Tera2 PCoIP® Zero Client Firmware

Version 6.0

Administrators' Guide



Teradici Corporation

#101-4621 Canada Way, Burnaby, BC V5G 4X8 Canada

phone +1.604.451.5800 fax +1.604.451.5818

teradici

www.teradici.com

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Document History

Version	Date	Description
6.0	September, 2017	Updated guide to reflect firmware version 6.0
5.5	May, 2017	Updated guide to reflect firmware version 5.5.1 and new structure for PCoIP® Zero Client product documentation.
5.4	January, 2017	Updated guide to reflect firmware version 5.4.
5.3/A	October, 2016	Updated guide to reflect firmware version 5.3.0 and new department styles.

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Who Should Read This Guide?

This guide is for administrators who are configuring Tera2 PCoIP® Zero Client firmware for release 6.0.



Note: Understanding terms and conventions in Teradici guides For information on the industry specific terms, abbreviations, text conventions, and graphic symbols used in this guide, see Using Teradici Product and Component Guides and the Teradici Glossary.

Using This Guide

This guide explains how to configure Tera2 PCoIP Zero Client firmware for release 5.5. This guide describes your Tera2 PCoIP Zero Client's capabilities, and explains how to set up, configure, and manage your Tera2 PCoIP Zero Client. It also answers frequently asked questions.

Use the following list for quick access to the topics covered in this guide:

- Who Should Read This Guide? on page 8 Outlines the document's intended readers, describes what's new in Tera2 PCoIP Zero Client 5.5 and how to use the guide, establishes document conventions, and lists additional resources you may find useful.
- Introducing Your Tera2 PCoIP Zero Client on page 12 Describes the main features of the Tera2 PCoIP Zero Client, outlines the peripherals you can attach to it, and lists the hosts the Tera2 PCoIP Zero Client can connect to. You'll also learn about the configuration tools—the pre-session display, and the Teradici PCoIP Management Console—and learn about support for common features under typical deployment scenarios.
- Setting Up Your Tera2 PCoIP Zero Client on page 30 Describes how to set up your Tera2 PCoIP Zero Client, and outlines what you need to do to secure the Tera2 PCoIP Zero Client.
- *Establishing a PCoIP Connection* on page 36 Shows you how to connect to a PCoIP agent, PCoIP Remote Workstation Card, Amazon Spokesperson, or Horizon Desktops, and how to disconnect from a PCoIP session.
- Managing Your Tera2 PCoIP Zero Client on page 174 Describes all the settings you can configure using your Tera2 PCoIP Zero Client's pre-session display, Administrative Web Interface (AWI), and the Teradici PCoIP Management Console. This section also describes how to connect to an endpoint manager, view information about your Tera2 PCoIP Zero Client, reset the device, and upload certificates and firmware.

Getting More Information

In addition to this guide, the Tera2 PCoIP Zero Client documentation includes:

- Tera2 PCoIP® 5.5 Quick Start Guide
- Tera2 PCoIP® 5.5.1 Release Notes

For detailed information on using the PCoIP Management Console to manage deployments, see the *PCoIP® Management Console 2.5 Administrators' Guide*.

For information about administering PCoIP hosts, see one of the following administrators' guides:

- Teradici PCoIP® Standard Agent 2.9 for Windows Administrators' Guide
- Teradici PCoIP® Standard Agent 2.9 for Linux Administrators' Guide
- Teradici PCoIP® Graphics Agent 2.9 for Windows Administrators' Guide
- Teradici PCoIP® Graphics Agent 2.9 for Linux Administrators' Guide
- Tera2 PCoIP Zero Client Firmware 4.x and Remote Workstation Card Firmware 4.9 Administrators' Guide.

For help configuring firmware 4.x for Tera2 PCoIP Zero Clients and PCoIP Remote Workstation Cards.

 For information on installing and configuring additional Tera2 Remote Workstation Cards and Tera2 PCoIP Zero Clients so that you can use additional monitors on your desk, see *Tera2 PCoIP® Multi-Monitor Deployment Guide*.

The latest updated information is always available at Teradici Support.

What's New in Firmware 6.0

This guide documents Tera2 PCoIP Zero Client firmware only.

This release contains the following Tera2 PCoIP Zero Client new features:

Amazon WorkSpaces Session Type

Firmware 6.0 introduces Amazon WorkSpaces session type that allows *Connecting to Amazon WorkSpaces Directly* on page 166 without having to use the PCoIP Connection Manager. This session will use an Amazon Connection Manager that requires multi-factor authentication.

Unified Communications configuration option removed

Unified Communications options located in the AWI Configuration menu have been removed from firmware.

TLS 1.1 is the minimum requirement for initiating PCoIP sessions

TLS 1.0 is no longer available to initiate PCoIP sessions and TLS 1.1 must be used as the minimum version to initiate PCoIP sessions.

This also means that if using host initiated wake with a Remote Workstation Card, the minimum firmware on the Remote Workstation Card must now be firmware 4.9.0.

TLS 1.2 is the minimum requirement for establishing an Administrative Web Interface (AWI) session

The zero client Administrative Web Interface now requires TLS 1.2. All browsers supported by the AWI include TLS 1.2.

About the Tera2 PCoIP Zero Client

This section provides an overview of your Tera2 PCoIP Zero Client. It also desceribes the devices and PCoIP hosts that can connect to it, introduces the tools you use to manage your Tera2 PCoIP Zero Client, and summarizes support for common features under typical deployment scenarios.

Introducing Your Tera2 PCoIP Zero Client

Tera2 PCoIP Zero Clients are hardware- and firmware-based endpoints that enable users to connect remotely to PCoIP Remote Workstations, workstations running Teradici Cloud Access Software, Teradici Cloud Access Platform desktops and workstations, Amazon WorkSpaces desktops, and VMware Horizon and VMware Horizon DaaS desktops. Because they do not have general purpose CPUs, local data storage, or application operating systems, Tera2 PCoIP Zero Clients are very secure and easy to manage. Tera2 PCoIP Zero Clients contain upgradable firmware that enables you to customize your client with various features.

Tera2 PCoIP Zero Clients come in many forms, such as small stand-alone devices, PCoIP integrated displays, and touch-screen monitors. They support multiple widescreen formats, HD audio and local USB peripherals, and are IPv6-ready. They also have extensive USB security and authentication features, including multiple-factor authentication for use with proximity cards, smart cards, and One-Time-Passwords (OTP).

