Firewall Traversal Summary

- In order for your system to communicate with end points in other sites or with your customers the network firewall in all your sites may have to be configured to allow video traffic

- There are a few different options to do this:
  - Option 1: Set up the room system in a De Militarized Zone (DMZ)
  - Option 2: Open Firewall Ports to allow incoming and outgoing video traffic
  - Option 3: Polycom Video Border Proxy (VBP) provides the most flexible option providing secure traversal for video traffic while ensuring that you experience the highest quality of service
HDX Configuration – Step 1
Fixed IP for the HDX

- Allocate a Fixed IP Address to the HDX – example 130.10.19.1
- Using dynamic IP address or DHCP could make traversal complicated
HDX Configuration – Step 2
Configure 1:1 NAT in HDX

- If the sites do not have VPN or if Polycom VBP is not installed the HDX may have to be configured for 1:1 Network Address Translation (NAT)
- Configure the HDX to use fixed ports
- Select “Auto” under NAT configuration
- System will automatically detect the public IP address and display it
Most firewall allow one system inside the firewall to be placed in the DMZ.

DMZ is a firewall configuration that opens all ports through the router to a specific computer and places the computer outside of the firewall. Other devices within the network remain within the protection of the firewall.

If the HDX is configured to be in the DMZ the firewall automatically routes video traffic to the HDX internal IP address.

DMZ option is viable if there is one room system in the site.
If the system cannot be put in a DMZ, firewalls allow specific ports to be opened within the firewall to allow video traffic bi-directionally.

Following ports must be opened:
- Inbound TCP: 1720, 3230 – 3243
- Inbound UDP: 3230 – 3285
- Outbound TCP: ANY
- Outbound TCP: ANY
Firewall Configuration – Option 2
Confirm if firewall ports are open

- Download the free open source port scanner program to check if the ports are open
Firewall Configuration – Option 2
Disable H.323 aware helpers in the firewall

Some firewalls are H.323 aware (H.323 is one of the protocols used to setup calls).

H.323 aware services may block video traffic. H.323 aware helper services may need to be disabled.

Also H.323 fixups or deep packet inspections may also need to be disabled.
Polycom VBP – Option 3
Most flexible internal + B2B configuration

- Supplement or replace firewall with Polycom VBP
- If the existing firewall is kept then all that needs to be done is configure DMZ to allow VBP to sit in a DMZ or place it in parallel to existing FW
- No need to configure 1:1 NAT in HDX
- End points register to VBP making it easier for them to communicate
- VBP prioritizes and shapes traffic optimizing the experience for video
Step 1 - User dials 8315551000

Step 2 - Prefix 831 matched, VBP routes call to 12.48.260.1

Step 3 - VBP receives call with destination E.164 8315551000 and routes to the registered endpoint

Main Office (IP: 12.48.260.1)

Office 1 (IP: 12.48.270.1)

Office 2 (IP: 12.48.280.1)

Video System E.164: 8315551000

Video System E.164: 5105551000

Video System E.164: 4085551000

VBP 4555

VBP 200

VBP 4555
PolyCom VBP – Option 3
VBP H.323 Prefix/Neighboring Routing

H.323 Neighboring
Prefix Routing and Gatekeeper Neighboring
The prefix routing table can be used to forward incoming calls based on their dialed aliases.

Add a prefix
Action:
Prefix:
Index:
Strip:
Add:
Neighbor:
Local Zone:
Address:

Add new prefix
Final Step
Place a test call through Polycom Test system

Place a video call from the HDX using the remote or web
Type following IP address: 140.242.250.205
Choose H.323 for the call type
If the connections are open you should see a self running video with audio on Polycom solutions