HP Velocity FAQ and Troubleshooting
Contents

Trademark and patents .......................................................... 2
Disclaimer ........................................................................... 2

About this document .................................................................... 5

Purpose .................................................................................. 5
Intended audience .................................................................... 5
Document styles and conventions ................................................ 5
For more information ............................................................... 6

HP Velocity FAQ ..................................................................... 7

General ................................................................................... 7
  How does HP Velocity improve user Quality of Experience (QoE)? .... 7
  Does HP Velocity introduce latency? .......................................... 8
  What is HP Velocity’s impact on available bandwidth?.................. 8
  What is an HP Velocity accelerated session? ............................... 8
  What is an HP Velocity monitored session? ............................... 8
  What is the maximum number of HP Velocity sessions? .............. 8
  What is the purpose of policy filters? ......................................... 9
  What is the TCP Optimizer? .................................................... 9
  What is the WiFi Optimizer? .................................................... 9
  What is Burst Loss Protection (BLP)? ....................................... 9

Installation and deployment ........................................................ 10
  Which platforms and operating systems are supported by the HP Velocity server component? 10
  What are the system requirements for the HP Velocity server component? .............................. 10
  Where should HP Velocity be installed? ..................................... 11
  Which HP Velocity Server install package should be used? .......... 11
  Why does the “Another version of this product is already installed.” message appear? .............. 11
  Why does the “Do you want to allow the following program from an unknown publisher to make
  changes to your system” message appear? ................................. 11
  Why does a message about a driver that has not passed Windows Logo Compatibility testing appear? 11

Management ........................................................................... 13
  What do the colors of the HP Velocity System Tray icon represent? 13
  How is HP Velocity managed? ................................................. 13
  Why is Log History greyed out on the Statistics tab? .................. 14
  On the Accelerated Streams tab, why are some protocol names listed and others not? .................. 14
  What do the red and green bars on the Network Monitor graph represent? .............................. 14
  How are Group Policy settings applied? ..................................... 15
  What are the account privileges for HP Velocity? ........................ 15

Accelerated sessions .................................................................. 16
  All HP Velocity data streams are blocked ................................. 16
  Traffic between HP Velocity servers is only monitored ................ 16
An RDP connection is not established to Microsoft Hyper-V when HP Velocity is enabled (Active or Monitor mode). ......................................................... 17
No accelerated sessions are established for connections to a VMware desktop with HP Velocity installed. ......................................................... 18

HP Velocity Troubleshooting ................................................. 19
VDI connectivity issue ............................................................. 20
Non-VDI connectivity issue ...................................................... 21
HP Velocity sessions not established ......................................... 22
Quality of Experience issue ..................................................... 23
Troubleshooting procedures .................................................... 24
  Disabling HP Velocity ......................................................... 24
  Enabling HP Velocity .......................................................... 25
  Displaying network loss ....................................................... 27
  Displaying corrected loss ..................................................... 27
  Displaying Target Loss Rate .................................................. 28
  Displaying accelerated session information .............................. 28
  Adding an IP address to the policy filter blacklist ....................... 29
  Adding a port to the transparent policy filter ............................ 30
  Validating HP Velocity deployment ....................................... 30
  Checking the traffic path for a security server or firewall .............. 31
  Generating the HP Velocity Configuration Report ...................... 31
  Opening a ticket ............................................................... 32
About this document

Purpose

This document provides HP support with FAQ and troubleshooting information for HP Velocity.

Intended audience

This document is intended for HP support staff.

Document styles and conventions

In this document, the following styles are used.