Tera2 PCoIP Zero Clients are powered by a single TERA2321 or TERA2140 processor.

Advanced Encryption Standard (AES) is employed for PCoIP session encryption. Tera2 PCoIP Zero Clients support both AES-128-GCM and AES-256-GCM encryption. For more information, see *Encryption Settings*.

About the Management Tools

The following configuration and management tools are available for Tera2 PCoIP Zero Clients:

- PCoIP On-Screen Display (OSD): The Tera2 PCoIP Zero Client's pre-session built-in interface for configuring the device's firmware. For more information, see *About the PCoIP On-Screen Display* on page 13.
- PCoIP Administrative Web Interface (AWI): A web-based interface for configuring a specific Tera2 PCoIP Zero Client's firmware remotely after typing

the client's IP address into the browser's address bar. For more information, see *About the PCoIP Administrative Web Interface* on page 18

• Teradici zero client management software: A management tool for configuring and managing multiple PCoIP Zero Clients remotely. Teradici's management software is the PCoIP Management Console. For information about the PCoIP Management Console, see <u>PCoIP Management Console</u> or <u>PCoIP®</u> <u>Management Console 2.5 Administrators' Guide</u>.

About the PCoIP On-Screen Display

The PCoIP On-Screen Display (OSD) is a graphical user interface (GUI) embedded within the client. It displays when the client is powered on and a PCoIP session is not in progress. The only exception to this is when the client is configured for a managed startup or auto-reconnect.



OSD main window

An **Options** menu at the top-left enables users to access various sub-menus to configure the client and view information about it. A **Connect** button in the center of the window enables users to connect the client to a virtual desktop or to a PCoIP Remote Workstation Card.

OSD Recovery Mode

Recovery mode is a special mode of the Tera2 PCoIP Zero Client firmware that takes effect when the client experiences a problem that renders it unable to operate. Recovery mode automatically becomes active under the following conditions:

- A firmware update fails.
- The client has an invalid configuration.
- The client has been unable to complete its boot sequence after a number of attempts.

This mode lets you correct the configuration, or upload a replacement firmware or certificate file.

When the client is in recovery mode, the OSD screen displays the following initial screen:



OSD recovery mode

OSD Recovery Mode Options

Select the **Options** menu to see the available options for configuring and displaying information when the client is in recovery mode.

🔜 Teradici Emulated Client Display (10.0.34.4)		
Options		
Configuration Diagnostics Information Password		
Diagnostics		
Information		
Password		

OSD recovery mode available options

- **Configuration:** Lets you correct the problem by changing the *network configuration* (including *IPv6 settings*), clearing the *management state*, and resetting the configuration and permissions settings stored on the device.
- Diagnostics: Displays the client's event log messages.
- Information: Displays hardware and firmware version information about the client.
- Password: Enables you to update the client's administrative password.

See also: Troubleshooting a Tera2 PCoIP Zero Client in Recovery Mode on page 316.

About Overlay Windows

Overlay windows occasionally appear on top of the user's PCoIP session to display pertinent information when the status changes—for example, when the network connection is lost or an unauthorized USB device is plugged in. These overlays show network, USB device, and monitor statuses as icons and text.

Overlay window	Description
Display link training failed Display link training failed overlay	This overlay only displays on Tera2 clients that contain DisplayPort display interfaces (as opposed to DVI interfaces). The DisplayPort protocol requires a link training sequence for adapting to differing cable lengths and signal qualities. If this training does not succeed, this overlay appears with the message Display link training failed.
Half-duplex network connection Half duplex overlay	PCoIP technology is not compatible with half-duplex network connections. When a half-duplex connection is detected, this overlay appears with the message <i>Half-duplex network connection</i> .

Quedeunis deur	Description	
Overlay window	Description	
Retwork connection lost	Loss of network connectivity is indicated using an overlay with the message <i>Network connection lost</i> over the most recent screen data. This overlay appears when the client network cable is	
Network connection lost overlay	disconnected or when no PCoIP protocol traffic is received by the client for more than two seconds.	
	The lost network connection message appears until the network is restored or the timeout expires (and the PCoIP session ends).	
	Tip: Consider disabling this notification message in sessions to virtual desktops It is not recommended to use this notification message when using PCoIP devices with virtual desktops. Normal scheduling within the virtual desktop hypervisor can falsely trigger this message. To prevent this problem, you can disable the <i>Enable Peer Loss</i> <i>Overlay</i> setting.	
No support resolutions	Display resolution may have limitations due to resource constraints when all four ports have large	
found. Please try unplugging other displays.	displays connected. If the resolution limit is exceeded, this overlay appears with the message <i>No support</i> <i>resolutions found. Please Try unplugging other</i>	
No support resolutions found overlay	displays.	
Preparing desktop	When a user first logs into a PCoIP session, this overlay appears with the message <i>Preparing desktop</i>	
Preparing desktop overlay		
• USB device not authorized	If an unauthorized USB device is connected, this overlay appears with the message USB device not authorized. This overlay lasts for approximately five	
USB device not authorized overlay	seconds.	
• USB over current notice	If the USB devices connected to the client cannot be handled by the USB ports, this overlay appears with the message USB over current notice. This overlay	
USB over current notice overlay	remains until USB devices are removed to meet the current handling of the USB ports.	

Overlay window	Description	
USB device not supported behind a high-speed hub	Some USB devices cannot be connected through a high speed (USB 2.0) hub, and should instead be connected directly to the Tera2 PCoIP Zero Client or through a full append (USB 1.1) bub. If auch a device in	
USB device not supported behind a high- speed hub overlay	through a full speed (USB 1.1) hub. If such a device is connected to the Tera2 PCoIP Zero Client through a high speed hub, this overlay appears with the message USB device not supported behind high speed hub. This overlay lasts for approximately five seconds.	
Resolution not supported	If the resolution of a monitor connected to the client cannot be supported by the host, the monitor is set to its default resolution and this overlay appears with the message <i>Resolution not supported</i> .	
Resolution not supported overlay	message resolution not supported.	
	e is denoted by two possible overlays, as shown next. e minutes. The monitor is put into sleep mode	
No source signal	When no video source is connected to the host, this overlay appears with the message <i>No source signal</i> . This helps you debug a situation where the host does not have the video source connected or the host PC	
No source signal overlay	has stopped driving a video signal. To correct this, connect the host PC video to the host. (This message	

	connect the host PC video to the host. (This message can also be triggered by the host going into display power save mode.)
Source signal on other port	When a video source to the host does not correspond to the video port used on the client, this overlay appears with the message <i>Source signal on other port</i> .
Source signal on other port overlay	This helps you debug a situation where the video source is connected to the wrong port. To correct this, swap the video ports at the host or the client.

