KNOWLEDGE BASE ARTICLES

- IP Video Phone E20

JUNE 2013

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Your Cisco product has been designed to give you many years of safe, reliable operation.

The articles in his Knowledge Base give advice on installation, interoperability, configuration, firewalls, and many other frequently asked questions.

We recommend that you visit the Cisco web site regularly for updated versions of this guide.

The user documentation can be found on ▸ http://www.cisco.com/go/telepresence/docs.

How to use this guide

The top menu bar, the entries in the Table of Contents, and the entries in the question lists are all hyperlinks. You can click on them to go to the topic.

The numbering of the questions is for reference only.

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Chapter 1

Introduction

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About this guide

Several small articles related to the Cisco TelePresence IP Video Phone E20 are gathered in this Knowledge Base document. Most of the articles are in question-answer form and cover installation, interoperability, configuration, firewalls, and many other frequently asked questions.

For complete user guides for the products, please visit the web pages as described to the right.

Cisco TelePresence products covered in this guide

- IP Video Phone E20

User documentation

For all our products we have several guides suitable for various user groups.

You can download all the user guides for the Cisco TelePresence products from the Cisco web site, ▸ http://www.cisco.com/go/telepresence/docs.

Depending on which product you have got, select the following in the right pane:

E20:
TelePresence Endpoints - Personal
> TelePresence VOIP Extensions
> Cisco IP Video Phone E20

Document categories

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Maintain and Operate | End-User Guides

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Install and Upgrade | Install and Upgrade Guides

Administrator guides:
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TE software release notes:
Release and General Information | Release Notes

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Software

You can download the software for your product from the Cisco web site,
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Chapter 2

Questions and answers

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389: I experience poor image quality when I am using the E20 from home. Why?

There may be a few network related reasons contributing to this problem when using the Cisco IP Video Phone E20:

- Limited bandwidth – try decreasing the Maximum upstream bitrate under *Call Settings* in *Menu* until you get a better quality image. This ensures that the bandwidth requirements of the encoded bitstream are better matched to actual available network bandwidth.
- Large amounts of your bandwidth are in use, leaving little for the E20 – the problem is solvable by setting up a QoS service at home. (Many routers have this option built in: check the manual for further instructions). The problem may also be solved by pausing other applications during video calls.
- Packet loss / packet reordering – this problem may be solved through your Internet Service Provider.
- To check if you currently have problems with packet loss on your E20 do the following:
- Press the *Home* button to display the *Main* menu.
- Press the right arrow key to navigate to *Menu*.
- Navigate to the *System Information* using the lower arrow key. Press the *OK* key to open the *System Information* menu. In this menu you can read out the current experienced packet loss.

390: How do I upload new software on the E20?

Software can be uploaded to your E20 remotely through the Cisco TelePresence Management Suite (Cisco TMS 12.1 or later) or locally through the options described below.

Using the web interface:

Access the web interface of your E20 by typing the IP-address of your unit in your web browsers address field (the IP-address is found under Settings > System information). Under the *Upgrade* tab of the web page, specify the file to upload and then click the *Install software* button.

Using secure copy:

- Using pscp: pscp root@:/upgrade/pkg
- Using WinSCP: Use WinSCP locate upgrade folder, drag and drop file and rename from upgrade/*.* to upgrade/pkg

To do that from TMS, follow the steps below:

- Go to *Systems*, then select *System upgrade* and there select*System upgrade*.
- If the software is not already in TMS, you can upload the software into TMS by selecting *Systems*, then selecting *System upgrade* and there selecting *Software manager*.

391: How do I get phone books on my E20?

Phone books are normally provisioned to the E20 from a central server. If your device is centrally managed, please contact your systems administrator to have the relevant phone books applied to your system.

For provisioning from the Cisco TelePresence Management System (Cisco TMS), the server must be running Cisco TMS 12.1 or later.

392: How do I change settings on the E20 through SSH/Telnet?

Type " *?*" to see a list of available commands for the E20, then type ***<command>?*** (where <command> is the name of the command you wish to have help for) to see the options for that command.

393: What are the default username and password for the E20?

The default username and password are "admin" and password " " (blank) for the Cisco IP Video.

394: I am not able to Telnet into the E20, but I can SSH in without a problem. Why?

