

TERA1 Firmware Release Notes Version 3.x

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Issue 27

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Revision History

Version	Date	Description
1	Apr10, 2008	Initial Release
2	May 8, 2008	Updated for release 1.0
3	May 30, 2008	Updated for release 1.1
4	June18, 2008	Updated for release 1.2
5	July 8, 2008	Updated for release 1.3
6	July 23, 2008	Updated for release 1.4
7	August 5, 2008	Updated for release 1.5, release 1.6
8	September 5, 2008	Updated for release 1.7
9	October 16, 2008	Updated for release 1.8
10	November 18, 2008	Updated for release 1.9
11	January 08, 2009	Updated for release 1.10 Updated document formatting
12	February 25, 2009	Updated for release 1.11
13	April 28, 2009	Updated for releases 1.12, 2.0 and 2.1
14	May 4, 2009	Clarified feature added to release 2.1
15	June 12, 2009	Updated for release 2.2 Clarified feature added to release 2.1
16	October 8, 2009	Updated for release 2.3
17	December 7, 2009	Updated for release 3.0 Changed the term Portal to Zero Client
18	March 12, 2010	Updated for release 3.1.0
19	April 16, 2010	Updated for release 3.1.1
20	June 11, 2010	Updated for release 3.1.2
21	July 30, 2010	Updated for release 3.2.0
22	October 10, 2010	Updated for release 3.2.1
23	December 9, 2010	Removed information for releases prior to 3.0 Updated for release 3.2.2
24	February 4, 2011	Updated for release 3.3.0
25	April 08, 2011	Updated for release 3.3.1
26	June 03, 2011	Updated for release 3.4.0
27	Sep 15, 2011	Updated for release 3.4.1

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Definitions

CAC	Common Access Card (smart card technology used in the U.S. Department of Defense)
CMI	Connection Management Interface – interface provided by the Zero Client or Host, used to communicate with an external connection management server
CMS	Connection Management Server (also referred to as Connection Broker)
EDID	Extended Display Identification Data – information provided by a monitor that describes the capabilities of the monitor. This information is typically used by the graphics card in the host computer.
FW	Firmware
GSC-IS	Government Smart Card Interoperability Specification
HPDET	Hot Plug Detect – HDMI signal used to sense when a display is plugged in or unplugged
OS	Operating System
OSD	On Screen Display on the PCoIP Zero Client
PCoIP®	Personal Computer over Internet Protocol (PC-over-IP®)
PCoIP Host	Host side of PCoIP system
PCoIP MC	PCoIP Management Console – tool provided by Teradici that gives IT personnel the ability to access and to manage all PCoIP Hosts and zero clients from a single location in a deployment
PCoIP Zero Client	User or client side of PCoIP system in the form of a standalone desktop device or integrated display based on a PCoIP processor
PIV	Personal Identity Verification
POE	Power Over Ethernet
RDP	Remote Desktop Protocol
SSO	Single Sign-On – authentication process that lets a user enter one username and password and grants access to multiple applications
Software Client	VMware View™ software application that can establish a PCoIP session with a PCoIP Host
TERA1100	Teradici PCoIP zero client processor
TERA1200	Teradici PCoIP host processor
URI	Uniform Resource Identifier
USB	Universal Serial Bus
VCS	View Connection Server

Preface

This application note provides a brief summary of the feature additions and issues resolved in each TERA1x00 firmware release starting with release 3.0 through release 3.4.1. The sections in this document are organized according to release date with the most recent releases listed first.

1 Release 3.4.1

This section provides a brief summary of the feature additions and issues resolved in release 3.4.1 versus release 3.4.0.

1.1 Compatibility

VMware View™ 4.6 deployments using zero client devices to connect to View virtual desktops should install release 3.4.1 on the zero client devices.

Deployments using zero clients with PCoIP host cards should install release 3.4.1 on the PCoIP processor found in both the host and client devices. This release is compatible with 3.4.0, 3.3.x, 3.2.x and 3.1.x releases. This release is not interoperable with releases 3.0, 2.x, 1.x or 0.x. A “session timeout” error message appears on the display if trying to connect to a PCoIP host card running an incompatible release.

Note that this firmware release can only be installed on PCoIP processors running firmware release 1.4 or greater. If the processor is loaded with a firmware release less than version 1.4 users must first download one or more intermediate firmware releases. The following table lists the steps the user must follow for each version of firmware that may be installed on a PCoIP processor. The firmware version can be viewed on the Info->Version web page for the device.

Installed Firmware Version	Upgrade process
0.1 through 0.17	1) Install firmware release 0.18 2) Install a 1.x firmware release (1.4 or greater) 3) Install the new firmware (3.4.1)
0.18 through 1.3	1) Install a 1.x firmware release (1.4 or greater) 2) Install the new firmware (3.4.1)
1.4 through 3.4.0	1) Install the new firmware (3.4.1)

1.2 Feature Additions

Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
Added support for pre-session user authentication using .NET smart cards	✓		
Add support for resetting a VM before logging into the VM.	✓		
Move cursor position to password field on View Login dialog when the username is prepopulated.	✓		

1.3 Important Bug Fixes

Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
Fixed problem that prevented zero clients from establishing View brokered connections in systems that include the "&" and "" characters in the domain name.	✓		
Fixed problem where two parameters in the DHCP request were in the wrong order. In some deployments this resulted in devices using gateway address 0.0.0.0.	✓	✓	✓
Fixed problem where some keys were incorrectly mapped on the Czech keyboard.	✓	✓	
Fixed memory leak problem introduced in FW release 3.4.0 that caused the device network interface to become non-responsive. When this happens the device does not support sessions and cannot be managed via the network interface.	✓	✓	✓
Fixed DVI VSYNC timing problem that caused interoperability issues with some displays and HDTVs.	✓	✓	
Fixed problem that prevented in-session authentication from working when using SIPR smart cards. Note: pre-session authentication is not yet supported for SIPR cards.	✓	✓	
Enable DNS SRV discovery on devices that have disabled DHCP.	✓	✓	✓
Fixed problem where the OSD may display incorrect certificate data when a smart card contains more than one certificate.	✓		
Fixed problem where the Seac Banche® SB 1600 scanner does not work.	✓		
Fixed problem introduced in FW release 3.4.0 that caused poor imaging performance. The problem affected host cards with 64 MB of RAM. It also affected host cards with 128 MB of RAM running sessions with large display resolutions (dual 2560x1600).			✓
Fixed problem introduced in FW release 3.3.0 where desktop icons become fuzzy while playing video. The problem occurs while network impairments are present.			✓
Fixed problem introduced in FW release 3.4.0 where visual artifacts appear on the zero client secondary display while the host OS boots.			✓

1.4 Known Issues

Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
See the knowledge base on the Teradici support website (techsupport.teradici.com) for known issues when PColP zero clients are connected to VMware View virtual desktops.	✓		
<p>The desktop display resolution may change when a user resizes the software client window while a session is active with a PColP host card. This occurs if the client window becomes smaller than the current desktop or a larger resolution will fit within the client window. Sometimes when this change occurs the graphics driver scales the image resulting in the desktop not fitting within the client window.</p> <p>To work around this resize the client window or configure the graphics driver to use the monitor's built in scaling feature.</p>			✓

1.5 Additional Collateral

Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
See the latest <i>VMware View 4 to PColP Zero Client Optimization Guide (TER1003001)</i> document for optimization guidelines for connecting PColP zero clients to VMware View 4 virtual desktops.	✓		
See the latest <i>VMware View 4 to PColP Zero Client WAN Network Guidelines (TER1007002)</i> document for network optimization guidelines when connecting PColP zero clients to VMware View 4 virtual desktops over remote access WAN networks.	✓		
See the Teradici support website (techsupport.teradici.com) for additional collateral for PColP zero client and PColP host card applications, implementation and management.	✓	✓	✓

2 Release 3.4.0

This section provides a brief summary of the feature additions and issues resolved in release 3.4.0 versus release 3.3.1.

2.1 Compatibility

VMware View 4.6 deployments using zero client devices to connect to View virtual desktops should install release 3.4.0 on the zero client devices.

Deployments using zero clients with PCoIP host cards should install release 3.4.0 on the PCoIP processor found in both the host and client devices. This release is compatible with 3.3.x, 3.2.x and 3.1.x releases. This release is not interoperable with releases 3.0, 2.x, 1.x or 0.x. A "session timeout" error message appears on the display if trying to connect to a PCoIP host card running an incompatible release.

Note that this firmware release can only be installed on PCoIP processors running firmware release 1.4 or greater. If the processor is loaded with a firmware release less than version 1.4 users must first download one or more intermediate firmware releases. The following table lists the steps the user must follow for each version of firmware that may be installed on a PCoIP processor. The firmware version can be viewed on the Info->Version web page for the device.

Installed Firmware Version	Upgrade process
0.1 through 0.17	1) Install firmware release 0.18 2) Install a 1.x firmware release (1.4 or greater) 3) Install the new firmware (3.4.0)
0.18 through 1.3	1) Install a 1.x firmware release (1.4 or greater) 2) Install the new firmware (3.4.0)
1.4 through 3.3.1	1) Install the new firmware (3.4.0)

2.2 Feature Additions

Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
Added support for T=1 CAC PIV smart cards.	✓		
Added support for bridging smart card readers for post-session authentication.	✓		

Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
Event Log enhancements <ul style="list-style-type: none"> Added syslog support. This allows PCoIP devices to transmit event log messages to a remote location. This feature is configured using the Management Console or the device <i>Diagnostics->Event Log</i> web page (see section 2.6.1). Support turning on/off additional logging from the device <i>Diagnostics->Event Log</i> web page (see section 2.6.1) Increase the number of messages stored in the event log 	✓	✓	✓
Updated some zero client OSD messages to improve the usability of the device.	✓	✓	
Removed support for configuring and establishing RDP sessions from the zero client.	✓	✓	
Added support for the following keyboard layouts: <ul style="list-style-type: none"> Czech Slovenian Romanian 	✓	✓	
Added support for viewing/configuring the following settings via the CMI interface, which is used by the PCoIP Management Console. <ul style="list-style-type: none"> DHCP timeout (static IP fallback settings) Syslog FW part number name (human readable version of FW part number) 	✓	✓	✓
Added support for TE's IntelliTouch™ surface acoustic wave and AccuTouch™ five-wire resistive touchscreen technologies used in Elo TouchSystems™ products. Section 2.6.2 shows how to configure this feature.	✓	✓	
Reduced the SSO time when using a zero client in a VMware View deployment with a smart card reader.	✓		
Improved support for accessing the device web pages using Internet Explorer 8 and 9	✓	✓	✓

2.3 Important Bug Fixes

Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
Fixed a problem where some DOT4-based printers do not work.	✓		

Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
Fixed audio problem where audio does not work on zero client devices with an ALC886 audio codec when resuming from a low power state (sleep/standby or hibernate).		✓	✓
Fixed issue that prevented connection to VMware View Connection Server through certain network load balancers.	✓	✓	
Implemented multiple audio quality and recording improvements.	✓		
Fixed a problem where the device event log included messages that reported an Ethernet PHY POST test failure. This occurred on devices with the RTL8211BN and RTL8211DN PHY.	✓	✓	✓
Fixed PCoIP Host Card reset when the network connection was interrupted.			✓
Fixed a problem where a zero client may reset while the OSD is active and the display is rotated 90 degrees counter-clockwise.	✓	✓	
Fixed a problem that caused large USB transfers to fail. The problem may occur while transferring photos to/from devices such as Canon cameras. The problem may also cause some print jobs to fail on certain DOT4-based printers. Note: This issue is resolved when using PCoIP Zero Clients with 128MB (1Gbit) of system memory. Please check your PCoIP Zero Client feature specification documentation to determine the system memory size. If you have 64MB (512Mbit) of system memory, then this fix does not apply.	✓		
Fixed a problem where the performance of a session may degrade on networks with broadcast traffic.	✓	✓	✓
Fixed a problem where some USB hand scanners do not work.	✓		
Fixed a problem introduced in FW release 3.3.0 where devices may reset after accessing device web pages. The problem occurs when DHCP is enabled and the length of the network domain name is large.	✓	✓	✓
Fixed a problem that prevents users from accessing a device web page. The problem occurs when the Device Name field includes illegal characters or too many characters. The following rules are now enforced when configuring this field. <ul style="list-style-type: none"> The first and last character must be a letter (A-Z, a-z) or a digit (0-9) The remaining characters must be letters, digits, or hyphens The length must be 63 characters or less 	✓	✓	✓

Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
Implemented changes to improve image quality and bandwidth management as compared to FW 3.3.x. These changes affect LAN and WAN connections between PCoIP host cards and zero clients.		✓	✓

2.4 Known Issues

Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
See the knowledge base on the Teradici support website (techsupport.teradici.com) for known issues when PCoIP zero clients are connected to VMware View virtual desktops.	✓		
<p>The desktop display resolution may change when a user resizes the software client window while a session is active with a PCoIP host card. This occurs if the client window becomes smaller than the current desktop or a larger resolution will fit within the client window. Sometimes when this change occurs the graphics driver scales the image resulting in the desktop not fitting within the client window.</p> <p>To work around this resize the client window or configure the graphics driver to use the monitor's built in scaling feature.</p>			✓

2.5 Additional Collateral

Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
See the latest <i>VMware View 4 to PCoIP Zero Client Optimization Guide (TER1003001)</i> document for optimization guidelines for connecting PCoIP zero clients to VMware View 4 virtual desktops.	✓		


Description	Zero Client (used with VMware View)	Zero Client (used with Host Card)	Host Card
See the latest <i>VMware View 4 to PCoIP Zero Client WAN Network Guidelines (TER1007002)</i> document for network optimization guidelines when connecting PCoIP zero clients to VMware View 4 virtual desktops over remote access WAN networks.	✓		
See the Teradici support website (techsupport.teradici.com) for additional collateral for PCoIP zero client and PCoIP host card applications, implementation and management.	✓	✓	✓

2.6 Supplemental Information

2.6.1 Event Log Web Page

[Log Out](#) PCoIP® Zero Client

Home Configuration / Permissions / **Diagnostics** / Info / Upload



Event Log
[Session Control](#)
[Session Statistics](#)
[Audio](#)
[Display](#)
[PCoIP Processor](#)

Event Log

Configure diagnostic logging options

Event Log Messages:

Event Log Filter Mode: Verbose ▾

Enable Syslog: ☐

Identify Syslog Host By: ☒ IP address ☐ FQDN

Syslog Host IP Address: . . .

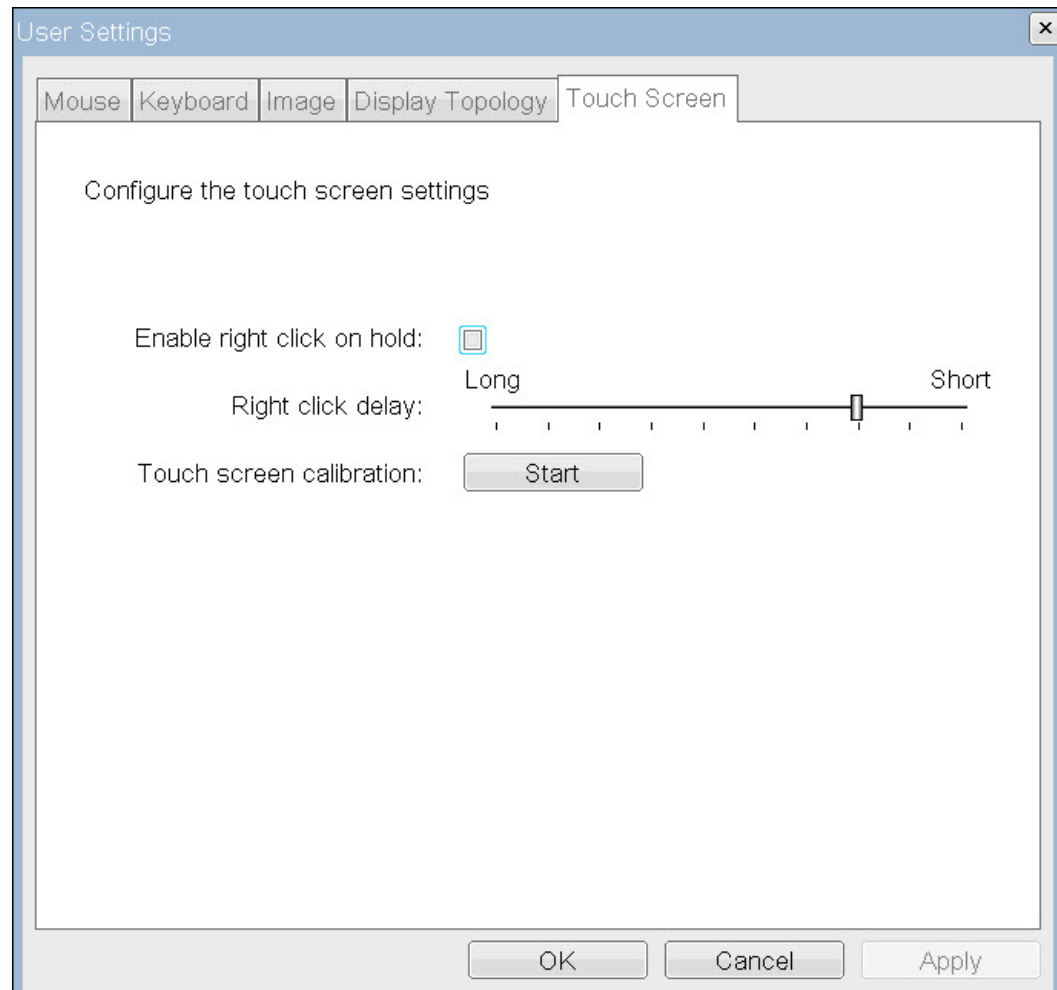
Syslog Host Port:

Syslog Facility: 19 - local use 3 ▾

Enhanced logging mode: Disable

Category	Enable enhanced logging
AUDIO	<input type="radio"/>
MANAGEMENT CONSOLE	<input type="radio"/>
NETWORKING	<input type="radio"/>
SESSION NEGOTIATION	<input type="radio"/>
SMARTCARD	<input type="radio"/>
SYSTEM	<input type="radio"/>
USB	<input type="radio"/>

2.6.2 Touch Screen Configuration OSD Screen



3 Release 3.3.1

This section provides a brief summary of the feature additions and issues resolved in release 3.3.1 versus release 3.3.0.

3.1 Compatibility

VMware View 4.5 and View 4.6 deployments using zero client devices to connect to View virtual desktops should install release 3.3.1 on the zero client devices.

Deployments using zero clients with PCoIP host cards should install release 3.3.1 on the PCoIP processor found in both the host and client devices. This release is compatible with 3.3.0, 3.2.x and 3.1.x releases. This release is not interoperable with releases 3.0, 2.x, 1.x or 0.x. A “session timeout” error message appears on the display if trying to connect to a PCoIP host card running an incompatible release.

Note that this firmware release can only be installed on PCoIP processors running firmware release 1.4 or greater. If the processor is loaded with a firmware release less than version 1.4 users must first download one or more intermediate firmware releases. The following table lists the steps the user must follow for each version of firmware that may be installed on a PCoIP processor. The firmware version can be viewed on the Info->Version web page for the device.

Installed Firmware Version	Upgrade process
0.1 through 0.17	1) Install firmware release 0.18 2) Install a 1.x firmware release (1.4 or greater) 3) Install the new firmware (3.3.1)
0.18 through 1.3	1) Install a 1.x firmware release (1.4 or greater) 2) Install the new firmware (3.3.1)
1.4 through 3.3.0	1) Install the new firmware (3.3.1)

3.2 Feature Additions

None

3.3 Important Bug Fixes

Description	Zero Client	Host
Fixed a problem introduced in FW release 3.3.0 where password protection becomes enabled on devices that disable password protection by default.	✓	✓
Fixed a problem introduced in FW release 3.3.0 that results in poor imaging performance on WAN connections between PCoIP host cards and zero clients. This problem can cause the following conditions: <ul style="list-style-type: none"> Zero client <i>PCoIP Packets Lost</i> counter exceeds the Host <i>PCoIP Packets Sent</i> counter The peak bandwidth used by the Host is less than the configured <i>Device Bandwidth Limit</i> setting 	✓	✓

Description	Zero Client	Host
Fixed the following problems observed by users with PIV (T=0) smart cards: <ul style="list-style-type: none"> Card reader does not power on when card is inserted When a card is inserted the username/password prompt appears instead of the PIN prompt 	✓	
Fixed a problem where USB audio does not work on Windows 7 64-bit hosts. This problem affected PCoIP connections between zero clients and a PCoIP server running VMware View 4.6 and above.	✓	
Fixed a problem where the zero client fails to connect to the View Connection Server after receiving a Server Hello packet with a zero length Session ID.	✓	
Fixed a problem introduced in FW release 3.3.0 where the host or zero client may return an invalid string if the serial number or hardware version fields were not configured properly at the factory. This can lead to problems when using the device with a Management Console or a Connection Broker.	✓	✓
Fixed a problem where the Logitech® ClearChat™ wireless headset failed to work with zero client devices.	✓	
Fixed a problem introduced in FW release 3.3.0 that results in the OSD appearing on the wrong set of monitors in certain quad display zero clients.	✓	
Fixed a problem where Power Over Ethernet (POE) enabled zero clients failed to power on if VLAN is enabled.	✓	
Updated some language translation strings.	✓	

3.4 Known Issues

Description	Zero Client	Host
See the knowledge base on the Teradici support website (techsupport.teradici.com) for known issues when PCoIP zero clients are connected to VMware View virtual desktops.	✓	
The desktop display resolution may change when a user resizes the software client window while a session is active with a PCoIP host card. This occurs if the client window becomes smaller than the current desktop or a larger resolution will fit within the client window. Sometimes when this change occurs the graphics driver scales the image resulting in the desktop not fitting within the client window. To work around this resize the client window or configure the graphics driver to use the monitor's built in scaling feature.		✓

3.5 Additional Collateral

Description	Zero Client	Host
See the latest <i>VMware View 4 to PCoIP Zero Client Optimization Guide (TER1003001)</i> document for optimization guidelines for connecting PCoIP zero clients to VMware View 4 virtual desktops.	✓	

4 Release 3.3.0

This section provides a brief summary of the feature additions and issues resolved in release 3.3.0 versus release 3.2.2.