<table>
<thead>
<tr>
<th>Style</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start &gt; Edit &gt; Cut</td>
<td>Any elements on screen such as menus or buttons use this format.</td>
</tr>
<tr>
<td>Select directory screen</td>
<td>A screen or dialog box name uses this format.</td>
</tr>
<tr>
<td>myfile.txt</td>
<td>Filenames, directory names, and command line text use this format.</td>
</tr>
<tr>
<td>Sample Product</td>
<td>Links to locations inside the document use this format.</td>
</tr>
<tr>
<td>Example book</td>
<td>References to external published documents, books, and articles use this format.</td>
</tr>
</tbody>
</table>

In this document, the following conventions are used

<table>
<thead>
<tr>
<th>Convention</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;sample_name&gt;</td>
<td>Replace the whole text including angle brackets with the expected value. For example, replace &lt;exec_filename&gt; with example.exe when entering this command.</td>
</tr>
<tr>
<td>{option1</td>
<td>option 2}</td>
</tr>
</tbody>
</table>
For more information

This document is part of a set of documents about HP Velocity. For more information, visit http://www.hp.com/support. Select the country/region from the map and then select Product Support & Troubleshooting. Type the thin client model in the field and select SEARCH.

The following documents are part of the HP Velocity documentation set:

- **HP Velocity Overview** – This document provides a high level overview of HP Velocity technology, components, and features.

- **HP Velocity User Guide for Thin Clients** – This document describes how to start, monitor, and display information about HP Velocity. It is specific to thin clients running Microsoft Windows operating systems.

- **HP Velocity Server Side Deployment Guide** – This document describes various deployment methods for HP Velocity on the server side.

- **HP Velocity FAQ and Troubleshooting** – This document provides HP support with FAQ and troubleshooting information for HP Velocity.

- **LiveQoS Support** – This document provides HP third and fourth level support staff with information about LiveQoS and how to request support for HP Velocity.
The FAQ is divided into the following categories:

- General
- Installation and deployment
- Management
- Accelerated sessions

General

This section includes:

- How does HP Velocity improve user Quality of Experience (QoE)?
- Does HP Velocity introduce latency?
- What is HP Velocity’s impact on available bandwidth?
- What is an HP Velocity accelerated session?
- What is an HP Velocity monitored session?
- What is the maximum number of HP Velocity sessions?
- What is the purpose of policy filters?
- What is the TCP Optimizer?
- What is the WiFi Optimizer?
- What is Burst Loss Protection (BLP)?

How does HP Velocity improve user Quality of Experience (QoE)?

HP Velocity integrates with existing systems and addresses the underlying problems found in today's networks: packet loss, transmission latency, and jitter.

HP Velocity continuously monitors end-to-end network conditions to select the most appropriate data delivery mechanism. Packet loss is automatically reduced and transmission latency is minimized, thereby improving an application's QoE and throughput.
Does HP Velocity introduce latency?

HP Velocity provides zero latency loss protection.

What is HP Velocity’s impact on available bandwidth?

The bandwidth control mode defines how accelerated streams are protected from network loss. Higher protection modes protect against a greater network loss but also require more bandwidth.

HP Velocity provides the following bandwidth control modes:

- **Dynamic** configures HP Velocity to dynamically maximize acceleration while optimizing bandwidth usage
- **Low** configures HP Velocity to cap the estimated protection overhead at or below 27%; this is best suited for very constrained environments
- **Medium** configures HP Velocity to cap the estimated protection overhead at or below 40%; this is best suited for moderately constrained environments
- **High** configures HP Velocity to cap the estimated protection overhead at or below 103%; this is best suited for high loss networks

**NOTE:** Protection overhead bandwidth refers to the amount of additional bandwidth required for the different encoding modes used by HP Velocity to protect against packet loss. See the “Packet loss protection” section of the *HP Velocity Overview* document for more details.

What is an HP Velocity accelerated session?

An accelerated session is formed between two HP Velocity endpoints in Active mode. In Active mode, HP Velocity continuously monitors end-to-end network conditions to activate and tune HP Velocity optimizers (such as zero latency loss protection, WiFi acceleration, and TCP flow control).

What is an HP Velocity monitored session?

A monitored session is formed between two HP Velocity endpoints in Monitor mode. In Monitor mode, HP Velocity continuously monitors end-to-end network conditions but does not activate and tune HP Velocity optimizers (such as zero latency loss protection, WiFi acceleration, and TCP flow control).

What is the maximum number of HP Velocity sessions?

