



Cisco IP Video Phone E20

Software release notes TE4.1.1

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Document revision history

Revision	Date	Description
04	23/12/2011	Updated for TE4.1.1 Release
03	01/11/2011	Updated for TE4.1.0 Release
02	01/04/2011	Supported CUCM versions
01	08/03/2011	Initial release of TE4.0.0

Introduction software version TE4.1.1

This release note describes the features and capabilities included in the Cisco IP Video PhoneE20 software version TE4.1.1 released on 23rd December 2011.

TE software is valid only for the Cisco IP Video Phone E20 system.



For CUCM users version 8.6.1 is highly recommended for this release.



E20 registered directly to CUCM will not currently support encryption.



The E20 supports Cisco Discovery Protocol (CDP) for easy deployment in CUCM environments. When provisioning mode is set to CUCM the E20 will try to use Voice VLAN if available in your network. When in other provisioning modes the E20 will try to use Data VLAN.

New features and functionality in TE4.1.1

There are no new features in this release, please see below for the new features introduced in TE4.1.0 if upgrading from an earlier release.



If you upgraded from TE4.1.0 your root access may be enabled with no password.

Administrators are advised to check and reset both the Admin and Root passwords – please see below.



If you upgraded from an earlier version (TE2.2.1 or TE4.0) you will find that root access is now disabled by default for security reasons, you can re-enabled if needed using the rootsetting command shown below.

RootsettingCommand

This command was introduced in TE4.1.0, to enable root access to the system login as admin:

rootsettings on <password>

(We strongly recommend setting a password if you enable root access)

You can check the status of rootsetting by:

rootsettings get

To disable root access to the E20:

rootsettings off

To Reset the Admin User Password

Login as admin and enter:

xcommandsystemunitadminpassword set password: <password>

Known Limitations

CUVC 3515	CUVC 3515 – If using E20 to contact CUVC 3515 we recommend creating a SIP trunk between CUCM and CUVC rather than use IOSGW.
Broadsoft	Several issues with BroadsoftBroadworks version R17. We advise to use R16 if possible.
VCS Provisioning	Provisioning menu will show "Still trying to connect" in VCS mode, but system is not retrying in this mode. Press Go Back to try again.
CUCM	No Encryption in CUCM environment when E20 registered directly to CUCM
CUCM	No Register failover/fallback redundancy - CUCM
CUCM	Only support direct registration to CUCM 8.5 or 8.6.x. 8.6.1 is highly recommended for this release
CUCM	If you want to register E20 as third party device to CUCM please use an older software version prior to TE4 (e.g. TE2.2.1) – registering as a third party endpoint is not supported using this version.
CUCM	No Multiple lines support in CUCM mode
CUCM	Ad hoc conferencing not supported CUCM (Support Barge/Multiway)
CUCM	Multiway CUCM – This field currently can't be provisioned from CUCM
CUCM	Extension mobility is currently not supported
E20 H323	H323 transfer function and hold/resume currently not implemented
E20	E20 does not support TLS verify and outbound being on at same time
E20	E20 does not support OBTP (One Button To Push)
E20	E20 does not support TIP
CUCM	E20 does not currently support KPML off-hook dialling or digit by digit dialling
CUCM	E20 does not currently support KPML DTMF
TMS	Cisco TelePresence Management Server (TMS) does not currently support E20 as an H323 endpoint. This functionality will be added to Cisco TMS in a future release

Resolved Caveats

Resolved since version TE4.1.0

Video

Internal ID	CDETS ID	Summary
123288	CSCtw52373	When H.263 is subjected to low packet loss (<0.5%) block type video defects are seen

System

Internal ID	CDETS ID	Summary
123440	CSCtw69889	Password not required/preserved for SSH as Root after S/W Upgrade
119656	CSCts69515	If you look at the call log in TMS for an E20 it will always report the call bandwidth as -1kbps
122115	CSCtw89956	History.xml reports callrate as 0 therefore TMS CDRs incorrect
121939	CSCtw89963	Removednetcat from release software
122185	CSCtw89967	Changing the admin password will take effect immediately on ssh sessions but will NOT take effect on the webserver until the device is rebooted.

OutstandingCaveats

Internal ID	CDETS ID	Summary
88935	CSCtn59597	After hold/resume E20 does not offer full range of audio codecs
121696	CSCtx03341	Broadsoft: Wrong appearance-index value in SUBSCRIBE & NOTIFY Messages
122106	CSCtx03345	E20 does not follow bandwidth provided by TMS
122616	CSCtx03350	Incoming call widget displays sip: as prefix to URI when there is no display name in sip packet

Updating to TE4.1.1

The E20 can be upgraded manually, from TMS or from CUCM. The method below describes how to manually upgrade an E20 from the web interface. TMS users please refer to the TMS documentation on how to upgrade systems.

Software filenames



There are two versions of the software; one has encryption enabled and the other disabled. Please ensure you download and install the correct version.

