

Communicate Simply

White Papers by Polycom

Secure ViewStation Deployment

For Polycom
ViewStations

Timothy M. O'Neil
Director of Technical Marketing
Polycom Video Communications

Table of Contents

Introduction	1
ISDN-Only Deployment	1
LAN Deployment	2
Normal Deployment	3
Hardened Deployment	3
Hardened Deployment Options	4
Streaming in Hardened Deployments	4
Non-Secure Domain	5
Conclusion	5
Contact Information	6

Introduction

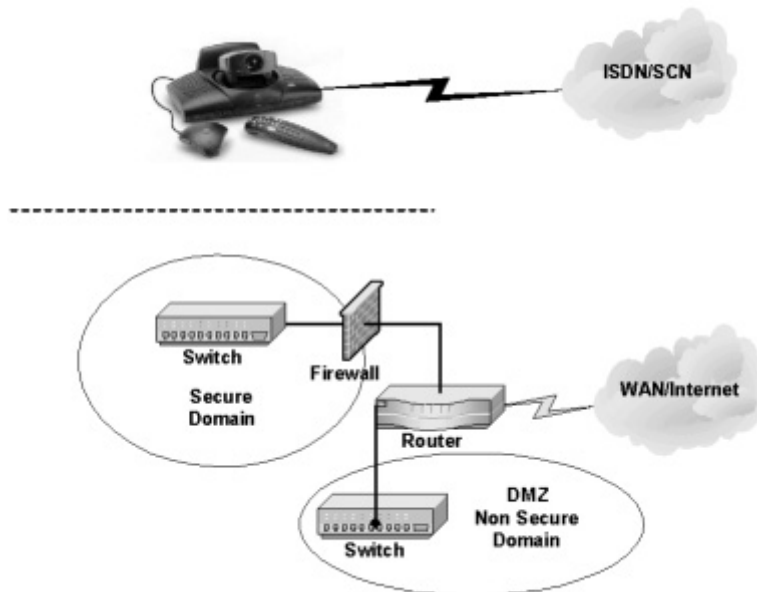
The information in this document provides an overview of the best practices for secure ViewStation video communications endpoint deployment. For the purposes of this white paper, “secure deployment” means a deployment which limits the risk of un-controlled access to the video communications endpoint.

Polycom Viewstation video communications endpoints can be deployed securely in the following ways:

- **ISDN-Only:** The endpoint is deployed as a stand-alone appliance with an independent H.320 (ISDN) connection to the outside world, and no IP connection whatsoever.
- **LAN:** The endpoint is attached to the LAN, allowing IP and/or ISDN connection. There are two options for deploying the endpoint attached to the LAN: normal deployment, and hardened deployment.

ISDN-Only Deployment

In a ISDN-only deployment, the video communications endpoint is attached directly through an ISDN (H.320) connection, not through a LAN. This is the most secure deployment option.



Note that, in this deployment scenario, the endpoint has no LAN connection whatsoever, and can *not* therefore be remotely managed. If the endpoint is connected to the LAN solely for management purposes, it is part of the LAN for security purposes. In this case, deploy the endpoint as described in the “LAN Deployment” section below.

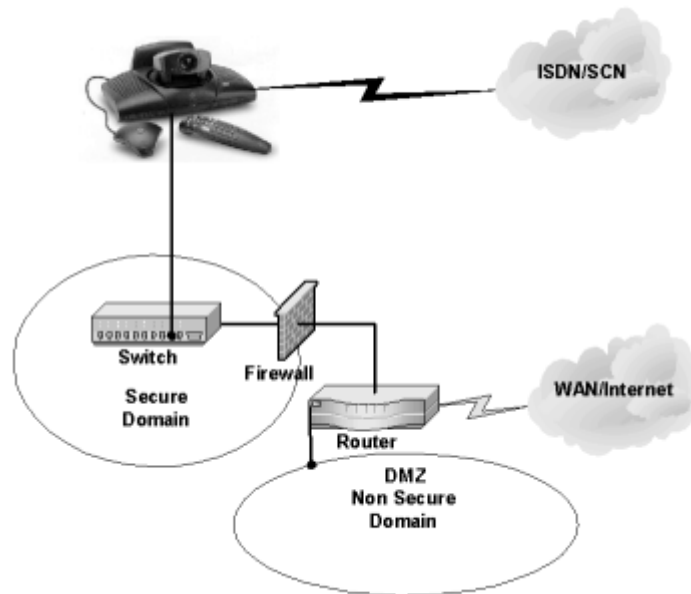
LAN Deployment

When deployed with a connection to the LAN, the ViewStation video communications endpoint is part of the enterprise domain. Secure LAN deployment can be performed in two ways:

- **Normal Deployment:** The video communications endpoint is attached to the network behind the firewall. This deployment scenario protects the endpoint from unauthorized access from outside the secure domain of the enterprise (i.e., outside the network firewall).
Normal deployment allows administrators within the network remote access and management of the endpoint. This is the same deployment model used by enterprise IT organizations to deploy personal computers within enterprise networks.
- **Hardened Deployment:** The endpoint is attached to the network behind the firewall, with remote access and remote management functions disabled. This is considered a “hardened” deployment, and protects the video communications endpoint from outside the secure domain of the enterprise, as well as unauthorized access from entities *within* the enterprise network.

