

Network Planning Worksheets for Video Conferencing

This document contains worksheets that will help you:

- Order ISDN for your video conferencing system in the United States and Canada
- Order ISDN for your video conferencing system outside of the United States and Canada
- Gather the information necessary to complete the installation of your video conferencing system on your LAN computer network

These worksheets should be completed with the assistance of your company's network administrator and/or your ISDN service provider. If your site already has ISDN set up and configured (installed and provisioned), you only need to fill out the "[How to Prepare Your Video Conferencing System for Your LAN Computer Network](#)" worksheet on page 6.

For more information about preparing your network, refer to the following resources available on the Polycom web site: *Preparing Your IP Network for Video Conferencing* document, *Polycom H.323 Endpoint Install Site Survey* document, and Polycom High Definition Readiness Services.



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How to Order ISDN BRI for Your Video Conferencing System in the United States and Canada

This worksheet will help you order ISDN BRI for your video conferencing system by guiding you through the process and ensuring that you receive the correct ISDN line for your video conferencing system.

There are two sections in this ordering worksheet:

Step 1: The video conferencing system user or system administrator fills out Section One of this worksheet then forwards this worksheet to the ISDN service provider, who completes Section Two.

Step 2: The ISDN service provider provisions the correct ISDN BRI and completes Section Two of this worksheet, supplying all the information necessary to install the video conferencing system. The ISDN service provider returns the completed worksheet to the user or system administrator listed in Section One.

Step 3: The user or system administrator retains this worksheet for quick reference when installing the video conferencing system.

Note: In the United States and Canada, you may need to plug your video conferencing system into a device called an NT-1 box before you plug the system into your ISDN wall jack. Your ISDN service provider will note in Section Two if you need an NT-1 box and, if so, how to order one.

Section One

To be completed by the video conferencing user or system administrator:

The site where I want my ISDN BRI installed is in the following city and country:

I need:

- One ISDN line for a Quad-BRI system (128 kbps)
- Two ISDN lines for a Quad-BRI system (256 kbps)
- Three ISDN lines for a Quad-BRI system (384 kbps)
- Four ISDN lines for a Quad-BRI system (512 kbps)
- Other: _____

My ISDN service provider is:

My name and contact information:

Name: _____ Title: _____

Company: _____

Street: _____

City: _____ State/Province: _____ Zip: _____

Phone: _____ Fax: _____

If your system uses an IMUX, you'll need to know the following information as you go through the installation process:

IMUX Type: _____ IMUX Call Mode: _____

Section Two

To be completed by the ISDN service provider:

Please read the "ISDN BRI Service Specification" section below, then fill in the "Information Required from ISDN Service Provider" section. Return this information to the video conferencing user or system administrator listed in Section One on the previous page.

ISDN BRI Service Specification

- As defined by Bellcore, the ISDN BRI simplified ordering packages are:
 - Capability Package R (circuit-switched data on two B channels, data capabilities including Calling Number Identification, and no voice capabilities)
 - or
 - Capability Package S (alternate voice/circuit-switched data on two B channels, and data and voice capabilities including Calling Number Identification).
- Both B channels must carry circuit-switched collaboration data simultaneously. One channel should support voice.
- The ISDN BRI service must allow collaboration calls to be dialed on either B channel or on both simultaneously.
- The D channel should not permit X.25 packet data.
- The ISDN BRI service must be configured as Terminal Type A, must support automatic Terminal Endpoint Identifiers (TEIs), must be tariffed and available from the customer's local central office, and must have passed a loop-qualification test at the user site listed in Section One.
- Because the system recognizes only the last seven digits when passing the local number to the far end for a BONDING call, any digits preceding the last seven digits must be the same for each ISDN line connected to the system.

Note: The ISDN service provider should not block BRI collaboration transmissions into its data network.

Information Required from ISDN Service Provider

User needs an NT-1 box to use the ISDN BRI service? Yes No

If Yes, the ISDN BRI service provider can cannot supply it.

If the ISDN BRI service provider cannot supply needed NT-1 box, then who is a recommended supplier?