4.1 Compatibility

VMware View 4.5 and View 4.6 deployments using zero client devices to connect to View virtual desktops should install release 3.3.0 on the zero client devices.

Deployments using zero clients with PCoIP host cards should install release 3.3.0 on the PCoIP processor found in both the host and client devices. This release is compatible with 3.2.x and 3.1.x releases. This release is not interoperable with releases 3.0, 2.x, 1.x or 0.x. A “session timeout” error message appears on the display if trying to connect to a PCoIP host card running an incompatible release.

Note that this firmware release can only be installed on PCoIP processors running firmware release 1.4 or greater. If the processor is loaded with a firmware release less than version 1.4 users must first download one or more intermediate firmware releases. The following table lists the steps the user must follow for each version of firmware that may be installed on a PCoIP processor. The firmware version can be viewed on the Info->Version web page for the device.

Installed Firmware Version	Upgrade process
0.1 through 0.17	1) Install firmware release 0.18 2) Install a 1.x firmware release (1.4 or greater) 3) Install the new firmware (3.3.0)
0.18 through 1.3	1) Install a 1.x firmware release (1.4 or greater) 2) Install the new firmware (3.3.0)
1.4 through 3.2.2	1) Install the new firmware (3.3.0)

4.2 Feature Additions

Description	Zero Client	Host
The peer loss overlay is now disabled by default. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, web interface, or management console.	✓	

Description	Zero Client	Host
<p>USB improvements for PCoIP connections between zero clients and a PCoIP server running VMware View 4.6 and above.</p> <ul style="list-style-type: none"> Improved robustness of USB bridging protocol Support for isochronous USB devices (e.g. USB headsets, USB microphones). Note that large scale soft phone and videoconferencing applications (e.g. unified communications) using USB headsets and webcams are not currently supported in VMware View virtual desktop environment. Refer to the Teradici support site for additional details on USB support. Improved support for devices connected to the zero client through a USB hub 	✓	
<p>VMware View login enhancements</p> <ul style="list-style-type: none"> Support configuring the pool/desktop name used by a zero client when starting a session. This feature is configured using the VMware View Advanced Web interface shown in section 4.6.3. Increase the number of supported desktop pools to 100 Support auto-logon, which allows administrators to configure the username, password and domain name. This feature is configured using the web interface shown in section 4.6.3. Modify the <i>Connection Server</i> entry box on the OSD VMware View connect screen to display up to five addresses. Section 4.6.1 shows how to enable/disable this feature. Section 4.6.4 shows the dropdown menu that supports displaying multiple addresses. Enhanced the format of the URI used to specify the VCS. Below are examples of valid entries: <ul style="list-style-type: none"> myconnectionserver.teradici.com http://myconnectionserver.teradici.com https://myconnectionserver.teradici.com:443 Support configuring how the zero client accesses smart cards that support both the GSC-IS and PIV Endpoint standards. This only affects smart card accesses performed outside of PCoIP sessions. This feature is configured using the VMware View Advanced OSD and Web interfaces shown in sections 4.6.2 and 4.6.3. 	✓	
Added support for pre-session secure user authentication via RSA SecurID®. This feature may only be used with VMware View 4.5 and above.	✓	
Added configuration support to enable/disable the zero client and PCoIP host card web interfaces. This feature is configured using release 1.4.x or higher of the PCoIP MC profile security settings shown in section 4.6.6.	✓	✓
Added configuration support to enable/disable the zero client OSD configuration menus. This feature is configured using release 1.4.x or higher of the PCoIP MC profile OSD settings shown in section 4.6.7.	✓	

Description	Zero Client	Host
Support for PCoIP connections between remote workstations with PCoIP host cards and VMware View PCoIP software clients. This feature works with VMware View 4.6 and above.		✓
Improvements to reduce the bandwidth used in WAN environments.	✓	✓
Added support for the following keyboard layouts: <ul style="list-style-type: none"> • Hungarian • Serbian • Latvian • Estonian 	✓	
Added support for Hewlett Packard USB smart card keyboard model #KUS0133/ED707AA.	✓	
Added support for using multimedia keys (USB HID usage page 12). Note that prior to this release these keys were only supported when using a zero client with a PCoIP host card while the local cursor feature was disabled.	✓	
Added support to configure specific devices to be bridged rather than locally terminated. Under certain configurations drivers in the zero client take control of some devices. This feature allows the user to force the device to be bridged and use a driver on the host. The feature is enabled by adding <i>Bridged Devices</i> entries shown on the web page in section 4.6.5.	✓	✓
Discard first keystroke when the zero client display is off and a PCoIP session is not active. This prevents users from inadvertently modifying user input fields such as the password.	✓	
Improvements to audio and video synchronization for PCoIP Zero Client sessions with VMware View virtual desktops.	✓	
Modified the monitor detection and removal to better handle monitors that do not assert hot plug.	✓	✓
Discontinued support for RDP client within the PCoIP zero client.	✓	

4.3 Important Bug Fixes

Description	Zero Client	Host
Fixed a problem that could cause a zero client to reset and disconnect a session when SLP discovery is enabled.	✓	
Fixed a problem that could cause a zero client or host card to reset when SNMP is enabled.	✓	✓
Fixed a problem that could cause a zero client to reset when a T=1 protocol smart card is inserted and the user clicks connect. Note that T=1 cards are not supported in this release.	✓	
Fixed a problem that could cause a zero client to reset when a PIV endpoint smart card with an empty certificate container is inserted and the user clicks connect.	✓	

Description	Zero Client	Host
Fixed a problem in OSD pre-login message window that prevented multilingual characters from being displayed properly.	✓	

4.4 Known Issues

Description	Zero Client	Host
See the knowledge base on the Teradici support website (techsupport.teradici.com) for known issues when PCoIP zero clients are connected to VMware View virtual desktops.	✓	
The desktop display resolution may change when a user resizes the software client window while a session is active with a PCoIP host card. This occurs if the client window becomes smaller than the current desktop or a larger resolution will fit within the client window. Sometimes when this change occurs the graphics driver scales the image resulting in the desktop not fitting within the client window. To work around this resize the client window or configure the graphics driver to use the monitor's built in scaling feature.		✓

4.5 Additional Collateral


Description	Zero Client	Host
See the latest <i>VMware View 4 to PCoIP Zero Client Optimization Guide (TER1003001)</i> document for optimization guidelines for connecting PCoIP zero clients to VMware View 4 virtual desktops.	✓	
See the latest <i>VMware View 4 to PCoIP Zero Client WAN Network Guidelines (TER1007002)</i> document for network optimization guidelines when connecting PCoIP zero clients to VMware View 4 virtual desktops over remote access WAN networks.	✓	
See the Teradici support website (techsupport.teradici.com) for additional collateral for PCoIP zero client and PCoIP host card applications, implementation and management.	✓	✓

4.6 Supplemental Information

4.6.1 VMware View Web Page

Log Out PCoIP® Zero Client

Home Configuration / Permissions / Diagnostics / Info / Upload



Configure the View Connection Server settings.

To enable this feature, the "Enable Connection Management" tab must be selected under "Connection Management" tab menu.

Enable VMware View: ☒

Identify Connection Server by: ☒ IP address ☐ FQDN

Connection Server IP Address: . . .

Port: (Leave blank for default)

SSL: ☐ Use secure connection (SSL)

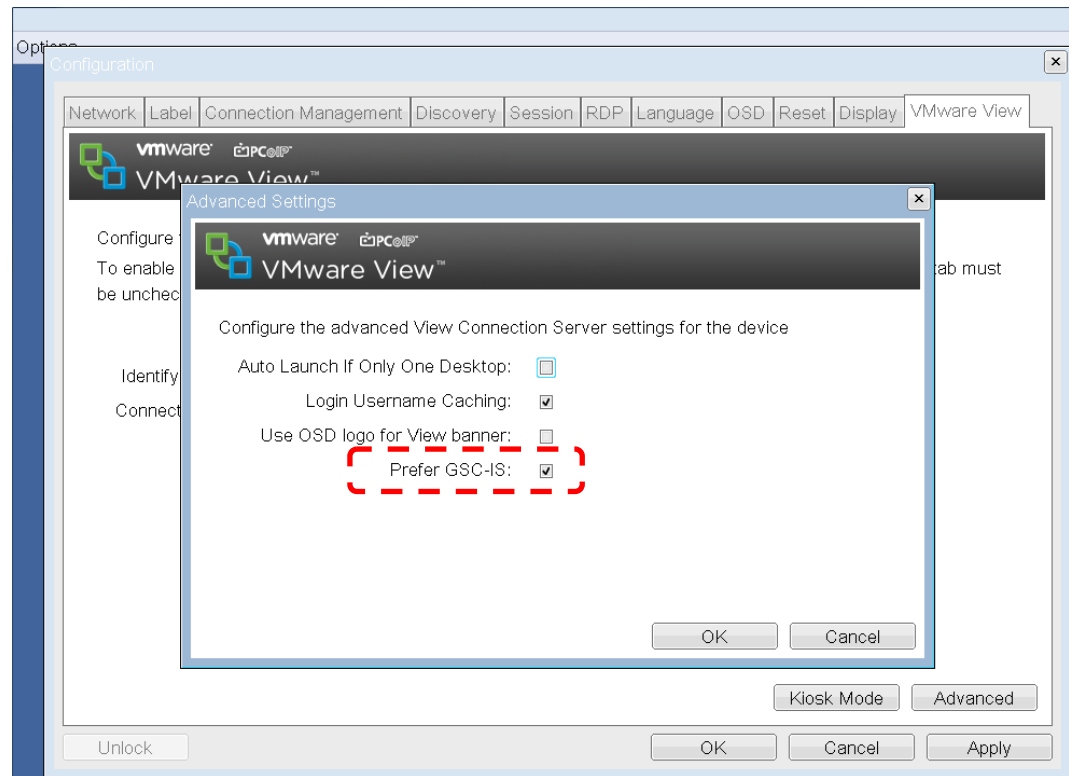
Auto connect: ☐ Always connect to this server at startup

Connection Server Cache Mode: Last five servers used Clear cache entries

- Initial Setup
- Network
- Label
- Connection Management
- VMware View**
- VMware View (Advanced)
- VMware View (Kiosk Mode)
- Discovery
- SNMP
- Session
- Bandwidth
- RDP
- Language
- OSD
- Image
- Time
- Password
- Reset Parameters

Apply Cancel


4.6.2 VMware View Advanced OSD Screen



4.6.3 VMware View (Advanced) Web Page

[Log Out](#) PCoIP® Zero Client

Home **Configuration** / [Permissions](#) / [Diagnostics](#) / [Info](#) / [Upload](#)



