

# TERA1 Firmware Release Notes Version 3.x

TER0804002

Issue 24

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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		Updated for release 3.3.0

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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.
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
RDP	Remote Desktop Protocol
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 3.3.0. The sections in this document are organized according to release date with the most recent releases listed first.

# 1 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.

## 1.1 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)

## 1.2 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"> <li>Improved robustness of USB bridging protocol</li> <li>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.</li> <li>Improved support for devices connected to the zero client through a USB hub</li> </ul>	✓	
<p>VMware View login enhancements</p> <ul style="list-style-type: none"> <li>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 1.6.3.</li> <li>Increase the number of supported desktop pools to 100</li> <li>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 1.6.3.</li> <li>Modify the <i>Connection Server</i> entry box on the OSD VMware View connect screen to display up to five addresses. Section 1.6.1 shows how to enable/disable this feature. Section 1.6.4 shows the dropdown menu that supports displaying multiple addresses.</li> <li>Enhanced the format of the URI used to specify the VCS. Below are examples of valid entries: <ul style="list-style-type: none"> <li>myconnectionserver.teradici.com</li> <li><a href="http://myconnectionserver.teradici.com">http://myconnectionserver.teradici.com</a></li> <li>https://myconnectionserver.teradici.com:443</li> </ul> </li> <li>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 1.6.2 and 1.6.3.</li> </ul>	✓	
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 1.6.6.	✓	✓
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 1.6.7.	✓	

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"> <li>• Hungarian</li> <li>• Serbian</li> <li>• Latvian</li> <li>• Estonian</li> </ul>	✓	
Added support for Hewlett Packard USB smartcard 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 1.6.5.	✓	✓
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.	✓	

### 1.3 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.	✓	

## 1.4 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.		✓

## 1.5 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.	✓	✓

## 1.6 Supplemental Information

### 1.6.1 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)

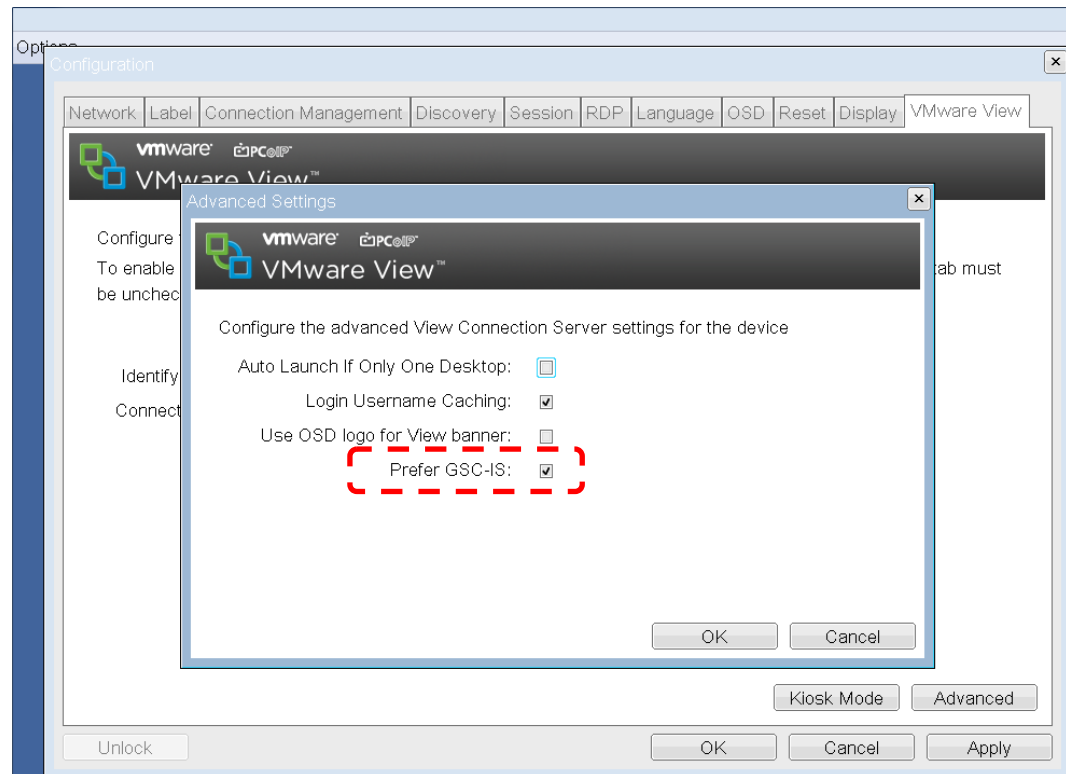
**SSL:** ☐ Use secure connection (SSL)