HP thin clients currently support up to 16 simultaneous accelerated streams.
HP Velocity FAQ and Troubleshooting 9

General

HP Velocity installed on a virtual desktop currently supports up to 16 simultaneous accelerated streams with one or more HP thin clients.

HP Velocity installed on a terminal services server currently supports up to 256 simultaneous accelerated streams with one or more HP thin clients.

What is the purpose of policy filters?

The policy filters define which data streams will be accelerated and the level of protection applied, based on their IP addresses and ports. See the Policy Filters section of HP Velocity Server Side Deployment Guide for more details.

What is the TCP Optimizer?

HP Velocity optimizes bandwidth utilization by minimizing TCP overhead on half-duplex links (including WiFi).

What is the WiFi Optimizer?

HP Velocity accelerates application streams by leveraging WiFi multimedia standards to minimize latency and prioritizing HP Velocity traffic.

What is Burst Loss Protection (BLP)?

Burst loss, also known as sequential loss, normally prevents HP Velocity from reconstructing the source packet at the remote endpoint. To mitigate against sequential loss, HP Velocity offers the Burst Loss Protection (BLP) feature.

The net effect of BLP is added resiliency against burst loss. Its success depends largely on the number of source packets that were HP Velocity-encoded and on the sequential loss duration.
Installation and deployment

This section includes:

- Which platforms and operating systems are supported by the HP Velocity server component?
- What are the system requirements for the HP Velocity server component?
- Where should HP Velocity be installed?
- Which HP Velocity Server install package should be used?
- Why does the “Another version of this product is already installed.” message appear?
- Why does the “Do you want to allow the following program from an unknown publisher to make changes to your system” message appear?
- Why does a message about a driver that has not passed Windows Logo Compatibility testing appear?
- What configurations need to be applied to HP Velocity?

Which platforms and operating systems are supported by the HP Velocity server component?

HP Velocity installs as a network driver on the following platforms:

- Virtual desktops
- Microsoft Terminal Services servers
- Microsoft Hyper-V servers

The HP velocity server side component is currently supported on Microsoft operating systems.

What are the system requirements for the HP Velocity server component?

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Server OS</th>
<th>Virtual desktop OS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU</td>
<td>Any</td>
<td>Any</td>
</tr>
<tr>
<td>Memory</td>
<td>30 MB</td>
<td>3 MB</td>
</tr>
<tr>
<td>Disk space</td>
<td>10 MB</td>
<td>10 MB</td>
</tr>
<tr>
<td>OS</td>
<td>Windows Server 2003</td>
<td>Windows 7</td>
</tr>
<tr>
<td></td>
<td>Windows Server 2008</td>
<td>Windows Vista</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Windows XP (SP3 and above)</td>
</tr>
<tr>
<td>OS variants</td>
<td>32-bit and 64-bit</td>
<td></td>
</tr>
</tbody>
</table>
Where should HP Velocity be installed?

HP Velocity comes pre-installed on select HP thin client images since March 2012. HP Velocity server side deployments vary based on the virtualization architecture (see the Deployments section of the HP Velocity Server Side Deployment Guide).

Which HP Velocity Server install package should be used?

<table>
<thead>
<tr>
<th>Operating system</th>
<th>OS variants</th>
<th>Install package</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows XP</td>
<td>32-bit</td>
<td>HPVelocity_Server_32_R#.msi</td>
</tr>
<tr>
<td>Windows 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows Vista</td>
<td>64-bit</td>
<td>HPVelocity_Server_64_R#.msi</td>
</tr>
<tr>
<td>Windows Server 2008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows Server 2003</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note that R# indicates the HP Velocity release number.

Why does the “Another version of this product is already installed.” message appear?

A previous version of HP Velocity is installed. It must be uninstalled before the new installation can proceed. Recent HP Remote Graphics Software (RGS) versions also include HP Velocity. If RGS is installed, before installing HP Velocity uninstall RGS, install HP Velocity, and then reinstall RGS.

Why does the “Do you want to allow the following program from an unknown publisher to make changes to your system” message appear?

During installation, this message may appear on Windows 7 and Windows Vista systems. If this message appears, select the option to allow the changes to take place. This is expected and is required for HP Velocity installation.