Configure the advanced View Connection
To access these settings, "Enable VMwa
under "VMware View" tab must be check

- Initial Setup
- Network
- Label
- Connection Management
- VMware View
- VMware View (Advanced)**
- VMware View (Kiosk Mode)
- Discovery
- SNMP
- Session
- Bandwidth
- RDP
- Language
- OSD
- Image
- Time
- Password
- Reset Parameters

Auto Launch if Only One Desktop: ☐

Login Username Caching: ☒

Use OSD Logo for View banner: ☐

Prefer GSC-IS: ☒

Enable Auto-Logon: ☐

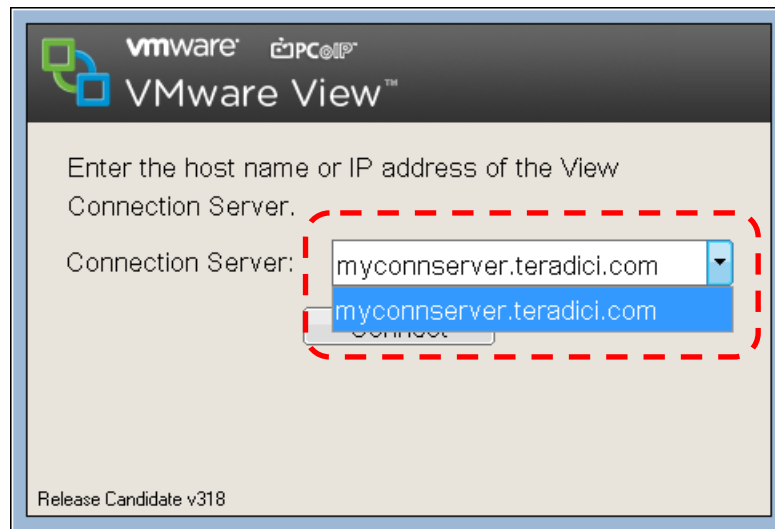
Logon Username:

Logon Password:

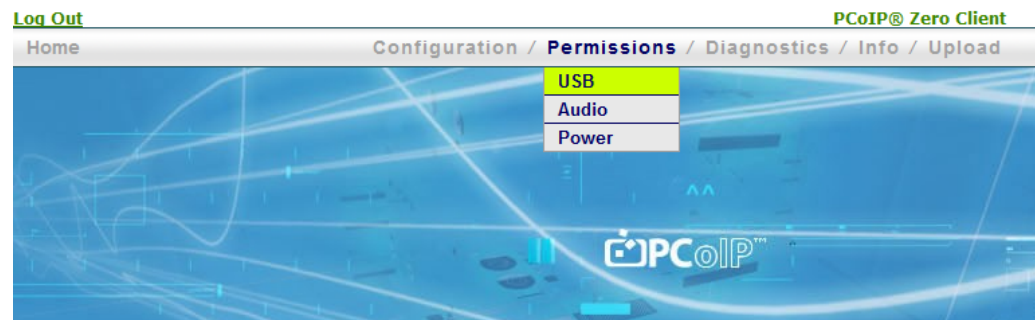
Logon Domain Name:

Desktop Name to Select:

4.6.4 OSD Connection Server Dropdown Menu



4.6.5 USB Permissions Web Page



USB

Configure the USB permissions table

The USB permissions table has been modified. Click 'Apply' to save your changes

Authorized Devices:

Any Device Class

Any Sub Class

Any Protocol

Remove

Add new

Unauthorized Devices: Table is empty

Add new

Bridged Devices:

VID: 046d; PID: c517

Remove

Vendor ID: 0000

Product ID: 0000

Add

Cancel

Apply

Cancel

4.6.6 Enable/Disable Web Server Via PCoIP MC

Set in Profile

<input type="checkbox"/>	Password	<input type="text"/>	This property configures the Host or Portal local administrative password. This password is required to access the web interface. It is also required to modify certain configuration settings accessible through the OSD. The password is a string of zero to 20 characters.
<input type="checkbox"/>	Enable Password Protection	<input type="radio"/> True <input checked="" type="radio"/> False	This property enables the Host or Portal local administrative password. When it is false, the web interface and OSD are not password protected.
<input type="checkbox"/>	Additional Root Certificate	<input type="text"/> Browse...	Installs an additional root certificate into the endpoint for use in the web UI and with VMware View Connection Servers.
<input type="checkbox"/>	Enable Web Interface	<input type="radio"/> True <input checked="" type="radio"/> False	When this property is true the device's embedded web interface is enabled. When it is false the web interface is disabled.

Save Cancel

⚡ indicates that the property requires a device restart after being changed

4.6.7 Enable/Disable OSD Menus Via PCoIP MC

Set in Profile

<input type="checkbox"/>	OSD Screensaver Text	<input type="text"/>	This property configures the OSD screensaver text for devices running firmware older than 3.0. The text can be up to 240 characters long. The screensaver is a simple black screen with the screensaver text jumping randomly. Beginning with firmware 3.0 the screensaver was replaced with monitor sleep and this text is not used.
<input type="checkbox"/>	OSD Screensaver Timeout	<input type="text"/> s (0,10-9999)	This property configures the OSD screensaver/monitor sleep timeout. A setting of 0 seconds disables the screensaver/monitor sleep.
<input type="checkbox"/>	Hidden Menu Entries	<input type="checkbox"/> Hide Options -> Configuration <input type="checkbox"/> Hide Options -> Diagnostics <input type="checkbox"/> Hide Options -> Information <input type="checkbox"/> Hide Options -> User Settings <input type="checkbox"/> Hide Options -> Password <input type="checkbox"/> Hide the Options menu <input type="checkbox"/> Hide all menus	This property controls which menu items or entire menus are hidden in the OSD. Hide a single menu item by selecting it. To hide an entire menu select the menu hide checkbox. To hide all of the menus select the hide all menus checkbox.

Save Cancel

⚡ indicates that the property requires a device restart after being changed

5 Release 3.2.2

This section provides a brief summary of the feature additions and issues resolved in release 3.2.2 versus release 3.2.1.

5.1 Compatibility

VMware View 4, View 4.0.1, View 4.0.2 and View 4.5 deployments using zero client devices to connect to View virtual desktops should install release 3.2.2 on the zero client devices.

Deployments using zero clients with PCoIP host cards should install release 3.2.2 on the PCoIP processor found in both the host and client devices. This release is compatible with 3.2.x and 3.1.x releases. This release is not interoperable with releases 3.0, 2.x, 1.x or 0.x. A “session timeout” error message appears on the display if trying to connect to a PCoIP host card running an incompatible release.

Note that this firmware release can only be installed on PCoIP processors running firmware release 1.4 or greater. If the processor is loaded with a firmware release less than version 1.4 users must first download one or more intermediate firmware releases. The following table lists the steps the user must follow for each version of firmware that may be installed on a PCoIP processor. The firmware version can be viewed on the Info->Version web page for the device.

Installed Firmware Version	Upgrade process
0.1 through 0.17	1) Install firmware release 0.18 2) Install a 1.x firmware release (1.4 or greater) 3) Install the new firmware (3.2.2)
0.18 through 1.3	1) Install a 1.x firmware release (1.4 or greater) 2) Install the new firmware (3.2.2)
1.4 through 3.2.1	1) Install the new firmware (3.2.2)

5.2 Feature Additions

None

5.3 Important Bug Fixes

Description	Zero Client	Host
Fixed problem with displays that toggle HPDET when they enter a low power state. Before the fix, the zero clients would incorrectly see the toggling of HPDET as disconnecting and reconnecting the display. This could cause the system to get into a state where the monitor repeatedly enters and exits standby.	✓	

5.4 Known Issues

Description	Zero Client	Host
See the latest <i>Using PCoIP Zero Clients with VMware View 4 (TER0904005)</i> document for a list of known issues when using zero clients loaded with firmware release 3.2.x with VMware View 4.	✓	

5.5 Additional Collateral

Description	Zero Client	Host
See the latest <i>VMware View 4 to PCoIP Zero Client Optimization Guide (TER1003001)</i> document for optimization guidelines for connecting PCoIP zero clients to VMware View 4 virtual desktops.	✓	
See the latest <i>VMware View 4 to PCoIP Zero Client WAN Network Guidelines (TER1007002)</i> document for network optimization guidelines when connecting PCoIP zero clients to VMware View 4 virtual desktops over remote access WAN networks.	✓	

6 Release 3.2.1

This section provides a brief summary of the feature additions and issues resolved in release 3.2.1 versus release 3.2.0.

6.1 Compatibility

VMware View 4, View 4.0.1, View 4.0.2 and View 4.5 deployments using zero client devices to connect to View virtual desktops should install release 3.2.1 on the zero client devices.

Deployments using zero clients with PCoIP host cards should install release 3.2.1 on the PCoIP processor found in both the host and client devices. This release is compatible with 3.2.x and 3.1.x releases. This release is not interoperable with releases 3.0, 2.x, 1.x or 0.x. A "session timeout" error message appears on the display if trying to connect to a PCoIP host card running an incompatible release.

Note that this firmware release can only be installed on PCoIP processors running firmware release 1.4 or greater. If the processor is loaded with a firmware release less than version 1.4 users must first download one or more intermediate firmware releases. The following table lists the steps the user must follow for each version of firmware that may be installed on a PCoIP processor. The firmware version can be viewed on the Info->Version web page for the device.

Installed Firmware Version	Upgrade process
0.1 through 0.17	1) Install firmware release 0.18 2) Install a 1.x firmware release (1.4 or greater) 3) Install the new firmware (3.2.1)
0.18 through 1.3	1) Install a 1.x firmware release (1.4 or greater) 2) Install the new firmware (3.2.1)
1.4 through 3.2.0	1) Install the new firmware (3.2.1)

6.2 Feature Additions

None

6.3 Important Bug Fixes

Description	Zero Client	Host
Fixed problem where sometimes audio does not work on a workstation with a PCoIP host card after an OS restart.		✓
Fixed problem where a zero client would sometimes fail to establish a View brokered session when the DNS entry for the View Connection Server contained multiple IP addresses.	✓	
Fixed problem where a zero client would repeatedly power on/off the attached monitor when the screen saver timeout was small.	✓	

Description	Zero Client	Host
Fixed problem where the smart card reader feature included in release 3.2.0 prevented users from using smart card readers in systems with PCoIP host cards.	✓	✓
Fixed a connection timeout problem that prevented users from establishing a VMware View brokered session using smart card authentication.	✓	
Modified audio buffering to improve audio and video synchronization in zero client sessions with VMware View PCoIP servers.	✓	

6.4 Known Issues

Description	Zero Client	Host
See the latest <i>Using PCoIP Zero Clients with VMware View 4 (TER0904005)</i> document for a list of known issues when using zero clients loaded with firmware release 3.2.x with VMware View 4.	✓	

6.5 Additional Collateral

Description	Zero Client	Host
See the latest <i>VMware View 4 to PCoIP Zero Client Optimization Guide (TER1003001)</i> document for optimization guidelines for connecting PCoIP zero clients to VMware View 4 virtual desktops.	✓	
See the latest <i>VMware View 4 to PCoIP Zero Client Network Guidelines (TER1007002)</i> document for network optimization guidelines when connecting PCoIP zero clients to VMware View 4 virtual desktops over remote access WAN networks.	✓	

7 Release 3.2.0

This section provides a brief summary of the feature additions and issues resolved in release 3.2.0 versus release 3.1.2.