**Auto connect:** ☐ Always connect to this server at startup

**Connection Server Cache Mode:**

- 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


## 1.6.2 VMware View Advanced OSD Screen



### 1.6.3 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:** ☐

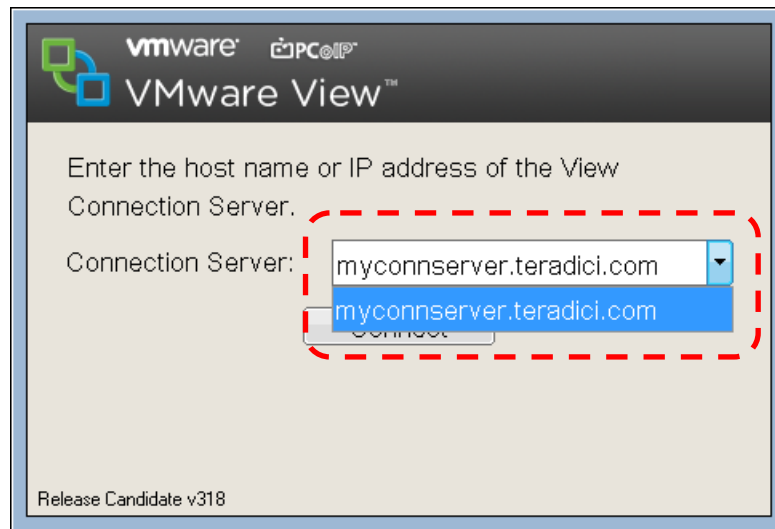
**Logon Username:**

**Logon Password:**

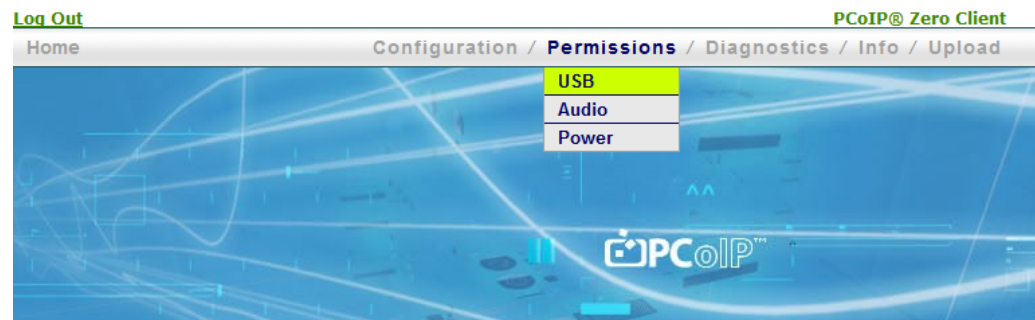
**Logon Domain Name:**

**Desktop Name to Select:**

## 1.6.4 OSD Connection Server Dropdown Menu



## 1.6.5 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

## 1.6.6 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

## 1.6.7 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



## 2 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.

### 2.1 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)

### 2.2 Feature Additions

None

### 2.3 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.	✓	

## 2.4 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.	✓	

## 2.5 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.	✓	

## 3 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.

### 3.1 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)

### 3.2 Feature Additions

None

### 3.3 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.	✓	

### 3.4 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.	✓	

### 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.	✓	
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.	✓	

## 4 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.

### 4.1 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)

### 4.2 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 <a href="mailto:support@teradici.com">support@teradici.com</a> .	✓	
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-&gt;User Settings-&gt;Display Topology</i> OSD screen, see section 4.6.1. 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 4.6.2 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 4.6.3 through 4.6.5.	✓	
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 4.6.6 and 4.6.7. The OSD logo replaces the default View banner. The OSD logo may be changed through the <i>Upload-&gt;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 4.6.8. 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 4.6.6 and 4.6.7.	✓	
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"> <li>Lithuanian</li> <li>Russian</li> </ul>	✓	