Cisco E20	Software	Serial number range
AES Encryption	s52100te4_1_1.pkg	All
No Encryption	s52101tenc4_1_1.pkg	All
AES Encryption (CUCM)	cmterm-te4_1_1.cop.sgn	All
No Encryption (CUCM)	cmterm-tenc4_1_1.cop.sgn	All

The software and these release notes can be downloaded from cisco.com or from <http://ftp.tandberg.com/pub/software/endpoints/te/>

Prerequisites

Before upgrading the systems ensure that:

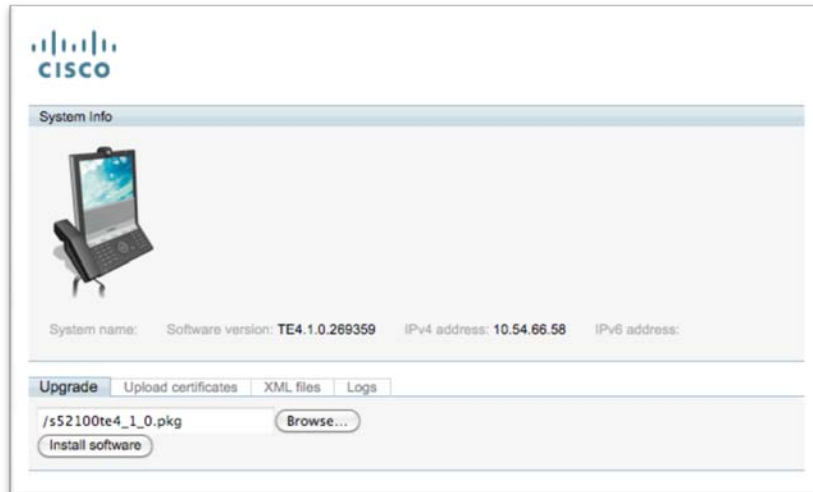
- You have the correct file. For non-CUCM use s52100te4_1_1.pkg for encryption-enabled software or s52101tenc4_1_1.pkg for the non-encryption enabled software. For CUCM ensure cmterm-te4_1_1.cop.sgn or cmterm-tenc4_1_1.cop.sgn are installed on CUCM. The files can be obtained from the locations mentioned above.
- You are upgrading a system running TE software. The only endpoint to support this software release is the Cisco IP Video Phone E20.
- CUCM – For registration as a native device to CUCM, CUCM 8.5 or greater is required, for this release we strongly recommend CUCM 8.6.1



No release key is needed for an upgrade with E20, the system does not require any option keys.

Upgrade instructions - Using a web browser

- 1) Download the file to your computer
- 2) Browse to IP address of the E20
- 3) Click **Browse** and locate the file on your computer
- 4) Click **Install Software**



- 5) The upgrade will now take place and you can monitor this on the E20 or via SSH if connected remotely.



- 6) Once the E20 restarts the system software will have been upgraded and you can check this on the system information screen. The version should be TE4.1.1.273710

Introduction software version TE4.1.0

This release note describes the features and capabilities included in the Cisco IP Video Phone E20 software version TE4.1.0 released on 4th November 2011.

TE software is valid only for the Cisco IP Video Phone E20 system.



For CUCM users version 8.6.1 is highly recommended for this release.



E20 registered directly to CUCM will not currently support encryption.



The E20 supports Cisco Discovery Protocol (CDP) for easy deployment in CUCM environments. When provisioning mode is set to CUCM the E20 will try to use Voice VLAN if available in your network. When in other provisioning modes the E20 will try to use Data VLAN.

New features and functionality in TE4.1.0

- Shared lines support with CUCM
- Auto Registration with CUCM (requires CUCM 8.6.1)
- Call Forward All on CUCM (requires CUCM 8.6.1)
- H323 support
- IPv6
- Differentiated Service Control Protocol (DSCP) CUCM
- 32 and 80 bit SRTP/SRTCP (For encrypted audio in some VCS/CUCM trunking scenarios)

- Support for 360p resolution
- Native video interoperability with CTS (1.7.4/1.8)
- Various GUI improvements

New features description

Shared lines support

E20 now supports shared lines on CUCM. Cisco UCM considers a directory number to be a shared line if it appears on more than one device in the same partition allowing the call to be accepted on more than one phone.

Auto Registration with CUCM

CUCM dynamically generates a directory number and configuration file for the E20 phone if autoregistration has been enabled.

Call Forward All on CUCM

E20 now supports call forwarding on CUCM 8.6 - if the called phone does not answer the call, the call should be forwarded to another phone or voicemail. This will work even if E20 is disconnected on CUCM. Using call forward with VCS E20 needs to be connected for call forwarding to work.

H323

H323 is now available on the E20 for the first time. We support register, dial and firewall traversal in this release. Transfer and hold/resume are not currently supported. For H323, registration is supported to a Cisco VCS. No other gatekeepers have been tested or are supported.

IPv6

With this release IPv6 has been introduced. You can choose which protocol stack to run, we do not support the use of dual stack.

Differentiated Service Control Protocol (DSCP) - CUCM

DSCP is now available to help with managing network traffic and providing Quality of Service. DSCP and 802.1p as per UCM service parameters and trust will be extended from switch to endpoint.

32 bit SRTP/SRTCP

This enables audio interoperability between a secure E20 on the VCS and a secure phone on the CUCM (encrypted audio in some VCS/CUCM trunking scenarios)

Support for 360p resolution

E20 now supports 360p resolution.

Native video interoperability with CTS (1.7.4/1.8)

CTS endpoints 1.7.4+ are now natively compatible with standards based H.264 endpoints so now the E20 supports direct dialling (without use of Telepresence Server) to a CTS endpoint. Version 1.8 offers advantages of BFCP allowing for presentations, AAC-LD and alpha-numeric dialling.

Various GUI improvements

- Improve transfer scenarios
- New style with drop shadow effect
- Replaced statusbar, clock and calendar widget.
- New multiple lines widget
- Shared lines widget

Known Limitations

CUVC 3515 – If using E20 to contact CUVC 3515 we recommend creating a SIP trunk between CUCM and CUVC rather than use IOSGW.

Several issues with BroadsoftBroadworks version R17. We advise to use R16 if possible.