OSD Menus

The **Options** menu in the upper left corner has five sub-menus that link to OSD configuration, information, and status pages.

- **Configuration:** This menu contains links to pages that let you define how the device operates and interacts with its environment. Each tab has an **OK**, **Cancel**, and **Apply** button that lets you accept or cancel the settings changes made.
- **Diagnostics:** This menu contains links to pages that help diagnose issues concerning the client.

- Information: The page under this menu displays hardware and firmware version information about the device and the client's IP address.
- User Settings: This menu contains links to pages that let users define mouse, keyboard, image, display topology, touch screen, tablet, and region settings, and also the certificate checking mode.
- **Password:** The page under this menu lets you update the administrative password for the device.



Note: Password option appears when password protection is enabled

The **Password** menu option is only present in the OSD for devices that are configured with password protection enabled. If this option is not visible in the **Options** menu, you can make it visible by using a PCoIP Management Console profile to enable password protection for the device. You can also use a PCoIP Management Console profile to hide a single menu item, the entire **Options** menu, or all menus from users. For details, see the *PCoIP® Management Console 2.5 Administrators' Guide*.

Options

Configuration

Diagnostics

Information

User Settings

Password

OSD Options menu

The GUI Reference in this documentation contains full details about each page. For information about how to configure or manage a device using these OSD pages, see the appropriate section in the GUI Reference.

About the PCoIP Administrative Web Interface

The PCoIP Administrative Web Interface (AWI) enables you to interact remotely with a PCoIP endpoint. From the AWI, you can manage and configure a client, view important information about it, and upload firmware and certificates to it.

After you type the device's IP address into an Internet Explorer, Mozilla Firefox, or Google Chrome browser, the browser will use HTTPS to connect to the device's AWI web page. Access to the AWI is controlled using an administrative password, which can be optionally disabled.

The AWI's HTTPS connection is secured using a PCoIP root Certificate Authority (CA) certificate. To avoid warning messages when you log into the AWI, it is

recommended that you install this certificate in your browser. The certificate file (cacert.pem) is always included in a firmware release, but you can also download it directly from How do I install the PCoIP Root Certificate in my Browser for secure access the Administrative Web Interface? (KB 15134-529). Detailed instructions on how to install the certificate are also included in the KB.

The following browsers are supported in this release:

- Firefox: current version
- Chrome: current version
- Microsoft Edge: current version
- Internet Explorer 11

Logging into the Administrative Web Interface

To log into the Administrative Web Interface (AWI) web page:

- Using a web browser, enter the client's IP address in the address bar. According to network requirements, this address may be either a static or dynamic address as follows:
 - Static IP Address: The IP address is hard-coded and must be known.
 - Dynamic IP Address: The Dynamic Host Configuration Protocol (DHCP) server dynamically assigns the IP address. You can get it from the DHCP server.
- 2. From the Log In page, enter the administrative password.



Note: Contact your reseller for your device's AWI password

Contact your reseller to obtain the default password for your device's AWI.

Log In	
Please enter the administrative password to access this device.	
Password:	
Idle Timeout: Never	Log In

AWI Log In page

3. To change idle timeout (the time after which the device is automatically logged off), select an option from the **Idle Timeout** drop-down menu.



4. Click Log In.



Note: Some PCoIP devices do not require a password to log in Some PCoIP devices have password protection disabled and do not require a password to log in.

If configured in the firmware defaults, the *Initial Setup* page appears the first time you log in. You can configure audio, network, and session parameters on this page. After you click **Apply**, the *Home* page appears for each subsequent session. This page provides an overview of the device status.

If a warning message appears when you try to log in, then a session is already in progress on that device. Only one user can log into a device at one time. When a new session logs in, the current session is ended and the previous user is returned to the *Log In* page.

AWI Initial Setup Page

The AWI's Initial Setup page contains the audio, network, and session configuration parameters that you must set before a client or host device can be used. This page helps to simplify initial setup and reduce the time for new users to establish a session between a Tera2 PCoIP Zero Client and PCoIP Remote Workstation Card.



Note: Complex environments require further configuration More complex environments that use host discovery or connection management systems require further configuration than is available on the Initial Setup page.

AWI Home Page

The AWI Home page displays a statistics summary for the Tera2 PCoIP Zero Client. You can display the Home page at any time by clicking the **Home** link at the top left section of the menu bar.

te	radici			
PCoIP® Z	ero Client			
PCoIP® devic	e status and statis	tics for the current sessi	ion.	
	PCoIF Co Conne 802.1X Authen Session Er Packets (Sent/R Bytes (S	me Since Boot: 7 Days 7 Police Name: pcoip-pc nnection State: Connect action Duration: 0 Days 8 tication Status: Disabled noryption Type: AES-128	ted to VDI host 192.168.63.216 8 Hours 24 Minutes 35 Seconds 3 3-GCM 9 / 983422 / 547 (0.0 %) 102 / 434504596	
Transmit B	Transmit Bandwidth (Min/Avg/Max/Limit): 0/8/264/8000 kbps Receive Bandwidth (Min/Avg/Max): 0/0/9056 kbps			
Pipeline Processing Rate (Avg/Max): 0 / 40 Mpps Endpoint Image Settings In Use: Host Initial Image Quality (Min/Max): 50 / 80 Image Quality Preference: 45 Build To Lossless: Disabled				
Display 1 2	Maximum Rate: User Defined 24 fps 24 fps	Output Process Rate O fps O fps	Image Quality Lossy Lossy	

AWI: Home page

The previous figure shows session statistics for devices that can support four connected displays. If your deployment only supports two displays, information for these two displays will appear in the bottom area of the page.

AWI Home Page Statistics

Statistics	Description
Processor	PCoIP processor type, version, and RAM size
Time Since Boot	Length of time that the PCoIP processor has been running.