### 4.3 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.	✓	

## 4.4 Known Issues

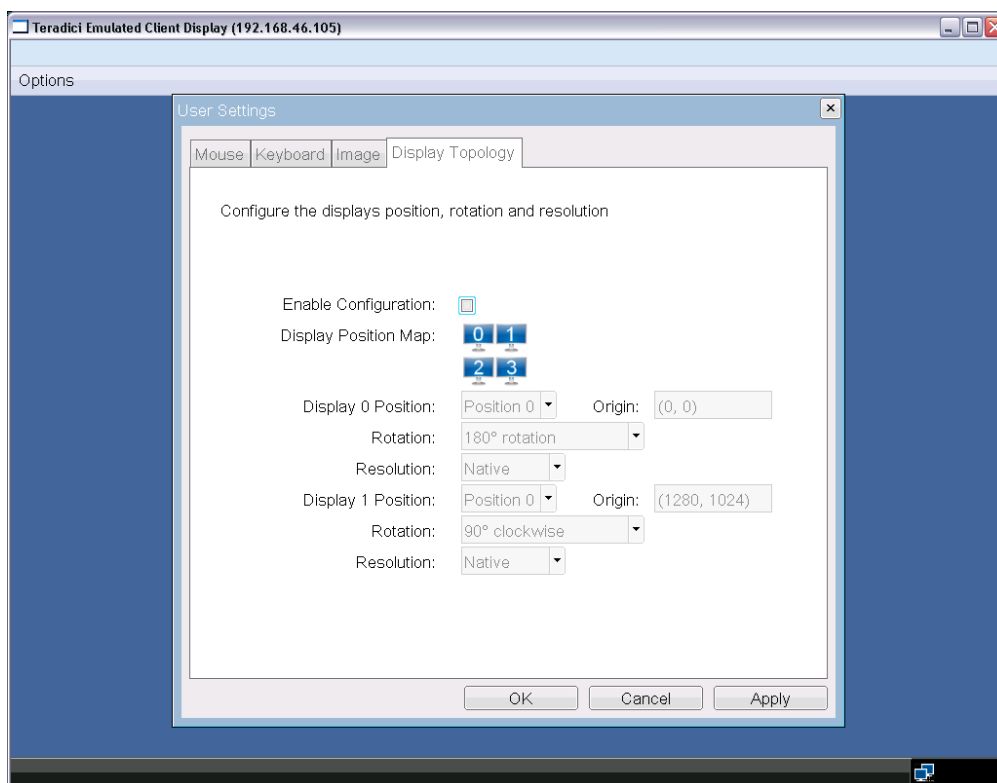
Description	Zero Client	Host
See the latest <i>Using PCoIP Zero Clients with VMware View 4 (TER0904005)</i> document for a list of known issues when using zero clients loaded with firmware release 3.2.0 with VMware View 4.	✓	

## 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 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.	✓	

## 4.6 Supplemental Information

### 4.6.1 Display Topology OSD Screen



## 4.6.2 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**

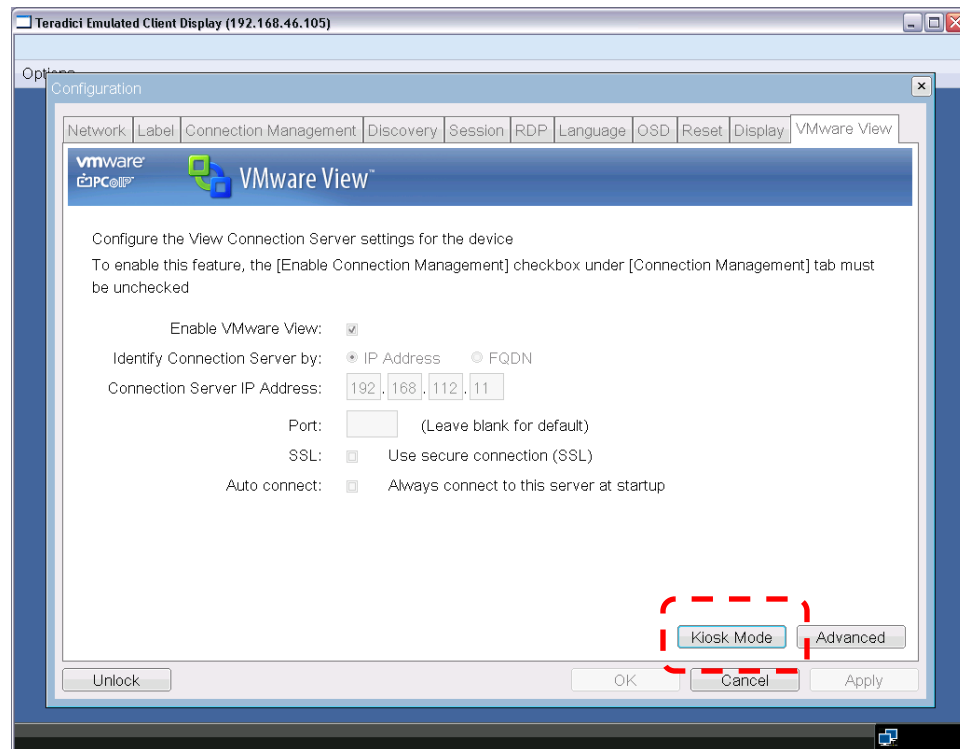
Display 0	
Display Resolution	1280 x 1024
Display Position	(0, 0)
Display Refresh Rate	60 Hz
Display Rotation	no rotation
Monitor Name	VA730m
Monitor Serial Number	QD4064520703