Why does a message about a driver that has not passed Windows Logo Compatibility testing appear?

During installation, this message may appear on Windows XP systems. If this message is displayed, allow the installation to proceed. This is expected and is required for HP Velocity installation.
What configurations need to be applied to HP Velocity?

HP Velocity is plug-and-play. It installs with a default configuration suitable for most deployments. See the Configuration section of the *HP Velocity Server Side Deployment Guide*. 


Management

This section includes:

- What do the colors of the HP Velocity System Tray icon represent?
- How is HP Velocity managed?
- Why is Log History greyed out on the Statistics tab?
- On the Accelerated Streams tab, why are some protocol names listed and others not?
- What do the red and green bars on the Network Monitor graph represent?
- How are Group Policy settings applied?
- What are the account privileges for HP Velocity?

What do the colors of the HP Velocity System Tray icon represent?

The following table describes the icon colors, operational modes, and their behaviors.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Color</th>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Green]</td>
<td>Green</td>
<td>Active</td>
<td>HP Velocity is actively accelerating one or more streams.</td>
</tr>
<tr>
<td>![Blue]</td>
<td>Blue</td>
<td>Active</td>
<td>HP Velocity is active but no accelerated streams have been established.</td>
</tr>
<tr>
<td>![Orange]</td>
<td>Orange</td>
<td>Monitoring</td>
<td>HP Velocity is profiling present and trending network conditions. In this mode HP Velocity does not accelerate streams.</td>
</tr>
<tr>
<td>![Gray]</td>
<td>Gray</td>
<td>Disabled</td>
<td>HP Velocity is disabled.</td>
</tr>
</tbody>
</table>

How is HP Velocity managed?

HP Velocity is managed using the following:

- HP Velocity Group Policy Objects
- HP Velocity Management application

See the *HP Velocity Server Side Deployment Guide* for more details.
**Why is **Log History** greyed out on the Statistics tab?**

If **Logging** is set to disabled, **Log History** will be greyed out. Enable **Logging** by selecting one of the logging intervals.

**On the Accelerated Streams tab, why are some protocol names listed and others not?**

The Protocol column will only display protocol names of well known default port numbers such as RGS (port 42996), ICA (port 1494), PCoIP (port 4172), and RDP (port 3389).

**What do the red and green bars on the Network Monitor graph represent?**

Red bars represent the packet loss in the network. Green bars represent the corrected packet loss seen by applications.

**How are Group Policy settings applied?**

The Group Policy Object (GPO) can be used to centrally manage and propagate new HP Velocity settings over an entire Windows Active Directory (AD) domain.

To configure the GPO with HP Velocity options, the HP Velocity Administrative Template must be applied to the GPO. The HP Velocity Administrative Template (hpvelocity_configuration-R#.adm) adds a set of options to the GPO and specifies which registry keys will be set for each option.

**NOTE:** Policy Engine configuration changes will be applied immediately to HP Velocity endpoints that have the HP Velocity Management application running. If the management application is not running, the Policy Engine changes will be applied to that endpoint after a system reboot.
What are the account privileges for HP Velocity?

HP Velocity provides the following access based on user account privileges. Refer to the tables below.

Administrator:

<table>
<thead>
<tr>
<th>Information</th>
<th>Read</th>
<th>Write</th>
<th>Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerated Stream information</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network Monitoring graphs</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Configuration values</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Policy Filters configuration values</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Non-administrator:

<table>
<thead>
<tr>
<th>Information</th>
<th>Read</th>
<th>Write</th>
<th>Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accelerated Stream information</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network Monitoring graphs</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statistics</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Configuration values</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Policy Filters configuration values</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Accelerated sessions

This section includes:

- All HP Velocity data streams are blocked
- Traffic between HP Velocity servers is only monitored
- An RDP connection is not established to Microsoft Hyper-V when HP Velocity is enabled (Active or Monitor mode)
- No accelerated sessions are established for connections to a VMware desktop with HP Velocity installed

All HP Velocity data streams are blocked

HP Velocity uses an Internet Protocol (IP) ID of 0x880477FB and an IP option of 0x420B in IP headers. Intrusion Detection Systems (IDS) and firewall systems may require configuration to support HP Velocity-enabled traffic. Failure to do so may result in these devices blocking HP Velocity-enabled traffic. Consult your device manuals to configure these settings.