Provisioning menu will show "Still trying to connect" in VCS mode, but system is not retrying in this mode. Press Go Back to try again.

No Encryption in CUCM environment when E20 registered directly to CUCM

No Register failover/fallback redundancy - CUCM

Only support direct registration to CUCM 8.5 or 8.6.x. 8.6.1 is highly recommended for this release

If you want to register E20 as third party device to CUCM please use an older software version prior to TE4 (e.g. TE2.2.1) – registering as a third party endpoint is not supported using this version.

No Multiple lines support in CUCM mode

Ad hoc conferencing not supported CUCM (Support Barge/Multiway)

Multiway CUCM – This field currently can't be provisioned from CUCM

Extension mobility is currently not supported

H323 transfer function and hold/resume currently not implemented

E20 does not support TLS verify and outbound being on at same time

E20 does not support OBTP (One Button To Push)

E20 does not support TIP

E20 does not currently support KPML off-hook dialling or digit by digit dialling

E20 does not currently support KPML DTMF

Resolved Caveats

Resolved since version TE4.0.0

Audio

Internal ID	CDETS ID	Summary
114736	CSCtq43559	E20 Reboot when calling RadvisionScopia XT1200

Video

Internal ID	CDETS ID	Summary
88355	CSCtu13424	E20 alternating between main & presentation video when in a call with Movi
116435	CSCtu13251	White strips appear on the edge of main video of E20
119055	CSCts46413	Video Mute/Unmute timestamps out of order

GUI

Internal ID	CDETS ID	Summary
76056	CSCtu13434	Call On Hold on screen message: callee SIP URI truncated
78382	CSCtu13124	Call Hold: Cannot do FECC on new calls when holding a call
113970	CSCtu16027	Can't resume shared line when in call
116848	CSCtu13618	Not possible to dial an IP address from GUI
117345	CSCtr56816	Missed Calls do not display Alerting/Display Name but only Directory Number

System

Internal ID	CDETS ID	Summary
86727	CSCtu13138	H.224 not renegotiating capabilities after a hold/resume
87690	CSCtu15553	DNS resolver stuck in infinite loop when registering with SIP over UDP with FQDN proxy address
88285	CSCts94895	E20 cannot call MPS Personal Conference with Encryption Off when using Best Effort
89111	CSCtu13132	Shared lines: View all calls shows (Unknown) instead of display name / number (Use CUCM 8.6.2)
89410	CSCtu13439	Call history not cleared after factory reset
114202	CSCtk95788	E20: QoS settings are not taken from CUCM
114301	CSCtu13610	E20 endpoint does not register when encryption is disabled
116516	CSCtt43955	Http / Https server stops on E20, causing No Web and No Communication with TMS
116767	CSCtu13429	HTTPS not working on E20
117275	CSCtu13630	E20 endpoint doesn't store Provisioning Connectivity configuration
117723	CSCtu16100	Bluetooth device continues ringing when reject a call

SIP

Internal ID	CDETS ID	Summary
62241	CSCtu13027	Polycom VSX8000, 7000, 3000 are not compatible with E20's hold-resume
86673	CSCtu13129	Adding The Same Proxy Twice in same SIP profile then enabling SIP Outbound Causes Cyclic Restarts
86843	CSCtu13257	Problem registering when using defaulttransport to TCP and using SRV records with TE4.0
87964	CSCtu15555	On an E20 with two lines a declined registration on one line will drop registrations on both lines.
114194	CSCtl23684	E20 uses diff. port in contact header than used to originate TLS con.
114355	CSCtk34744	E20 continues to display "Transferring Call" Dialogue box post transfer
116676	CSCtr30922	Placed Calls history should come from Request URI, not from To, RPID or PAI headers

Interoperability Testing

The following systems have been tested and verified compatible with this software release.

SIP Registrars/Proxies

Equipment	Software Revision	Comments
Cisco TelePresence Video Communication Server (VCS)	X4.3, X5.1.1, X5.2, X6, X7	Max w288 resolution from E20 to MXP on H323 using X4.2. This issue is fixed in X5.
Cisco Unified Communications Manager	8.5, 8.6.1	Now registers as a native device on CUCM rather than as 3 rd party device (from 8.5)
Broadsoft	Broadworks R16, R17	E20 to E20 calls
Alcatel OmniPCX	OXE 8.0.1	E20 to E20 and E20 to Alcatel IP phones
Siemens	HiPath8000 v3.1	E20 to E20 and E20 to Siemens Openscape
Nortel MCS5100	4.0	E20 to E20 calls and E20 to Nortel IP phones.

Gateway Interoperability

Equipment	Software Revision	Comments
TANDBERG MPS Gateway	J4.6	
TANDBERG Gateway	G3.2	

MCU Interoperability

Equipment	Software Revision	Comments
TANDBERG MPS	J4.6	
TANDBERG MCU	D3.11	
Cisco MCU 4210	4.2(1.50)	
Cisco MCU 4505	4.2(1.50)	

Streaming Servers

Equipment	Software Revision	Comments
Cisco Telepresence Content Server	S4.0, S5.1	Ability to control session with S5.1

Endpoint Interoperability

Equipment	Software Revision	Comments
Cisco TelePresenceMovi	3.1.1, 4.0,4.1,4.2	
Cisco TelePresence TC	TC3.1.2, TC4.0.x, TC4.2.1	
Cisco TelePresence MXP	F7.3.3, F8.2, F9.1.1	
TANDBERG Personal Series	L6.1.0	
Polycom VSX 3000 / VSX 7000	9.0.5.2	Tested with interworking H323-SIP. Issues receiving calls from VSX, VSX hangs on connect. E20 to VSX works. Encryption is not working.
Polycom HDX 8000	3.0.0.1-14006	Only SIF (352x240) transmitted to E20. Duo Video does not work when call initiated by E20. Transfer fails.
Sony PCS-XG80	2.14.00	Transfer not working.
LifeSize Room	LS-RM2_4.7.17(1)	On the E20 receive 704x480, image is compressed horizontally.
LifeSize Express	LS_EX1_3.0.2(1) LS_EX1_4.0.0(0)	We were unable to register this device to our SIP server (Cisco Telepresence VCS); hence we were unable to dial in or out.