7.1 Compatibility

VMware View 4, View 4.0.1 and View 4.5 deployments using zero client devices to connect to View virtual desktops should install release 3.2.0 on the zero client devices.

Deployments using zero clients with PCoIP host cards should install release 3.2.0 on the PCoIP processor found in both the host and client devices. This release is compatible with 3.1.x releases (3.1.2 through 3.1.0). This release is not interoperable with releases 3.0, 2.x, 1.x or 0.x. A "session timeout" error message appears on the display if trying to connect to a PCoIP host card running an incompatible release.

Note that this firmware release can only be installed on PCoIP processors running firmware release 1.4 or greater. If the processor is loaded with a firmware release less than version 1.4 users must first download one or more intermediate firmware releases. The following table lists the steps the user must follow for each version of firmware that may be installed on a PCoIP processor. The firmware version can be viewed on the Info->Version web page for the device.

Installed Firmware Version	Upgrade process
0.1 through 0.17	1) Install firmware release 0.18 2) Install a 1.x firmware release (1.4 or greater) 3) Install the new firmware (3.2.0)
0.18 through 1.3	1) Install a 1.x firmware release (1.4 or greater) 2) Install the new firmware (3.2.0)
1.4 through 3.1.2	1) Install the new firmware (3.2.0)

7.2 Feature Additions

Description	Zero Client	Host
Added support for analog audio input in PCoIP connections between zero clients and a PCoIP server installed with VMware View 4.5. Support for analog audio input requires the installation of a Teradici audio driver in the virtual desktop. This driver is not installed by the VMware View Agent 4.5 installer and is not officially supported by VMware. To install the audio driver or for any technical support issues, please contact support@teradici.com .	✓	
Added support for pre-session secure user authentication via smart card (CAC only). This feature may only be used in conjunction with VMware View 4.5 and above.	✓	
Added support for configuring the zero client's topology (screen resolution and position). The settings are accessed via the zero client's <i>Options->User Settings->Display Topology</i> OSD screen, see section 7.6.1. These settings control the topology of PCoIP sessions with both VMware View PCoIP servers and PCoIP host cards. Experimental: Users must install PCoIP Host Software	✓	✓

Description	Zero Client	Host
release 3.2.20 to use this feature with PCoIP host cards. Section 7.6.2 provides a screen shot of a new Host Software <i>Monitors</i> tab which lets users configure the feature and view the client and host topology settings.		
Added support for configuring zero clients to operate in Kiosk Mode. In this mode the clients automatically log into a configured VMware View PCoIP server. See sections 7.6.3 through 7.6.5.	✓	
Added support for configuring the image displayed on the zero client connect window GUI (On Screen Display) when VMware View connections are enabled. The feature is enabled using the <i>Use OSD logo for View banner</i> option shown on the OSD and web interfaces in sections 7.6.6 and 7.6.7. The OSD logo replaces the default View banner. The OSD logo may be changed through the <i>Upload->OSD Logo</i> web page.	✓	
Added support for enabling keyboard repeat detection in client devices connected to PCoIP host cards. Users must install PCoIP Host Software release 3.2.20 to use this feature. The feature is enabled using the Host software's <i>Features</i> tab, as shown in section 7.6.8. When this feature is disabled the host OS (Windows) performs keyboard repeat processing. When this feature is enabled the client performs keyboard repeat processing.	✓	✓
Added support to configure whether the <i>username</i> of the previous VMware View brokered session is displayed when a user enters their credentials. The feature is enabled using the <i>Login Username Caching</i> option shown on the OSD and web interfaces in sections 7.6.6 and 7.6.7.	✓	
Added support to maintain the state of the <i>Num Lock</i> key outside of a session. Zero clients read the state of the key when a session starts and restore the key to the pre-session state when a session ends.	✓	
Added support for the following keyboard layouts: <ul style="list-style-type: none"> Lithuanian Russian 	✓	

7.3 Important Bug Fixes

Description	Zero Client	Host
Fixed a problem where the network interface of a PCoIP host card or zero client stops working.	✓	✓
Fixed problem where some SNMP statistics were not maintained properly.	✓	✓
Fixed problem where no video is displayed after a session is established. The problem occurred on clients using certain DVI-VGA adapter cables.	✓	

7.4 Known Issues

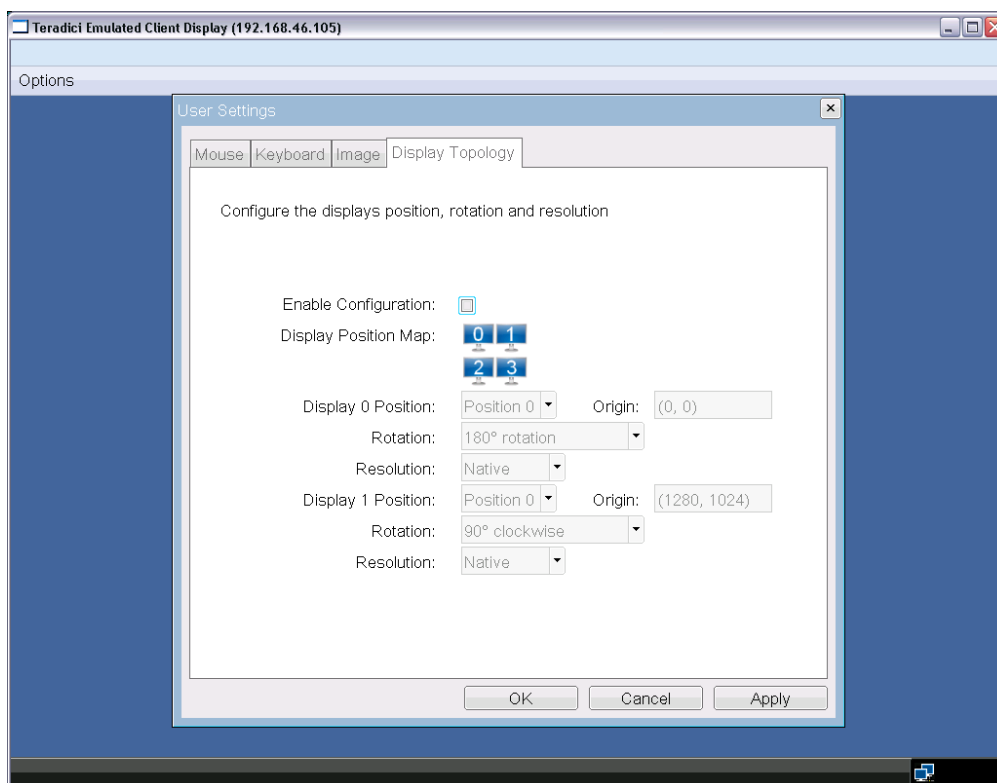
Description	Zero Client	Host
See the latest <i>Using PCoIP Zero Clients with VMware View 4 (TER0904005)</i> document for a list of known issues when using zero clients loaded with firmware release 3.2.0 with VMware View 4.	✓	

7.5 Additional Collateral

Description	Zero Client	Host
See the latest <i>VMware View 4 to PCoIP Zero Client Optimization Guide (TER1003001)</i> document for optimization guidelines for connecting PCoIP zero clients to VMware View 4 virtual desktops.	✓	
See the latest <i>VMware View 4 to PCoIP Zero Client Network Guidelines (TER1007002)</i> document for network optimization guidelines when connecting PCoIP zero clients to VMware View 4 virtual desktops over remote access WAN networks.	✓	

7.6 Supplemental Information

7.6.1 Display Topology OSD Screen



7.6.2 Host Software Monitors Settings

PCoIP Agent Settings

Features
Network
Statistics
Monitors
About

Monitor (Display Topology) Settings

Agent Configuration Settings

☒ Use client topology settings when a session is established

Client Display Topology Settings

DVI-1	
Display Resolution	1280 x 1024
Display Position	(0, 0)
Display Refresh Rate	60 Hz
Display Rotation	no rotation
Monitor Name	VA730m
Monitor Serial Number	QD4064520703

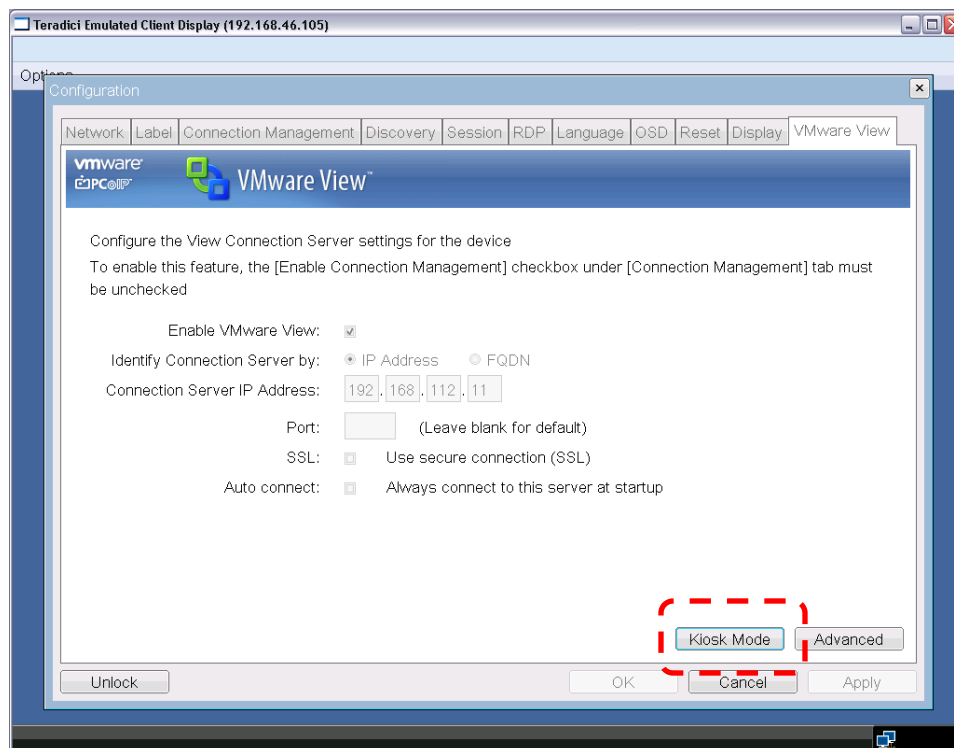
Host Display Topology Settings

Display 0	
Display Resolution	1280 x 1024
Display Position	(0, 0)
Display Refresh Rate	60 Hz
Display Rotation	no rotation
Monitor Name	VA730m
Monitor Serial Number	QD4064520703

