Polycom is pleased to announce the release of Polycom PVX™ version 8.0.1. Polycom PVX version 8.0.1 delivers unprecedented technology and performance to PC video conferencing. With premium audio and video algorithms and enhanced collaboration features, the Polycom PVX software delivers power and performance never before seen in PC video conferencing.

Working together with a PC and a standard USB camera, the Polycom PVX 8.0.1 software application brings video conferencing to your desktop. It is ideal for employees who work from home, sales or consulting professionals who travel, educators conducting distance learning events, or health care professionals delivering services in remote facilities. Polycom PVX software extends Polycom’s unmatched capabilities and conference room performance to the desktop.

Polycom PVX 8.0.1 will continue to support the ViaVideo™ and ViaVideo II cameras, however Polycom recommends using standard USB 2.x web cameras to achieve the highest video quality. When you choose a standard webcam, the PC processing capabilities let you use additional features such as H.264 and Siren™ 14. View-only mode allows users without cameras to participate in video conferences using audio and H.329 standards-based People+Content™.

**What’s New in Release 8.0.1?**

Polycom PVX 8.0.1 is a maintenance release. A number of minor improvements have been added to PVX for this release; however, the major change is that you can now specify the CPU resources required by your camera.

A new tab, the Advanced Tab, has been added to the Video page. Settings on this tab allow you to configure PVX to compensate for a higher CPU load from your camera driver. You can lower the estimated CPU power by a fixed amount and, thereby, enhance the quality of your PVX video.

**What’s New in Release 8.0?**

- VGA (640x480) Resolution Support - Polycom PVX 8.0.0 supports sending and receiving video at VGA and half-VGA resolutions. This can be enabled on systems with higher speed CPUs and USB 2.0 cameras.
- Session Initiation Protocol (SIP) Support - Point-to-point SIP calling, direct dialed or through a Nortel™ MCS or Microsoft® LCS 2005 (SP1) proxy server, is supported.
• Universal Plug and Play (UPnP™) Support - Polycom PVX 8.0.0 supports secure firewall traversal calls using UPnP-enabled home routers.

• Automatic Gain Control - Significant improvements were made to audio input levels. A new automatic gain control was added that adjusts microphone input to minimize echo reflected back to the far site. It also adjusts the audio level into a conference to improve the volume match with other endpoints connected to an MCU.

• H.239 Standards Based People+Content - Polycom PVX has full support for H.239 standards based People+Content.

• Improved Calling with People+Content - The frame rate for people video is no longer affected by enabling People+Content. At the point that content is sent or received, Polycom PVX adjusts to leave more CPU cycles for content video.

• Asymmetric Call Support - Polycom PVX 8.0.0 supports calls with ADSL or cable modems with asymmetric bandwidth for upload and download.

• Network Adapter Management - Polycom PVX 8.0.0 offers more flexibility in controlling which network adapter is used for video calls. The Network setup page was streamlined to make configuration easier.

• Global Directory Server (GDS) ISDN Dialing Enhancement - Endpoints listed in a directory with both an ISDN number and an ISDN extension will be dialed by appending the extension to the number separated by a delimiter of "##".

• Recent Calls List - The list includes incoming calls that were not answered.

• New Security Features - New security setup options allow users to:
  — Restrict SIP setup page access.
  — Lock user settings and prevent factory default settings from being restored inadvertently.
  — Disable location profile settings.

• User Interface Improvements
  — Enhanced full-screen video allows users to see the Toolbar and PIP while showing full-screen video. In earlier versions, switching to full-screen video disabled access to all other windows except the video window, which had exclusive use of the desktop.
  — For systems without a camera, a user-configurable image can be displayed in the local video window.
  — Users now have direct access to the camera, tone pad, and data sharing controls from the main Toolbar.
  — By using Location Profiles, users can better control multiple location network settings.
• Additional Software Updates
  – Users can disable the H.264 video algorithm on the Setup > Video page.
  – The default media port range was changed to 3230-3237.
  – T.120 is disabled by default.
  – The web management interface is no longer supported.

## Hardware and Software Requirements

| Windows® | Windows 2000 with Service Pack 4 or later  
Windows XP with Service Pack 1 or later |
|-----------|----------------------------------------|
| Processor | ViaVideo I and ViaVideo II camera  
People video only:  
• 800 MHz Intel® Pentium® III  
• Any Intel Pentium 4 or Intel Pentium M  
• 1800+ AMD Athlon™ XP  
People+Content:  
• 1.2 GHz Intel Pentium 4  
• 900 MHz Intel Pentium M  
• 1800+ AMD Athlon XP  
Webcam with PC processing  
H.263 People video only:  
• 1.0 GHz Intel Pentium 3  
• 1.2 GHz Intel Pentium 4  
• 900 MHz Intel Pentium M  
• 1800+ AMD Athlon XP  
H.264 People video only:  
• 1.5 GHz Intel Pentium 4  
• 1.2 GHz Intel Pentium M  
• 1800+ AMD Athlon XP  
People+Content:  
• 2.0 GHz Intel Pentium 4  
• 1.4 GHz Intel Pentium M  
• 1800+ AMD Athlon XP  
(Polycom PVX requires a processor that supports the Intel SSE™ processor extensions. SSE is not supported on the Pentium II family or AMD Athlon CPUs prior to the Athlon XP.) |
| RAM | 256 MB |
| Video Memory | Minimum requirement: 16 MB |
| Hard Drive Space | 60 MB available (for Polycom PVX software) |
Release Notes
Polycom PVX Version 8.0.1

For information about setting up Polycom PVX for use with a ViaVideo or ViaVideo II, see the documentation that came with the camera. For information about setting up Polycom PVX for use with a webcam, see the documentation that comes with the software.

Supported Audio Devices and Webcams

Polycom PVX software is tested extensively with a wide range of audio devices and webcams. For a list of compatible devices and for important information about factors you should consider when selecting your audio and video devices, refer to the Selecting Audio and Video Devices for Use with Polycom PVX document, available at http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf.

SoundStation2™ and SoundStation2W™

To make calls with PVX using the Polycom SoundStation2 or SoundStation2W, you need the Computer Calling Kit. For more information about this kit, refer to the Selecting Audio and Video Devices for Use with Polycom PVX document, available at http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf.

<table>
<thead>
<tr>
<th>Device Type</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>USB Camera</td>
<td>USB 1.x or 2.x webcam, ViaVideo, or ViaVideo II camera (camera is optional for view-only calls)</td>
</tr>
</tbody>
</table>
| Audio             | • Headphones  
|                   | • Microphone - options include a headset or webcam with built-in microphone or a standalone analog microphone.  
|                   | • Computer speakers (external or internal)  
|                   | • Speakers connected directly to ViaVideo |
| Monitor           | SVGA (800 x 600) or higher resolution |
| Network Access    | Broadband IP (64 Kb and above) |
| Microsoft® Internet Explorer | Version 6.0 or later |
| Windows Media Player® | Version 9.0 or later |
| Microsoft DirectX® Software | Version 9.0b or later |
**System Performance**

For systems with a ViaVideo or ViaVideo II camera, most of the media processing is done by the camera. Systems with a 1.2 GHz Pentium 4 or later can support People+Content. People+Content sharing requires PC processing and, therefore, demands the higher performance processor. Content sharing will benefit from additional CPU speed.