Traffic between HP Velocity servers is only monitored

HP Velocity only accelerates streams between HP thin clients and HP Velocity-enabled servers (virtual desktops or terminal services). In the case of server-to-server connections, HP Velocity will display the green icon but will only be monitoring the sessions.
An RDP connection is not established to Microsoft Hyper-V when HP Velocity is enabled (Active or Monitor mode)

If HP Velocity is installed directly on Microsoft Hyper-V and there is a “Local Area Connection - Virtual Network” entry as shown in Figure 1, ensure that the LiveQoS NDIS 6 Filter Driver is disabled for the physical network adapter, as shown in Figure 2.

Figure 1. Microsoft Hyper-V network connections

![Network Connections](image1)

Figure 2. HP Velocity NDIS driver filter uninstalled

![Local Area Connection Properties](image2)
No accelerated sessions are established for connections to a VMware desktop with HP Velocity installed

Virtualization architectures that require HP thin clients to access virtual desktops via a proxy service provided by a connection broker (such as VMware View Manager) must install HP Velocity on the connection broker. See the Deployments section of the *HP Velocity Server Side Deployment Guide*. 
This section includes:

• VDI connectivity issue
• Non-VDI connectivity issue
• HP Velocity sessions not established
• Quality of Experience issue
• Troubleshooting procedures
VDI connectivity issue

- Unable to connect
  - Disable HP Velocity. Try to connect again.
  - Connectivity restored
- Reboot HP thin client. Try to connect again.
  - Connectivity restored
- Still unable to connect
  - It is not an HP Velocity issue. Enable HP Velocity.
- Re-enable HP Velocity. Try to connect again
- Unable to connect
  - Reboot HP thin client. Try to connect again
  - Connection successful
- Connection successful
  - Check the original traffic path for a security server or firewall
  - Disable HP Velocity on the HP thin client to restore connectivity
  - Open a ticket
- Open a ticket
Non-VDI connectivity issue

Unable to connect

Disable HP Velocity. Try connecting again.

Connectivity restored

Try another HP Velocity accelerated protocol.

No accelerated session

Add source IP address to blacklist, or add port to transparent filter. Try connecting again.

Connection successful

Open a ticket.

‡ Check the original traffic path for a security server or firewall.
‡ Disable HP Velocity on the HP thin client to restore connectivity.
‡ Open a ticket.

Still unable to connect

It is not an HP Velocity issue. Enable HP Velocity.

Connection successful

Open a ticket.

‡ Check the original traffic path for a security server or firewall.
‡ Disable HP Velocity on the HP thin client to restore connectivity.
‡ Open a ticket.

Reboot thin client. Try connecting again.

Connection successful

Open a ticket.

‡ Check the original traffic path for a security server or firewall.
‡ Disable HP Velocity on the HP thin client to restore connectivity.
‡ Open a ticket.

Reboot thin client. Try connecting again.

Solved!

‡ Check the original traffic path for a security server or firewall.
‡ Disable HP Velocity on the HP thin client to restore connectivity.
‡ Open a ticket.

Try again with HP Velocity enabled.
‡ If it fails again, disable HP Velocity to restore connectivity.
‡ Open a ticket.

Try again with HP Velocity enabled.
‡ If it fails again, disable HP Velocity to restore connectivity.
‡ Open a ticket.

Try another HP Velocity accelerated protocol.

Connection successful

Open a ticket.

‡ Check the original traffic path for a security server or firewall.
‡ Disable HP Velocity on the HP thin client to restore connectivity.
‡ Open a ticket.

Try another HP Velocity accelerated protocol.

Connection successful

Open a ticket.

‡ Check the original traffic path for a security server or firewall.
‡ Disable HP Velocity on the HP thin client to restore connectivity.
‡ Open a ticket.

Try another HP Velocity accelerated protocol.