Updating to TE4.1.0

The E20 can be upgraded manually, from TMS or from CUCM. The method below describes how to manually upgrade an E20 from the web interface. TMS users please refer to the TMS documentation on how to upgrade systems.

Software filenames



There are two versions of the software; one has encryption enabled and the other disabled. Please ensure you download and install the correct version.

Cisco E20	Software	Serial number range
AES Encryption	s52100te4_1_0.pkg	All
No Encryption	s52101tenc4_1_0.pkg	All

The software and these release notes can be downloaded from cisco.com or from <http://ftp.tandberg.com/pub/software/endpoints/te/>

Prerequisites

Before upgrading the systems ensure that:

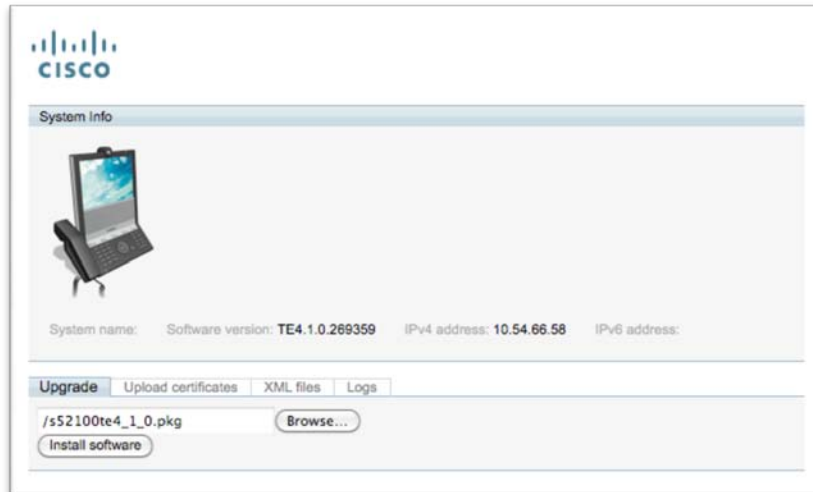
- You have the correct file s52100te4_1_0.pkg for encryption-enabled software or s52101tenc4_1_0.pkg for the non-encryption enabled software. The file can be obtained from the locations mentioned above.
- You are upgrading a system running TE software. The only endpoint to support this software release is the Cisco IP Video Phone E20.
- CUCM – For registration as a native device to CUCM, CUCM 8.5 or greater is required, for this release we strongly recommend CUCM 8.6.1



No release key is needed for an upgrade with E20, the system does not require any option keys.

Upgrade instructions - Using a web browser

- 7) Download the file to your computer
- 8) Browse to IP address of the E20
- 9) Click **Browse** and locate the file on your computer
- 10) Click **Install Software**



- 11) The upgrade will now take place and you can monitor this on the E20 or via SSH if connected remotely.



- 12) Once the E20 restarts the system software will have been upgraded and you can check this on the system information screen. The version should be TE4.1.0.269359.

Checking for updates and getting help

Register for notifications

Cisco recommends that you register and set up a notification for your Cisco IP Video Phone E20 by using the **Cisco Notification Service** at <http://www.cisco.com/cisco/support/notifications.html>. By doing so you will receive notifications about the latest software and security updates whenever they are available. New feature and maintenance releases are published regularly, and we recommend that the software of your E20 is always kept up to date.

Finding help & downloading software

If you experience any problems when configuring or using your Cisco IP Video Phone E20, consult the online help for an explanation of how its individual features and settings work. If you cannot find the answer you need, please check the Release Notes at http://www.cisco.com/en/US/products/ps11329/prod_release_notes_list.html to make sure that your E20 is running the most up-to-date software.

You may download new software by selecting “Download Software” at the product page: http://www.cisco.com/en/US/products/ps11329/tsd_products_support_series_home.html. At the software download page you can also find other relevant software.

You or your reseller can get help from our support team by raising a case at <http://tools.cisco.com/ServiceRequestTool/create/launch.do>. Make sure you have the following information ready:

- ▶ The serial number and product model number of the unit
- ▶ The software build number which can be found on the product user interface
- ▶ Your contact email address or telephone number

Introduction software version TE4.0.0

This release note describes the features and capabilities included in the Cisco IP Video Phone E20 software version TE4.0.0 released on 8th March 2011.

TE software is valid only for the Cisco IP Video Phone E20 system.



Please note this release contains a new user interface so users may require some training before deployment.



With TE4.0.0 the E20 supports provisioning and basic call functionality with Cisco Unified Communications Manager (CUCM) version 8.5 and above. The E20 also supports Cisco Discovery Protocol (CDP) for easy deployment in CUCM environments. When provisioning mode is set to CUCM the e20 will try to use Voice VLAN if available in your network. When in other provisioning modes the E20 will try to use Data VLAN.

Please Note - TE3.0 was never released and all improvements and bug fixes from that version have been incorporated into this release.

The TANDBERG E20 is now known as the Cisco IP Video Phone E20.