For systems with a webcam, all of the processing is done on the PC. There are a wide range of PC performance levels. To optimize the video experience on each system, a CPU resource manager within the Polycom PVX software gauges the system performance and adjusts the media features accordingly.

You can also adjust the way Polycom PVX allocates system resources between PVX and other applications. To do this, on the Setup > General page, click **Performance**. Choose one of these performance settings:

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balanced</td>
<td>Good video without too great an impact on general application performance.</td>
</tr>
<tr>
<td>Other Applications</td>
<td>More processing power for running critical applications while reducing the processing allocated to people video and audio.</td>
</tr>
<tr>
<td>Polycom PVX</td>
<td>Great audio and video while reducing the responsiveness of other applications.</td>
</tr>
</tbody>
</table>

**Factors Affecting Video**

The video format in a call depends on many factors — both on the near-site system and on the far-site system.

Some of the other factors that can affect the video format include:
- PVX settings under Setup > General > Performance
- PVX settings under Setup > Video
- Gatekeeper configuration under Setup > H.323
- Audio format
- Presence of content video (send or receive)
- Camera type
Camera Driver Load

The **For the camera you have selected, specify the camera driver’s load on the system** setting on the Setup > Video > Advanced page allows you to configure PVX properly, especially if you need to compensate for a higher CPU load from the camera driver. This setting enables you to lower the estimated CPU power by a fixed amount so you can enhance the quality of your PVX video.

The original video capture driver load for PVX is approximately 150 MHz worth of CPU resources. Therefore, on a 1.5 GHz computer, the video capture driver will use 10% of the CPU (you can check this using the Task Manager). On a faster computer, the load will be less, such as 5% on a 3.0 GHz system.

In the **For the camera you have selected, specify the camera driver’s load on the system** field on the Setup > Video > Advanced page:

<table>
<thead>
<tr>
<th>If you select...</th>
<th>Subtract this amount from your actual CPU speed...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>None</td>
</tr>
<tr>
<td>Medium</td>
<td>200 MHz</td>
</tr>
<tr>
<td>High</td>
<td>600 MHz</td>
</tr>
</tbody>
</table>

The following table lists some examples of what you should specify for the **For the camera you have selected, specify the camera driver’s load on the system** setting for some of the webcams supported by PVX:

<table>
<thead>
<tr>
<th>For this camera...</th>
<th>Select this setting...</th>
</tr>
</thead>
<tbody>
<tr>
<td>AVerMedia® AVerTV™ GO 007 FM Plus PCI</td>
<td>Low</td>
</tr>
<tr>
<td>Creative WebCam Live® Motion</td>
<td>High</td>
</tr>
<tr>
<td>Creative WebCam Live! Pro</td>
<td>Medium</td>
</tr>
<tr>
<td>GlobalMedia® IREZ™ KD 1394</td>
<td>Low</td>
</tr>
<tr>
<td>GlobalMedia iREZ K2 USB 2.0</td>
<td>Medium</td>
</tr>
<tr>
<td>Logitech® QuickCam® Pro 4000</td>
<td>Driver version 7.3.0</td>
</tr>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Driver version 8.4.8</td>
</tr>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Logitech QuickCam Pro 5000</td>
<td>Driver version 9.0.2</td>
</tr>
<tr>
<td>Logitech QuickCam Fusion</td>
<td>Driver version 9.0.2</td>
</tr>
<tr>
<td></td>
<td>Medium</td>
</tr>
<tr>
<td>Logitech QuickCam Fusion</td>
<td>Driver version 9.0.2</td>
</tr>
<tr>
<td>Logitech QuickCam Orbit MP</td>
<td>Driver version 9.0.2</td>
</tr>
<tr>
<td>V-Stream TV2800 (V-Stream Xpert DVD Maker USB 2.0)</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Note: If the Logitech Audio Echo Canceller (AEC) is enabled, select <strong>High</strong>.</td>
</tr>
</tbody>
</table>

Note: If the Logitech Audio Echo Canceller (AEC) is enabled, select **High**.
Note that, for best performance, only one USB camera at a time should be plugged into the PC.

For important additional information about the camera driver load, refer to the Selecting Audio and Video Devices for Use with Polycom PVX document, available at http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf.

**PVX 8.0.1 Processor/Bit-rate/Resolution Tables**

The tables in this section provide overall targets for different PC processor types and call speeds.

Keep the following in mind when viewing the tables:

- The values listed in the tables assume that PVX is set to Balanced on the Setup > General > Performance page. If you select Other Applications on this page, PVX will use less processing power; if you select Polycom PVX, PVX will use more of the CPU. For more information, refer to System Performance on page 5.

- The values listed are based on the Low camera driver load setting. To check this setting, see the For the camera you have selected, specify the camera driver’s load on the system field on the Setup > Video > Advanced page. If your camera driver load setting is set to High or Medium, you must manually compensate for the different setting as follows:
  - If your camera driver load setting is set to High, subtract 600 MHz from the speed shown. For example, if your system’s CPU speed is 2000 MHz, subtract 600 MHz from that, for a total of 1400 MHz.
  - If your camera driver load setting is set to Medium, subtract 200 MHz from the speed shown. For example, if your system’s CPU speed is 2000 MHz, subtract 200 MHz from that, for a total of 1800 MHz.

For more information about the camera driver load, refer to the Selecting Audio and Video Devices for Use with Polycom PVX document, available at http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf.

- The values listed are set to maximize the video experience for a wide variety of user situations and can change in each release.
### H.264 People Video Receive

<table>
<thead>
<tr>
<th>Processor</th>
<th>Resolution Options</th>
<th>Maximum Receive People Video Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Pentium 4 1.5 GHz</td>
<td>VGA/4@15</td>
<td>384 kbps</td>
</tr>
<tr>
<td>Intel Pentium M 1.8 GHz</td>
<td>VGA/4@30</td>
<td>384 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 2.0 GHz</td>
<td>VGA/4@30</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium M 1.4 GHz AMD Athlon XP 1800+</td>
<td>VGA/2@15</td>
<td></td>
</tr>
<tr>
<td>Intel Pentium 4 2.4 GHz</td>
<td>VGA/4@30 VGA/2@15</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 3.2 GHz</td>
<td>VGA/4@30</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 2.8 GHz (HTT)</td>
<td>VGA/2@30 VGA@15</td>
<td></td>
</tr>
<tr>
<td>Intel Pentium 4 3.6 GHz</td>
<td>VGA/4@30</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 3.4 GHz (HTT)</td>
<td>VGA/2@30 VGA@30</td>
<td></td>
</tr>
</tbody>
</table>

### H.264 People Video Transmit with Smoother Motion (default)

<table>
<thead>
<tr>
<th>Processor</th>
<th>Call Rates (kbps)</th>
<th>Maximum People Video Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Pentium 4 1.5 GHz</td>
<td>VGA/4@15 VGA/4@15 VGA/4@15 N/A</td>
<td>384 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 1.8 GHz</td>
<td>VGA/4@30 VGA/4@30 VGA/4@30 N/A</td>
<td>384 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 2.0 GHz</td>
<td>VGA/4@30 VGA/4@30 VGA/4@30 VGA/4@30</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium M 1.4 GHz AMD Athlon XP 1800+</td>
<td>VGA/2@30 VGA@30</td>
<td></td>
</tr>
<tr>
<td>Intel Pentium 4 2.4 GHz</td>
<td>VGA/4@30 VGA/4@30 VGA/4@30 VGA/4@30</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 3.2 GHz</td>
<td>VGA/4@30 VGA/4@30 VGA/2@30</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 2.8 GHz (HTT)</td>
<td>VGA@30</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 3.6 GHz</td>
<td>VGA/4@30 VGA/4@30 VGA/2@30</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 3.4 GHz (HTT)</td>
<td>VGA@30</td>
<td>1920 kbps</td>
</tr>
</tbody>
</table>
H.264 People Video Transmit with Sharper Image