Statistics	Description
PCoIP Device Name	The logical name for the device.
	This field is the name the client registers with the DNS server if DHCP is enabled or the system is configured to support registering the hostname with the DNS server. (See the <i>PCoIP Device Name</i> parameter on the <i>Label</i> page.)
Connection State	The current (or last) state of the PCoIP session. Possible connection states are:
	Asleep
	Canceling
	Connected
	Connection Pending
	Disconnected
	Waking
Connection Duration	Displays the length of time the device has been connected to a host endpoint.
802.1X Authentication Status	Indicates whether 802.1x authentication is enabled or disabled on the device.
Session Encryption Type	Displays the encryption algorithm in use when a session is active.
PCoIP Packets Statistics	PCoIP Packets Sent: The total number of PCoIP packets sent in the current/last session.
	PCoIP Packets Received: The total number of PCoIP packets received in the current/last session.
	PCoIP Packets Lost: The total number of PCoIP packets lost in the current/last session.
Bytes	Bytes Sent: The total number of bytes sent in the current/last session.
	Bytes Received: The total number of bytes received in the current/last session.
Round Trip Latency	The minimum, average, and maximum round-trip PCoIP system and network latency in milliseconds (+/-1 ms).

Statistics	Description
Bandwidth Statistics	Transmit Bandwidth: The minimum, average, and maximum traffic transmitted by the Tera processor. The active bandwidth limit is the maximum amount of network traffic the Tera processor may currently generate. The value is derived from the configured bandwidth parameters and the current (or last) network congestion levels.
	Receive Bandwidth: The minimum, average, and maximum traffic received by the Tera processor.
Pipeline Processing Rate	Shows the average and maximum amount of image data being processed by the image engine (in megapixels per second).
Endpoint Image Settings In Use	Displays if the image settings being used are configured within the client or within the host. This is based on how the <i>Use Client</i> <i>Image Settings</i> field is configured on the Image page for the host device.
Initial Image Quality	The minimum and maximum quality setting is taken from the Image page for the device.
	The active setting is what's currently being used in the session and only appears on the host.
Image Quality Preference	This setting is taken from the <i>Image Quality Preference</i> field on the Image page. The value determines if the image is set to a smoother versus a sharper image.
Build to Lossless	Options that may appear in this field include the following:
	Enabled: The <i>Disable Build to Lossless</i> field on the Image page is unchecked.
	Disabled: The Disable Build to Lossless field is checked.
Display	The port number for the display.
Maximum Rate:	This column shows the refresh rate of the attached display.
Refresh Rate	If the <i>Maximum Rate</i> field on the Image page is set to 0 (that is, there is no limit), the maximum rate is taken from the monitor's refresh rate.
	If the <i>Maximum Rate</i> field on the Image page is set to a value greater than 0, the refresh rate shows as User Defined.
Output Process Rate	The frame rate currently being sent from the image engine on the host to the client.
Initial Image Quality	Shows the current lossless state of the attached display:
	LossyPerceptually losslessLossless



V s

Note: Clicking Reset Statistics also resets statistics on Home page When you click the **Reset Statistics** button on the Session Statistics page, the statistics reported in the Home page are also reset.

AWI Recovery Mode

Recovery mode is a special mode of the Tera2 PCoIP Zero Client firmware that takes effect when the client experiences a problem that renders it unable to operate. Recovery mode automatically becomes active under the following conditions:

- A firmware update fails.
- The client has an invalid configuration.
- The client has been unable to complete its boot sequence after a number of attempts.

This mode lets you correct the configuration, or upload a replacement firmware or certificate file.

When the client is in recovery mode, the following AWI login screen displays when you enter the client's IP address in your browser's address bar:

terad					
Log In	opf:	6	St-	ODE	
Please enter the admini	strative password to a	access this device	2.		
This Zero Client is in Re firmware load. Please the Zero Client.	ecovery mode due to alert your administra Password:	an interrupted o tor to upload firr	r corrupted mware and restart		
I A	dle Timeout: Never	· AND	Log In	at MODE	

AWI recovery mode

AWI Recovery Mode Options

After logging in, the AWI displays the recovery mode Home page. The menus at the top show the available options for configuring and displaying information.



Ν	_O ^V		-O ^V	-O ^V
Log Out	<u>_O</u> Y		NO ^Y	PCoIP® Zero Client
Home		Configuration	n / Diagnostics /	Info / Upload
te	radici			
	<u></u>	/		A.
PCoIP® Z	ero Client			
PCoIP® devic	e status and stat	istics for the current sessi	on.	
	d. Please alert yo	y mode due to an interrup our administrator to uploa		art
		Processor: TERA214	10 revision 1.0 (128 M	в)
	1	ime Since Boot: 19 Days	• • • • •	
	PCol	P Device Name: pcoip-po	ortal-emu001-0250569	972792
	c	onnection State: Disconne	ected	
	Conn	ection Duration:		
	802.1X Authe	ntication Status: N/A		
	Session I	Encryption Type: Not in Se	ession	
PCoIF	Packets (Sent/	Received/Lost): 5 / 4 / 3	(37.5 %)	
	Bytes (S	Sent/Received): 2 / 1		
Rou	nd Trip Latency	(Min/Avg/Max): 10 / 50 /	/ 100 ms	
		vg/Max/Limit): 10000 /		0000 kbps
Rec	eive Bandwidth ((Min/Avg/Max): 1000 / 2	000 / 5000 kbps	
Ріре		tate (Avg/Max): 0 / 0 Mp	ps	
		Settings In Use: Client ality (Min/Max): 10 / 20		
		ality Preference: 30		
		uild To Lossless: Enabled		
	7 2 1	and to cossiess. chabled		
	0			
Display	Maximum Rate: User Defined		Image Quality	
Display 1	N/A	Output Process Rate N/A	Image Quality	
2	N/A N/A	N/A N/A	N/A N/A	
3	N/A	N/A N/A	N/A N/A	
4	N/A	N/A	N/A	
7	6			

AWI recovery mode - home page

- **Configuration:** Enables you to correct the problem by changing the *network configuration* (including *IPv6 settings*), clearing the *management state*, updating the client's administrative *password*, and *resetting* the configuration and permissions settings stored on the device.
- **Diagnostics:** Displays the client's *event log* messages and lets you *reset* the PCoIP processor.
- Information: Displays hardware and firmware *version information* about the client.

• Upload: Lets you upload firmware and certificates for a client. You can also use the Management Console to upload firmware and certificates to a group of Tera2 PCoIP Zero Clients. For details, see *PCoIP® Management Console 2.5 Administrators' Guide*.

See also: Troubleshooting a Tera2 PCoIP Zero Client in Recovery Mode on page 316.