Normal Deployment

Secure domain deployment involves deploying the endpoint behind the network's firewall, as shown in the diagram below.



In this deployment configuration, if the administrator has no concern of unauthorized access from within the enterprise, no further steps are necessary.

Hardened Deployment

In the case where an endpoint is deployed in a network where the system administrator has concerns over unauthorized access from *within* the enterprise domain, a hardened deployment is recommended.

Performing a hardened deployment prevents the problems that could arise should someone with the relevant skills attempt unauthorized access from within the domain. This is accomplished by disabling remote access and remote management functions of the endpoint.

1. In the FX 4.2.1 version of the software, it is not possible to enable streaming from the web-based management interface. Streaming can only be enabled from the endpoint interface using the infrared remote control. If streaming is enabled via the infrared remote control, then it is possible to initiate streaming on a per-conference basis via the remote management interface.

Hardened Deployment Options

Hardened deployment restricts remote access by disabling the FTP, HTML, Telnet and SNMP functions of the endpoint. Access to hardened deployment settings is in the **Security** screen in the endpoint interface (*System Information>Admin Setup>Security*).

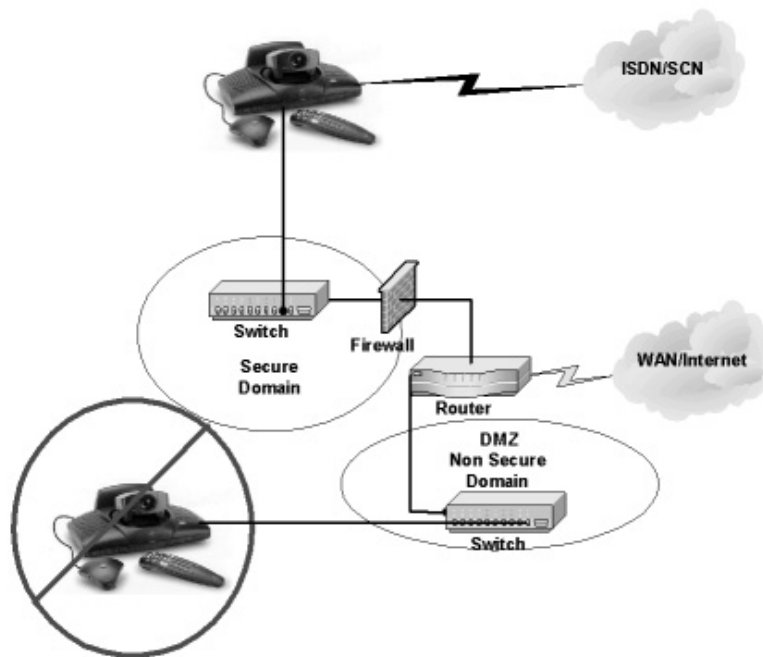
The endpoint capabilities affected by hardened deployment are identified in *Polycom Security Advisory 02-001: Disabling Remote Access on ViewStation Systems*. The security advisory is available on the Polycom Security Center website (<http://www.polycom.com/securitycenter>).

Streaming in Hardened Deployments

Hardened ViewStation FX deployments should disable streaming in the **Streaming** screen (*System Information>Admin Setup>LAN/H.323>Streaming*). As described in Footnote 1 above, with FX 4.2.1 it is not possible to initiate streaming through the web interface.

Non-Secure Domain

It is also possible to deploy the endpoint in a non-secure domain (e.g., in a DMZ). This is not recommended, unless the endpoint is deployed with a hardened installation as described above. If the endpoint is deployed in a DMZ without the hardened deployment, security risks are present.



Conclusion

All Polycom systems have secure password protection for access to the administrative and remote-access capabilities of the devices. Polycom makes every effort to ensure the integrity of our systems against malicious attack. Our video communications systems are consistently tested by third-party security testing facilities, and Polycom strives to maintain a high level of communication through our sales, marketing, distribution and service channels. Polycom users are encouraged to visit Polycom's security advisory website (<http://www.polycom.com/securitycenter>) to receive additional information and register for security updates via e-mail.

Contact Information

Corporate Headquarters

Polycom, Inc.
4750 Willow Rd.
Pleasanton, CA 94588-2708
USA

Phone: +1.925.924.6000

Fax: +1.925.924.6100

European Headquarters

Polycom Ltd.
270 Bath Road
Slough
Berkshire SL1 4DX
United Kingdom

Phone: +44 (0) 1753 723000

Fax: +44 (0) 1753 723010

Asia Pacific Headquarters

Polycom Solutions Pte. Ltd.
16 Raffles Quay
#40-02A, Hong Leong Building
Singapore 048581

Phone: +65.323.3882

Fax: +65.323.3022

For additional information, please visit the Polycom web site at: www.polycom.com



Polycom, the Polycom logo design, ViewStation, ViaVideo, SoundStation, SoundPoint, SoundStation Premiere, SoundStation Premiere Satellite, ViewStation StreamStation, WebStation, MeetingSite, Global Management System, and “Clarity by Polycom” are trademarks or registered trademarks of Polycom, Inc. in the U.S. and various countries.

©2002 Polycom, Inc. All rights reserved.