Connection successful

Open a ticket.

‡ Check the original traffic path for a security server or firewall.
‡ Disable HP Velocity on the HP thin client to restore connectivity.
‡ Open a ticket.
HP Velocity Troubleshooting

HP Velocity sessions not established

Is it a supported HP Velocity protocol?

HP Velocity will only form sessions for supported protocols.

Is HP Velocity set to "Active" on both ends?

Yes

Set them both to "Active" mode.

No

Try reinstalling HP Velocity.
• Replace the HP thin client if possible.

Try another client. Does it create sessions?

Are other protocols being accelerated?

Yes

Is it a valid HP Velocity deployment?

Make the necessary changes to the topology or configuration, based on the HP Velocity deployment guide.

No

Open a ticket.

No

Reboot the server side, if possible.
• Check the traffic paths for a security server or firewall that could be blocking traffic.
• Disable HP Velocity on the clients.
• Open a ticket.

Can you form accelerated sessions to another HP Velocity Server?

No

Open a ticket.

Yes

Is the issue with a VDI protocol?

Yes

• Check the traffic paths for a security server or firewall.
• Open a ticket.

No

Yes

No

HP Velocity sessions not established
Quality of Experience issue

1. Is the accelerated stream to the expected destination?
   - Yes
   - No

2. Are HP Velocity accelerated streams being created?
   - Yes
   - No

3. Is the HP Velocity stream to the expected destination IP address?
   - Yes
   - No

4. Does corrected loss show improvement?
   - Yes
   - No

- **Follow the HP Velocity sessions not established decision tree.**
- **Verify that HP Velocity is active on both client and server.**
- **Are you exceeding the accelerated stream limit on the client or server?**
- **Verify that the connection is between an HP Velocity client and server. Server-to-server sessions will only be monitored.**

5. Yes, but they are in monitored mode

- **Verify the topology to determine which device is at the far end of the HP Velocity session.**

6. Quality of Experience issue

- **HP Velocity helps when there is network loss.**
- **Check the HP thin client and server system resources (CPU, RAM, etc).**
- **The quality issue could be due to low bandwidth on the link, or high latency.**

- **The application may require an even higher network quality.**

- **HP Velocity is working and improving the network quality.**
- **Look for other causes such as insufficient CPU or memory.**
- **The quality issues could be due to low bandwidth on the link or high latency.**

- **Check for available bandwidth.**
- **If there is sufficient bandwidth, try enabling Burst Loss Protection (BLP).**
Troubleshooting procedures

This section includes:

- Disabling HP Velocity
- Enabling HP Velocity
- Displaying network loss
- Displaying corrected loss
- Displaying Target Loss Rate
- Displaying accelerated session information
- Adding an IP address to the policy filter blacklist
- Adding a port to the transparent policy filter
- Validating HP Velocity deployment
- Checking the traffic path for a security server or firewall
- Generating the HP Velocity Configuration Report
- Opening a ticket

Disabling HP Velocity

To disable HP Velocity - Windows:
1. Start the HP Velocity System Tray Application from the start menu.
2. Left-click on the HP Velocity system tray icon.
3. Move the HP Velocity mode slider to Off.
4. Select OK.

See the HP Velocity User Guide for more details.

To disable HP Velocity - Linux Graphical User Interface (GUI):
1. Login as an administrator.
2. Select Control Panel.
3. Select Setup > Network.
4. Select the iPeak tab.
5. Uncheck Enable packet loss protection.
6. Select OK.
To disable HP Velocity - Linux Command Line Interface (CLI):
1. Login as an administrator.
2. Select **Control Panel**.
3. Select **Setup > X Terminal**.
4. Enter the following command:
   ```
   echo globalFilter=1 > /proc/net/ipeak{0|1}/config/core
   echo commit > /proc/net/ipeak{0|1}/config/commit
   ```
   Select *ipeak0* for the wired or *ipeak1* for the wireless network interface in the above command.

   **Note:** Disabling HP Velocity using `globalFilter` is not persistent over a reboot. To permanently disable HP Velocity, comment out `ipeak` and `ipeak-wireless` in `/etc/modules`.