<table>
<thead>
<tr>
<th>Processor</th>
<th>Call Rates (kbps)</th>
<th>Maximum People Video Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Pentium 4 1.5 GHz</td>
<td>VGA/4@15, VGA/4@15, VGA/4@15, N/A</td>
<td>384 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 1.8 GHz</td>
<td>VGA/4@30, VGA/4@30, VGA/4@30, N/A</td>
<td>384 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 2.0 GHz</td>
<td>VGA/4@30, VGA/2@15, VGA/2@15, VGA/2@15</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium M 1.4 GHz</td>
<td>VGA/4@30, VGA/2@15, VGA/2@15, VGA/2@15</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 2.4 GHz</td>
<td>VGA/4@30, VGA/2@15, VGA/2@15, VGA/2@15</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 3.2 GHz</td>
<td>VGA/4@30, VGA/2@15, VGA@15, VGA@15</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 2.8 GHz (HTT)</td>
<td>VGA/4@30, VGA/2@15, VGA@15, VGA@30</td>
<td>1920 kbps</td>
</tr>
<tr>
<td>Intel Pentium 4 3.4 GHz (HTT)</td>
<td>VGA/4@30, VGA/2@15, VGA@15, VGA@30</td>
<td>1920 kbps</td>
</tr>
</tbody>
</table>

In the tables above:

- VGA/4 is 320x240 (or CIF/SIF for interop)
- VGA/2 is 320x480 (or 2CIF/2SIF for interop)
- VGA is 640x480 (or 4CIF/4SIF for interop)
- Processors are Pentium 4 or Pentium 4 with HTT

H.263 People Video

H.263+ video is scaled in a similar way to H.264. However, it is not as efficient and it is not used at any call rate unless H.264 is disabled on PVX or the far site does not support H.264.

For example:

- On a 2.4 GHz Pentium 4, PVX will support 1920 Kbps VGA/4@30fps
- On a 3.6 GHz Pentium 4, PVX will support 1920 Kbps VGA@30fps
The CPU speed for H.263+ video is based on the Low camera driver load setting. To check this setting, see the For the camera you have selected, specify the camera driver’s load on the system field on the Setup > Video > Advanced page. If your camera driver load setting is set to High or Medium, you must manually compensate for the different setting as follows:

- If your camera driver load setting is set to High, subtract 600 MHz from the speed shown. For example, if your system’s CPU speed is 2000 MHz, subtract 600 MHz from that, for a total of 1400 MHz.
- If your camera driver load setting is set to Medium, subtract 200 MHz from the speed shown. For example, if your system’s CPU speed is 2000 MHz, subtract 200 MHz from that, for a total of 1800 MHz.

For more information about the camera driver load, refer to the Selecting Audio and Video Devices for Use with Polycom PVX document, available at http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf.

Installing Polycom PVX Version 8.0.1

Before You Begin

If you have ViaVideo version 5.x or earlier currently installed on your system and you wish to preserve user preferences and directories, you will first need to upgrade to Polycom PVX version 6.x before upgrading to PVX version 8.0.1. Polycom PVX 6.x downloads and release notes are available on Polycom's website at www.polycom.com/videosoftware.

If you have ViaVideo version 5.x or earlier and do not need to preserve user preferences and directories, then use the Windows Add/Remove Programs Control Panel to uninstall ViaVideo and install PVX version 8.0.1 as directed below.

If you are upgrading from PVX version 8.0.0, be sure that you select Use local settings on the Setup > GMS page before you begin the upgrade to version 8.0.1. (If Use provisioned settings is selected, some of the settings might get lost during the upgrade.)
**Updating to PVX Version 8.0.1**

To install Polycom PVX 8.0.1 for the first time or to upgrade from Polycom PVX 6.x or 8.x:

1. Close any programs running on your computer.
2. If you are using a ViaVideo or ViaVideo II camera, make sure that the camera is turned off.
4. Double-click the downloaded installation file.
5. When the install wizard starts, follow the instructions on the screen.
6. When installation is complete, verify the new software version number in the Polycom PVX System Information screen.

**Post-Installation Note:**
Should you decide at any time to reinstall PVX version 6.x, you must first uninstall version 8.0.x using the Microsoft Windows Add/Remove Programs utility. Before uninstalling PVX, make a note of your existing user settings and directories and backup any files that you personally created and placed in the PVX program files directory, typically C:\Program Files\Polycom\PVX that you wish to save. All files in the PVX directory are deleted during the uninstall process.

**Tools for System Administrators**

The tools listed below are being made available to system administrators to facilitate deployment and management of PVX systems. The PVXSET utility allows administrators to set or query PVX configuration properties. The PVX Capability Viewer allows administrators to view the video capabilities for a variety of system configurations.

While these tools are now being offered by Polycom, their immediate use is contingent upon their implementation "as-is" and without technical support from Polycom Services. Fully supported versions of these tools may be made available in a future release of the Polycom PVX software.

As always, user feedback is encouraged. Your comments and suggestions will assist in the future planning and development of these and other tools for system administrators that will ultimately enhance the Polycom PVX user experience. To submit feature enhancement ideas, go to www.polycom.com and click on Support > Video > Suggest Product Enhancements.
PVXSET Utility

PVXSET is a utility that enables administrators to set or query PVX configuration properties.

- To set properties, a text file is created with a .pvp extension containing a list of properties and values.
- To query properties, create a .pvq file and list the properties alone; PVXSET will return the values in a .pvp file that it creates.

When PVX is installed, the .pvp and .pvq file extensions will be associated with the PVXSET utility. Double clicking a file with one of these extensions will cause PVXSET to process that file.

For .pvp files:
- The property name should be followed by an equal sign, followed by the value to be set. If the value is blank, an empty value will be saved for the property.
- Do not use quotes for strings.

For .pvq files:
- The property name should be followed by an equal sign alone.
- When a .pvq file is processed, the results will be saved to a .pvp file in the same directory and with the same root name as the source .pvq file. For example, the results of C:\pvxsetfiles\gatekeeper.pvq will be saved in a new text file named C:\pvxsetfiles\gatekeeper.pvp.

The .pvp and .pvq files must be ASCII text files containing recognized property names.

An example of setting a property in a .pvp file is shown here:

```
; AES encryption: 0 - None, 1 - Auto
H323_ENCRYPTION = 1
```

Below is an example of querying a property in a .pvq file. The resulting .pvp file would be similar to the sample shown above.

```
; AES encryption: 0 - None, 1 - Auto
H323_ENCRYPTION =
```

PVXSET processes input lines as follows:
- Blank lines are ignored.
- Comment lines must start with a semicolon.
- Comments cannot be on the same line as a property.
- Only one property can appear on a line.

