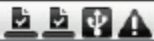
-  James Baron  
76543 2:56 PM
-  Kristina Chung  
76542 2:55 PM
-  Frank Johnson  
76541 2:54 PM
-  Rob McNamara  
76540 2:53 PM

7654

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
* +	0	#

Call





8:30 PM

Janet Smith  
In Office





5

Edward Molina  
In Office

7

Do Not Disturb

Phone

-  James Baron  
76543 2:56 PM
-  Kristina Chung  
76542 2:55 PM
-  Frank Johnson  
76541 2:54 PM
-  Rob McNamara  
76540 2:53 PM

7654

1	2 ABC	3 DEF
4 GHI	5 JKL	6 MNO
7 PQRS	8 TUV	9 WXYZ
* +	0	#

Call







Frank Johnson  
76541

1:13





  
CISCO





Incoming Call:



Sandy Raynor  
76539

Answer

Divert

Ignore



# CUCM Configuration




# Step 1 – Install COP

1. Apply cop file, restart CUCM and TFTP

CUCM Version	Cius	MD5 Hash Value
8.5	cmterm-cius-ccm85-devpack-7.cop.sgn	fded5b10b78c54a6f468898690d7de38
8.6	cmterm-cius-ccm86-devpack-7.cop.sgn	fe78b2c26f09df74bf54fcc9861256e8
7.1.5	cmterm-cius-ccm715-devpack-7.cop.sgn	319fae79881ca5fe6af712bdeb3fa807


## Step 2 – Add Cius Device

**Add a New Phone**

 Next

---


**Status**


 Status: Ready


---

**Select the type of phone you would like to create**

Phone Type\* -- Not Selected --

 \*- indicate

 \*\* - Create

 Next


- Cisco 7970
- Cisco 7971
- Cisco 7975
- Cisco 7985
- Cisco 8961
- Cisco 9951
- Cisco 9971
- Cisco ATA 186
- Cisco ATA 187
- Cisco Cius**
- Cisco Dual Mode for iPhone
- Cisco E20
- Cisco IP Communicator




# Step 3 – Configure Cius Device Page

1. The preferred method to register Cius is auto-registration. If you know the correct Cius MAC address, you can enter the Cius MAC address here

**Phone Configuration**


 Save

**Status**  
 Status: Ready

**Phone Type**  
**Product Type:** Cisco Cius  
**Device Protocol:** SIP

**Device Information**  
☒ Device is trusted  
MAC Address\*  
Description  
Device Pool\*  
Common Device Configuration  
Phone Button Template\*  
Common Phone Profile\*

-- Not Selected --  
< None >  
-- Not Selected --  
Standard Common Phone Profile



# Step 4 – Camera Setup

1. Enable “Cisco Camera” and “Video Capabilities” and check the “Override Common Settings” check box
2. By default these are disabled. They can be enabled globally on the “System->Enterprise Phone Configuration” or “Device->Feature Control Policy.”

**Product Specific Configuration Layout**

?

Param

☐ Disable Speakerphone

☐ Disable USB

☐ Allow Applications from Unknown Sources

☐ Allow Applications from Android Market

☒ Enable VPN Client

☒ Allow User Defined VPN Profiles

☐ Always Require VPN

PC Port \*


Cisco Camera\*

Video Capabilities\*

Enabled

Disabled

Disabled



# Step 5 – Cius Security Settings

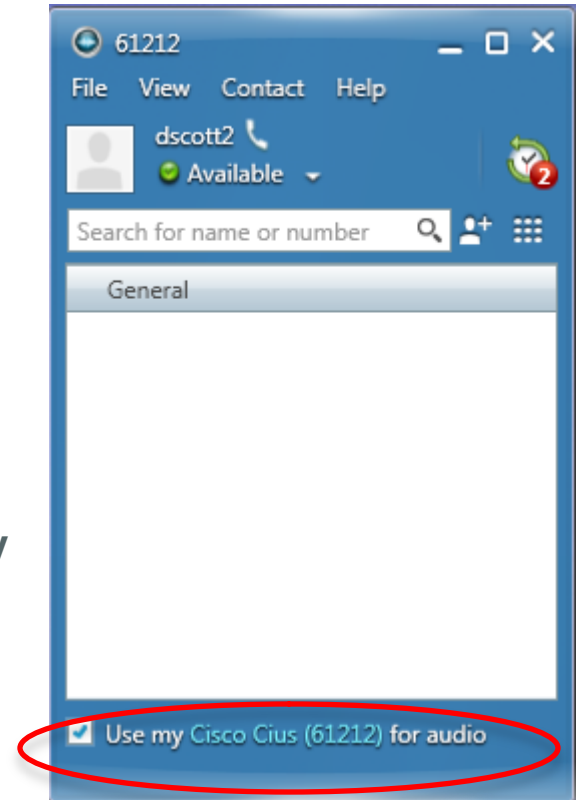
1. Caution: The “Wipe Device” security setting is intended to wipe the device.