New features and functionality in TE4.0.0

- Register to CUCM 8.5+ as a native Cisco device
- Presence (with Broadsoft BLF, VCS, CUCM BLF)
- New User Interface
- VLAN Selection
- Call screening
- Custom wallpapers and ringtones uploaded via USB
- Custom soft keys
- Web Apps (Experimental)
- Recording control
- USB Alert (for the hearing impaired)
- Network Customisability
- URL screensaver
- Cisco Rebranding

New Features and Functionality in TE4.0

Register CUCM 8.5 as a native Cisco device

With TE4.0.0 the E20 is able to register to the Cisco Unified Communications Manager (CUCM) v 8.5 as a native Cisco device. TE4.0.0 should contain the minimum set of features needed to deploy and use the E20 in a CUCM environment.



Users who are currently using CUCM 6, 7 or 8 are recommended to continue using TE2.2.1 until their CUCM is upgraded to 8.5 before upgrading to this release.

- ▶ CUCM Basic telephony
 - Registration
 - Basic call
 - Hold / Resume
 - Transfer
- ▶ CUCM Provisioning
- ▶ CUCM Phonebook
- ▶ CUCM Service Control
 - SW upgrade



In this release voice VLAN is set to off by default so some Release Noteconfiguration is needed.

To register as native device if you have a CUCM v 8.5 set up in your network and your device (MAC address) is configured on the CUCM you should simply select 'Startup wizard' in the device on screen menu or do a factory reset. From the wizard select 'Cisco UCM' from the dropdown and select 'Register'. With this setting the system should switch to Voice VLAN if available and use Cisco Discovery Protocol (CDP) to locate the CUCM from DHCP option 150..

A separate document will be available shortly after release describing the steps needed to register to CUCM as a native device.

Presence (with Broadsoft BLF, VCS, CUCM BLF)

Presence is now supported for endpoints registered to a VCS, CUCM or Broadsoft infrastructure.

New User Interface

The user interface has been redesigned. This allows you to see at a glance your favourites and frequent called entries with presence indicators (if supported by your registrar) when outside of a call.



Please be aware the interface has changed significantly and plan accordingly.

VLAN Selection

VLAN is set to 'off' by default in this release to prevent existing installations E20's appearing in the voice VLAN if there is one configured and CDP is enabled as we believe most TANDBERG endpoints are probably not running in a voice VLAN. For CUCM users this means zero configuration is not possible in this release with new systems as CUCM has to be chosen to enable voice VLAN to be set to auto.



This behaviour will be changing in future releases to the Cisco recommended setting of voice VLAN set to auto, so existing installations should be aware of this and plan accordingly. Please see the Appendix in the E20 Administrator Guide for more details.

Cisco Rebranding

All logos and references to TANDBERG have been replaced with Cisco.

Call Screening

Call Screening is supported as outlined in RFC 5359, meaning calls must be screened via a screening proxy before INVITE is accepted by E20.

Custom wallpapers and ringtones uploaded via USB

Inserted USB memory stick can be used to upload custom wallpaper images and ringtones.

Custom ringtones must be AAC-LC encoded and only one can be active at a time.

Wallpaper images should be in JPG, PNG or GIF format and will be scaled to screen.

Custom Softkeys

Custom softkeys can be setup against the five quick keys on the E20. This gives you the ability to assign:

- ▶ Speed Dials
- ▶ Menu Shortcuts
 - Applications
 - Call Forward
 - Call Settings
 - Move Camera
 - System Settings

- ▶ Actions
 - Redial
 - USB Media (Browse USB Media)

WebApps (Experimental)

This is an experimental feature allowing HTML/javascript apps to be written and executed by the E20. There will be more information posted in the future on how to write your own WebApps. By default the web apps are hidden to enable them you will have to enter the command;

xConfiguration Experimental Menu Applications Mode: On

Recording control

With Cisco Telepresence Content Server S5.0 you will now have recording control on your soft keys. These will include Record, Play, Pause, Review, Discard and Save.

USB Alert

This feature adds support for USB Alert R and USB Alert which are USB devices produced by the Swedish company Polycom Technologies (not to be confused with the video conferencing company Polycom).

It is a feature that can help hearing impaired by allowing visual or tactical notification on incoming calls. The operation is plug and play. When the device is connected to the E20, alert signals are sent on incoming calls with cable or wirelessly from the device.

Two flavors of the device are tested, S and R.

USB Alert S is connected with cable to any standard or non-standard alerting system for hearing impaired, such as Bellman Visit or AVISO.

USB Alert R transmits wirelessly to for example the notification system Lynx.

Network Customisability

Now have the ability to set RTP port range for media, MTU size and QOS parameters.

URL screensaver

You can now define up to five URL's for use as a screensaver. You can then select one of these to use as a screensaver. Content displayed depends upon the complexity of the website, the system will not render flash.