Write these settings to the client      Refresh

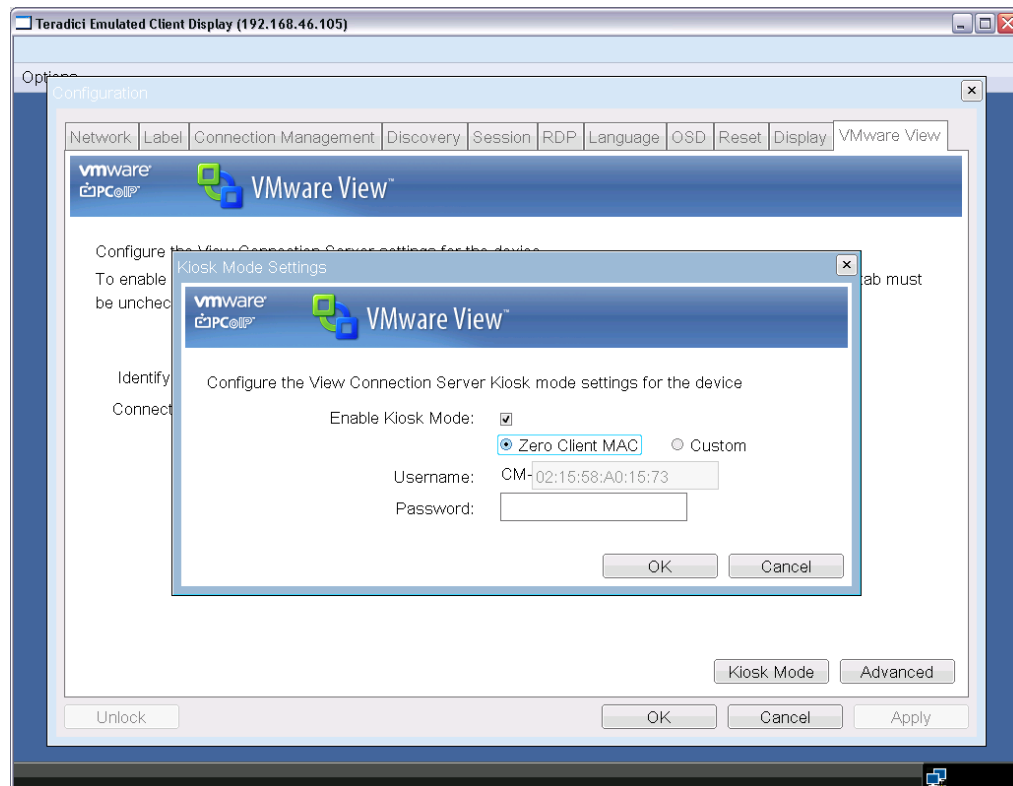
OK      Cancel      Apply



### 4.6.3 VMware View Kiosk Mode OSD Screen Selection



### 4.6.4 VMware View Kiosk Mode OSD Screen



## 4.6.5 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

## 4.6.6 VMware View Advanced OSD Screen

Teradici Emulated Client Display (192.168.46.101)

Options 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

Advanced Settings

vmware PCoIP VMware View™

Configure the advanced View Connection Server settings for the device

Auto Launch If Only One Desktop: ☐

Login Username Caching: ☒

Use OSD logo for View banner: ☐

OK Cancel

Kiosk Mode Advanced

Unlock OK Cancel Apply

## 4.6.7 VMware View (Advanced) Web Page

[Debug](#)

