Cisco TelePresence ISDN Link

Software Release Notes IL1.1.0

D1498102

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Contents

Document revision history

Revision	Date	Description
02	7th February 2013	Updated for IL1.1.0
01	23rd July 2012	Initial release of IL1.0.0

Introduction IL1.1

These release notes describe the features and capabilities included in the Cisco TelePresence ISDN Link software IL 1.1.0 released on 7th February 2013.

IL1.1.0 is recommended for use with TC6. It can still be used with older software, but this requires the use of the previous manual pairing method. It is highly recommended to use IL1.1.0 with TC6.0 to obtain the benefits of the new features providing enhanced usability and managability. Please see Upgrading from Pprevious Rrelease IL1.0/TC5.x to IL1.1/TC6.0 Page - 8 if you are already using an ISDN Link with 1.0.

For automatic pairing discovery and general operation the ISDN Link must be on the same network segment as the endpoint it will pair to. We recommend that you cable the endpoint directly to the ISDN Link using the dedicated port on the ISDN Link.

The new pairing method with TC6.0 and IL1.1 is known as automatic pairing as opposed to the previous pairing method known as manual pairing. If you are using a previous release, you must upgrade and re-pair the ISDN Link and endpoint using the new method to obtain the benefits of all the new features.

New features and functionality in IL1.1.0

Automatic pairing of ISDN Link and endpoint (requires TC6.0)

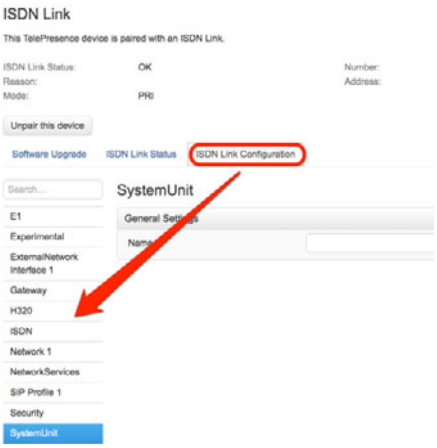
Previously there was a fair amount of manual configuration from the serial interface in order to setup the ISDN Link.

With IL1.1 and TC6.0 you can now connect an unconfigured ISDN Link and from the web interface of the endpoint search and pair with the ISDN Link (see ISDN Link Installation Guide 1.1 for more details).

Configuration of ISDN Link from the endpoint (requires TC6.0)

Once you have paired the device with an endpoint you will now be able to configure the device from the web page of the endpoint.

Please see the ISDN Link Installation Guide for some typical examples of settings for various configurations.



Software upgrade via web interface of paired endpoint (requires TC6.0)

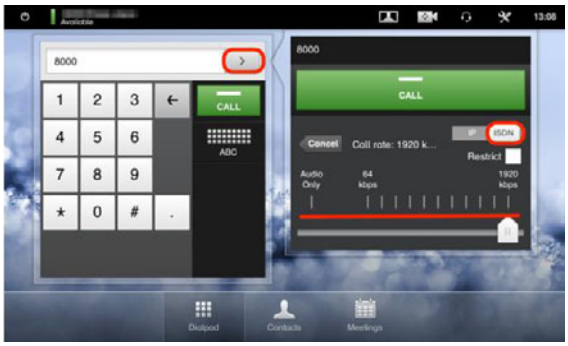
The ISDN Link can now be easily upgraded from the paired endpoint, using the endpoint's web interface.

Better call integration (requires TC6.0)

With IL1.0/TC5.x you had to enter a complicated dial string in order to dial ISDN calls. With IL1.1 and TC6.0 you just enter the ISDN number to dial and then select the call as ISDN and the call rate and press call.

If primarily dialing through the ISDN Link you can set your default call to H.320 and default call rate to that desired on the endpoint web interface, then all you need to do is enter the number to dial and press Call.

See ISDN Link Installation Guide for more details on how to place calls.



AAC-LD

AAC-LD is now supported with the ISDN Link in this release.

Encryption

Encryption is now supported in this release.

Favourites

Frequently dialled ISDN numbers can be stored in the favourites list.

Upgrading from previous release IL1.0/TC5.x to IL1.1/TC6.0

Note – for new installations please refer to the ISDN Link Installation Guide for pairing and configuration examples, this procedure is for installations using TC5.x and IL1.0.

The recommended method of upgrading from TC5/IL1.0 would be as follows:

1. Upgrade endpoint to TC6.0 (license key required).
2. Upgrade the ISDN Link from IL1.0 to IL1.1.
    a. If your ISDN Link has IP connectivity to Internet then you can log in as admin and enter the command:
        i. **xcom SystemUnit SoftwareUpgrade URL: "http://ftp.tandberg.com/pub/software/endpoints/isdnlink/il1/s51500il1_1_0.pkg" UserName: "" password:""**
        ii. Nothing should happen while the file is downloaded, then the ISDN Link will restart.
        iii. Confirm the ISDN Link has been updated when it restarts. Log in as admin and enter **xstat sys soft** and confirm you have IL1.1.
    b. If the ISDN Link does not have Internet access, you can download the file to a local computer and use scp to copy the file onto the ISDN Link:
        i. You have to enable root if it is not already enabled. Log in as admin on ISDN Link and enter **systemtools rootsettings on [PASSWORD]** where PASSWORD is the password you want. We highly recommend that you set a password.
        ii. Use WinSCP or scp to copy the IL1.1 file to /appl/installsw.
            - Example for scp
                a. **scp s51500il1_1_0.pkg root@ip.address.of.isdnlink:/appl/installsw**
            - Using WinSCP (Windows)
                a. Connect as root using SCP to ISDN Link.
                b. Drag and drop the file from local (on the left) drive into the /appl folder on the ISDN Link.
                c. You will now get a dialogue box saying **/appl/*.*** change the ***.*** to **installsw** so you see this -> **/appl/installsw** .
                d. You will then be asked to confirm to overwrite file.

e. When finishes you will get an error message. Press OK. The file has been copied even though file size is 0.

iii. Reboot the ISDN Link (**reboot** as root or **xcom boot** as admin).

iv. Confirm that the ISDN Link has been updated to IL1.1, by logging in as admin after it restarts and enter **xstat sys soft.**

v. You can now disable root access on the ISDN Link by logging in as admin and using command **systemtools rootsettings off.**

3. Now the ISDN Link will be on IL1.1 and endpoint on TC6.0, but still in manual pairing mode.
4. To enable the auto pairing mode, that will give you access to the new feature allowing for easy dialing and management from TC6 endpoint, log in to the ISDN Link as admin and enter the command **xConfiguration Gateway PairingMode: Auto**
5. You will get a red alarm on the ISDN Link. This indicates that (it has lost the connection to the endpoint.
6. Now follow the steps in the ISDN Installation Guide for IL1.1 on how to pair the endpoint and ISDN Link, and on how to place calls.

From this release onwards (once you have re-paired the ISDN Link and endpoint) you will now upgrade the software on the ISDN Link using the web interface of the paired endpoint. SCP is not needed after this.

Resolved issues and improvements since IL1.0

You can use the Bug Search Tool to find information about caveats (bugs) for this release, including a description of the problems and available workarounds. The Bug Search Tool lists both open and resolved caveats.

To access the Bug Search Tool, you need the following items:

• Internet connection

• Web browser

• Cisco.com user ID and password

To use the Bug Search Tool, follow these steps:

Step 1 To access the Bug Search Tool, go to http://www.cisco.com/cisco/psn/bssprt/bss

Step 2 Log in with your Cisco.com user ID and password.

Step 3 To look for information about a specific problem, enter the bug ID number in the

Search for bug ID field, then click **Go**.

The following issues were found in previous releases and are resolved in IL1.1:

ISDN Link

CDETS ID	Summary
CSCud31836	Incoming calls with microphone muted on calling system caused a crash on ISDN Link
CSCub66283	Noise during negotiation with Polycom RMX bridge
CSCub78084	Video refresh, freeze, and black screen calling through ISDN GW
CSCuc76025	Incoming call from a mobile one way audio (inbound to ISDN Link) only – **Requires IL1.1/TC6.0**

Known limitations

Reference ID	Equipment	Summary
NA	Endpoint	In manual pairing mode the paired endpoint must have a known static address. Please ensure the endpoint has static IP or DHCP reserved address. **If using TC6.0 and IL1.1 and pair the endpoint to the ISDN Link through web interface (automatic pairing), this limitation is removed.**
NA	ISDN Link / Endpoint	Calls via the ISDN Link will cause a SIP call to be placed from the endpoint to the ISDN Link, which is connected immediately. There will be some delay in the ISDN Link establishing the external (ISDN/Net) call. During this period the endpoint will receive no audio or video and just show a black image until connection is established to the far end. **This is improved in TC6.0/IL1.1.**
NA	ISDN Link	The dialling method is quite complex with TC5.x/IL1.0. **Resolved with TC6.0/IL1.1 in auto-pair mode.**
NA	ISDN Link	The ISDN Link has no web interface or management functionality. **With TC6.0/IL1.1, the ISDN Link is now managed via the web interface of the paired endpoint.**

Interoperability

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

Endpoint interoperability (pairing)

Equipment	Software revision	Protocol	Comments
C Series, EX, SX, MX	TC5.1.x /TC6.0	SIP	Recommended to use TC6.0 in auto-pairing mode

Introduction IL1.0.0

These release notes describe the features and capabilities included in the Cisco TelePresence ISDN Link software IL 1.0.0 released on 23 July 2012.

New product abstract

The Cisco TelePresence ISDN Link is a compact appliance for in-room ISDN and external network connectivity supporting Cisco TelePresence EX, MX, SX, and C Series endpoints.

It provides direct connectivity to ISDN or external networks (V.35) for individual TelePresence endpoints without the need for additional gateways or other infrastructure. The ISDN Link helps ensure that ISDN can be used as the primary, backup, or external connectivity for a high-quality and reliable TelePresence experience.