API Changes From TE2.2.1

xCommands Added

- ▶ Xcommand Audio Sound PlayFile
- ▶ xCommand Audio Sound PlayPredefinedSound
- ▶ xCommand Presence Get
- ▶ xCommand Presence Subscribe Stop
- ▶ xCommandRecordingProtocolSend

xCommandsRemoved

- ▶ xCommandLayoutFamily

xCommands with Changed Parameters

- ▶ xCommandCallJoin
 - Added parameter 'Line'
- ▶ xCommandPhonebookContactAdd
 - Added parameters 'ImageURL', 'ShowInBuddyList', 'SpeedDialNumber', 'Title'
- ▶ xCommandPhonebookContactModify
 - Added parameters 'ImageURL', 'ShowInBuddyList', 'SpeedDialNumber', 'Title'
- ▶ xCommandPhonebookSearch
 - Added parameter 'Recursive'

xConfigurationChanges/Additions

- ▶ xConfigurationConferenceAutoAnswerMute
- ▶ xConfigurationConferenceMicUnmuteOnDisconnect
- ▶ xConfiguration Experimental Menu MyContactsExpanded
- ▶ xConfiguration Experimental Menu ApplicationsURL
- ▶ xConfiguration Experimental SystemUnitCrashReporting Mode
- ▶ xConfiguration Experimental SystemUnitCrashReporting URI
- ▶ xConfigurationMenuCustomSoftbuttonsStateSoftButton
- ▶ xConfigurationMenuScreensaverURLScreensaver
- ▶ xConfigurationNetworkMTU
- ▶ xConfigurationNetworkQoS
- ▶ xConfigurationNetworkServicesPresenceSubscribe
- ▶ xConfigurationNetworkServicesHTTPSVerifyServerCertificate
- ▶ xConfigurationNetworkServicesSSH
- ▶ xConfigurationProvisioningConnectivity
- ▶ xConfiguration RTP Ports Range
- ▶ xConfigurationSIPProfileDisplayName
- ▶ xConfigurationSIPProfileNonStandardDTMF
- ▶ xConfigurationSIPProfileCallScreening
- ▶ xConfigurationSIPProfileBusylampfield
- ▶ xConfigurationVideoHZSensor
- ▶ xConfigurationVideoOSD

xConfiguration Removed

- ▶ xConfigurationNetwork IPv4 QoS (*See xConfiguration Network QoS above*)

xStatus Changes/Additions

- ▶ xStatus Network 1 IPv4 MTU
- ▶ xStatusPresenceList
- ▶ xStatus SIP Profile [1..4] Proxy [2..4] Status
- ▶ xStatus SIP Profile [1..3] MessageWaiting

Resolved caveats

Resolved since version TE2.2.1

Audio

Reference ID	Summary
63939	Not possible to auto answer with microphone off
77190	Audio memory leak
86437	E20's losing audio

Video

Reference ID	Summary
77969	Auto exposure does not trigger when it should
74905	hold-resume leaves "No incoming video dialog box"
75036	In call if Camera Movement is enable on Caller End Selfview displays
78308	Video drops while in call with Polycom VSX
78936	Crash when receiving call from Movi v4.0

GUI

Reference ID	Summary
83984	Menu -> Camera Control: Exposure and Whitebalance do not display selfview
72258	Speed dial config is inside password protected area
68505	When entering FECC the arrows in selfview pip is not removed
70065	Not able to dial + when dialling input box in "123" mode
72270	Unable to Close dialog "Configure your TANDBERG E20" using "Red disc" key
56027	In off-hook condition call is disconnecting by On-hooking the handset
76895	Wrong call-time in dialog when hold/resume-ing multiple times
55911	New Contact is not adding to "My Contacts" immediately

61973	Incoming call dialog should be displayed for consultative transfer
71870	Speed dial feature should be available after e.g lifting the handset
72462	"Configure your TANDBERG E20" clashed with "USB memory stick detected"
72463	Configure your TANDBERG E20 wizard only presented if menu language is English when an USB stick is available
79142	Can't scroll down on phonebook
63151	Camera control is not possible using Up/down navigation key while holding another call
77177	E20 only gives the option to use e.164 number from TMS Phonebooks
73704	Ringtone volume not working in menu
74248	Gui restarts when pressing up/down key during call
74509	Pressing Quickkey 4 or 5 in adv. configuration restarts osd/gui
75086	Add FPS to System Information
75959	Speed dial transfer does not work
76261	GUI is unresponsive when put on hold
76560	Disconnect button should cancel standby mode dialog
56907	Insufficient diagnostic information for failed registration

System

Reference ID	Summary
78503	Your E20 has been registered dialogue box states previous uri.
85068	Tandberg Radio app causes system reboot
83642	BroadSoft provisioning not working if initial provisioning fails.
83484	Software upgrade dialog will forcefully upgrade
73878	Changing wallpaper image file makes the wallpaper black
74900	Duo status is shown "Off" state in System information for E20 when in Call with Edge 95
72475	Screen is not turned into RED when "HearingImpairedMode" is enabled
78319	Unexpected restart when receiving incoming audio call
87446	E20 boots when calling Cisco Bridge (CUVC)

85793	EAP-TLS not working (802.1x)
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API

Reference ID	Summary
71575	Provisioning fails
76297	Consultative transfer through api causes E20 to reboot
75950	Ethernet information not updated, causing GUI not to show error dialog "No LAN"
70037	TMS phonebook search result gives 'no data'
74885	Call log not cleared after factory reset

Protocol

Reference ID	Summary
82518	Consultative transfer with encryption does not work
83858	E20 and Avaya Connection Issue
73070	When registered to a cluster of SIP proxies the E20 needs to reboot to try an alternate proxy.
71920	Broadsoft: Unable to Resume Audio/Video call when after SESSION AUDIT
62042	Incoming call when dialing out is not correct handled
73425	Traversal interworked call from TC to TE fails to show presentation on TE after some starts and stops
73300	401 response without corresponding response digest
74317	resume call after "accept incoming call, put current call on hold" fails
74935	Broadsoft: call fails because of missing ACK