Ensure that the E20 has Telnet Mode set to On under *Network Services* in the *System Configuration* menu. In the *Home* menu, select *Menu > Advanced Settings > System Configuration > Network Services*.

395: The E20 does not register to the registrar after I changed my SIP settings. What should I do?

This problem can often be solved by rebooting the E20.

Open the *Home* menu and select *Menu > Reboot* . If this does not help, ensure that you are using the correct SIP settings or contact your system administrator.

396: How do I restore the system configuration on the E20?

You can restore a backup of the system configuration on the E20 as follows:

1. Log in as root using WinSCP (or another SCP client)
2. Navigate to the folder: ***/mnt/base/active/***
3. Copy your backup ***config.db*** file to this directory and reboot the system

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397: Are there any keypad shortcuts on the E20?

You can set up shortcuts of your choise to all of the five soft keys. On the main menu go to *Menu* and select *My shortcuts*. There you are able to choose between *Speed dial*, *Menu shortcuts* and *Actions*.

398: Can the E20 be used as a video system or is it a pure IP-telephony system?

The E20 is a fully interoperable, high quality desktop video system when it is registered to Cisco VCS.

399: How do I set the correct time zone on the E20?

You can set the correct time zone on your E20 by selecting *Time* in the *System configuration* menu. From the *Menu*, select *Advanced settings > System configuration > Time*.

400: How do I back up the system configuration of the E20?

You can make a backup of the E20 system configuration as follows:

1. Log in as root using WinSCP (or another SCP client).
2. Navigate to the folder: ***/mnt/base/active/***
3. Copy the file config.db and store it somewhere safe.

Note: Removing this file and rebooting the system causes the system to boot up with factory default settings.

401: Does the E20 support H.323?

H.323 is supported in E20 from TE4.1 on The Cisco IP Video Phone E20. On earlier software versions connection to H.323 devices is possible when doing interworking through a Cisco VCS.

402: Which video standards does the E20 support?

The E20 supports the following video standards:

- H.264, H.263+, H.263, H.261
- Transmit up to w448p @ 30fps
- Receive up to w448p @ 30fps, maximum resolution supported is WXGA @ 7,5fps
- Receive dual/presentation stream (BFCP)

404: Can I run MultiSite on the E20?

MultiSite is not embedded on the E20, but it supports MultiWay(TM), enabling intuitive initiation of multiparty video conferences using an external MCU.

The E20 can also join any conference hosted on either a dedicated conference server (MCU) or on a video system with embedded conference (MultiSite) capabilities. To control the layout when in a Cisco TelePresence MCU or MultiWay call, use the numeric keypad buttons 2, 4, 6 and 8.

405: Is the E20 a portable system?

The E20 is designed to replace a desktop phone. Hence, it does not have batteries or wireless support. However, its size and shape together with the foldable foot makes it easy to transport if needed.

Related questions:

406: Is the E20 a wireless system?

406: Is the E20 a wireless system?

No. If you need to use the E20 in a wireless network, consider using an Ethernet-to-wireless adapter with your E20 unit.

Related questions:

405: Is the E20 a portable system?

407: Is the E20 compatible with other Cisco TelePresence endpoints?

The E20 is a fully standards-compliant system and connects with all current Cisco TelePresence endpoints from PC video using Jabber to the TelePresence T3.

For further information on interoperability, refer to the release notes for the relevant software release (TE platform).

408: Is the E20 based on industry standards?

Yes, the E20 is based on industry standards.

Related questions:

402: Which video standards does the E20 support?
415: Which audio standards does the E20 support?

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409: Do I need Cisco TelePresence infrastructure products in order to use the E20?

The E20 is a SIP only device and needs to register to a SIP registrar. We recommend the use of Cisco VCS or CUCM 8.6.2 for the SIP registrar. Please check the release notes for the recommended registrars.

Related questions:

420: Which SIP PBXs (registrars) has the E20 been tested with?

410: Can the handset be removed from the unit?

Yes, the handset cradle can be easily removed as follows:

1. Remove the back of the handset base.
2. Loosen the two screws.
3. Unplug the handset plug.
4. Store the base for later use.

411: Does the E20 support Power over Ethernet (PoE)?

No, the PoE is limited to 12.95 watts. To be able to deliver high quality video and services, the E20 consumes around 18 watts.

412: Does the E20 have support for IPv6?