PVXSET can be used while the PVX application is open or closed. Please note that if PVX is open when the processes are being executed, some property changes may not be reflected until PVX is closed and restarted.
PVXSET will display a status dialog when it is initiated. It will show the name of the file being processed and the completion status. Click on the Details button to display each property that was processed in a .pvp file.

**Using .pvp Files to Initialize New Users**

Most PVX properties are unique to each PVX user; however, some properties are PC-specific (that is, they are common for all users on a particular PC). When a new user launches PVX for the first time, PVX will initialize properties for that user. If that user is the first user on the system, PVX will initialize the PC-specific properties, as well.

At first launch, PVX will display a Setup Wizard to the user for initial configuration. Alternatively, an administrator could provide a .pvp initialization file that contains the initial settings. This file could contain all the needed values, or it could provide some values and use the Wizard for the remaining values.

A sample PVX configuration file is installed with PVX and is located in the PVX install folder. The sample file is called Sample.pvp. You can edit the sample file for your organization's specific PVX deployment needs. Instructions are provided in the file itself. You can use the file to specify default property values and define the behavior of the Setup Wizard that PVX displays to new users. The file must reside in the same folder as the PVX executable, ViaVideoNG.exe (typically C:\Program Files\Polycom\PVX), and it must be named InitConfig.pvp.

The first time each user on the PC opens PVX, PVX will parse the configuration file, set the designated properties, and then proceed with the first-time-use initialization.

In addition to the properties included in the Sample.pvp file, the following properties are also useful for configuring PVX for a specific user. Copy these lines into your .pvp file and remove the comment character (semicolon) before each property that you want to set.

```plaintext
;--------------------------------------------------
; User Information
;--------------------------------------------------
; This is the site name or user name.
; NOTE that the site name and H.323 name should
; always be the same, so set them
; both even if not using an H.323 Gatekeeper.
;GENERAL_USER_NAME =
;H323_H323_NAME_DATA =
; If using an H.323 Gatekeeper, this is the numeric
; E.164 address.
;H323_H323_EXTENSION_DATA =
; This is the email address for sending VideoMail.
;GENERAL_EMAIL_ADDRESS =
```
PVXSET Feature Limitations

- To enable or disable People+Content, use the GENERAL_USE_DUAL_STREAM property rather than the GENERAL_PEOPLE_CONTENT_ENABLE property that is referenced in the sample.

```
;--------------------------------------------------
; Video Protocol Configuration
;--------------------------------------------------
; Enable People+Content - set to TRUE or FALSE
; Do not use GENERAL_PEOPLE_CONTENT_ENABLE. Instead
; use the following:
;GENERAL_USE_DUAL_STREAM = TRUE
```

- PVX version 8.0.1 has improved and simplified the Quality of Service (QoS) feature. Use the H323_QOS_ENABLE property to enable or disable QoS as shown.

```
;--------------------------------------------------
; Network Configuration
;--------------------------------------------------
; Enable Quality of Service (QoS) to give increased
; priority to video, audio,
; and far-end camera control that is transmitted on
; the network.
; Set to TRUE or FALSE.
;H323_QOS_ENABLE = TRUE
```

- The directory settings for Global Directory Servers (GDS) and Internet Locator Servers (ILS) cannot be used in an InitConfig file. After PVX has been run the first time, you can then use a .pvp file to apply GDS and ILS settings. PVX will register with the specified directories when the application is restarted.

- If you use a .pvp file to specify a gatekeeper, GDS, or ILS, the PVX will not register with these servers until the PVX application is restarted.
PVX Capability Viewer

The PVX Capability Viewer allows administrators to view the video capabilities of various system configurations. This program can be found in the PVX program files directory, typically C:\Program Files\Polycom\PVX.

To view the capabilities of a system:

1. Double-click the VvCapView.exe application file.

2. Do one of the following:
   - To view the capabilities of the current system, uncheck **Choose a different PC configuration**.
   - To view the capabilities of other system configurations, click on the **Choose a different PC configuration** checkbox, select a PC model, and enter both the processor speed and size of the L2 cache.

3. Click **View** to view the Summary window, which displays system capabilities in Balanced mode.

4. In the Summary window, click **Details** to view the system capabilities for all three performance modes: Balanced, Favor Other Applications, and Favor Polycom PVX.

5. In the Details window, click **Save** to save the capabilities detail to a text file.

The capabilities shown in the VvCapView.exe file are based on the **Low** camera driver load setting. To check this setting, see the **For the camera you have selected, specify the camera driver’s load on the system** field on the Setup > Video > Advanced page. If your camera driver load setting is set to **High** or **Medium**, the VvCapView.exe file does not reflect this, so you must manually compensate for the different setting as follows:

- If your camera driver load setting is set to **High**, subtract 600 MHz from the speed shown in the **Speed** field in the VvCapView.exe file. For example, if the **Speed** field shows 2000 MHz, subtract 600 MHz from that, for a total of 1400 MHz.

- If your camera driver load setting is set to **Medium**, subtract 200 MHz from the speed shown in the **Speed** field in the VvCapView.exe file. For example, if the **Speed** field shows 2000 MHz, subtract 200 MHz from that, for a total of 1800 MHz.

For more information about the camera driver load, refer to the **Selecting Audio and Video Devices for Use with Polycom PVX** document, available at [http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf](http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf).
Network Profile Management and Configuration

PVX enables users to specify different network settings depending upon the location in which they’re using the system. System configurations can be set for particular locations and the network settings can be saved as a named profile.

Several profiles can be created for a single user. Then, whenever the system is moved to a different location, the profile selection can simply be changed rather than having to change multiple network settings on various Setup pages.

Location profiles are configured from the Setup > Network page. PVX provides three default profiles: Office, Home, and Travel.

- To activate a profile, simply choose the location name from the drop-down list.
- To create a new profile, change a profile name or description, or copy, edit, or delete a profile, simply click the Configure Profiles button.

All the configuration settings on the Network tab apply to a location profile, including all items on the Connection, Ports, QoS, and Bandwidth tabs. Other settings that are defined per location are:

- General - Call Settings Tab
  - Maximum time in call
- Video - Video Sources Tab (for ViaVideo cameras only)
  - Power Frequency
  - 60 Hz
  - 50 Hz
- H.323 Tab
  - Use PathNavigator™ OneDial for gateway calling
  - Dial Prefix

Creating .plcm Speed-dial Files

You can create speed-dial desktop shortcuts for PVX directory entries that you dial frequently.

To create a shortcut on their desktop, and make a call, users can do the following:

1. Click the Directory button on the main PVX page or on the Toolbar.
2. Click and drag any directory entry onto their desktop.
   A new speed-dial icon will appear on the desktop. The filename will correspond to the directory entry and will be appended with an extension of .plcm.
3. To make a call to the entry on the desktop, either double-click the icon or right-click the icon and select **Call** from the menu.