Known limitations

Reference ID	Equipment	Summary
	CUCM	We do not support encryption with CUCM.
	CUCM	CUCM 8.5 is the only supported version in this release. For users using CUCM 6, 7 or 8 please continue using TE2.2.1 until your infrastructure is upgraded.
	Voice VLAN/CUCM	Voice VLAN is now 'Off' by default in this release. Setting Provisioning Mode to 'CUCM' will also set Voice VLAN to 'Auto'. Setting Provisioning Mode to anything else but 'CUCM' will turn off Voice VLAN. If Voice VLAN is set to 'Release Note' it will not be changed. In effect CUCM provisioning now requires one more step in the Start up wizard, i.e. Select 'Cisco UCM' and press 'Register'. Existing install bases (VCS, Callway, etc.) should be unaffected. Please see Appendix in E20 Administrator Guide for more details.
	VCS/CUCM/Multiway	Escalating calls to Multiway with one E20 registered to VCS and another on a CUCM 8.5 as native device will work intermittently.
	VCS/CUCM	There are some limitations on hold/resume and transfer between endpoints registered on these registrars with a SIP trunk.
	VCS/CUCM/MXP	Sending Duo video/H239 from MXP on VCS to E20 on CUCM is not possible due to CUCM not currently supporting BFCP. This will be addressed in CUCM 8.6.1.
	E20	Custom Ringtones must be encoded using AAC failure to upload correctly encoded files may result in the system restarting.
	E20	Picture Frame. If pictures are stored in root folder this will result in performance issues. Please store pictures in directories. This will be resolved in next release.
	CUCM	There are some CUCM interop issues with low-bandwidth regions (G.729 codec). If you experience problems you can try this workaround ssh to the E20 and give the following commands: xconfcapsetfilterdebug: "G.729AB"

60270	E20	When connecting the LAN cable to the PC port everything will work, but you will get a “No LAN” message on the display. Connect the LAN cable to the LAN port.
	OCS	Not possible to escalate from an audio call to a video call when dialing from E20 to a Microsoft OCS client.
	OCS	Not possible to hold/resume on the TANDBERG E20 in an E20 to MOC call.
	E20	Multiple SIP profiles will not work with all combinations of PBXs.
	E20	In most scenarios we recommend not using the PacketPacing feature due to possible lip sync problems.
	Polycom HDX	No video on Polycom HDX JITC version when E20 sends video with resolution higher than 448p. Select lower bandwidth to avoid this issue.
77708	E20	When using the E20 with Cisco Unified Communications Manager 6.1.x the E20 fails sending DTMF.
	E20	Consultative transfer does not work with Siemens PBX.
	E20 / Broadsoft R16	Shared lines feature on Broadsoft requires that BFCP is turned off to function properly.
	E20	HTTPS without an installed certificate requires that HTTPSTestCertificate is set to ‘On’

Open caveats

Reference ID	Summary
85817	Multiway with mixed VCS and CUCM endpoints fail occasionally
87013	Unencrypted call when doing a transfer
86833	E20 interop problem with G.729 annexb=no (Low bandwidth)
85349	Phonebooks added or removed from a system are not shown in GUI until either a search is attempted or a reboot is done.

Interoperability Testing

The following systems have been tested and verified compatible with this software release.

SIP Registrars/Proxies

Equipment	Software Revision	Comments
Cisco TelePresence Video Communication Server (VCS)	X4.3, X5.1.1, X5.2	Max w288 resolution from E20 to MXP on H323 using X4.2. This issue is fixed in X5.
Cisco Unified Communications Manager	8.5	Now registers as a native device on CUCM rather than as 3 rd party device.
Office Communications Server 2007	R1 & R2	Not possible to escalate from an audio call to a video call when dialing from E20 to a Microsoft OCS client. Hold/Resume not working on E20 in an E20 to MOC call.
Alcatel OmniPCX	OXE 8.0.1	E20 to E20 and E20 to Alcatel IP phones
Broadsoft	Broadworks R16	E20 to E20 calls
Siemens	HiPath8000 v3.1	E20 to E20 and E20 to Siemens Openscape
Nortel MCS5100	4.0	E20 to E20 calls and E20 to Nortel IP phones.

Gateway Interoperability

Equipment	Software Revision	Comments
TANDBERG MPS Gateway	J4.5	
TANDBERG Gateway	G3.2	

MCU Interoperability

Equipment	Software Revision	Comments
TANDBERG MPS	J4.5	
TANDBERG MCU	D3.11	
Cisco MCU 4210	4.1(1.59)	
Cisco MCU 4505	4.1(1.59)	

Streaming Servers

Equipment	Software Revision	Comments
Cisco Telepresence Content Server	S4.0, S5.0	Ability to control session with S5.0

Endpoint Interoperability

Equipment	Software Revision	Comments
Cisco TelePresenceMovi	3.1.1, 4.0,4.1	
Cisco TelePresence TC	TC3.1.2, TC4.0.x, TC4.1	
Cisco TelePresence MXP	F7.3.3, F8.2, F9.01	
TANDBERG Personal Series	L6.0.1	
Polycom VSX 3000 / VSX 7000	9.0.5.2	Tested with interworking H323-SIP. Issues receiving calls from VSX, VSX hangs on connect. E20 to VSX works. Encryption is not working.
Polycom HDX 8000	3.0.0.1-14006	Only SIF (352x240) transmitted to E20. Duo Video does not work when call initiated by E20. Transfer fails.
Sony PCS-XG80	2.14.00	Transfer not working.
LifeSize Room	LS-RM2_4.7.17(1)	On the E20 receive 704x480, image is compressed horizontally.
LifeSize Express	LS_EX1_3.0.2(1) LS_EX1_4.0.0(0)	We were unable to register this device to our SIP server (Cisco Telepresence VCS); hence we were unable to dial in or out.