All E20 phones support IPv4. From TE4.1 onwards IPv6 is also supported. To configure this:

```
xcon //network
*c xConfiguration Network 1 IPStack: IPv4
*c xConfiguration Network 1 Assignment: Static
*c xConfiguration Network 1 MTU: 1500
*c xConfiguration Network 1 IPv4 Address: "64.104.74.178"
*c xConfiguration Network 1 IPv4 SubnetMask: "255.255.255.0"
*c xConfiguration Network 1 IPv4 Gateway: "64.104.74.1"
*c xConfiguration Network 1 IPv6 Address: ""
*c xConfiguration Network 1 IPv6 Gateway: ""
*c xConfiguration Network 1 IPv6 Assignment: Autoconf
*c xConfiguration Network 1 IPv6 Dhcpoptions: On
```

413: What is the maximum call speed for video calls?

The maximum call speed for the E20 is 1152 kbps.

414: Does the E20 have DTMF support?

Yes, when in a call just press the number keys as needed on the keypad of your E20.

415: Which audio standards does the E20 support?

The E20 supports the following audio standards:

- MPEG4
- AAC-LD
- G.729ab
- G.722
- G.722.1
- G.711
- L16-256

416: How do I reset the E20 to the factory settings using the keypad?

To reset the E20 to default factory settings:

On the E20 keypad, press the following keys:

** * Presentation # #*

(The ***Presentation*** key has the icon of an open laptop computer.)

This needs to be done within ~3 seconds.

Related questions:

417: I have lost the admin/root passwords for my E20. What should I do?

417: I have lost the admin/root passwords for my E20. What should I do?

In order to reset the passwords, you need to reset the E20 to the default factory settings.

On the E20 keypad, press the following keys:

** * Presentation # #*

(The Presentation key has the icon of an open laptop computer.)

This needs to be done within ~3 seconds.

Related questions:

416: How do I reset the E20 to the factory settings using the keypad?

418: How come my E20 works even though it lists No LAN?

This is a known issue with the E20. You have probably plugged the LAN cable to the PC port on your E20. Plug it into the LAN port and the message disappears.

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419: Why is the URI (address) on the top banner of my E20 screen refreshing?

The E20 re-registers to the SIP server every 30 to 40 seconds. This is normal behavior.

420: Which SIP PBXs (registrars) has the E20 been tested with?

The E20 has been tested with the following SIP PBX's (Registrars).

Our recommended registrars are:

Vendor	Model	Version
Cisco	CUCM	6.1 and 7.0
Cisco	VCS	X6, or greater
Broadsoft	Broadworks	14sp7

We offer limited support on:

Vendor	Model	Version
Alcatel	OmniPCX	8.0.1
Nortel	MCS5100	4.0
Siemens	HiPath 8000	3.1

Related questions:

409: Do I need Cisco TelePresence infrastructure products in order to use the E20?

421: Can I connect a wired headset to the E20?

Yes, there is support for professional grade wired headsets through an RJ9 connector on the E20. For superior Wideband audio we recomend ***Plantronics EncorePro HW291N***.

When ordering, remember the ***Coil Cable (QD to modular phone jack)*** (Plantronics Part Number: 27190-01).

422: Does the E20 have Bluetooth support?

Yes, the E20 supports the use of Bluetooth headsets.

423: Does the E20 have support for 802.1Q (VLAN)?

Yes, the E20 supports 802.1Q (VLAN).

424: Does the E20 have a web management interface?

Yes. The E20 has a limited web interface. This offers software upgrade functionality, upload of certificates and download of XML files and system logs. Use to the following URL: http://<IP-address of E20>.

425: What languages are supported in the E20 user interface?

From the TE4.0.0 release the E20 user interface supports English, Norwegian, Swedish, German, French, Korean, Chinese Simplified, Chinese Traditional, Danish, Dutch, Finnish, Italian, Japanese, Polish, Portuguese Brazilian, Russian, Spanish, Spanish Latin, Czech, Hungarian and Turkish language.

432: How can I resend username and password from Cisco TelePresence Management Suite (Cisco TMS) to provisioned users of Movi and E20?

Under *Systems > Provisioning > Directory*, it is not possible to see the password for the user in the user's details. Therefore, you must resend the user's account information.

To resend the user's account information:

1. Go to *Systems > Provisioning > Directory*.
2. Select the user.
3. Click *Send Account Info*. The Send Account Information window opens.
4. Click *Send E-mail*.