[Log Out](#) PCoIP@ Zero Client

Home Configuration / Permissions / Diagnostics / Info / Upload





Configure the advanced View Connection Server settings for the device

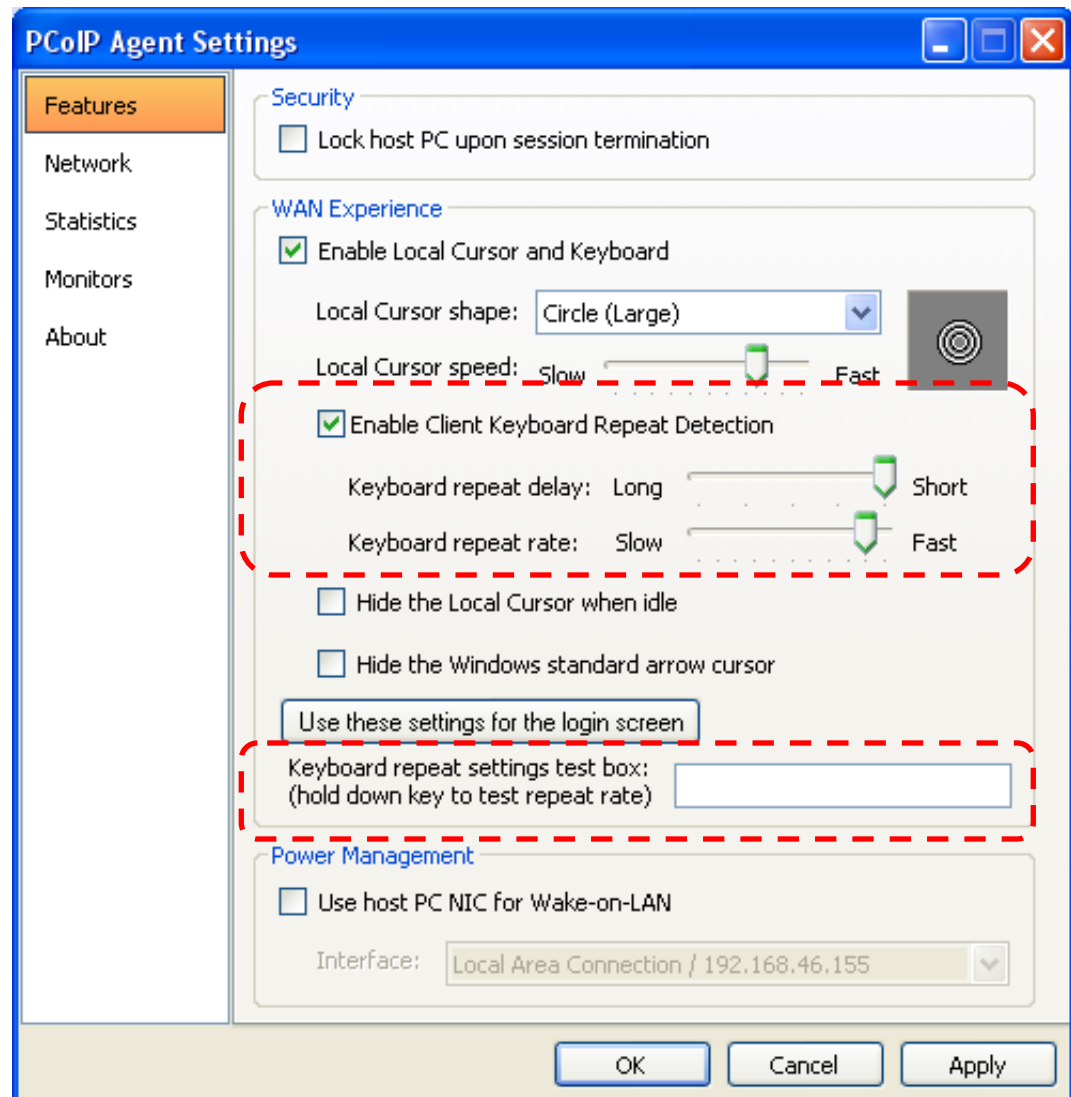
To access these settings, "Enable VMware View" checkbox under "VMware View" tab must be checked

**Auto Launch If Only One Desktop:** ☐

**Login Username Caching:** ☒

**Use OSD logo for View banner:** ☐

## 4.6.8 Host Software Client Keyboard Repeat Enable



## 5 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.

### 5.1 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)

### 5.2 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 5.6.1) or the OSD (see section 5.6.2).	✓	

### 5.3 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)		✓

## 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 3.1.2 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.	✓	

## 5.6 Supplemental Information

### 5.6.1 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:** ☒

## 5.6.2 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



## 6 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.

### 6.1 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)

### 6.2 Feature Additions

None

### 6.3 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.	✓	

## 6.4 Known Issues

Description	Zero Client	Host
See the latest <i>Using PColP 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.	✓	