_____ Phone: (_____) _____ - _____

This user's service will use which of the following ISDN BRI dialects? Check only one:

National ISDN (NI1, NI2) 5ESS Point-to-Point 5ESS Multipoint DMS-100 ETSI
 TS-031 NTT-INS-64

Which Network Number Type will the ISDN service use? (Not required for 5ESS.) Check only one:

Unknown International National Network Specific Subscriber

Which Network Numbering Plan will the ISDN service use? (Not required for 5ESS.) Check only one:

Unknown ISDN Data <X.21> Telex (F.69) National Private

Does the service require Service Profile Identifiers (SPIDs) in addition to the Local Numbers? Check only one:

This user's ISDN BRI line does not require a SPID number for installation. The table below lists the local number(s) assigned to the user's line(s).

This user's ISDN BRI line requires the following SPIDs and local line number(s) (also called directory number, Multi-Subscriber Number, or MSN) for installation to the user's line(s).

		Local Number	SPID	Data Enabled	Voice Enabled	Circuit ID
Line 1	B Channel 1			() Yes, () No	() Yes, () No	
	B Channel 2			() Yes, () No	() Yes, () No	
Line 2	B Channel 1			() Yes, () No	() Yes, () No	
	B Channel 2			() Yes, () No	() Yes, () No	
Line 3	B Channel 1			() Yes, () No	() Yes, () No	
	B Channel 2			() Yes, () No	() Yes, () No	
Line 4	B Channel 1			() Yes, () No	() Yes, () No	
	B Channel 2			() Yes, () No	() Yes, () No	

How to Order ISDN BRI for Your Video Conferencing System Outside the United States and Canada

This worksheet will help you order ISDN BRI for your video conferencing system by guiding you through the process and ensuring that you receive the correct ISDN line for your video conferencing system.

There are two sections to this ordering worksheet:

Step 1: The video conferencing user or system administrator fills out Section One of this worksheet, then forwards this worksheet to the ISDN service provider, who completes Section Two.

Step 2: The ISDN service provider provisions the correct ISDN BRI and completes Section Two of this worksheet, supplying the user or system administrator with all the information necessary to install the video conferencing system. The ISDN service provider returns the completed worksheet to the user or system administrator listed in Section One.

Step 3: The user and system administrator retains this worksheet for quick reference when installing the video conferencing system.

Section One

To be completed by the video conferencing user or system administrator:

The site where I want my ISDN BRI installed is in the following city and country:

I need:

- One ISDN line for a Quad-BRI system (128 kbps)
- Two ISDN lines for a Quad-BRI system (256 kbps)
- Three ISDN lines for a Quad-BRI system (384 kbps)
- Four ISDN lines for a Quad-BRI system (512 kbps)

Other: _____

My ISDN service provider or international carrier is:

My name and contact information:

Name: _____ Title: _____

Company: _____

Street: _____

City: _____ Country: _____ Postal Code: _____

Phone: _____ Fax: _____

If your system uses an IMUX, you'll need to know the following information as you go through the installation process:

IMUX Type: _____ IMUX Call Mode: _____

Section Two

To be completed by the user's ISDN service provider:

Please read the "ISDN BRI Service Specification" section below, then fill in the "Information Required from ISDN Service Provider" section. Return this information to the video conferencing user or system administrator listed in Section One on the previous page.

ISDN BRI Service Specification

- Both B channels must carry circuit-switched collaboration data simultaneously. One channel should support voice.
- The ISDN BRI service must allow collaboration calls to be dialed on either B channel or on both simultaneously.
- The D channel should not permit X.25 packet data.
- The ISDN BRI service must be configured as Terminal Type A.
- The ISDN BRI service must support automatic Terminal Endpoint Identifiers (TEIs).
- The ISDN BRI service must be tarified and available at the user site listed in Section One.
- Because the system recognizes only the last seven digits when passing the local number to the far end for a BONDING call, any digits preceding the last seven digits must be the same for each ISDN line connected to the system.

Note: The ISDN service provider should not block BRI collaboration transmissions into its data network.