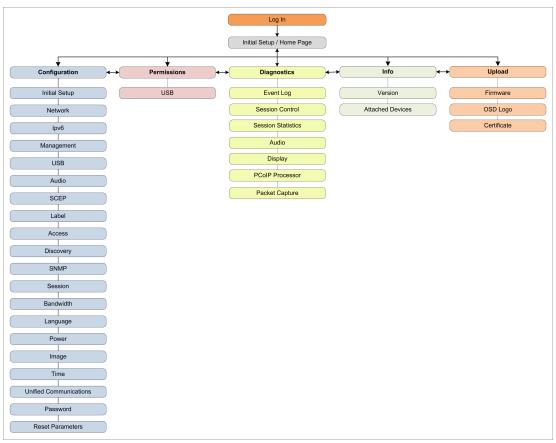
AWI Menus

The AWI has five main menus that link to the various configuration and status pages.

- **Configuration:** The pages under this menu let you configure the various aspects for the device, such as network settings, language, session parameters, and so on.
- **Permissions:** The pages under this menu let you set up the permissions for the USB on the client and host.
- **Diagnostics:** The pages under this menu help you troubleshoot the device.
- Info: The pages listed this menu let you view firmware information and the devices currently attached to the device.
- Upload: The pages under this menu let you upload a new firmware version, an OSD logo, and your certificates to the device.

The following figure shows the menus and pages available in the AWI.





AWI menu overview



Related: Refer to GUI Reference section

The GUI Reference in this documentation contains full details about each page. For information about how to configure or manage a device using these AWI pages, see the appropriate section in the GUI Reference.

What Can You Connect To Using Your Tera2 PCoIP Zero Client?

Your Tera2 PCoIP Zero Client can connect to wide variety of host desktops and peripherals. This section provides an overview of your connection options. It describes:

- PCoIP Host Support on page 28
- Device Support on page 28
- Supported Displays and Resolutions on page 28





Resource: Physically Setting Up a Tera2 PCoIP Zero Client For detailed instructions on how to physically set up a Tera2 PCoIP Zero Client and connect it to USB devices, monitors, and a network, see the *PCoIP® Tera2 Zero Client Quick Start Guide*. This guide has detailed instructions for each step of the installation process.

PCoIP Host Support

Tera2 PCoIP Zero Clients are pre-configured to connect directly to PCoIP Connection Manager or VMware Horizon brokers, but you can easily configure them for any session connection type. Tera2 PCoIP Zero Clients can connect to the following PCoIP host endpoints:

- PCoIP Remote Workstation Cards
- Teradici Cloud Access Software
- Teradici Cloud Access Platform desktops and workstations
- Amazon WorkSpaces Desktops
- VMware Horizon Desktops

Device Support

The Tera2 PCoIP Zero Client supports the following devices:

- Monitors: Depending on the Tera2 PCoIP Zero Client model, you can attach *up* to four monitors.
- Analog devices: You can attach analog output devices such as headphones and speakers to the Tera2 PCoIP Zero Client's analog output (line out) jack, and analog input devices such as microphones and recording devices to the client's analog input (line in) jack.
- USB devices: You can attach a variety of USB devices to your Tera2 PCoIP Zero Client. USB human interface device (HID) devices (for example, keyboards, mice, Wacom tablets) are locally terminated by the client. Non-HID devices (for example, mass storage devices, some printers, non-isochronous scanners) are automatically bridged when the USB permissions are set to allow the device. The drivers for many of these devices need to be installed in the host operating system (OS).

Supported Displays and Resolutions

Tera2 PCoIP Zero Clients support from one to four displays at the following resolutions:

Tera2 PCoIP Zero Client Processor	Maximum No. of Supported Displays and Resolutions
TERA2321	2 x 1920x1200
	1 x 2560x1600*
TERA2140	4 x 1920x1200
	2 x 2560x1600*
	ents support 2560x1600 resolution on attached

displays using either DVI (with Y-cable) or DisplayPort interfaces. For instructions on how to connect cables to Tera2 PCoIP Zero Clients with DVI and/or DisplayPort ports to support this resolution, see *DVI and DisplayPort Interfaces*.

Setting Up Your Tera2 PCoIP Zero Client

This section describes how to connect your Tera2 PCoIP Zero Client to the network. You'll also learn how to configure initial setup parameters, as well as secure your Tera2 PCoIP Zero Client so that you can establish a successful PCoIP session.

The topics include:

- Connecting the Tera2 PCoIP Zero Clientto the Network on page 30
- Configuring Initial Setup Parameters on page 31
- Securing Your Tera2 PCoIP Zero Client on page 32
- 1. Connect USB keyboard and mouse.
- Connect one end of the Ethernet cable to the zero client and the other end to a switch/router. The switch or router should be on the same network as the host card or virtual desktop server. For more advanced network environments, visit the Teradici technical support site at techsupport.teradici.com.
- 3. Connect monitor cables to the zero client.
- 4. Connect speakers and/or headphones (optional).
- 5. Connect power supply to the zero client and a power source.
- 6. Press front panel button to power on the zero client

Connecting the Tera2 PCoIP Zero Clientto the Network

<mark>...</mark>.

To connect the Tera2 PCoIP Zero Client:

- 1. Connect a USB keyboard and mouse to the Tera2 PCoIP Zero Client.
- 2. Connect one end of the Ethernet cable to the Tera2 PCoIP Zero Client and the other end to a switch/router. The switch or router must be on the same network as the host card or virtual desktop server.
- 3. Connect monitor cables to the Tera2 PCoIP Zero Client.
- 4. (*Optional.*) Connect speakers and/or headphones to the Tera2 PCoIP Zero Client.
- 5. Connect the power supply to the Tera2 PCoIP Zero Client and a power source.
- 6. Press the front panel button to power on the Tera2 PCoIP Zero Client.

For detailed installation steps, including diagrams and information about session LEDs and button operation, see the *Tera2 PCoIP® 5.5 Quick Start Guide*.

Configuring Initial Setup Parameters

Before you use your Tera2 PCoIP Zero Client for the first time, you need to configure initial setup parameters, including setting basic audio, network, and session information.

You can perform this initial setup from the AWI Initial Setup page, shown next.

Initial Setup (1:1 Manual Configuration)
These settings must be configured before the device is used for the first time
Step 1: Audio Enable HD Audio: 🗹 Note: To enable audio, please ensure that audio is also enabled on the Host.
Step 2: Network Enable DHCP: IP Address: 10.0.6.85
Subnet Mask: 255 255 0 Gateway: 10 -0 -6 -1 Primary DNS Server: 192 -168 -1 -50 Secondary DNS Server: 192 -168 -1 -52
Step 3: Session Identify Host by: © IP address © FQDN Host IP Address: 10 -0 -34 .7 Host MAC Address: 00 -30 -04 -0E -4F - A2
Step 4: Apply Changes Apply Cancel

AWI Initial Setup page

The following parameters display on the AWI Initial Setup page:

Audio Parameters

Parameter	Description
Enable HD Audio	Enables audio support on the client.