The account information is now sent to the selected user.

546: How do I change from dialing numbers to dialing letters (touch tone mode) using the remote control or keypad?

Using a remote control:

On your remote control, hold down the pound (#) button (a/A also appears on this button). This toggles between numbers (123) and letters/touch tone mode (abc or ABC). To toggle back to number (123) mode press the pound (#) button again and then hold it down.

Note: Letter (abc/ABC) mode is also known as touch tone mode.

In letter (abc/ABC) mode:

- To type @, press *1* twice on your remote control while in letter (abc/ABC) mode.
- To type a full stop/period (the . symbol), press * once while you are in letter (abc/ABC) mode.

Using an endpoint's keypad:

To toggle between numbers (123) and letters (abc/ABC), hold down pound (#) on your keypad.

To type @, press *1* twice on your keypad while in letter (abc/ABC) mode.

To select a full stop/period (the . symbol) on your endpoint depends on the model. See the endpoint documentation for more information.

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558: How do I record my video calls?

You can record your video calls, and include all participants and any presentations using the Cisco TelePresence Content Server. For more information, please refer to the ▸ Content Server user documentation.

561: How should the video room layout and lighting be?

Here are some tips for making the room better suited for video calls. Make sure that the background is not too cluttered. Avoid curtains, windows or doors, or distracting artwork in the background. Take into consideration that the participants are facing the screen as well as each other. The lighting should be even and bright. Avoid strong backlighting. The participants should not be placed in front of a window or other lighting sources. You should also avoid placing light sources directly oover the participants, as this leads to distracting shadows on the participants face. You can improve the lighting by having light colored, but not bright, walls, covering any windows with curtains, and ensuring that the source of lighting is out of the picture shot.

580: Does the E20 have support for 802.1x authentication?

Yes, the E20 supports 802.1x authentication.

581: Does the E20 have an auto answer feature?

Yes, the E20 can auto answer incoming calls without user interaction. You can set the E20 to auto answer mode from *Menu > Call Settings > Auto answer*.

582: How do I reject all incoming calls on my E20?

If you set *Do Not Disturb* to On, the E20 rejects all incoming calls. You can find the setting at *Menu > Advanced settings > System configuration > Conference1 > Do Not Disturb*.

583: What is the maximum call rate the E20 supports?

The E20 can support calls up to 1152 kbps.

584: Can I change the maximum upstream and downstream call rate on my E20?

Yes, you can change the maximum upstream and downstream call rate on your E20.

586: Can I use the E20 as a picture frame?

Yes, the E20 has USB picture frame support. You can display a picture in screen saver mode when plugging in a USB stick with image files.

587: Does the E20 have a setup wizard?

Yes, the E20 has a setup wizard that guides the user through basic configuration.

588: Does the E20 have support for BroadSoft?

The E20 has expanded its integration with PBX vendors by introducing full integration support with BroadSoft SIP-based PBX. This integration allows the E20 to function similarly to other IP phones when registered to the BroadSoft solution. This includes full support of the following features:

- ***Provisioning*** – Easy plug and play provisioning with the BroadSoft platform.
- ***Shared Call Appearance*** – allowing an E20 to participate as a part of a group sharing the same number/URI
- ***Click-to-dial*** – Control call activity of the E20 from your computer.
- ***Push-to-talk*** – Connect instantly to a defined person or group.

589: Does the E20 have support for multiple lines?

Yes, the E20 has support for multiple lines (SIP profiles). You can have the E20 registered with up to 3 SIP numbers/SIP URIs.

590: Does the E20 have support for Cisco TMS Agent large scale provisioning?

Yes, the E20 is easy to deploy in large scale deployments both within the enterprise and in external locations, including the following features:

- ***Provisioning*** – Easy provisioning using Cisco TelePresence Large Scale Provisioning
- ***Software upgrade*** – Easily upgrade software on all your deployed E20s.
- ***Phonebook*** – Manage and deploy phonebooks to all your deployed E20s.

591: Does the E20 have support for HTTPS provisioning?

Yes, the E20 has support for HTTPS provisioning with digest scheme. This is an alternative generic provisioning for no touch provisioning based on bootstrap server. 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 tries to use Voice VLAN if available in your network. When in other provisioning modes the E20 tries to use Data VLAN.

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Cisco contacts

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