You can also manually create speed-dial files as text files with a .plcm extension. To do so, use this format:

```plaintext
NAME=<Name Field>
SPEED=<Speed Field>
NUMBER1=<IP Address Field; can also be a DNS name>
NUMBER2=<not used; leave blank>
EXT=<H.323 Extension (E.164) Field>
SIP=<SIP Address Field>
ISDN=<ISDN Number Field>
```

Below is a sample file named **AnyUser.plcm**.

```plaintext
NAME=AnyUser
SPEED=512
NUMBER1=100.100.100.100
NUMBER2=
EXT=
SIP=
ISDN=
```

When creating the speed-dial files:

- The speed must equal one of the call speeds listed in the directory’s Call Rate dropdown list, which is configured on the Bandwidth tab of the Network > Setup page. These speeds can be viewed by clicking the **Call Speeds** button.
- If you enter both a SIP and a H.323 number, PVX will dial the call using the H.323 number. If you want to place a SIP call, do not enter an H.323 number in the speed-dial file.
- Unused fields should remain blank.
Feature Limitations

The following types of feature limitations are described in this section:

- Audio Issues
- Calling Issues
- Microsoft Windows Issues
- Network Issues
- Session Initiation Protocol (SIP) Issues
- ViaVideo and ViaVideo II Hardware Issues
- Video Issues
- VideoMail Issues
- Webcam Hardware Issues

Audio Issues

- When you upgrade from 6.0.2 to 8.0.1, the **Echo Cancellation** setting will change from **Off** to **Internal**. **Internal** is the default setting for 8.0.1 and is roughly equivalent to the **Off** setting in 6.0.2.

- If you experience lip-sync and CPU usage problems when using PVX with a new Logitech camera (such as the QuickCam Fusion and the QuickCam Pro 5000), check if the camera has built-in AEC. If it does, disable AEC using the camera's configuration software. You may also want to disable all other Logitech features, such as face tracking. For more information, refer to the *Selecting Audio and Video Devices for Use with Polycom PVX* document, available at http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf.

- For optimum audio performance, connect an external microphone to the same device as the external speaker set. Once connected, be sure to select the device in the PVX audio options under Setup > Audio > Audio Input Device.

- You may experience various audio anomalies using USB audio with your ViaVideo or ViaVideo II cameras. Polycom recommends using analog audio instead.

- To minimize the echo that might be returned to the person at the far site, do the following:
  - Verify that **Automatic Gain Control** is enabled on the Setup > Audio page.
  - Reduce the volume of the local speakers.
  - Separate the microphone and speakers as far as possible.

- You may notice loss of far-site audio when you speak at the same time as the far site when using a ViaVideo or ViaVideo II camera.

- Many Bluetooth® headsets only support telephone quality audio and degrade the wideband audio feature in PVX. Consider the frequency response and convenience tradeoff when using a Bluetooth headset.
• You may notice an increase or decrease of the audio volume level when starting the Polycom PVX application.

• When using a headset with the ViaVideo or ViaVideo II cameras, connect the headset to the camera via a 2.5 mm stereo jack to the 3.5 mm stereo plug adaptor. While many cell-phone headsets are compatible for use with ViaVideo cameras, those that support an audio range up to 7 kHz are recommended.

• While PVX supports audio algorithms up to Siren 14, audio algorithms up to G.722 only are supported in calls using a ViaVideo or ViaVideo II camera. This is a limitation of the camera.

• If a ViaVideo or ViaVideo II camera's audio cable is connected to a mic jack and the playback volume is too loud, check to make sure that there is no microphone level adjustment enabled. This may be labeled Microphone Boost on some audio devices.

**Calling Issues**

• Before troubleshooting calling issues, check first to ensure that the latest firmware versions and device drivers are downloaded onto all peripherals such as routers, webcams, etc., that are connected to the PVX system. Often, simply updating these items with the latest drivers or firmware will correct the problem.

• Although PVX supports both encrypted call mode and H.239, some Network Address Translator (NAT)/firewall devices do not. If you encounter difficulty with call connection or data sharing and your system is connected to a NAT/firewall, you may experience better results by disabling one or both of these options in the Polycom PVX application.

• When you are in an audio-only call, you may lose your local video if you click the PIP button. Local video will return once the call is terminated. To avoid losing local video, do not click the PIP button in an audio-only call.

• If your system is registered with a gatekeeper, you must use quotes when you call an alias or extension that includes a space in the name. For example, to dial Polycom Austin as an alias, you must enter "Polycom Austin" in the address field to connect the call.

• When placing a call from the Directory dialog either by manually entering an address or by selecting a number from a directory, use the Call Quality drop-down list to choose a call rate for that address. The selected rate will override the rate stored in the directory for that number. If you choose a different address from the directory, the call will be placed using the rate stored in the directory rather than the Call Quality override rate.

• If you change the available speeds on the directory drop-down list or remove the current directory default speed, you must go back to the directory and explicitly change to the new speed. If you do not select a new speed in the directory, Polycom PVX will continue to place calls at the previous default speed, even though that speed no longer appears in the list. Go to the Network > Bandwidth page and click on the Call Speeds button to select up to six speed settings.
• If you are having problems with E.164 or ISDN dialing, check that the **Dial using H.323 extension when connected to a gatekeeper** setting is enabled on the Setup > Directory page.

• You may see incorrect information in the Recent Calls list when dialing E.164 prefixes through an MCU.

• Encryption is not supported when the system is registered to a gatekeeper that is configured to do H.245 routed signaling. Either change the **AES Encryption** setting to **Off** on the Setup > General > Call Settings page or disable H.245 routed signaling on the gatekeeper.

• The use of the Call Forwarding feature requires that your system be registered with a gatekeeper. Once you have registered your system with a gatekeeper, the Call Forwarding options will be enabled.

• The use of People+Content requires calling speeds above 128 kbps.

• When dialing into a password-protected VSX™ multipoint call from PVX, you may encounter black video for up to 30 seconds. During this time, the far-site system is being prompted to accept or decline your incoming call. PVX endpoints will not be prompted to enter a password.

• Once you have closed a PVX chat session, you must reactivate data sharing by turning it off and then on again before beginning a new chat session.

• The **Maximum Call Rate** setting on the Bandwidth tab under Setup > Network does not currently apply to inbound SIP calls.

• Dynamic bandwidth allocation is not currently supported in SIP calls.

• PVX calls that are transferred to an invalid extension will display black video and require manual disconnection of the call.

• When a call is placed from a PVX system registered to a gatekeeper to an endpoint with call forwarding activated, the entry saved to the address book when the call completes will need to be modified. The IP address of the endpoint will appear correctly in the address book, but the system name will not.

**Microsoft Windows Issues**

• If you experience difficulty with PVX call connection, ensure that the latest Microsoft Windows updates are installed on the operating system. Often, simply installing the latest updates will correct the problem.

• When you install the ViaVideo camera and Polycom PVX software on a Windows 2000 system, you must reboot the PC in order to complete the installation. If you do not reboot the PC, DiffServ does not display correctly.

• When you run Polycom PVX software on a system running Windows XP, screen fonts in the Polycom PVX windows may appear to be blurred. If this happens, turn off ClearType font smoothing by following these steps:
  1. Right-click the Windows XP desktop and choose **Properties**.
  2. Click the Appearance tab, and then click **Effects**.
3. Do one of the following:
   — Clear the Use the following method to smooth edges of screen fonts check box.
   — Set this option to use Standard font smoothing.

• Some Windows 2000 systems may fail to exit stand-by mode if they entered stand-by while Polycom PVX was running. On these systems, exit Polycom PVX before entering stand-by mode.