## 6.5 Additional Collateral

Description	Zero Client	Host
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.	✓	

## 7 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.

### 7.1 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)

### 7.2 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: - 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)	✓	

## 7.3 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. - Session encryption type - Host Driver Function	✓	✓

## 7.4 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.		
---	--	--

## 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.	✓	

## 8 Release 3.0

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

### 8.1 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)

### 8.2 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 8.4.1. 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"> <li>The following changes have been made to the Home web page. See section 8.4.2. <ul style="list-style-type: none"> <li>Added minimum and maximum round trip latency</li> <li>Added minimum and maximum transmit bandwidth</li> <li>Added receive bandwidth (minimum, average and maximum)</li> </ul> </li> </ul>	✓	✓

Description	Zero Client	Host
<ul style="list-style-type: none"> <li>○ Added display frame rate</li> <li>• The following changes have been made to the Session Statistics web page. See section 8.4.3. <ul style="list-style-type: none"> <li>○ Added minimum and maximum round trip latency</li> <li>○ Added minimum and maximum transmit bandwidth</li> <li>○ Added receive bandwidth (minimum, average and maximum)</li> <li>○ Added display frame rate on zero client devices. Previously this was only valid on Host devices.</li> <li>○ Added “Reset Statistics” button.</li> </ul> </li> </ul>		
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 8.4.4.	✓	
Added support for configuring USB permissions on the Host. Previously this could only be configured on the zero client. See section 8.4.5 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.	✓	✓

## 8.3 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.		✓

## 8.4 Supplemental Information

### 8.4.1 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:

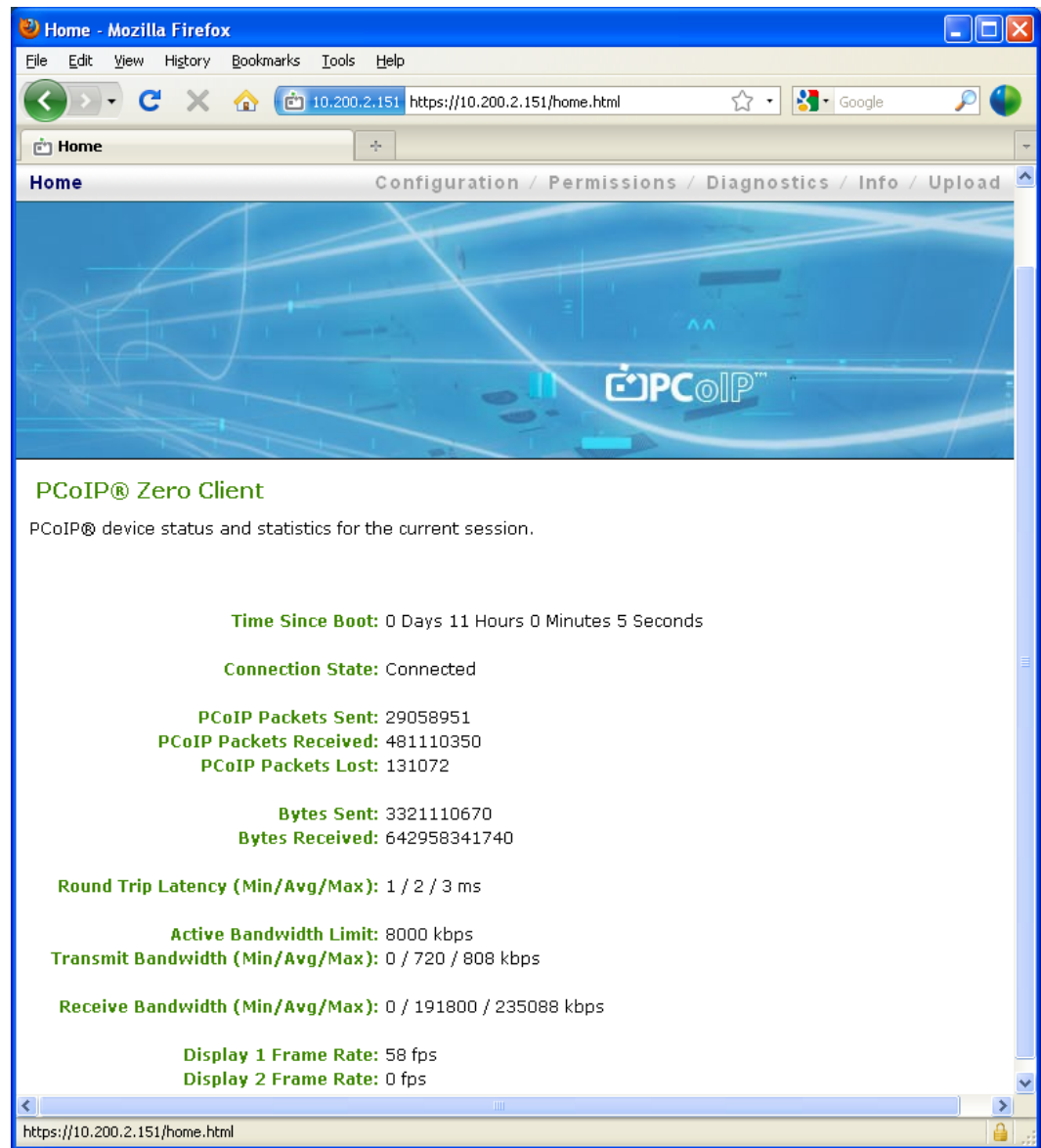
- Accept Any Peer (host only):** ☐
- Session Type (client only):** PCoIP (dropdown menu)
- Identify Peer by:** ☒ IP address ☐ FQDN
- Peer IP Address:** 192 . 168 . 112 . 66
- Peer MAC Address:** 00 - 00 - 00 - 00 - 00 - 00
- Enable Auto-Reconnect (client only):** ☐
- Enable AES-128-GCM:** ☒ (highlighted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