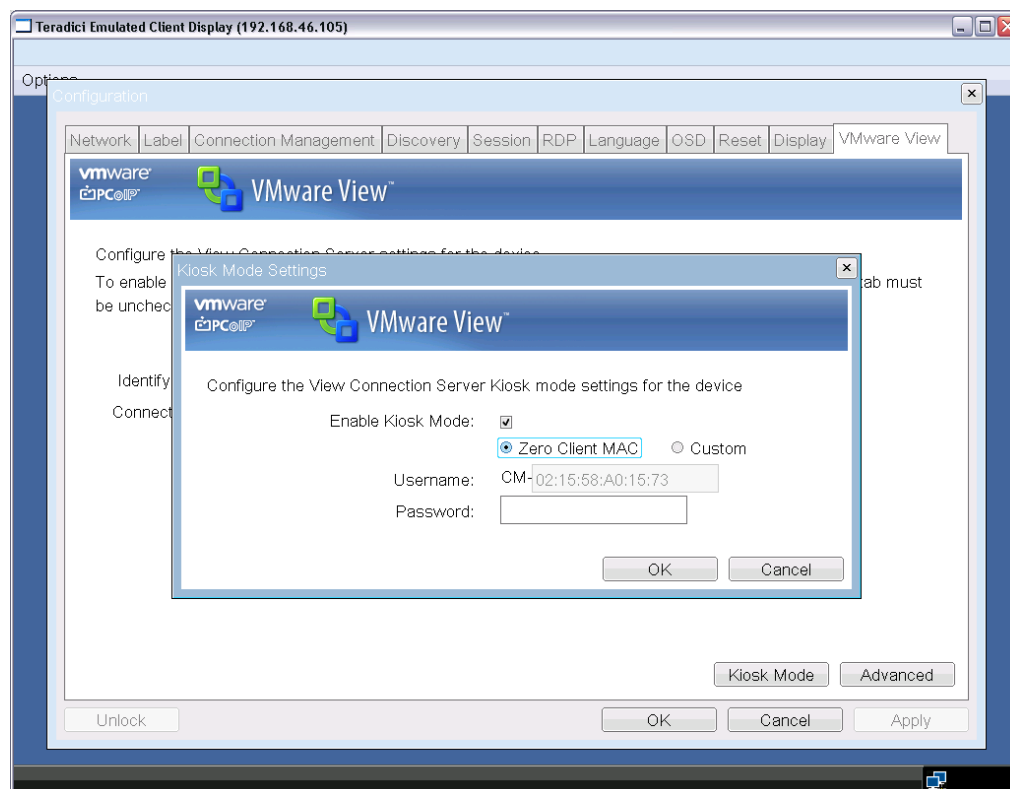
Write these settings to the client Refresh

OK Cancel Apply

7.6.3 VMware View Kiosk Mode OSD Screen Selection



7.6.4 VMware View Kiosk Mode OSD Screen



7.6.5 VMware View (Kiosk Mode) Web Page

Home Configuration / Permissions / Diagnostics / Info / Upload

PCoIP@ Zero Client

vmware PCoIP VMware View™

Configure the advanced View Connection Server settings for the device

To access these settings, "Enable VMware View" checkbox under "VMware View" tab must be checked

Enable Kiosk Mode: ☒

☐ Zero Client MAC ☒ Custom

Username: Custom-

Password:

Apply Cancel

7.6.6 VMware View Advanced OSD Screen

Teradici Emulated Client Display (192.168.46.101)

Configuration

Network Label Connection Management Discovery Session RDP Language OSD Reset Display VMware View

vmware PCoIP VMware View™

Configure the advanced View Connection Server settings for the device

To enable be unchecked

Identify Connect

Auto Launch If Only One Desktop: ☐

Login Username Caching: ☒

Use OSD logo for View banner: ☐

OK Cancel

Kiosk Mode Advanced

Unlock OK Cancel Apply

7.6.7 VMware View (Advanced) Web Page

[Debug](#)

[Log Out](#) PCoIP@ Zero Client

Home Configuration / Permissions / Diagnostics / Info / Upload



 VMware View™

Configure the advanced View Connection Server settings for the device

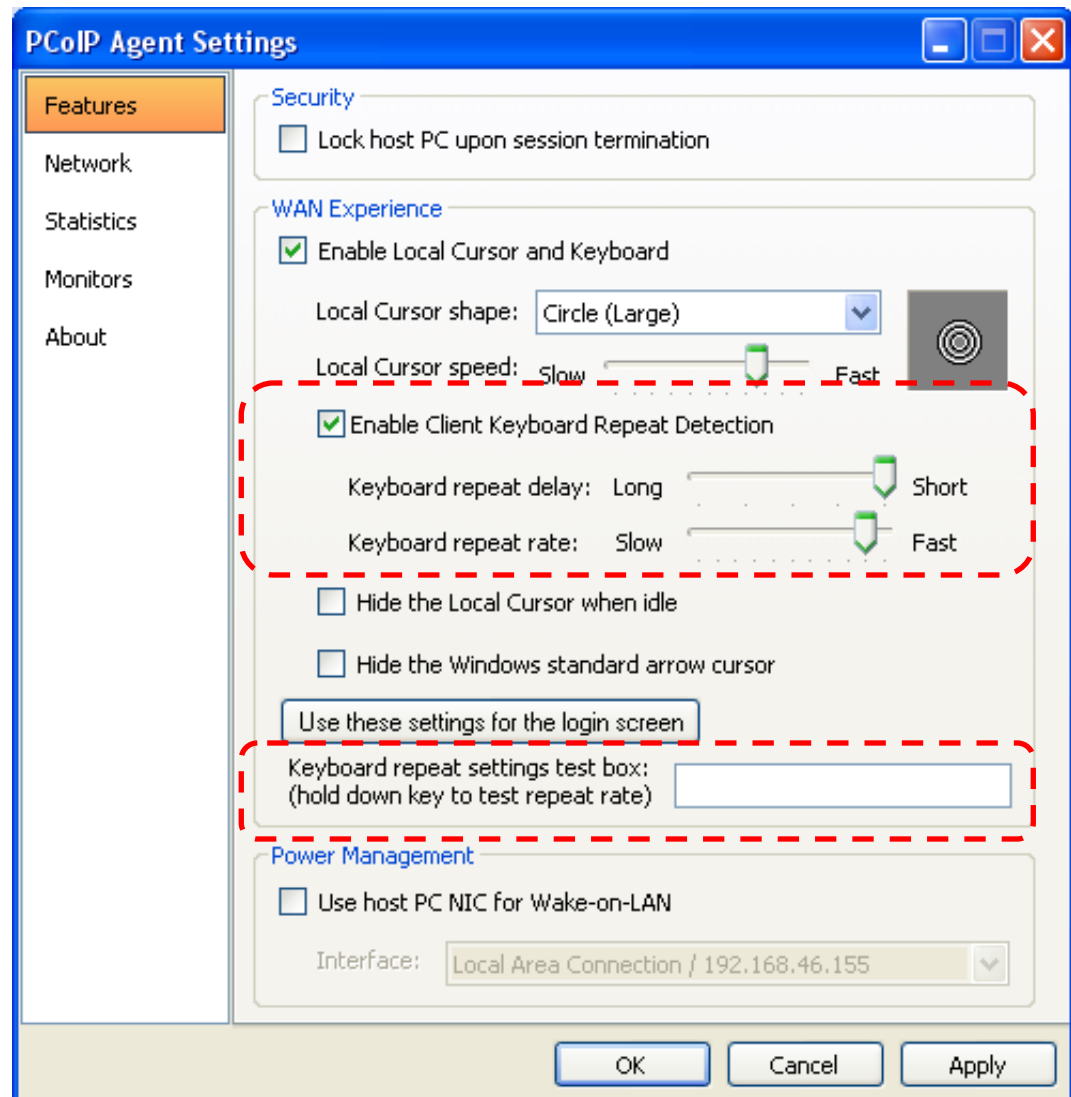
To access these settings, "Enable VMware View" checkbox under "VMware View" tab must be checked

Auto Launch If Only One Desktop: ☐

Login Username Caching: ☒

Use OSD logo for View banner: ☐

7.6.8 Host Software Client Keyboard Repeat Enable



8 Release 3.1.2

This section provides a brief summary of the feature additions and issues resolved in release 3.1.2 versus release 3.1.1.

8.1 Compatibility

View 4 and View 4.0.1 deployments using zero client devices to connect to View virtual desktops should install release 3.1.2 on the zero client devices.

Deployments using zero clients with PCoIP host cards should install release 3.1.2 on the PCoIP processor found in both the host and client devices. This release is compatible with 3.1.x releases (3.1.2 through 3.1.0). This release is not interoperable with releases 3.0, 2.x, 1.x or 0.x. A "session timeout" error message appears on the display if trying to connect to a PCoIP host card running an incompatible release.

Note that this firmware release can only be installed on PCoIP processors running firmware release 1.4 or greater. If the processor is loaded with a firmware release less than version 1.4 users must first download one or more intermediate firmware releases. The following table lists the steps the user must follow for each version of firmware that may be installed on a PCoIP processor. The firmware version can be viewed on the Info->Version web page for the device.

Installed Firmware Version	Upgrade process
0.1 through 0.17	1) Install firmware release 0.18 2) Install a 1.x firmware release (1.4 or greater) 3) Install the new firmware (3.1.2)
0.18 through 1.3	1) Install a 1.x firmware release (1.4 or greater) 2) Install the new firmware (3.1.2)
1.4 through 3.1.1	1) Install the new firmware (3.1.2)

8.2 Feature Additions

Description	Zero Client	Host
Added support to enable/disable displaying the <i>Peer Loss</i> overlay when no PCoIP traffic is received by a zero client. This feature is configured using the web interface (see section 8.6.1) or the OSD (see section 8.6.2).	✓	

8.3 Important Bug Fixes

Description	Zero Client	Host
Fixed problem where no video is displayed after a session is established. The problem occurred using some monitors that support HDCP (High-bandwidth Digital Content Protection)		✓

8.4 Known Issues

Description	Zero Client	Host
See the latest <i>Using PCoIP Zero Clients with VMware View 4 (TER0904005)</i> document for a list of known issues when using zero clients loaded with firmware release 3.1.2 with VMware View 4.	✓	

8.5 Additional Collateral

Description	Zero Client	Host
See the latest <i>VMware View 4 to PCoIP Zero Client Optimization Guide (TER1003001)</i> document for optimization guidelines for connecting PCoIP zero clients to VMware View 4 virtual desktops.	✓	

8.6 Supplemental Information

8.6.1 Session Web Page

Session

Configure the connection to a peer device

Accept Any Peer (host only): ☐

Session Type (client only): PCoIP

Identify Peer by: ☒ IP address ☐ FQDN

Peer IP Address: 192. 168. 110. 100

Peer MAC Address: 00 - 0F - 01 - 00 - 01 - 00

Enable Auto-Reconnect (client only): ☐

Enable Peer Loss Overlay (client only): ☒

Enable AES-128-GCM: ☒

Enable Salsa20-256-Round12: ☒

8.6.2 OSD Session Web Page

Configuration

Network Label Connection Management Discovery Session RDP Language OSD Reset Display VMware View

Configure the connection to a peer device

Session Type: PColP

Identify Peer by: ☒ IP Address ☐ FQDN

Peer IP Address: 192 . 168 . 110 . 100

Peer MAC Address: 00 - 0F - 01 - 00 - 01 - 00

Enable Auto Reconnect: ☐

Enable Peer Loss Overlay: ☒

Unlock OK Cancel Apply

9 Release 3.1.1

This section provides a brief summary of the feature additions and issues resolved in release 3.1.1 versus release 3.1.0.