Info: Configuring other audio parameters

You can configure other audio parameters from the OSD and AWI Audio pages. To configure audio parameters from these pages, see *Configuring Audio* on page 209.

Network Parameters

Parameter	Description
Enable DHCP	Enables DHCP (as opposed to using manual IP address configuration)
IP Address	Device's IP address
Subnet Mask	Device's subnet mask
Gateway	Device's gateway IP address
Primary DNS Server	Device's primary DNS IP address
Secondary DNS Server	Device's secondary DNS IP address



Info: You can also configure network settings from the OSD and AWI *Network* pages

You can configure the initial setup settings, as well as other network settings, from the OSD and AWI *Network* pages. To configure network settings from these pages, see *Configuring Network Settings* on page 225.

Session Parameters

Parameter	Description
Identify Host By	Specifies the host identify method
Host IP Address	Specifies the host IP address
Host MAC Address	Specifies the host MAC address.
	You can set the host MAC address to 00-00-00-00-00 to ignore this field when a session starts.

To configure initial setup parameters from the AWI:

- 1. From the AWI, select **Configuration > Initial Setup**.
- 2. From the AWI *Initial Setup* page, configure audio, network, and session parameters.
- 3. Click Apply to save your configuration.

Securing Your Tera2 PCoIP Zero Client

The security needs of your deployment are driven by your specific environment. You can configure Tera2 PCoIP Zero Clients to meet security requirements for a range of scenarios, from high-security environments to trusted environments.

Securing your Tera2 PCoIP Zero Client involves some or all of these tasks, depending on your deployment needs:

- Setting the Certificate Checking Mode Configure how the Tera2 PCoIP Zero Clientbehaves if it can't verify a secure connection to the server. See Setting Certificate Checking Mode on page 34.
- Uploading certificates to the Tera2 PCoIP Zero Client Depending on the certificate checking mode you choose, you may have to upload server certificates to the Tera2 PCoIP Zero Client's certificate store. See Uploading Certificates on page 183.
- Configuring the Tera2 PCoIP Zero Client with an endpoint manager Configure your Tera2 PCoIP Zero Client for either automatic or manual discovery by an endpoint manager. See *Connecting to an Endpoint Manager* on page 174.
- Configuring 802.1x Network Device Authentication Configure 802.1x network device authentication for enhanced security. See *Configuring 802.1x Network Device Authentication* on page 280.
- Configuring Access to Management Tools Configure a PCoIP device management tool from managing the Tera2 PCoIP Zero Client, disable administrative access to the Tera2 PCoIP Zero Client's AWI, or force an administrative password change the next time someone accesses the AWI or OSD. See *Configuring Access to Management Tools* on page 206.



Tip: You can access additional security functionality from the PCoIP Management Console

You can configure security settings for multiple devices from the PCoIP Management Console, as well as access additional AWI and OSD security settings (including password settings and the option to hide OSD menus). For more information, see the *PCoIP® Management Console 2.5 Administrators' Guide*.

Default Security Mode

Out of the box, the Tera2 PCoIP Zero Client is configured with the following security settings:

- The Certificate Checking Mode is set to Warn before connecting to untrusted servers. See Setting Certificate Checking Mode on page 34.
- The Security Level is set to Low. See About Tera2 PCoIP Zero Client Security Levels on page 175.
- The security certificate store is empty. See *About Certificates* on page 177 and *Uploading Certificates* on page 183.

Setting Certificate Checking Mode

When the Tera2 PCoIP Zero Client can't verify a secure connection to the host or connection broker, its behavior is determined by the *Certificate Checking Mode* option.

You configure this option from the OSD Certificate page (shown next).

User Settings	×
Certificate Mouse Keyboard Image Display Topology Touch Screen Tablet Region	
teradici. PCoIP® Zero Client	
Certificate Checking Mode:	
This mode determines how the client proceeds when it cannot verify that your connection the server is secure. It is not recommended that you change this setting unless instruct do so by your system administrator.	
Never connect to untrusted servers	
 Warn before connecting to untrusted servers 	
O Do not verify server identity certificates	
OK Cancel	Apply

OSD Certificate page



Info: Trusting Servers

Server trust is established by certificates. Certificates are uploaded to the Tera2 PCoIP Zero Client through endpoint managers such as the PCoIP Management Console. For more information, see *Performing Common Tasks* on page 174.



info option You

Info: Preventing users from changing the *Certificate Checking Mode* option

You can prevent users from changing the *Certificate Checking Mode* option on the OSD *Certificate* page. To do this, access the *Certificate Check Mode Lockout* option found in the advanced options for any of the *PCoIP® Connection Manage*r or *View Connection Server* session connection types.

To set the Certificate Checking Mode:

- 1. From the OSD, select **Options > User Settings > Certificate**.
- 2. From the OSD *Certificate* page, choose one of the *Certificate Checking Mode* options:
 - Never connect to untrusted servers Configures the client to reject the connection if a trusted, valid certificate is not installed.
 - Warn before connecting to untrusted servers Configures the client to display a warning if an unsigned or expired certificate is encountered, or when the certificate is not self-signed and the client trust store is empty.
 - **Do not verify server identity certificates** Configures the client to enable all connections.
- 3. Click OK.

Establishing a PCoIP Connection

Tera2 PCoIP Zero Clients can connect to the following hardware and software host endpoints:

- PCoIP Remote Workstation cards (see *Connecting to PCoIP Remote Workstation Cards* on page 157).
- Teradici Cloud Access Software (see *Connecting to Teradici Cloud Access Software* on page 162).
- Amazon WorkSpaces desktops (see *Connecting to Amazon WorkSpaces Desktops* on page 165).
- VMware Horizon desktops and applications (see *Connecting to VMware Horizon Desktops and Applications* on page 168).

Configuring a Session

Configuring a Session Connection Type

The Session pages on the AWI and OSD let you configure how the device connects to PCoIP endpoints. The available configuration options depend on the session connection type you select.