The product provides:

- Smooth connectivity for IP-to-ISDN or IP-to-V.35 networks
- Support for up to four Basic Rate Interface (BRI) or one Primary Rate Interface (PRI) ISDN ports and external networks (cable standards V.35, RS530, RS449, and RS366)
- ISDN connectivity for one endpoint, eliminating the need to buy an additional gateway.

ISDN Link

Product specification

Endpoints Supported	C-series-based systems and SX-, MX-, and EX-series endpoints
Bandwidth	4 BRI up to 512 kbps; 1 PRI up to 1920 kbps; external networks up to 1920 kbps
Video Standards/	H.261, H.263, H.263++, and H.264, depending upon codec support
Audio Standards	(AAC-LD – future release), G.711, G.722, and G.722.1
Dual Stream	BFCP /H.239
Network Interfaces	Four ISDN BRI (RJ-45) S/T interfaces; one E1/T1 (RJ-45) for ISDN PRI; two LAN/Ethernet (RJ-45) 10-/100-/1000-Mb (LAN); and one external network (V.35, RS530, RS449, and RS366)
No. of Concurrent Calls	System will support up to 3 video/audio calls
Dimensions (H x W x D)	1.18 x 11.02 x 6.69 in. (28 x 3 x 17 cm)

Figure 1 – Front of ISDN Link

A B C D E F

A - Power/System health status indicator. This should normally be white if there are no problems. If red then there is either a physical interface or configuration error, (check the xstatus for further information)

B - When lit, BRI has been selected as preferred communication method

C - When lit, PRI has been selected as preferred communication method

D - When lit, NET has been selected as preferred communication method

E - Will flicker upon information sent/received from the network.

F - Will flicker upon information sent/received from the endpoint.

Figure 2 – Rear of ISDN Link

A B C D E F G

A - 4 x BRI Interfaces

B - 1 x PRI Interface

C - NET/V.35 Interface

D - Network Interface (Connect to IP Network)

E - Endpoint Interface (Connect to EX, MX, SX, and C Series endpoint)

F - Serial/RS-232 Interface

G - Power

Software upgrade

Method 1 - ISDN Link has IP connection and Internet connectivity

- SSH to ISDN Link as admin

xCommand SystemUnit SoftwareUpgrade URL: "ftp://ftp.tandberg.com/pub/software/endpoints/isdnlink/s51500il1_0_0.pkg" UserName: "anonymous" Password: ""

Method 2 - ISDN Link has no IP connectivity (Direct Upload)

- Download the file
- Give your PC/Laptop same IP address range as ISDN Link(static)
- Connect ISDN Link and Laptop to switch or use crossover cable
- Ensure you have root access to ISDN Link(test *ssh root@isdnlink.ip.address*)

  If you do not have access you will have to enable using the command

  Systemtools rootsettings on <passwd>

  Where <passwd> is required password for root account

  Please ensure a password is set on the root account
- Use SCP or WINSCP to copy the file to root@isdnlink.ip.address:/appl/installsw e.g.

  scp s51500il1_0_0.pkg root@192.168.1.100:/appl/installsw
- Wait for the file to transfer then power off (reboot/xcom boot) and on the ISDN Link to reload new software
- Confirm successful by logging in as admin and enter the command

  xstat sys

Option keys / Release keys

No keys are required for the product, all bandwidth and functionality is enabled by default.

Known limitations

Reference ID	Equipment	Summary
NA	Endpoint	In this release the paired endpoint must have a known static address. Please ensure the endpoint has static IP or DHCP reserved address.
NA	ISDN Link / Endpoint	A non-IP call from the endpoint via the ISDN Link will cause a SIP call to be placed to the ISDN Link, which is connected immediately. There will be some delay in the ISDN Link establishing the external (ISDN/Net) call. During this period the endpoint will receive no audio/video and just show a black image until connection is established to the far end.
NA	ISDN Link	The ISDN Link does not currently support VLANs. This will be implemented in a future release.
NA	ISDN Link	The dialling method is quite complex. This will be addressed in future releases of software (TC6/TE 7 and IL1.1).
NA	ISDN Link	AAC-LD is currently not supported. This will be addressed in a future release.
NA	ISDN Link	The ISDN Link has no web interface or management functionality. Its management will be integrated into the endpoint software in future releases.

Interoperability

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

SIP Registrars/Proxies

Equipment	Software revision	Comments
Cisco TelePresence System Video Communication Server (VCS)	X6.1, X7.0.x, X7.1.0	

Endpoint interoperability (pairing)

Equipment	Software revision	Protocol	Comments
C Series, EX, SX, MX	TC5.1.x	SIP	

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
Cisco website	http://www.cisco.com
Cisco Software Download	http://www.cisco.com/cisco/software/navigator.html?i=!ch
Cisco TelePresence User Documentation	http://www.cisco.com/go/telepresence/docs
Cisco TelePresence ISDN Link documentation	http://www.cisco.com/go/isdnlink-docs

Software filenames

The correct software filename is listed in the following table.

Cisco ISDN Link	Software for ISDN Link	Release ID	Serial number range
AES Encryption	S51500IL1_1_0.pkg	247d2f9	All