Switch Port Remote Configuration*	Disabled
PC Port Remote Configuration*	Disabled
Power Negotiation*	Enabled
Restrict Data Rates*	Disabled
Company Photo Directory	
USB Debugging*	Disabled
PIN Complexity*	Standard
Encrypt User Data*	Disabled
Require Lock*	Enabled
Lock Device*	Disabled
Wipe Device*	Disabled

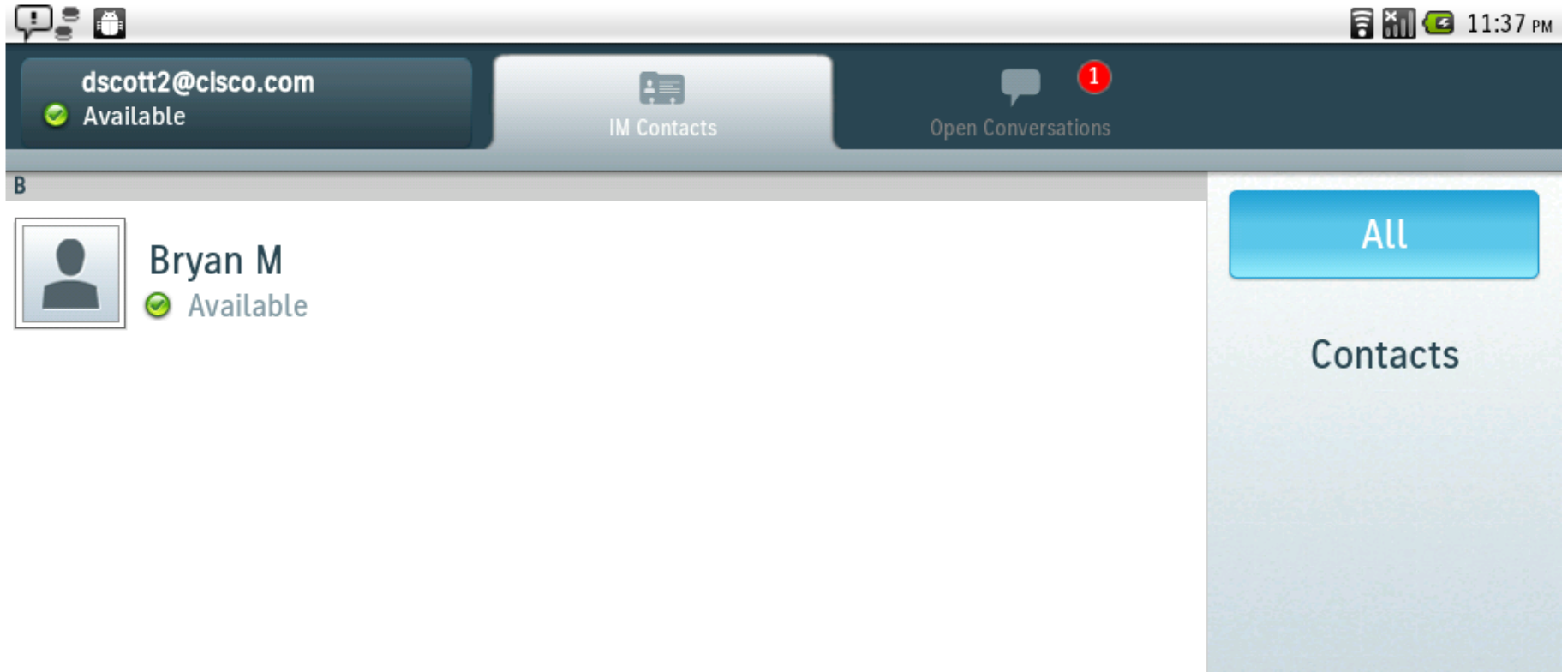


# Step 6 – CUP (Optional)

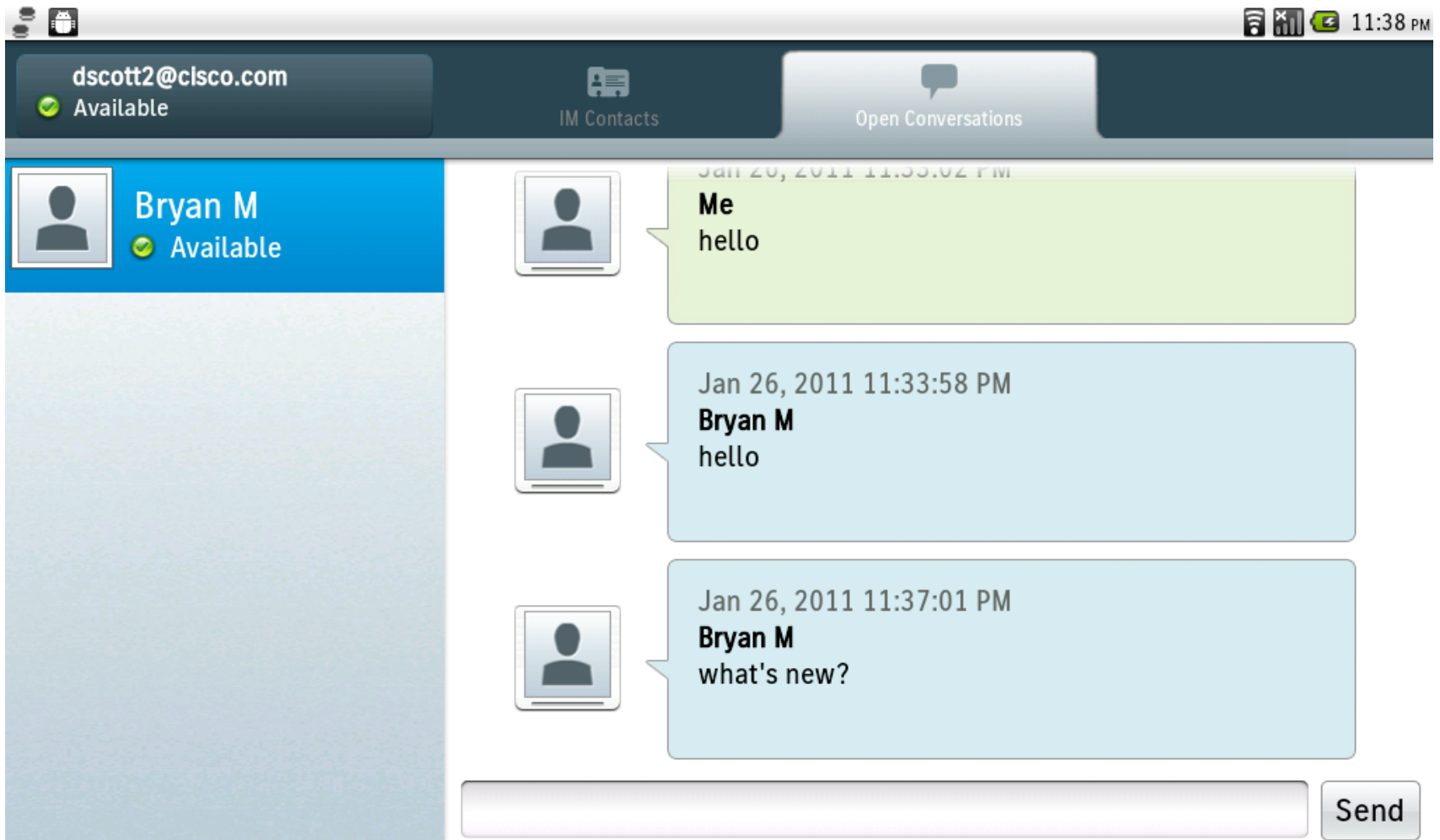
- **Consistent CUCM/CUP Configuration**  
Same as with any Cisco IP Phone
- **Inbound/Outbound Calling**  
Use CUPC to control Cius for audio/video
- **Changing IM Status on Cius changes it on CUPC**  
Make Inbound/Outbound Cius Calling with CUPC only