Session Connection Types

The following are the main session connection types:

- Amazon Workspaces on page 36
- Auto Detect
- Direct to Host (with option for SLP host discovery)
- PCoIP Connection Manager (with option for Auto-Logon)
- View Connection Server (with various options)

Amazon Workspaces

Auto Detect

This connection type automatically detects which broker protocol a connection server is using so users in a mixed environment (for example, one that uses View Connection Servers and PCoIP Connection Managers) do not have to manually reconfigure the session type each time they switch brokers.

Auto Detect is the default session connection type.

Auto Detect Connections

Management Tool	Session Connection Options
AWI	Auto Detect
OSD	Auto Detect

Direct to Host

A Direct to Host session is a direct connection between a Tera2 PCoIP Zero Client and a remote workstation containing a PCoIP Remote Workstation Card. You can specify a host's DNS name or IP address, or you can configure clients to use Service Location Protocol (SLP) to discover a host. You can also configure clients to automatically reconnect to a host when a session is lost.

Direct Session Connections

Management Tool	Session Connection Options
AWI	Direct to Host
	Direct to Host + SLP Host Discovery
OSD	Direct to Host
	Direct to Host + SLP Host Discovery

PCoIP Connection Manager

A PCoIP Connection Manager session is a connection between a Tera2 PCoIP Zero Client and a PCoIP endpoint using the PCoIP Connection Manager as a broker. You can configure this session type in basic mode or Auto-Logon mode.

PCoIP Connection	Manager	Connections
-------------------------	---------	-------------

Management Tool	Session Connection Options
AWI	PCoIP Connection Manager
	PCoIP Connection Manager + Auto-Logon
OSD	PCoIP Connection Manager
	PCoIP Connection Manager + Auto-Logon

View Connection Server

A VMware Horizon session is a connection between a Tera2 PCoIP Zero Client and a VMware Horizon VDI desktop, DaaS desktop, or RDS-hosted desktop using View Connection Server as the connection manager (also known as the *connection broker*). You can configure this session type in basic mode, Auto-Logon mode, View

Connection Server + Kiosk mode, and View Connection Server + Imprivata OneSign mode.



Note: VMWare RDS-hosted application connections support different session types

VMWare Horizon RDS-hosted application connections are supported on the View Connection Server, View Connection Server + Auto-Logon, View Connection Server + Kiosk, and View Connection Server + Imprivata OneSign session types for Tera2 PCoIP Zero Clients. After configuring your View Connection Server, select the *Enable RDS Application Access* check box in Advanced Options on the Session page.

Management Tool	Session Connection Options
AWI	View Connection Server
	View Connection Server + Auto-Logon
	View Connection Server + Kiosk
	View Connection Server + Imprivata OneSign
OSD	View Connection Server
	View Connection Server + Auto-Logon
	View Connection Server + Kiosk
	View Connection Server + Imprivata OneSign

VMware Horizon Connections

OSD: Amazon WorkSpaces Session Settings

Use the Amazon WorkSpaces session Connection Type to connect directly to your Amazon WorkSpaces desktop through multi-factor authentication. This connection type removes the need to deploy and manage the PCoIP Connection Manager for Amazon WorkSpaces in order to connect zero clients to Amazon WorkSpaces.



Info: Security consideration

The connection manager determines the security requirements. Amazon connection manager requires multi-factor authentication when connecting to Amazon WorkSpaces.



Tip: Advanced Options

Advanced parameters for this session type are accessible from the AWI.

Configuration				×
Network IPv6 Management SCEP	Label Discovery Ses	sion Power D	isplay Access Au	dio Reset
G	amazonW	orkSpace	es	
Configure the connection to a pee	r device			
Connection Type:	Amazon WorkSpace	15	•	
Registration Code:				
Connection Name:				
Unlock		OK	Cancel	Apply

The following parameters can be found on the OSD Session tab for the Amazon WorkSpaces selection.

OSD Amazon WorkSpaces Parameters

Parameter	Description
Registration Code	Enter the code provided by Amazon when your Workspace was created.
Connection Name	The name you gave your connection displayed in the OSD when you turn your zero client on.

OSD: Auto Detect Session Settings

This connection type automatically detects which broker protocol a connection server is using so users in a mixed environment (for example, one that uses View Connection Servers and PCoIP Connection Managers) do not have to manually reconfigure the session type each time they switch brokers. Once a successful connection has been made, the server URI will automatically appear in the **Server** drop-down list on the

user's OSD **Connect** screen, along with any other desktops the user has successfully connected to.

Configuration						×
Network IPv6 Management SCEP L	abel Discovery	Session Po	ower Displa	y Access	Audio Res	set
Loug die	.:					
teradio	0	PC	olP® Zero (Client		
Configure the connection to a peer d	evice					
Connection Type:	Auto Detect			-		
Server URI:						
Unlock			рк [Cancel		oply

OSD session connection type - Auto Retect

The following parameters can be found on the OSD Auto Detect page.

OSD Auto Detect Parameters

Parameter	Description
Server URI	Enter the Uniform Resource Identifier (URI) of the current connection broker. Once a successful connection has been made to this server, it will appear in the Server drop-down list on the OSD Connect page if the Tera2 PCoIP Zero Client is configured to cache servers.



OSD: Direct to Host Session Settings

Select the **Direct to Host** session connection type from the **Options > Configuration > Session** page to configure a client to connect directly to a host.

Click the Advanced button to configure advanced settings for this option.

Configurati	on											×
Network	IPv6	Management	SCEP	Label	Discovery	Session	Power	Display	Access	Audio	Reset	
Config	jure th	ie connection to	o a peer	device)							
		Connectior	п Туре:	Dire	ct to Host				-			
	DNS	Name or IP Ac	dress:	192	.168.1.100							
										Ad	vanced	
Unloc	k						OK		Cancel		Apply	

OSD Session Connection Type - Direct to Host

Advanced Settings	×
Wake Host from Low Power State: Host Wake MAC Address: Host Wake IP Address: Enable Auto-Reconnect: Enable Peer Loss Overlay: Enable Preparing Desktop Overlay: Disconnect Message Filter:	Wake-On-LAN Enabled + Peer Address 00-00-00-00 192, 168, 110, 100 Show All
	OK Cancel

Advanced Settings

The following parameters can be found on the OSD Direct to Host page.

OSD Direct to Host Parameters

Parameters	Description
DNS Name or IP Address	Enter the IP address or DNS name for the host.