Enabling HP Velocity

**To enable HP Velocity - Windows:**
1. Start the HP Velocity System Tray Application from the start menu.
2. Left-click on the HP Velocity system tray icon.
3. Move the HP Velocity mode slider to **Active**

See the *HP Velocity User Guide* for more details.
To enable HP Velocity - Linux GUI:
1. Login as an administrator.
2. Select Control Panel.
3. Select Setup > Network.
4. Select the iPeak tab.
5. Check Enable packet loss protection.
6. Select OK.

Figure 4. Enabling HP Velocity on Linux GUI

To enable HP Velocity - Linux CLI:
1. Login as an administrator.
2. Select Control Panel.
3. Select Setup > X Terminal.
4. Enter the following command:

   ```
   echo globalFilter=0 > /proc/net/ipeak{0|1}/config/core
   echo commit > /proc/net/ipeak{0|1}/config/commit
   ```

Select ipeak0 for the wired or ipeak1 for the wireless network interface in the above command.

Note: To re-enable HP Velocity if it is permanently disabled, uncomment ipeak and ipeak-wireless in /etc/modules.
Displaying network loss

To display network loss - method 1:
1. Start the HP Velocity System Tray Application from the start menu.
2. On the HP Velocity server system, right-click the system tray icon.
3. Select Management.
4. Select Statistics.

The Network Loss row indicates packet loss in the network seen by applications (see the Statistics section of HP Velocity Server Side Deployment Guide).

To display network loss - method 2:
1. Start the HP Velocity System Tray Application from the start menu.
2. On the HP Velocity server system, right-click the system tray icon.
3. Select Management.
4. Select Network Monitor.

Red bars indicate packet loss in the network seen by applications (see the Network Monitor section of HP Velocity Server Side Deployment Guide).

Displaying corrected loss

To display corrected loss - method 1:
1. Start the HP Velocity System Tray Application from the start menu.
2. On the HP Velocity server system, right-click the system tray icon.
3. Select Management.
4. Select Statistics.

The Corrected Loss row indicates corrected packet loss seen by applications (see the Statistics section of HP Velocity Server Side Deployment Guide).
To display corrected loss - method 2:
1. Start the HP Velocity System Tray Application from the start menu.
2. On the HP Velocity server system, right-click the system tray icon.
3. Select Management.
4. Select Network Monitor.

Green bars indicate the corrected packet loss seen by applications (see the Network Monitor section of HP Velocity Server Side Deployment Guide).

Displaying Target Loss Rate

To display the currently configured Target Loss Rate (TLR):
1. Start the HP Velocity System Tray Application from the start menu.
2. On the HP Velocity server system, right-click the system tray icon.
3. Select Management.
4. Select Configuration.

TLR displays the target loss rate that HP Velocity will attempt to achieve (see the Configuration section of HP Velocity Server Side Deployment Guide).

To display the TLR of each accelerated stream:
1. Start the HP Velocity System Tray Application from the start menu.
2. On the HP Velocity server system, right-click the system tray icon.
3. Select Management.
4. Select Accelerated Streams.

The TLR column displays the target loss rate that HP Velocity will attempt to achieve (see the Accelerated Streams section of HP Velocity Server Side Deployment Guide).

Displaying accelerated session information

To display accelerated session information:
1. Start the HP Velocity System Tray Application from the start menu.
2. Right-click the HP Velocity system tray icon.
3. Select Management.
4. Select Accelerated Streams
The Accelerated Streams tab displays detailed information for each unique HP Velocity accelerated stream.