• Some laptops will slow the clock speed when running on batteries, thereby causing the Polycom PVX software to show a processor alert. To correct, connect the PC to AC power and restart Windows or reconfigure the Power Options settings in the Windows control panel to maximize performance (shorter battery time).

Network Issues

• The QoS tab on the Setup > Network page has been simplified so that a single setting allows you to enable or disable QoS. In PVX version 8.0.0, IP Precedence and DiffServ had to be set separately, which did not work reliably on all Windows systems.

• If you change the Media port range on the Ports tab of the Setup > Network page and then upgrade to PVX version 8.0.1, the values you entered in the Media port range field will be set back to the default values.

• If you register to an invalid Global Directory Server, the PVX user interface may hang briefly and then recover.

• Users with the Windows XP operating system will not be able to place or receive video calls if the Internet Connection Firewall is enabled. To correct this:
  1. Right-click My Network Connections.
  2. Select Network Properties.
  3. In Local Area Connection Properties, select Advanced.
  4. Clear the Internet Connection Firewall option.

• Users running Windows XP Service Pack 2 may experience difficulty establishing a connection to incoming calls through a firewall. If this occurs, do the following:
  1. Click Start and then choose Settings > Control Panel.
  2. Select Windows Firewall.
  3. Select Exceptions.
  4. Confirm the vvsys.exe and Windows NetMeeting check boxes are selected.

• T.120 may not work properly through some NAT devices.

• If calls stop working after you configure the software and the NAT device, ensure that the NAT is still configured properly. Internal testing has shown that some NAT devices can lose their settings and must be
reconfigured. Verify that you have the latest firmware for your NAT device.

- After installing a new NAT device and configuring the NAT device settings in the Polycom PVX software, you must power cycle both the device and the computer. To do this:
  1. Close all applications currently running on the system.
  2. Power off the computer.
  3. Power off the NAT device.
  4. After 30 seconds, power on the NAT device.
  5. Power on the computer.
  6. Restart the Polycom PVX application.

- If the system is registered with an Internet Locator Server or a Global Directory and you delete the server address, the system displays a server error message. Uncheck the Register checkbox instead.

- Auto-discovery of a gatekeeper may not operate properly if the PVX system is connected to a router.

- PVX calls conducted over a network that uses a combination of both a NetGear router and a Cisco Gatekeeper may disconnect after a period of approximately four minutes.

- PVX systems registered to the Global Management System™ that are also located behind a NAT must open port 3603 (TCP) on the NAT firewall device.

**Session Initiation Protocol (SIP) Issues**

- Encryption and People+Content do not work in SIP calls.

- On the Setup > SIP page, you must enter the IP address of the SIP proxy server in the Proxy Server field. In PVX version 8.0.0, you were not required to enter the Proxy Server if it was the same as the Registrar Server; however, in version 8.0.1 you are required to enter an address in both fields in order to register to the server.

- If you register to a SIP server on the Setup > SIP page, unregister, and then place a SIP call, the far site will display your IP address as unreadable characters. To correct this issue, restart the system after changing SIP server settings.

- SIP calls to systems using MSN Windows Messenger or Microsoft Office Communicator may:
  - Report incorrect calling rates on the PVX Media Statistics page.
  - Connect with audio only.
  - Connect at line rates lower than those requested when the call was dialed.
  - Fail to resume video transmission if the Pause feature on Communicator is activated.
• PVX SIP calls to a VSX version 7.5.2 may intermittently fail to connect. Redialing the call or upgrading the VSX to version 8.x will correct the problem.

• If two PVX endpoints with an identical user names both register to the same Microsoft LCS server, the second user to register will be able to answer incoming PVX SIP calls from a third system. The first to register will not.

• PVX systems located behind a Cisco PIX firewall will be unable to receive incoming SIP calls routed through a Microsoft LCS server.

• Nortel MCS Servers will confirm registration of a PVX system even if a blank or incorrect server password is used.

• Nortel MCS servers do not support PVX SIP calls that use a ViaVideo camera.

• PVX SIP calls through an SMC7004BR NAT firewall device will transmit an incorrect IP address to a far-site system. If the far-site system saves that information in the address book and attempts to place a return call using the saved entry, the call will not connect.

• If a PVX system that is registered to a Microsoft LCS server does not answer an incoming SIP call, the call cannot be returned using the address as listed in the Recent Call log.

ViaVideo and ViaVideo II Hardware Issues

• Do not shut down PVX while the ViaVideo or ViaVideo II camera is being loaded. Doing so causes vvsys.exe to crash.

• The Polycom PVX software may intermittently fail to recognize the ViaVideo cameras. If this happens, close the camera's shutter for approximately 10 seconds and reopen it. You may need to restart the Polycom PVX application if the camera preference is set to Use ViaVideo hardware if present.

• ViaVideo camera users who do not plan on switching between their ViaVideo and a webcam, should configure their system to always use ViaVideo hardware. This prevents Polycom PVX from switching to webcam mode if a ViaVideo camera is not detected on startup. To do this, go to the Setup > General page.

• If you use a laptop docking station, you may encounter difficulty while loading the ViaVideo camera's firmware. If this happens, connect the ViaVideo unit directly to computer's USB port.

• If you experience problems loading ViaVideo firmware through a USB hub, connect the ViaVideo unit directly to computer's USB port instead.
Video Issues

- If you are using a new Logitech QuickCam for Notebooks Pro camera, you may see horizontal streaks in the video under very low lighting conditions.

- With some webcam drivers, the camera appears to be connected when it is not actually connected. The system does not display an alert and no video is displayed locally or during a call.

- Users may experience no video from the Polycom PVX application after a computer reboot or upon leaving hibernation or standby mode. To correct this, cycle the power switch to refresh the ViaVideo camera's firmware.

- Users may experience no video from the Polycom PVX application after a computer reboot if Auto-Start Application in Background under the General tab is checked. To correct this, open the system’s Windows Task Manager, click on the Processes tab, click on vvsys.exe, and click End Task. Exit the Windows Task Manager and restart the Polycom PVX application.

- For optimal low light calibration with the ViaVideo camera, the camera lens must be completely covered. To cover the lens, move the slider on the front of the camera to the middle position. With the slider in the middle position, the camera is still running but the lens is covered. If the lens cover is not completely closed during calibration, you may need to repeat the calibration process. To repeat the camera calibration:
  1. Power off the ViaVideo camera.
  2. In the Polycom PVX application, go to Setup.
  3. Click Reset to restore default factory settings.
  4. Restart the Polycom PVX application and complete the Setup Wizard.
  5. Power on the ViaVideo camera.
     After approximately 30 minutes, the camera calibration will begin.
  6. When prompted, move the slider on the front of the camera to the middle position to cover the lens.

- ViaVideo cameras may display corrupted video if the camera has been on for a long period of time. Use one of the following solutions to correct:
  - Recycle the power on the ViaVideo camera.
  - Close all programs and restart the Polycom PVX application.

- When the user launches the Polycom PVX application, the application loads software to the ViaVideo camera. This is normal operation for the ViaVideo unit. This occurs when:
  - The camera is powered on.
  - The computer is restarted and the application is launched while the camera is powered on.
• The ViaVideo camera software may fail to load when the customer is using a non-powered USB hub. Complete the following steps to load the software to the camera:

1. Power off the ViaVideo camera.
2. Disconnect the USB cable from the back of the ViaVideo camera.
3. Verify that the Polycom ViaVideo device driver has been removed from the computer's device manager.
4. Reconnect the USB cable to the back of the ViaVideo camera.
5. Power on the ViaVideo camera.
6. Verify the existence of the Polycom ViaVideo device driver in the computer's device manager.