Information Required from ISDN Service Provider

ISDN BRI service [] is [] is not tarified, available, and loop-qualified at all the sites the user has listed. This user's service will use which of the following ISDN BRI dialects (also known as protocol or switch types)? Check only one:

- | | |
|---|--------------------------------|
| <input type="checkbox"/>] Euro-ISDN (CTR3) | Europe and elsewhere |
| <input type="checkbox"/>] INS-Net64 (NTT/KDD) | Japan |
| <input type="checkbox"/>] NET3 (Taiwan Variant) | Taiwan |
| <input type="checkbox"/>] VN3 | Europe (Legacy) |
| <input type="checkbox"/>] 1TR6 | Europe (Legacy) |
| <input type="checkbox"/>] TPH1962 | Australia/New Zealand (Legacy) |
| <input type="checkbox"/>] NET1 | Belgium (Legacy) |
| <input type="checkbox"/>] 5ESS Point-to-Point | United States |
| <input type="checkbox"/>] 5ESS Multipoint | United States |
| <input type="checkbox"/>] DMS-100 | United States |
| <input type="checkbox"/>] National ISDN (NI1, NI2) | United States |
| <input type="checkbox"/>] TS-031 | United States |

Which Network Number Type will the ISDN service use? (Not required for 5ESS.) Check only one:

- | | | |
|-------------------------------------|---|---------------------------------------|
| <input type="checkbox"/>] Unknown | <input type="checkbox"/>] International | <input type="checkbox"/>] Subscriber |
| <input type="checkbox"/>] National | <input type="checkbox"/>] Network Specific | |

Which Network Numbering Plan will the ISDN service use? (Not required for 5ESS.) Check only one:

- | | | |
|---|-------------------------------------|--|
| <input type="checkbox"/>] Unknown | <input type="checkbox"/>] ISDN | <input type="checkbox"/>] Data <X.21> |
| <input type="checkbox"/>] Telex (F.69) | <input type="checkbox"/>] National | <input type="checkbox"/>] Private |

The user's ISDN BRI line requires the following local line numbers (also known as Multi-Subscriber Numbers, MSNs, or the numbers other users will dial to connect to this user's video conferencing system).

		Local Number	SPID	Data Enabled	Voice Enabled
Line 1	B Channel 1			() Yes, () No	() Yes, () No
	B Channel 2			() Yes, () No	() Yes, () No
Line 2	B Channel 1			() Yes, () No	() Yes, () No
	B Channel 2			() Yes, () No	() Yes, () No
Line 3	B Channel 1			() Yes, () No	() Yes, () No
	B Channel 2			() Yes, () No	() Yes, () No
Line 4	B Channel 1			() Yes, () No	() Yes, () No
	B Channel 2			() Yes, () No	() Yes, () No

How to Prepare Your Video Conferencing System for Your LAN Computer Network

This worksheet will help you get the information you need to install your video conferencing system on your company's LAN computer network.

Your system administrator, or the person who sets up the equipment on your company's network, should complete this worksheet before you install your video conferencing system. Once you have this information, continue with your installation and refer to this worksheet as needed.

To be completed by the network administrator:

To use your system for LAN-based system management and LAN-based software upgrades you need to know the type of addressing your network uses:

DHCP (Dynamic Host Configuration Protocol) (Recommended for LAN calls)

Fixed IP address

IP address for the video conferencing system: _____

Subnet Mask: _____

LAN Gateway: _____

Check the type of configuration the system uses. Check only one:

DNS Server Configuration

WINS Server Configuration

Host: _____ Domain: _____ Primary WINS: _____

Primary DNS: _____ Secondary WINS: _____

Secondary DNS: _____

To ready your system for LAN-based collaboration you also need to know:

Gatekeeper DNS name or IP address (if necessary): _____

Alias for the video conferencing system: _____

Extension (Terminal ID or E.164 number) for the video conferencing system: _____

SNMP Information (if necessary)

If you intend to ready your system for remote management via Simple Network Management Protocol (SNMP), you also need to know:

IP address for the network management station: _____

SNMP community string: _____

Dialling Directory Information (if necessary)

If you intend to use central dialling directories with your video conferencing system(s), you need to know:

Central Directory (LDAP) Server URL or IP address: _____

Port number (default is 389): _____

Directory service root: _____ Server type: _____

Account password (if you want to auto-publish the account name): _____

SIP

For systems using SIP as the signalling protocol, you need to know:

Transport Protocol: UDP TCP

User Name: _____ User Password: _____

SIP Registrar Server: _____ SIP Proxy Server: _____