Updating to TE4

Prerequisites and software dependencies

Before upgrading the systems ensure that:

- You are upgrading a system running TE software. The only endpoint to support this software release is the Cisco IP Video Phone E20.
- CUCM – For registration as a native device CUCM 8.5 or greater is required.

Checking for updates and getting help

Cisco recommends registering your product at <http://www.tandberg.com/services/video-conferencing-product-registration.jsp> in order to receive notifications about the latest software and security updates. New feature and maintenance releases are published regularly, and we recommend that your E20 software is always kept up to date.

If you experience any problems when configuring or using your E20 system consult the online help for an explanation of how its individual features and settings work. If you cannot find the answer you need, check on the web site at <http://www.tandberg.com/support> to make sure that your system is running the most up-to-date software and for further relevant documentation.

You or your reseller can get help from our support team by raising a case at <http://www.tandberg.com/support/video-conferencing-online-support.jsp>. Make sure you have the following information ready:

- ▶ The serial number and product model number of the unit
- ▶ The software build number which can be found on the product user interface
- ▶ Your contact email address or telephone number

Current RFCs and drafts supported in TE4.0.0

- [RFC 1889](#) - RTP: A Transport Protocol for Real-Time Applications
- [RFC 2190](#) - RTP Payload Format for H.263 Video Streams
- [RFC 2327](#) - SDP: Session Description Protocol
- [RFC 2396](#) - Uniform Resource Identifiers (URI): Generic Syntax
- [RFC 2429](#) - RTP Payload Format for the 1998 Version of ITU-T Rec. H.263 Video (H.263+)
- [RFC 2617](#) - HTTP Authentication: Basic and Digest Access Authentication
- [RFC 2782](#) - A DNS RR for specifying the location of services (DNS SRV)
- [RFC 2833](#) - RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals
- [RFC 2976](#) - The SIP INFO Method
- [RFC 3016](#) - RTP Payload Format for MPEG-4 Audio/Visual Streams
- [RFC 3047](#) - RTP Payload Format for ITU-T Recommendation G.722.1
- [RFC 3261](#) - SIP: Session Initiation Protocol
- [RFC 3262](#) - Reliability of Provisional Responses in the Session Initiation Protocol (SIP)
- [RFC 3263](#) - Session Initiation Protocol (SIP): Locating SIP Servers
- [RFC 3264](#) - An Offer/Answer Model with the Session Description Protocol (SDP)
- [RFC 3311](#) - The Session Initiation Protocol (SIP) UPDATE Method
- [RFC 3361](#) - Dynamic Host Configuration Protocol (DHCP-for-IPv4) Option for Session Initiation Protocol (SIP) Servers
- [RFC 3420](#) - Internet Media Type message/sipfrag
- [RFC 3515](#) - The Session Initiation Protocol (SIP) Refer Method
- [RFC 3550](#) - RTP: A Transport Protocol for Real-Time Applications
- [RFC 3581](#) - An Extension to the Session Initiation Protocol (SIP) for Symmetric Response Routing
- [RFC 3605](#) - Real Time Control Protocol (RTCP) attribute in Session Description Protocol (SDP)
- [RFC 3711](#) - The Secure Real-time Transport Protocol (SRTP)
- [RFC 3840](#) - Indicating User Agent Capabilities in the Session Initiation Protocol (SIP)
- [RFC 3890](#) - A Transport Independent Bandwidth Modifier for the Session Description Protocol (SDP)
- [RFC 3891](#) - The Session Initiation Protocol (SIP) "Replaces" Header
- [RFC 3892](#) - The Session Initiation Protocol (SIP) Referred-By Mechanism
- [RFC 3960](#) - Early Media and Ringing Tone Generation in the Session Initiation Protocol (SIP)
- [RFC 3984](#) - RTP Payload Format for H.264 Video
- [RFC 4028](#) - Session Timers in the Session Initiation Protocol (SIP)
- [RFC 4145](#) - TCP-Based Media Transport in the Session Description Protocol (SDP)
- [RFC 4566](#) - SDP: Session Description Protocol

- [RFC 4568](#) - Session Description Protocol (SDP) Security Descriptions for Media Streams
- [RFC 4574](#) - The Session Description Protocol (SDP) Label Attribute
- [RFC 4583](#) - Session Description Protocol (SDP) Format for Binary Floor Control Protocol (BFCP) Streams
- [RFC 4585](#) - Extended RTP Profile for Real-time Transport Control Protocol (RTCP)-Based Feedback (RTP/AVPF)
- [RFC 4587](#) - RTP Payload Format for H.261 Video Streams
- [RFC 4629](#) - RTP Payload Format for ITU-T Rec. H.263 Video
- [RFC 4796](#) - The Session Description Protocol (SDP) Content Attribute
- [RFC 5168](#) - XML Schema for Media Control
- [RFC 5359](#) - SIPPING19

References and related documents

The following table lists documents and web sites referenced in this document. All product documentation can be found on our [web site](#).

Name	Document reference
TANDBERG Website	http://www.tandberg.com
TANDBERG FTP Site	http://ftp.tandberg.com
TANDBERG documentation	http://www.tandberg.com/docs

Software filenames



There are two versions of the software, one has encryption enabled and the other disabled. Please ensure you download and install the correct version.

TANDBERG E20 system	Software	Serial number range
AES Encryption	s52100te4_0_0.pkg	All
No Encryption	s52101tenc4_0_0.pkg	All

The software and these release notes can be downloaded from <http://ftp.tandberg.com/pub/software/endpoints/te/>

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