9.1 Compatibility

View 4 and View 4.0.1 deployments using zero client devices to connect to View virtual desktops should install release 3.1.1 on the zero client devices.

Deployments using zero clients with PCoIP host cards should install release 3.1.1 on the PCoIP processor found in both the host and client devices. This release is compatible with release 3.1.0. This release is not interoperable with releases 3.0, 2.x, 1.x or 0.x. A "session timeout" error message appears on the display if trying to connect to a PCoIP host card running an incompatible release.

Note that this firmware release can only be installed on PCoIP processors running firmware release 1.4 or greater. If the processor is loaded with a firmware release less than version 1.4 users must first download one or more intermediate firmware releases. The following table lists the steps the user must follow for each version of firmware that may be installed on a PCoIP processor. The firmware version can be viewed on the Info->Version web page for the device.

Installed Firmware Version	Upgrade process
0.1 through 0.17	1) Install firmware release 0.18 2) Install a 1.x firmware release (1.4 or greater) 3) Install the new firmware (3.1.1)
0.18 through 1.3	1) Install a 1.x firmware release (1.4 or greater) 2) Install the new firmware (3.1.1)
1.4 through 3.1.0	1) Install the new firmware (3.1.1)

9.2 Feature Additions

None

9.3 Important Bug Fixes

Description	Zero Client	Host
Fixed problem where the time of a View 4 virtual desktop was set incorrectly. The problem affected zero client devices connecting to View 4 virtual desktops in certain time zones.	✓	

9.4 Known Issues

Description	Zero Client	Host
See the latest <i>Using PCoIP Zero Clients with VMware View 4 (TER0904005)</i> document for a list of known issues when using zero clients loaded with firmware release 3.1.1 with VMware View 4.	✓	

9.5 Additional Collateral

Description	Zero Client	Host
See the latest <i>VMware View 4 to PCoIP Zero Client Optimization Guide (TER1003001)</i> document for optimization guidelines for connecting PCoIP zero clients to VMware View 4 virtual desktops.	✓	

10 Release 3.1.0

This section provides a brief summary of the feature additions and issues resolved in release 3.1.0 versus release 3.0.

10.1 Compatibility

Release 3.1.0 should be installed on both the PCoIP host and zero client processors. This release is not interoperable with previous releases, including release 3.0. A “session timeout” error message appears on the display if trying to connect to a PCoIP host card running a previous release.

Note that this firmware release can only be installed on PCoIP processors running firmware release 1.4 or greater. If the processor is loaded with a firmware release less than version 1.4 users must first download one or more intermediate firmware releases. The following table lists the steps the user must follow for each version of firmware that may be installed on a PCoIP processor. The firmware version can be viewed on the Info->Version web page for the device.

Installed Firmware Version	Upgrade process
0.1 through 0.17	1) Install firmware release 0.18 2) Install a 1.x firmware release (1.4 or greater) 3) Install the new firmware (3.1.0)
0.18 through 1.3	1) Install a 1.x firmware release (1.4 or greater) 2) Install the new firmware (3.1.0)
1.4 through 3.0	1) Install the new firmware (3.1.0)

10.2 Feature Additions

Description	Zero Client	Host
Added support for Windows® 7.	✓	✓
Added experimental support for PCoIP connections between workstations with PCoIP host cards and software clients		✓
Added experimental support for pre-session secure user authentication via smart card (CAC only). This feature may only be used with VMware View 4.5 and above.	✓	
Add local cursor/keyboard support. This feature allows users to operate PCoIP sessions over a long latency network connection. The software package is available for Windows 7, Windows Vista® and Windows® XP 32-bit and 64-bit operating systems. See the PCoIP Host Software User Guide (TER0810001) for additional details on this feature.	✓	✓
Added a third digit to the firmware release number. The new digit is a patch number that increments when bug fixes are released.	✓	✓
Changed the UDP port number used for data plane communications from 50002 to the IANA reserved port for PCoIP traffic (4172).	✓	✓
Changed the TCP port number used for control plane communications from 50002 to the IANA reserved port for	✓	✓

Description	Zero Client	Host
PCoIP traffic (4172). This affects connections that are not brokered by a VMware View Connection Server.		
Increased the maximum number of domains displayed when connecting to a VMware View Connection Server from 5 to 100.	✓	
Added support for the following keyboard layouts: <ul style="list-style-type: none"> - Danish Codepage 865 - Danish ISO-8859-1 - Danish ISO-8859-1 (accented keys) - Finnish Codepage 850 - Finnish ISO-8859-1 - Finnish ISO-8859-1 (accented keys) - Norwegian Dvorak - Norwegian ISO-8859-1 - Norwegian ISO-8859-1 (accented keys) - Swedish Codepage 850 - Swedish ISO-8859-1 - Swedish ISO-8859-1 (accented keys) - Turkish Q ISO-8859-9 (accented keys) - Turkish Q ISO-8859-9 - Dutch ISO-8859-1 (accented keys) - Polish ISO-8859-2 (Programmers) - Belgian ISO-8859-1 - Belgian ISO-8859-1 (accented keys) 	✓	

10.3 Important Bug Fixes

Description	Zero Client	Host
Fixed problem that prevents the zero client from establishing an RDP session with a Windows 7 desktop.	✓	
Fixed problem that prevents zero clients from completing the SSL handshake process with VMware View Connection Servers using extended validation certificates.	✓	
Fixed problem that prevents zero clients from connecting with VMware View Connection Servers that have optionally enabled smart cards.	✓	
Fixed problem where the network loss overlay was sometimes not displayed on zero client devices loaded with firmware release 3.0.	✓	
Added support for configuring the following setting via the CMI interface, which is used by the PCoIP Management Console. <ul style="list-style-type: none"> - Session encryption type - Host Driver Function 	✓	✓

10.4 Known Issues

Description	Zero Client	Host
See the latest <i>Using PCoIP Zero Clients with VMware View 4</i>	✓	

(TER0904005) document for a list of known issues when using zero clients loaded with firmware release 3.1.0 with VMware View 4.		
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10.5 Additional Collateral

Description	Zero Client	Host
See the latest <i>VMware View 4 to PCoIP Zero Client Optimization Guide (TER1003001)</i> document for optimization guidelines for connecting PCoIP zero clients to VMware View 4 virtual desktops.	✓	

11 Release 3.0

This section provides a brief summary of the feature additions and issues resolved in release 3.0 versus release 2.3.

11.1 Compatibility

Release 3.0 should be installed on both the PCoIP Host and zero client devices. This release is not interoperable with previous releases. A “session timeout” error message appears on the display if trying to connect to a PCoIP host card running a previous release.

Note that this firmware release can only be installed on PCoIP devices running firmware release 1.4 or greater. If the device is loaded with a firmware release less than version 1.4 users must first download one or more intermediate firmware releases. The following table lists the steps the user must follow for each version of firmware that may be installed on a PCoIP device. The firmware version can be viewed on the Info->Version web page for the device.

Installed Firmware Version	Upgrade process
0.1 through 0.17	1) Install firmware release 0.18 2) Install a 1.x firmware release (1.4 or greater) 3) Install the new firmware (3.0)
0.18 through 1.3	1) Install a 1.x firmware release (1.4 or greater) 2) Install the new firmware (3.0)
1.4 through 2.3	1) Install the new firmware (3.0)

11.2 Feature Additions

Description	Zero Client	Host
Added interoperability support for PCoIP zero clients with the PCoIP server installed with VMware View 4.	✓	
Added support that allows VMware View to manage PCoIP sessions between PCoIP zero clients and workstations with PCoIP host add-in cards.	✓	✓
Added support for an additional encryption algorithm, SALSA20-256. Firmware releases prior to 3.0 use AES-128. Firmware release 3.0 allows the user to select either AES-128 or SALSA20-256. See section 11.4.1. The SALSA20-256 algorithm provides the best user experience when connecting a zero client to a View 4 virtual desktop over a network connection that provides more than around 5 Mbps of bandwidth.	✓	✓
Improved Statistics <ul style="list-style-type: none"> The following changes have been made to the Home web page. See section 11.4.2. <ul style="list-style-type: none"> Added minimum and maximum round trip latency Added minimum and maximum transmit bandwidth Added receive bandwidth (minimum, average and maximum) 	✓	✓

Description	Zero Client	Host
<ul style="list-style-type: none"> ○ Added display frame rate • The following changes have been made to the Session Statistics web page. See section 11.4.3. <ul style="list-style-type: none"> ○ Added minimum and maximum round trip latency ○ Added minimum and maximum transmit bandwidth ○ Added receive bandwidth (minimum, average and maximum) ○ Added display frame rate on zero client devices. Previously this was only valid on Host devices. ○ Added “Reset Statistics” button. 		
Added experimental support for Windows 7. See the note regarding Windows 7 support in the <i>Known Issues</i> section below.	✓	✓
Modified the zero client screen saver. The new screen saver turns off the monitor when it is activated. Previously the zero client displayed a text string configured on the OSD web page. See section 11.4.4.	✓	
Added support for configuring USB permissions on the Host. Previously this could only be configured on the zero client. See section 11.4.5 and the <i>PCoIP Administrative Interface User Manual (TER0606004)</i> document for details on configuring USB permissions.	✓	✓
Changed the term “Portal” to “Zero Client” on all OSD and Web Pages.	✓	✓

11.3 Known Issues

Description	Zero Client	Host
See the <i>Using PCoIP Zero Clients with VMware View 4 (TER0904005)</i> document for a list of know issues when using zero clients loaded with firmware release 3.0 with VMware View 4.	✓	
Audio may not work on host systems with PCoIP Host add-in cards loaded with the Windows 7 64-bit operating system. This will be resolved in a future release. To work around this, disable HD Audio on the PCoIP host card using the Permissions->Audio web page.		✓

11.4 Supplemental Information

11.4.1 Session Web Page

The screenshot shows a Mozilla Firefox browser window titled "Session - Mozilla Firefox". The address bar displays "10.200.2.154 https://10.200.2.154". The page content is titled "Session" and includes the instruction "Configure the connection to a peer device".