# Cius IM Client Overview

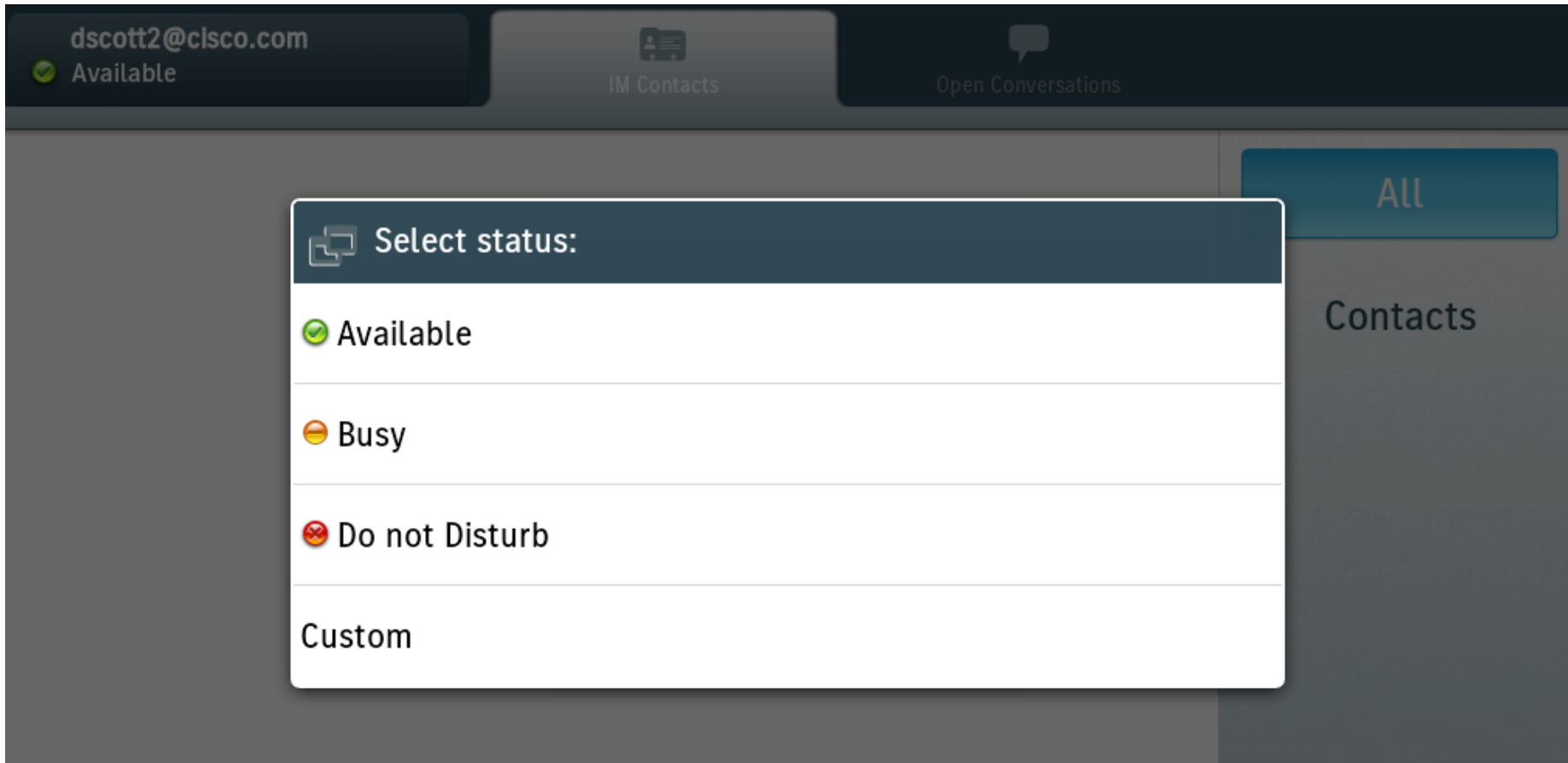


# Cius IM Client - Overview





# Cius IM Client – Select Status

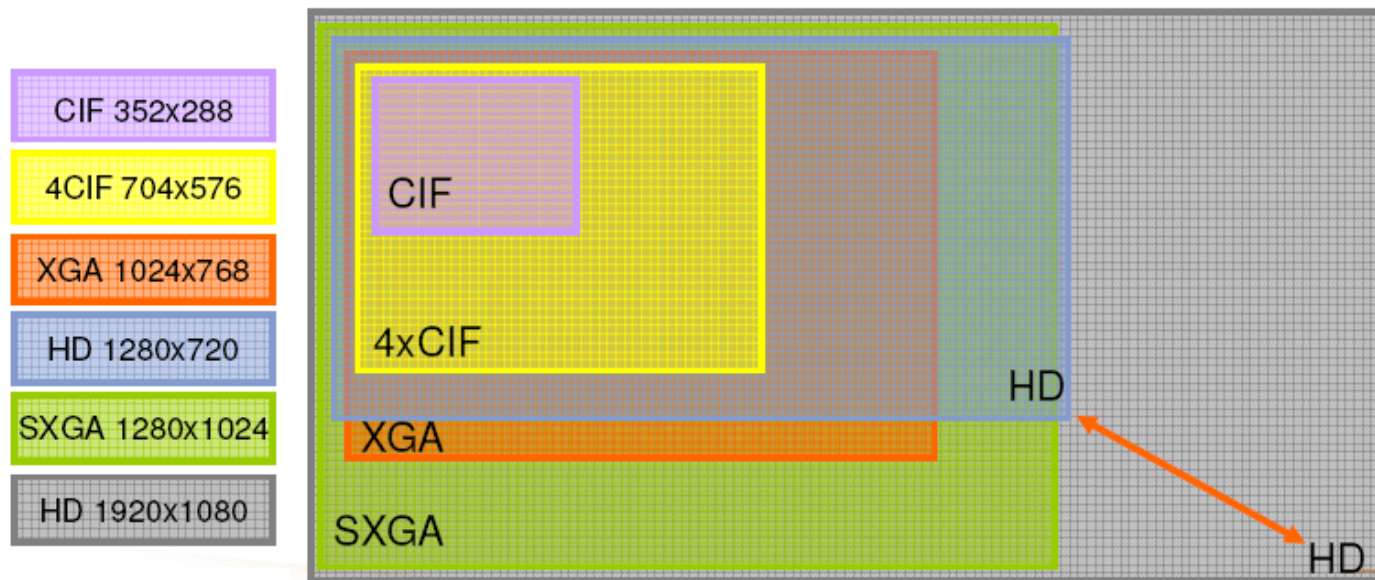


# Video



# Region Bandwidth Configuration

- CIF support (352 x 288)
- VGA (640 x 480, ratio 4:3)
- HD (1280x720, ratio 16:9)



1. By default CUCM has 384Kbps in the default Region. You need to increase this to ensure VGA (640x480) or High Definition (1024x720) resolution instead of CIF (352x288) resolution
2. The max setting is 32256Kbps

# Three solutions for multipoint conferencing



## a Telepresence Server

Powerful immersive multipoint solution with continuous presence, ad hoc flexibility, individual transcoding and native interoperability with standards-based endpoints and TIP

- Multi and single screen immersive
- Active presence
- 720p30 quality
- Individual transcoding for best quality to every endpoint
- Optimized for TANDBERG and standards-based endpoints
- Interoperability with competitor immersive systems
- Standards-based interoperability
- TIP support
- Expandable up to 144 screens, up to 48 screens per conference



## b CTMS + MXE 5600

High quality, ultra low latency, media switching for large immersive conferences with user-friendly features such as one button to push and conference controls

- Multi and single screen immersive
- Voice switching
- 1080p30 quality for CTS
- Ultra low latency non-transcoded call for CTS participants
- Optimized for CTS products
- Standards-based interoperability available through MXE or CUVC
- TIP support
- Up to 48 screens in a conference



## c MCUs

The leading multipoint solution for single-screen endpoints with a variety of conference features, custom layouts for different meeting scenarios, and native interoperability with standards-based endpoints

- Single screen multipoint
- Ad-hoc MeetMe conferencing
- Continuous presence
- Up to 1080p30 quality and support for multiple SD resolutions
- Individual transcoding for best quality to every endpoint
- Optimized for TANDBERG and standards-based endpoints
- Multivendor interoperability with all standards-based endpoints
- Expandable up to 180 HD ports, 720 SD ports, up to 60 HD/80 SD ports per conference