Buttons at the bottom: Apply, Cancel.

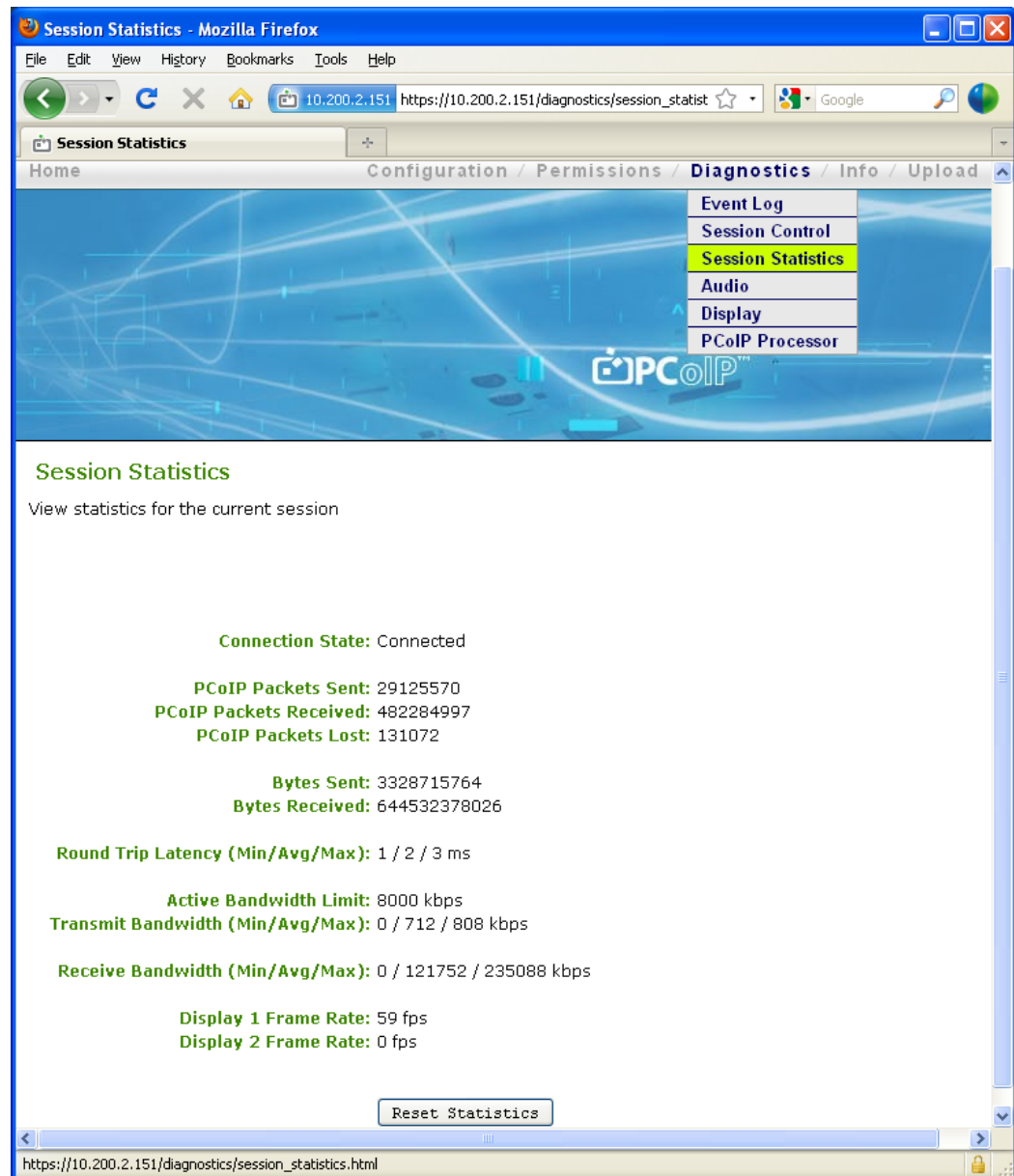
The status bar at the bottom shows the URL: <https://10.200.2.154/configuration/bandwidth.html>.