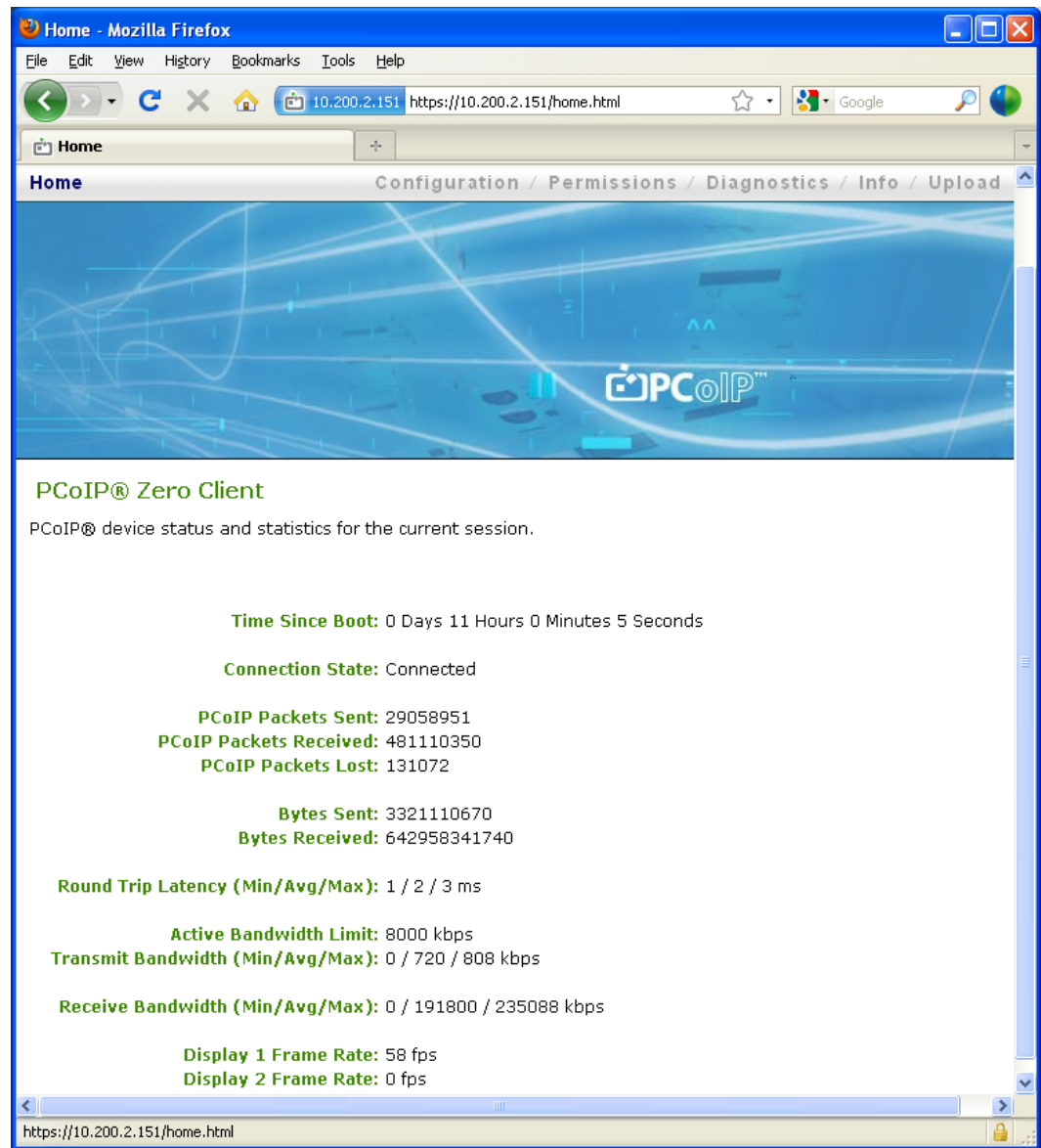
Configuration options include:

- Accept Any Peer (host only):** ☐
- Session Type (client only):** PCoIP (dropdown menu)
- Identify Peer by:** ☒ IP address ☐ FQDN
- Peer IP Address:** 192 . 168 . 112 . 66
- Peer MAC Address:** 00 - 00 - 00 - 00 - 00 - 00
- Enable Auto-Reconnect (client only):** ☐
- Enable AES-128-GCM:** ☒ (highlighted with a red dashed oval)
- Enable Salsa20-256-Round12:** ☒ (highlighted with a red dashed oval)

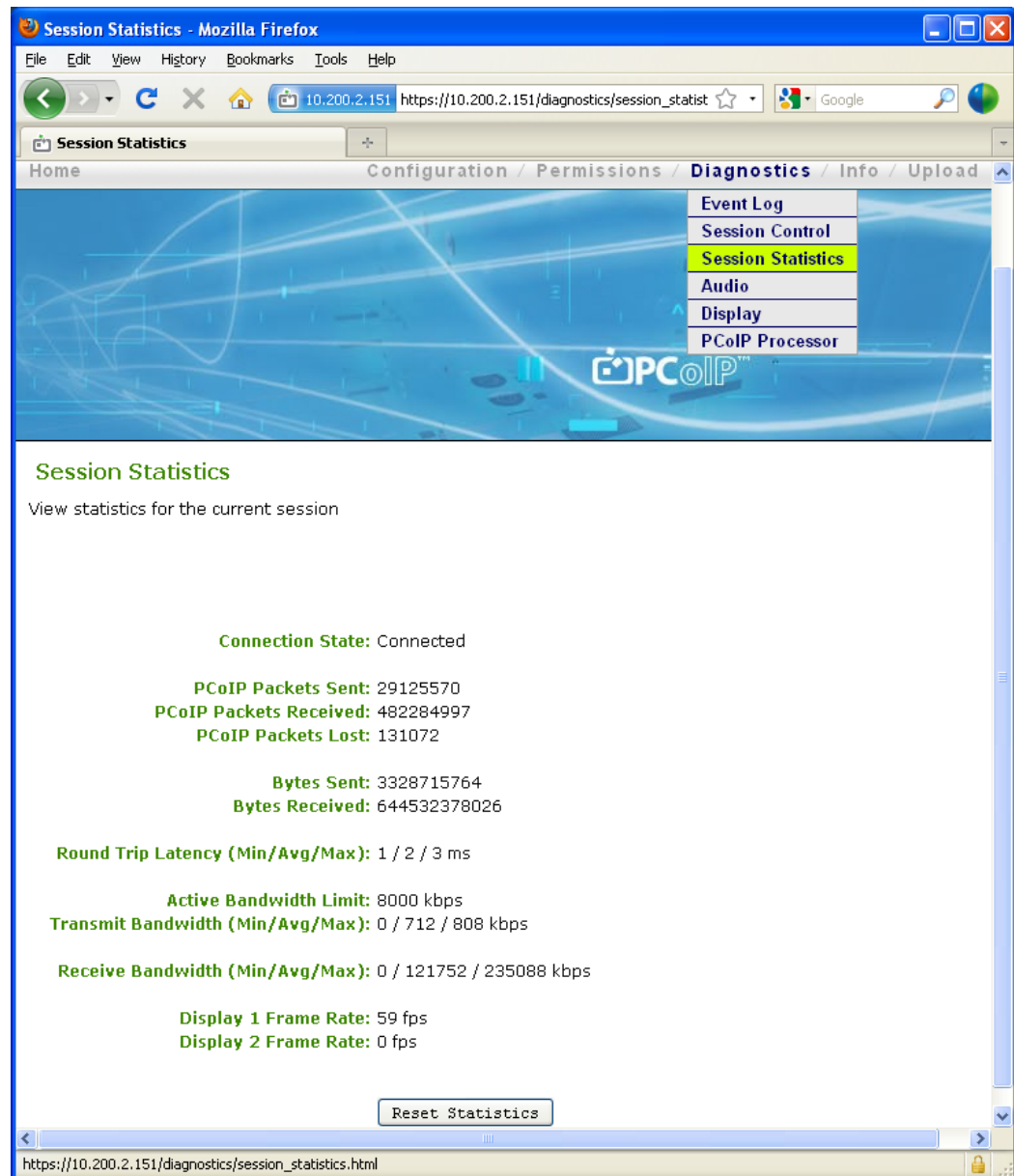
Buttons at the bottom: Apply, Cancel.

The status bar at the bottom shows the URL: <https://10.200.2.154/configuration/bandwidth.html>.

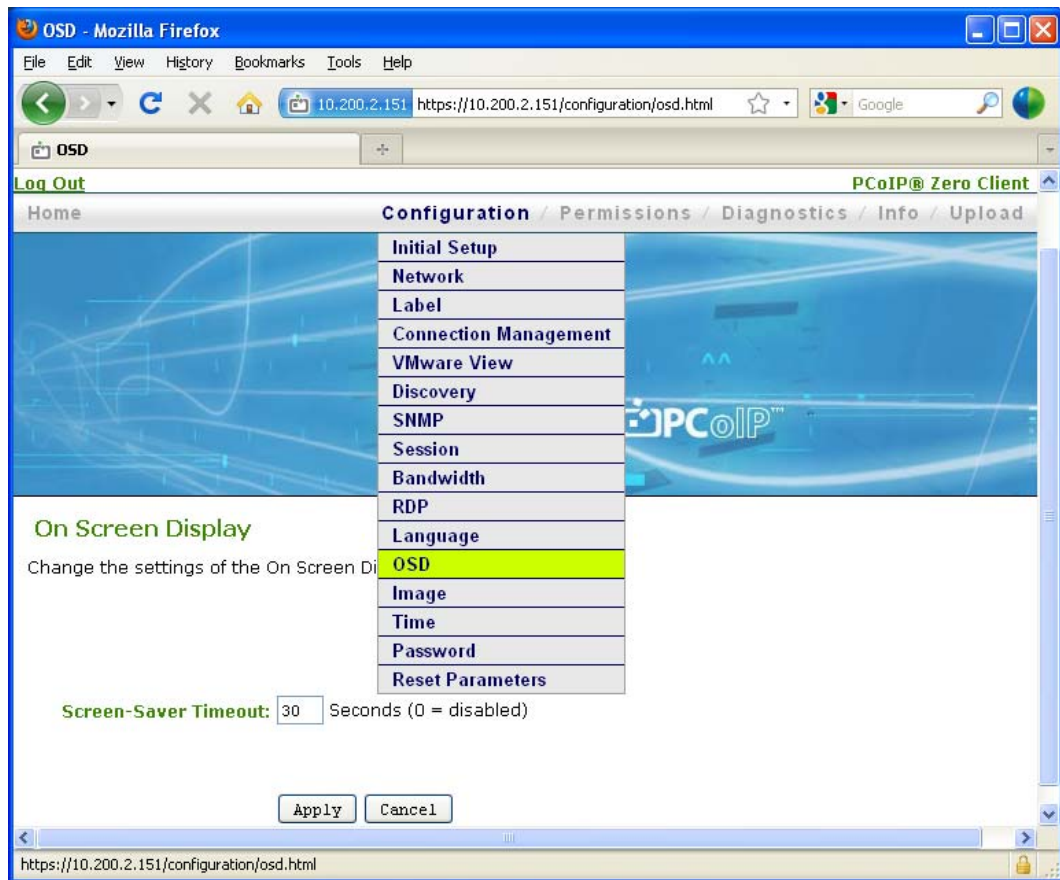
11.4.2 Home Web Page



11.4.3 Session Statistics Web Page



11.4.4 OSD Web Page



11.4.5 Host USB Permissions Web Page