**IMMERSIVE TELEPRESENCE MULTIPOINT**

# WebEx



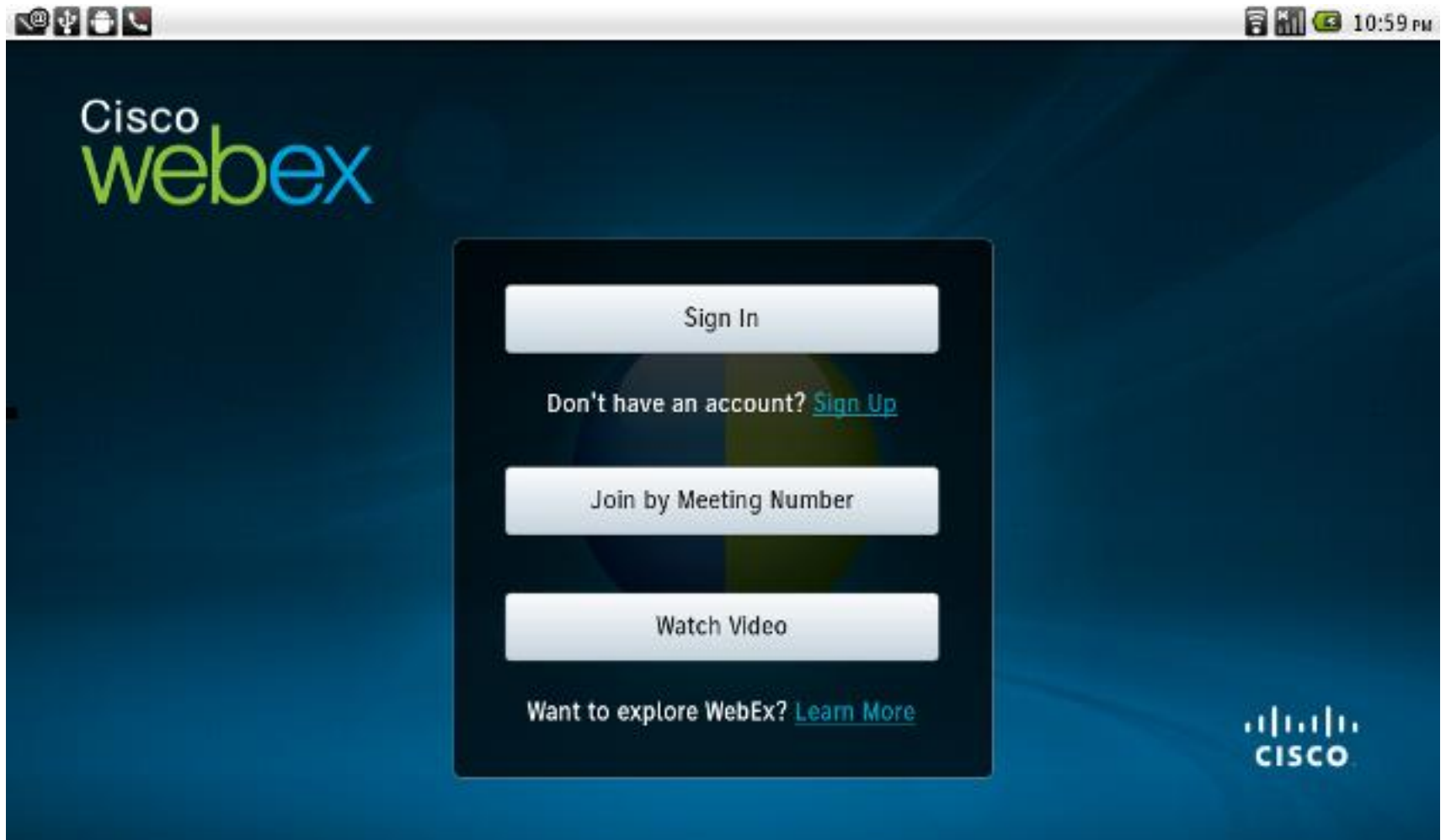
# WebEx Meeting Center

- App for Cius
- Start directly or via Contacts, IM session, and Calendar
- Must have Internet access (WiFi or ethernet)





# Cisco WebEx – Meeting Sign In



# WebEx – Join Now

The screenshot shows the Cisco WebEx mobile application interface. At the top, the Cisco WebEx logo is on the left, and system status icons (Wi-Fi, cellular signal, battery) and the time 7:19 AM are on the right. The main content area is a dark blue screen with a central white box containing the following elements:

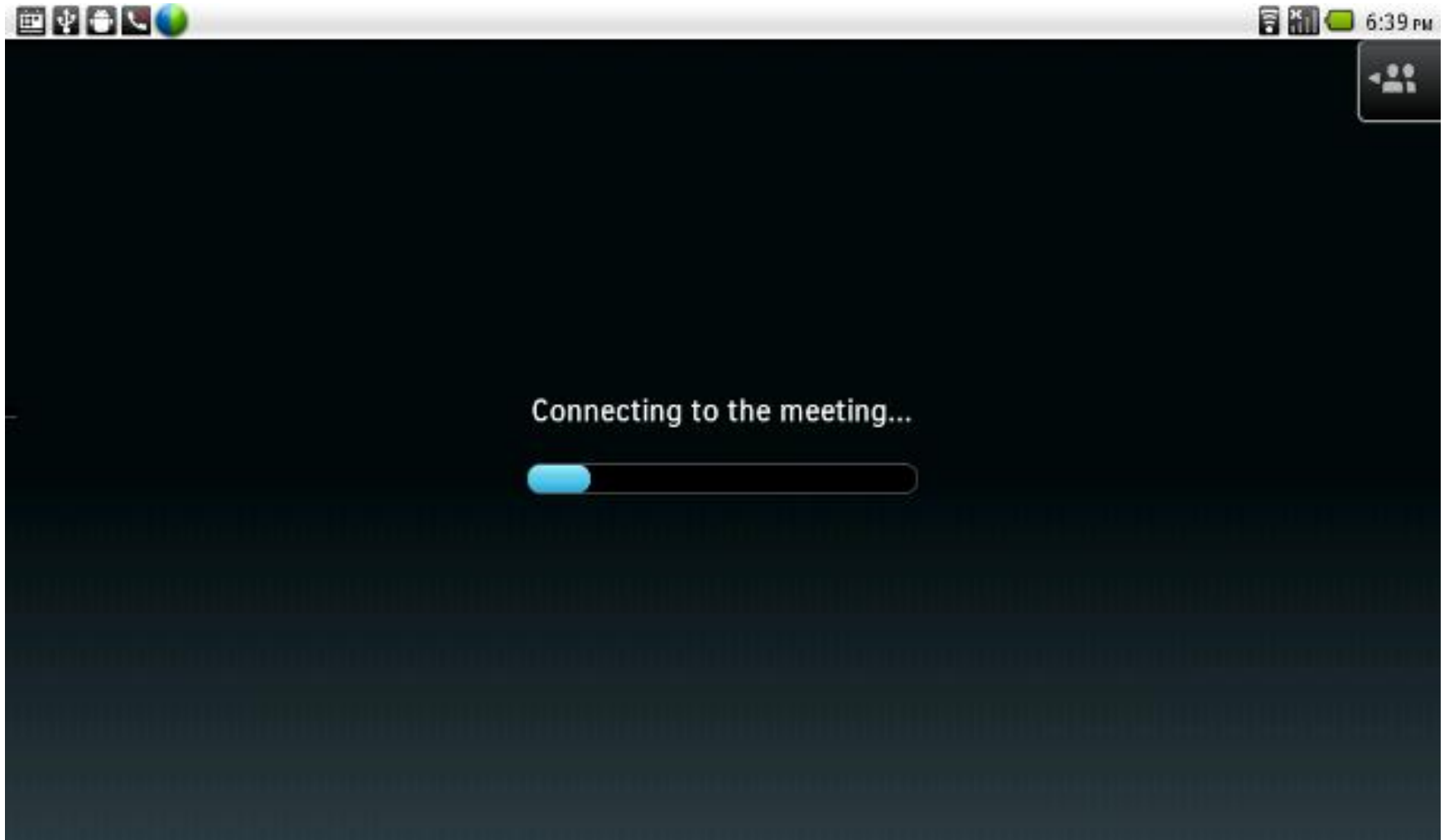
- A numeric input field containing the number 203 207 812.
- A text input field containing "Brad on Cius".
- A "Join Now" button.
- A link "I want to explore WebEx."
- A "Join Live Online Demo" button.

Below the main content area, there is a light gray bar with the text "Cius". At the bottom of the screen is a virtual keyboard with three rows of keys:

- Row 1: q, w, e, r, t, y, u, i, o, p
- Row 2: a, s, d, f, g, h, j, k, l
- Row 3: A key with an upward arrow and "B", z, x, c, v, b, n, m, a key with "DEL" and a right arrow, and a "Done" key.

Below the keyboard is a row of five colored bars in shades of green and blue.

# WebEx – Connecting to the meeting...



# WebEx – Call Me at This Number

The image shows a screenshot of a mobile application interface, likely a WebEx client. The top status bar displays various icons (calendar, USB, printer, phone, globe) and the time 6:42 PM. The main screen has a dark background with a large text message: "Content sharing from the Clus is not supported. To make someone else the presenter, drag and drop the ball to the person's name." On the right side, there is a "Participants" panel with a plus icon. Overlaid on this is a "Audio" dialog box. The dialog box has a title "Audio" and a subtitle "Clus1 Openpeak (host, me)". It contains the text "I want to receive a call from the meeting at this number:". Below this text is a phone number input field with a "+1" country code selector and a dropdown arrow, followed by the number "1-555-555-5111". At the bottom of the dialog is a button labeled "Call Me at This Number". At the bottom of the screen is a numeric keypad with buttons for digits 1-9, \*, #, 0, and a "Done" button. The keypad also includes letters for each digit (e.g., ABC for 2, DEF for 3, etc.).

Content sharing from the Clus is not supported. To make someone else the presenter, drag and drop the ball to the person's name.

**Participants**

**Audio**  
Clus1 Openpeak  
(host, me)

I want to receive a call from the meeting at this number:

+1 ▼ 1-555-555-5111

**Call Me at This Number**

1	2 ABC	3 DEF	-
4 GHI	5 JKL	6 MNO	.
7 PQRS	8 TUV	9 WXYZ	DEL X
* # (	0 +		Done

# Security



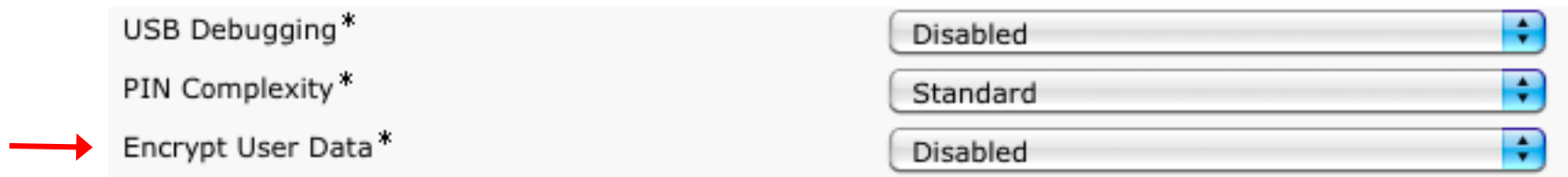
# Cius Security Overview

From an admin perspective, very similar to 89xx/99xx:

- Image/File/Config Authentication and Encryption
- Media Security (sRTP)
- CTL/ITL X.509v3 Certificates
- Security by Default (SBD)
- Trust Verification Service (TVS)
- CAPF
- Signaling Security (SSL/TLS)
- SSH
- 802.1x and 802.1x PC port
- Secure Boot
- Secure Storage