   Note: If the Polycom ViaVideo device driver is not present, restart the computer and repeat steps 1-5.
7. Launch the Polycom PVX application software.

• To optimize video quality, application sharing is disabled in Polycom PVX by default. Users of Microsoft NetMeeting who enable the application sharing function may notice a slight decline in video quality. Microsoft disables some DirectX video features in order to provide a more accurate view of remote applications.

• When using dual monitors, PVX will not work if the secondary monitor is on the left of or above the primary monitor. The secondary monitor must to be the right of or below the primary monitor.

• When sharing applications from PVX, users on the receiving end may notice distorted content on the sender's desktop in other open windows that are not being shared. This is an intentional security feature that protects information in any open window that is not the target of the data share.

• If you are in a call while your PVX window is set to Toolbar mode, and the far site transmits VGA video, you may need to reposition or resize the far-site video window on your desktop after the call connects.

• High resolution H.263 calls should be conducted at speeds greater than 768 kbps.

• Calls from a system using a webcam and PVX version 6.0.1 to a system using PVX version 8.0 will connect without video on the 6.0.1 system. Upgrading the 6.0.1 system to PVX version 6.0.2 will correct the problem.

**VideoMail Issues**

• If you are having difficulty saving a VideoMail file, it may be because Windows has not appended the .asf extension correctly in the File Save dialog box.

• If you explicitly enter the .asf extension as part of the file name, the file will be saved correctly. For example, in the file name field, enter the file name as *MyVideoMail.asf*. 
• Recording a video mail is interrupted when an incoming call is automatically answered. To resolve this issue, turn off the Auto-Answer feature.

• If you leave the VideoMail drop-down box open after recording a VideoMail message and then place a call, you cannot play or record VideoMail until you close the VideoMail drop-down box and then reopen it.

• The VideoMail feature cannot be used if you are in a call and the VideoMail control panel is disabled.

• Use of the VideoMail recording feature with third party cameras is currently supported on Windows XP operating systems only.

• If you expand the PVX window to preview a VideoMail recording and the video image does not expand as well, the problem may be resolved by temporarily disabling hardware acceleration. To disable hardware acceleration, go to the Setup > Video page and uncheck the Use DirectX Hardware Acceleration box.

**Webcam Hardware Issues**

• On the Setup > Video > Advanced page, if you select Low or High in the For the camera you have selected, specify the camera driver's load on the system field, and then you press Reset to restore the system defaults, the camera driver load setting does not change back to Medium. Since this setting is machine-dependent, it does not get automatically restored.

• If you have a new Logitech camera, such as the QuickCam 5000 Pro, Orbit MP, QuickCam Fusion, or a new QuickCam for Notebooks Pro, the local video may become choppy or may freeze if you check Enable VGA 30 frames per second on the Setup > Video > Advanced page. For most cameras, you should not check this setting. For important information about how to set this and other settings to achieve optimum video quality, refer to the Selecting Audio and Video Devices for Use with Polycom PVX document, available at [http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf](http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf).

• Polycom has qualified the cameras listed in the Selecting Audio and Video Devices for Use with Polycom PVX document (available at [http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf](http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf)) for use with Polycom PVX software. Many other cameras with Microsoft WDM video capture support will also work, although some are not fully compatible or place their own demands on the CPU that prevent them from being included on the list. Polycom continues to evaluate cameras and will add them as appropriate.

• Very high CPU usage can be seen in a number of situations:
  - On systems with less than a 2.0 GHz Pentium 4 or equivalent, the software is very busy with media processing with only a modest amount left for other applications. Changing the resource allocation under the Setup > General > Performance page to favor Other Applications can reduce the load for video processing.
On systems with some video capture devices, including some USB 2.0 cameras, the camera driver can use a high percentage of the CPU to do video capture. If you see the CPU load above 40% while previewing local video when not in a call, this can be the cause. Changing the system resource allocation to favor Other Applications under the Setup > General > Performance page can help with this somewhat. Please verify that you have the latest video capture drivers for your device.

When sending the desktop to the far site, you should see the CPU at or above 95%. This is expected since the desktop capture and encoder are busy running to provide the best desktop video quality. This code is running at a lower priority than normal applications, which ensures that those applications run first, but that desktop video uses all remaining CPU resources.

For important information about how to manage CPU resources to achieve optimum video quality, refer to the Selecting Audio and Video Devices for Use with Polycom PVX document, available at http://www.polycom.com/common/pw_item_show_doc/1,1276,4556,00.pdf.

- If you experience no video or audio in a call, please verify that the latest hardware drivers are installed and check the video or audio with the vendor's software to verify that the operating system can handle the device properly. This can make a significant difference in media performance.
- In some cases the graphics interface in older systems is too slow to render video properly. This is especially true when multiple video windows are open at the same time or if a video window is stretched to a larger size. If this is an issue, a newer graphics card should be considered.
- You can connect multiple third-party cameras; however, not all types of cameras work with other cameras. If you experience problems using a system with two third-party cameras connected, try connecting only the camera you want to use.
- Multiple cameras of the same model are not supported.
- The camera configuration dialogs are provided by the camera vendor and may not be translated into all languages.
- If you wish to designate a preferred camera on the Setup > Video page, you must connect the camera prior to starting the PVX application. Otherwise, the camera will not appear as a selection in the Preferred Camera drop-down list.
Interoperability Testing

Polycom PVX version 8.0.1 has been tested extensively with a wide range of products. The following list is not a complete inventory of compatible equipment; it simply indicates the products that have been tested for compatibility with this release. Any interoperability issues or restrictions documented during testing are noted in the section that follows this table.

<table>
<thead>
<tr>
<th>Type</th>
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<th>Version</th>
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<td>NATs, Firewalls, Routers</td>
<td>Check Point Nokia IP130</td>
<td>NG R55 Build 127</td>
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<td></td>
<td>Cisco Router (QoS and NAT)</td>
<td>12.3</td>
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<td></td>
<td>Cisco PIX Firewall</td>
<td>6.3 (4) and 7.01</td>
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<td>D-Link DI-604</td>
<td>3.39 UPnP</td>
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<td>RADVISION ECS Gatekeeper</td>
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## Interoperability and Compatibility Issues

