



Security Controls for IP and Wide Area Network Interfaces

Polycom endpoints and bridges offer Local Area Network interfaces (Ethernet) as well as Wide Area Network (WAN) interfaces (POTS and ISDN). This document describes the security controls that apply to the WAN interfaces.

Ethernet interfaces have IP bound to the interface, with IP datagrams transmitted and received via the interface. WAN interfaces (analog POTS or circuit-switched digital) do not have IP bound to the interfaces. Rather, they are used exclusively as circuit-switched connections over which H.320 raw data is transmitted and received. It is not possible to bind IP to these interfaces, or to route datagrams between the WAN and LAN interfaces. Conceptually, no Layer 3 Internetworking stack sits above the Layer 2 POTS or ISDN Data Link level.

This applies to RMX bridges as well as to HDX, VVX, VSX, ViewStations, and other endpoints.

The endpoint analog POTS line does NOT contain a modem. It is strictly an analog phone line. ZERO connectivity exists between it and either the IP or ISDN functionality. There is neither the software nor the hardware in place to do anything other than dial analog phone calls, using the endpoint as the 'phone'.

The analog phone (POTS) components have no interaction, either from a physical or electrical connectivity standpoint to the LAN side of the video codec. There is no modem functionality in the POTS jack to allow for data connection by any device. No data access to operating system shells or configuration services are possible via these interfaces.

The same restrictions apply to the PLINK H.320 (over ISDN, V.35, etc) interface: while H.320 is a digital (not analog) line, no IP connectivity (or shell access) is possible via the interface. The only functionality possible using this interface is to dial or receive video calls across the H.320 network.

HDX analog phone administrative setup:

To configure the HDX analog phone line (POTS line):

1. Go to **System > Admin Settings > Network > Telephony**
Enter the **System Telephone Number** for the analog phone line
2. Go to **System > Admin Settings > Network > Call Preference**
Enable **Analog Phone**
3. Go to **System > Admin Settings > Network > Call Preference >**
Add **Analog Phone** to the Phone Dialing Order on the Network Dialing screen

To place a call using the HDX analog phone line:

The user types in a phone number and either manually selects Phone in the UI to dial out via the POTS interface or the HDX will try the preferred methods of dialing to automatically select the network interface (either via SIP, H.323, ISDN, or analog POTS).

To place video calls instead of analog phone calls:

From the manual dialing screen, the user enters the number and selects H.323 or SIP to use the appropriate interface for placing video calls.

HDX OS applications and POTS interface:

The HDX OS has direct and exclusive control to the POTS components. These components are not available to be accessed by any other processes besides the HDX dialing application.

The HDX dialing application processes requests from all HDX user interfaces. The supported HDX user interfaces are the on-screen dialing UI, the web dialing page, the integrator external API, and the IP 7000 conference phone.

An analog line must be connected to the system for the call to go anywhere. The HDX must also be configured to allow analog phone calls in order to use the POTS interface (see HDX analog phone administrative setup above). This configuration can also be used to disable all analog POTS functions.

The HDX ISDN administrative setup is similar to the POTS setup described above. It is described in detail in Chapter 2 of the HDX Administrator's Guide. For configuring VVX or other endpoints, or RMX bridges, please consult the respective administrator's guide.