# Encrypted File System

- New facility to protect data at rest on the device
- Encrypts user data on a per user basis (users can't see each other's data)
- Support is in the kernel so it is transparent to users
- New “Encrypt User Data” config parameter under Product Specific Configuration Layout





# Overview AnyConnect VPN Client on the CIUS

- AnyConnect 2.4
- Vpn Profile Configurations
  - Admin Configured gateways (via cucm)
    - Configuration - Inside enterprise, pre-provision phone with VPN configuration and certificate trustlists. 'Alternate TFTP' setting is configured to UCM or TFTP server IP address. Automatically displayed in vpn settings list
    - Admin settings are applied if gateway configuration matches auth method configured on cucm (user id and password, certificate only, and certificate + password)
      - e.g., user name/password is configured ASA tunnel group policy must also be configured for user name/password auth). In addition it's assumed that each profile refers to a single tunnel group.
    - In case of mismatch, user will still be able to connect to VPN, however password persistence, host id check, autoNetDetect will be disabled.
  - User Created VPN profiles
    - Created via VPN settings gui
    - User acceptance of server certs
    - Password persistence, host id check, and autoNetDetect features are ignored
- Auto-Network Detect works in conjunction with the VPN Setting
- Feedback on the phone UI indicates the state of the VPN connection. VPN tunnel is being established, has failed to connect or is connected to one of the provisioned VPN concentrators

# Accessories



# Accessories


- HD media station
  - 3 USB ports
  - 3.5-mm headset jack
  - 10/100/1000-Gbps switch ports for wired connections and Power over Ethernet (PoE)
  - Additional speaker for wideband hands-free communications
  - DisplayPort™ to connect to a larger display for an immersive video experience and for a virtualized desktop experience
  - Two handset options: standard and slimline
- Charging dock
  - Elegant charging dock to recharge the replaceable battery
- Carrying case
  - Provides LCD protection while transporting the Cisco Cius™ business tablet



# USB ports on the dock

- 3 standard USB ports total ( 2 in back, 1 on right side).
- Allowed USB accessories at FCS (up to 16 can be connected):
  - USB serial cable (for debug console)
  - USB mouse (Tested Logitech MK320, MK520, most others work.)
  - USB keyboard
  - USB memory stick
  - USB powered hub (To attach more than one accessory per port.)
- In future releases, more accessories (such as USB headset) might be added.
- The micro USB port on top of tablet is used only for adb access OR sync to PC (can not attach mouse, other accessories there).

# Bluetooth Highlights

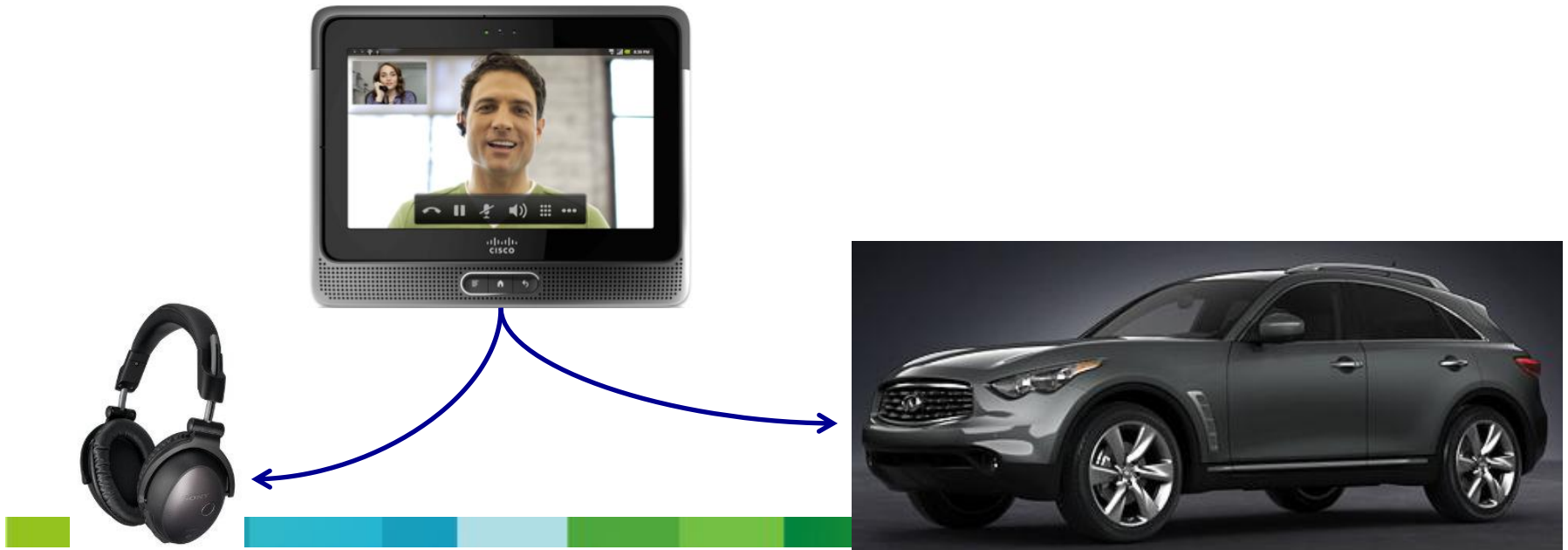
- Bluetooth  3.0
- Support for Hands-Free (HFP) and (A2DP) Profiles
- Coexistence (802.11b/g/n + Bluetooth)
- Recommend to deploy 802.11a/n (5 GHz) when using Bluetooth to avoid Coexistence limitations
- Range can be up to 30 feet, but suggested to stay within 10 feet

# Hands-Free (HFP) Profile

- Bluetooth Hands-Free Profile (HFP) support offers the following call functions and features.
  - Ring
  - Answer a call
  - End a call
  - Volume Control
  - Last Number Redial
  - Call Waiting
  - Divert / Reject
  - 3 way calling (Hold & Accept and Release & Accept)
  - Speed Dialing
- For more information, refer to the documentation from the Bluetooth headset manufacturer.