<table>
<thead>
<tr>
<th>Statistic name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Destination IP</td>
<td>The destination IP address for the accelerated stream.</td>
</tr>
<tr>
<td>Destination Port</td>
<td>The destination TCP or UDP port number for the accelerated stream. If the port number is a recognized protocol, the protocol name will be displayed as well.</td>
</tr>
<tr>
<td>Local IP</td>
<td>The local IP address for the accelerated stream.</td>
</tr>
<tr>
<td>Local Port</td>
<td>The local TCP or UDP port number for the accelerated stream. If the port number is a recognized protocol, the protocol name will be displayed as well.</td>
</tr>
<tr>
<td>Protection Mode</td>
<td>Specifies whether the accelerated stream is active (protection enabled) or simply monitored. The field will read <strong>Active</strong> for streams which are accelerated and <strong>Monitored</strong> for streams which are monitored.</td>
</tr>
<tr>
<td>Protocol</td>
<td>The protocol (such as TCP or UDP) used by the accelerated stream.</td>
</tr>
<tr>
<td>TLR</td>
<td>The Target Loss Rate (TLR) applied to the accelerated stream that HP Velocity will attempt to achieve.</td>
</tr>
</tbody>
</table>

Adding an IP address to the policy filter blacklist

**To add an IP address to the policy filter blacklist:**

1. Start the HP Velocity System Tray Application from the start menu.
2. Right-click the HP Velocity system tray icon.
3. Select **Management**.
4. Select **Configuration > Policy Filters**.
5. Select **Advanced**.
6. In the **IP Filters Blacklist** field, enter the IP address and netmask in the format `xxx.xxx.xxx.xxx/xx`. Separate entries with a space.
7. When done, select **Apply** and close the window.

For more information, see the Policy Filters section of **HP Velocity Server Side Deployment Guide**.
Adding a port to the transparent policy filter

To add a port to the transparent filter:
1. Start the HP Velocity System Tray Application from the start menu.
2. On the HP Velocity server system, right-click the system tray icon.
3. Select Management.
4. Select Configuration > Policy Filters.
5. Select either Transparent TCP Ports or Transparent UDP Ports as appropriate.
6. Enter the port number. Separate entries with a space.
7. When done, select Apply and close the window.

For more information, see the Policy Filters section of HP Velocity Server Side Deployment Guide.

Validating HP Velocity deployment

Valid HP Velocity deployments are explained in the deployment chapter of the HP Velocity Server Side Deployment Guide.

To validate the version of HP Velocity:
1. Start the HP Velocity System Tray Application from the start menu.
2. Right-click the HP Velocity system tray icon.
3. Select About.

In Figure 5 below, HP Velocity is version 1.4.1. The release number is 6005, and it is a server install.

Figure 5. HP Velocity About
To validate the version of HP Velocity - Linux CLI:
1. Login as administrator.
2. Select **Control Panel**.
3. Select **Setup > X Terminal**.
4. Enter the following command:
   
   ```
   cat /proc/net/ipeak{0|1}/config/system | grep coreVersion
   ```

   Select ipeak0 for the wired or ipeak1 for the wireless network interface in the above command.

Checking the traffic path for a security server or firewall

HP Velocity uses an Internet Protocol (IP) ID of 0x880477FB and an IP option of 0x420B in IP headers. Intrusion Detection Systems (IDS) and firewall systems may require configuration to support HP Velocity-enabled traffic. Failure to do so may result in these devices blocking HP Velocity-enabled traffic. Consult your device manuals to configure these settings.

Generating the HP Velocity Configuration Report

To generate the HP Velocity Configuration Report:
1. Start the HP Velocity System Tray Application from the start menu.
2. Right-click the HP Velocity system tray icon.
3. Select **Management**.
4. Select **Configuration > Export**.

   The report will be automatically displayed using Windows Notepad or other application associated with .txt files.

5. Save the (HPVelocityConfig.txt) plain text file to your system. The default location is the current user’s temporary folder.

The HP Velocity Configuration Report includes the following information:

- Driver configuration
- Operating system
- Registry configuration
- Statistics
- Accelerated streams
For more information, see the Configuration section of the HP Velocity Server Side Deployment Guide.

Opening a ticket

Once HP support has performed the initial Third Level and Fourth Level support services and the issue has been isolated to HP Velocity, the responsibility will shift to LiveQoS Third Level support.

LiveQoS Third Level support professionals will promptly address the Technical Support Request (TSR). Each TSR is assigned a unique case number for tracking purposes throughout the resolution cycle.

For more information, see the LiveQoS Support Guide.