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<tr>
<td>Aethra Vega Star Gold</td>
<td>In calls with Aethra Vega Star Gold version 5.2.11 systems using H.239, content can be sent by PVX to the Aethra system, but not received.</td>
</tr>
<tr>
<td>Check Point Firewall</td>
<td>PVX H.323 calls through a Check Point Firewall version NG R55 may connect without audio or video.</td>
</tr>
<tr>
<td>Cisco VPN</td>
<td>This version of Polycom PVX interoperates with Cisco VPN software version 4.0.3F and later.</td>
</tr>
<tr>
<td>Cisco PIX Firewall</td>
<td>The Cisco PIX firewall version 6.3 (4) does not support PVX H.323 dual stream calls with H.323 aware enabled. To correct this, disable the H.323 aware feature on the Cisco PIX firewall.</td>
</tr>
<tr>
<td>Cisco IP Gateway</td>
<td>The Cisco IP Gateway does not currently support PVX calls using People+Content, H.239 data sharing or encryption.</td>
</tr>
<tr>
<td>Ezenia! MCU</td>
<td>When using the Polycom PVX software with an Ezenia! MCU version 6.0, AES encryption must be disabled.</td>
</tr>
<tr>
<td>Microsoft NetMeeting</td>
<td>The Polycom PVX application does not support G.723 audio when using a webcam. This means that connections to endpoints like NetMeeting that previously connected at G.723 may now connect with G.711. The call rate must be increased to 128 kbps or above or there will be no video. NetMeeting calls to a PVX system that are subsequently transferred by PVX will disconnect. NetMeeting does not support Call Transfer.</td>
</tr>
<tr>
<td>Polycom Global Management System</td>
<td>Global Management System managers may notice incorrect caller ID listed under the Call Status tab in the GMS manager. This occurs when a Polycom PVX is in a video call with a ViewStation FX.</td>
</tr>
<tr>
<td>Polycom iPower</td>
<td>T.120 does not work with an iPower if the iPower is configured for encryption required. iPower systems do not accept transferred calls from Polycom PVX at this time. When sharing data from PVX to an iPower system, you must wait until the readiness tone is heard before sending data. Sending data before the receiving end is ready to accept it, may result in having to disconnect and redial the call. During audio-only calls to an iPower system, the data-sharing buttons on the PVX system may appear to be active and functional when they are not.</td>
</tr>
<tr>
<td>Product</td>
<td>Issue</td>
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<tr>
<td>Polycom MGC</td>
<td>Polycom PVX does not support sending snapshots when in a conference call with an MGC-100 using H.261 protocols. To correct this, reestablish the call using H.263 protocols. Users may experience ghosting and freezing image video when in a video call with an MGC-100 bridge running software version 5.0. MGC version 5.1 addresses this issue. PVX far end camera control (FECC) is not operable on SIP calls through a Polycom MGC conferencing bridge. When deactivating a T.120 data-share through a bridged MGC call, the data-share option buttons may continue to appear active and functional in the PVX application when they are not. PVX SIP calls through an MGC bridge to a VSX system running version 7.5.2 may result in no audio being heard from the VSX system.</td>
</tr>
<tr>
<td>Polycom PathNavigator</td>
<td>Users may experience an audio screech when in a Conference on Demand call. This is caused when one or more of the conference parties are placed on mute. To correct, users should un-mute the far sites. If you designate a PathNavigator version 5.0 or 6.0 address as your system gatekeeper, call forwarding settings will not automatically be reestablished when you close and then reopen PVX. This problem does not occur with PathNavigator version 7.0. Call transfer cannot currently be used when you are in a call using Conference on Demand. T.120 is not supported in a Conference on Demand call. Users may experience poor video quality when only one endpoint is using PathNavigator 5.0. Use one of the following options to correct this: Register both endpoints with PathNavigator 5.0. De-select PathNavigator and re-establish the call.</td>
</tr>
<tr>
<td>Polycom Soundpoint IP600 and IP4000</td>
<td>Calls to Polycom Soundpoint IP600 and IP4000 phones version 1.5.2 are not supported.</td>
</tr>
<tr>
<td>Polycom V2IU</td>
<td>Calls received from an endpoint using a Polycom V2IU 5300E version 5.4.1 will display an incorrect system address in the PVX address book if added when prompted at call completion. The correct endpoint dialing information should be entered manually to the address book.</td>
</tr>
<tr>
<td>Polycom WebOffice</td>
<td>Polycom WebOffice 6.0 is currently compatible only with ViaVideo version 5.1. Interoperability with Polycom PVX software may be addressed in a future release of WebOffice.</td>
</tr>
<tr>
<td>RADVISION ECS Gatekeeper</td>
<td>Encrypted calls through a RADVISION ECS gatekeeper may connect without audio or video.</td>
</tr>
<tr>
<td>RADVISION viaIP Gateway</td>
<td>A loud tone may be heard from PVX systems when disconnecting calls from a RADVISION viaIP Gateway. Content sharing using H.239 or People+Content is not supported in PVX calls placed through a RADVISION viaIP Gateway version 4.0.</td>
</tr>
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</table>
### Where to Get the Latest Product Information

To view the latest Polycom product documentation, visit the Documentation section of our website at [www.polycom.com/videodocumentation](http://www.polycom.com/videodocumentation).

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<th>Product</th>
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<td>RADVISION viaIP MCU</td>
<td>Calls through a RADVISION viaIP MCU version 3.2.38 may connect without video. Calls placed from PVX through a RADVISION viaIP MCU may appear to be fully encrypted when they are not. Data on the PVX statistics page may indicate that far end camera control, video, and audio channels are encrypted, when only the PVX channels are encrypted.</td>
</tr>
<tr>
<td>Sony PCS-1600</td>
<td>Users will experience an audio only call when connecting to a Sony PCS-1600 video conferencing system.</td>
</tr>
<tr>
<td>Sony PCS-1 with H.264</td>
<td>Some Sony PCS-1 systems will not decode a Polycom PVX H.264 video stream if the format is not exactly CIF. Sony has been made aware of the issue.</td>
</tr>
<tr>
<td>Tandberg Gateway</td>
<td>Calls through a Tandberg Gateway version G2.1 may send video to PVX at algorithms lower than that at which PVX is transmitting. For example, PVX may transmit H.263 video, but receive only H.261.</td>
</tr>
<tr>
<td>Tandberg 880 MXP</td>
<td>In calls with a Tandberg 880 MXP with H.239 enabled, content may continue to display on the Tandberg system even after content sharing has been terminated. To correct this, disconnect the call and redial. &lt;br&gt;In calls with a Tandberg 880 MXP versions B9.2, E4.2 &amp; F2.5 with H.239 enabled, video may transmit at only 50% of the dialed rate.</td>
</tr>
<tr>
<td>Tandberg 6000 E</td>
<td>Tandberg 6000 E systems may not display far-site video if H.239 is enabled on PVX when the call is connected. To correct this, disconnect the call, disable H.239 on PVX and redial. &lt;br&gt;In calls with a Tandberg 6000 E with H.239 enabled, content may continue to display on the Tandberg system even after content sharing has been terminated by PVX. To correct this, disconnect the call and redial.</td>
</tr>
<tr>
<td>VCON Escort</td>
<td>Users will experience corrupted audio when a call is made from Polycom PVX to a VCON Escort at 64 kbps.</td>
</tr>
<tr>
<td>VCON MXM Gatekeeper</td>
<td>The VCON MXM Gatekeeper does not currently support the Send Desktop feature in Polycom PVX. The VCON MXM Gatekeeper may fail to successfully register a Polycom PVX endpoint upon the initial registration attempt. Repeating the registration process typically proves to be successful on the second attempt.</td>
</tr>
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Warranty and Registration

The Polycom PVX includes a one-year hardware warranty (30-day return upon receipt at factory) and 90-day software warranty. For the first year, software updates (bug fixes and maintenance releases) and software upgrades (feature releases) are also included. Complete the one-time product registration form on the Polycom Resource Center website at http://extranet.polycom.com to access software downloads. Using the information provided as part of product registration, Polycom will make every effort to send you electronic notification of software releases as and when available.

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