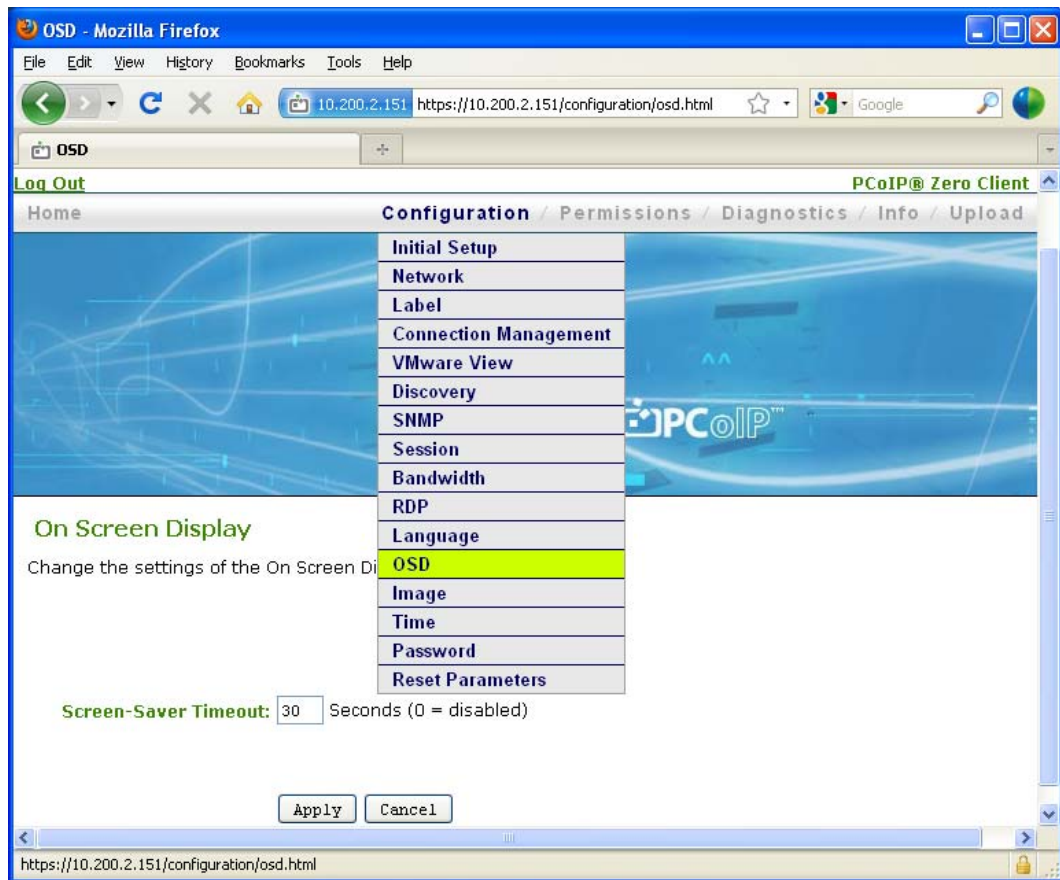
## 8.4.2 Home Web Page



## 8.4.3 Session Statistics Web Page



## 8.4.4 OSD Web Page



## 8.4.5 Host USB Permissions Web Page