# Advanced Audio Distribution (A2DP) Profile

- Bluetooth Advanced Audio Distribution (A2DP) Profile support allows for the transfer of a uni-directional high quality stereo audio stream to a Bluetooth enabled stereo headset, car audio system, etc.





# Bluetooth Headsets

Bluetooth headsets are available from the following vendors

**Aliph®** [www.jawbone.com](http://www.jawbone.com)

Jawbone Icon for Cisco

Jawbone Icon

**Plantronics®** [www.plantronics.com](http://www.plantronics.com)

Discovery 655, 925, 975

Explorer 360, 390, 395

Voyager 510, 520, 855, Pro

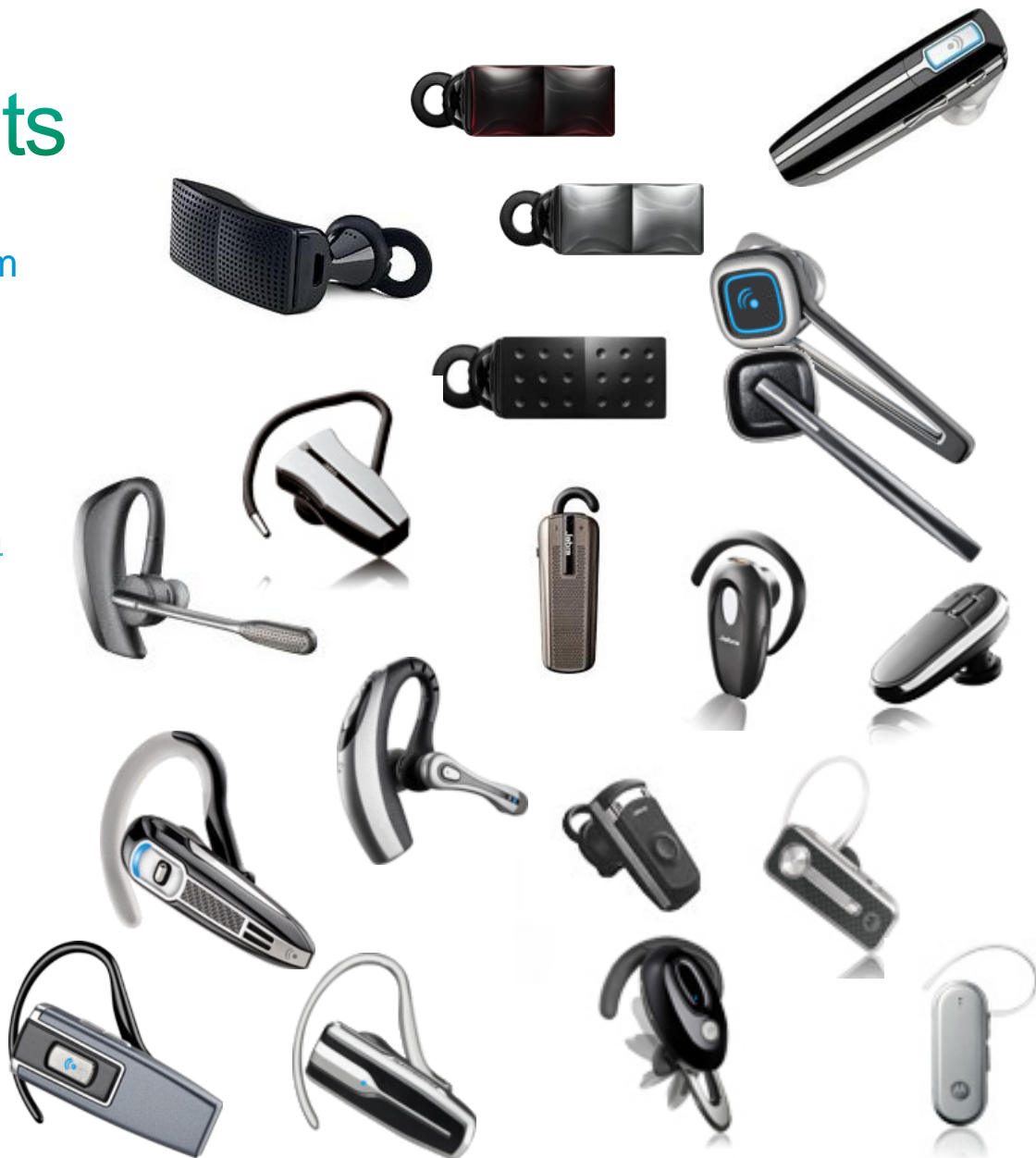
**Jabra®** [www.jabra.com](http://www.jabra.com)

BT5020, BT8040, BT5010, T533

JX10 Series 2

**Motorola®** [www.motorola.com](http://www.motorola.com)

H720, H780



# Cius Positioning



# Cius Positioning

- Purpose-built for Enterprise
- Collaboration & Computing  
Deeper Integration
- Desktop Replacement
- Centralized Manageability
- Enterprise-class Security
- Portability
- Enterprise-class Mobility
- Open Platform
- Application Control



Thank you.