Parameters	Description
Wake Host from Low Power State	Select whether to use the PCoIP Remote Workstation Card's MAC and IP address or a custom MAC and IP address when configuring the Wake-On-LAN feature on a client. This feature wakes up the host when the user presses the client's host PC button or clicks the Connect button on the Connect window.
	• Wake-On-LAN Enabled + Peer Address: After you have successfully connected to the PCoIP Remote Workstation Card, both the card's MAC address and IP address are automatically populated in the Host Wake MAC Address and Host Wake IP Address fields.
	 Wake-On-LAN Enabled + Custom Address: When selected, enables you to manually enter the MAC address and IP address of the device you want to wake up.
	Note: MAC and IP address of the host PC's network interface card (NIC) will automatically be populated in certain situations If the host software is installed in the host PC and the Use host PC NIC for Wake-on-LAN setting is enabled in the Features > Power Management section of the host software GUI, the MAC address and IP address of the host PC's network interface card (NIC) will automatically be populated in the Host Wake MAC Address and Host Wake IP Address fields.
	Note: Hardware host must support waking from low power state The hardware host must be able to support waking from low power state (off/hibernate/sleep) when it receives a wake-on-LAN packet.
	Note: Disabling the Wake-On-LAN feature You can disable the Wake-On-LAN feature from the AWI <i>Power</i> page.
Host Wake MAC Address	Enter the host's MAC address to complete the host wake up configuration when Wake-On-LAN Enabled + Peer Address or Wake-On-LAN Enabled + Custom Address is selected. The client will send a 'magic packet' to this MAC address to wake the host computer from a low power state.

wake the host computer from a low power state.

Parameters	Description
Host Wake IP Address	Enter the host's IP address to complete the host wake up configuration when Wake-On-LAN Enabled + Custom Address is selected. The client will send a 'magic packet' to this IP address to wake the host computer from a low power state.
Enable Auto- Reconnect	When enabled, lets the client automatically reconnect with the last connected host when a session is lost.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.Mote: Option only available for a Tera2 PCoIP Zero ClientThis option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is

Parameters	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	 You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameters	Description
	 You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
	 Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	 Show Error Only - This option hides Info and Warning messages and displays only Error messages.

OSD: Direct to Host + SLP Host Discovery Session Settings

Select the **Direct to Host + SLP Host Discovery** session connection type from the **Options > Configuration > Session** page to configure a client to connect directly to a host and to use Service Location Protocol (SLP) to discover the host automatically.

Click the Advanced button to configure advanced settings for this option.

Configuration											×
Network IPv6	8 Management	SCEP	Label	Discovery	Session	Power	Display	Access	Audio	Reset	
Configuration	be connection t		- davlar								
Conligure	the connection t		_								
	Connection	n Type:	Dire	ect to Host +	- SLP Hos	at Discov	/ery	-			
									Ad	vanced	
Unlock						OK		Cancel		Apply	

OSD session connection type - Direct to Host + SLP Host Discovery

Advanced Settings	×
Enable Auto-Reconnect:	
Enable Peer Loss Overlay:	
Enable Preparing Desktop Overlay:	
Disconnect Message Filter:	Show All
	OK Cancel

Advanced Settings

The following parameters can be found on the OSD Direct to Host + SLP Host Discovery page.

OSD Direct to Host + SLP Host Discovery Parameters

Parameters	Description
Enable Auto- Reconnect	When enabled, lets the client automatically reconnect with the last connected host when a session is lost.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.

Parameters	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	 You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameters	Description
	 You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	You can choose to display:
	1. Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
	2. Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	2 Show Error Only This antion hides Info and Warning
	 Show Error Only - This option hides Info and Warning messages and displays only Error messages.

OSD: PCoIP Connection Manager Session Settings

Select the **PCoIP Connection Manager** session connection type from the **Options > Configuration > Session** page to configure the client to use a PCoIP Connection Manager as the PCoIP session broker.

Click the Advanced button to configure advanced settings for this option.

Configuration					×
Network IPv6 Management SCEP	Label Discovery	Session Power	Display Acces	s Audio Reset	
1	-				
teradi	CI.	PCoIP	[®] Zero Client		
Configure the connection to a peer	device				
		• • •	_		
Connection Type:	PCoIP Connect	ion Manager	•		
Server URI:					
				Advanced	
				_ / avanced	
Unlock		OK	Cance	Apply	/

OSD Session connection type - PCoIP Connection Manager

Advanced Settings	dici.	PCoIP® Zero Client		×
	[
Desktop Name to Select:				
Auto Connect:	Disabled	•		
Remember Username:	V			
Auto Launch If Only One Desktop:				
Use OSD Logo For Login Banner:				
Enable Peer Loss Overlay:				
Enable Preparing Desktop Overlay:				
Disconnect Message Filter:	Show All	-		
Organization ID:				
			Apply	Cancel

Advanced Settings

The following parameters can be found on the OSD PCoIP Connection Manager page.

OSD PCoIP Connection Manager Parameters

Parameter	Description
Server URI	Enter the Uniform Resource Identifier (URI) for the PCoIP Connection Manager.
	Note: Type the URL in the form 'https:// <hostname address="" ip="">'. The URL must be in the form 'https://<hostname ip<br="">address>'.</hostname></hostname>
Desktop Name to Select	Enter the desktop name used by the client when starting a session.
Auto Connect	This field determines the client's auto connect behavior after startup:
	 Enabled: The client automatically connects with the connection server after startup and a PCoIP session ends, bypassing the OSD Connect page.
	 Disabled: The client does not automatically connect with the connection server.
	• Enabled With Retry On Error: The client will continuously attempt to contact the connection server. After a connection failure, the client waits before attempting to connect again. This wait time increases with each successive failure. The wait interval is not configurable.
	Note: Devices running 4.1.1 or lower do not support Retry On Error
	Devices running firmware 4.1.1 or lower do not support Retry On Error behavior and will always perform a single attempt to contact the connection server when this option is selected.
	Note: Restart the client after enabling Auto Connect After enabling Auto Connect, the client must be power-cycled for the change to take effect.
Remember Username	When enabled, the user name text box automatically populates with the last username entered.



Parameter	Description
Auto Launch If Only One Desktop	When enabled, users are automatically connected to a provisioned desktop after user credentials are entered.
	Note: Feature applies to single desktop users This feature only applies to users who are entitled to a single desktop. It does not apply to users entitled to multiple virtual desktops.
Use OSD Logo for Login Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted. You have been disconnected because an administrator
	 disconnected you. You have been disconnected because you logged in from another location.
	 You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	• Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameter	Description
	 You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes
	For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	You can choose to display:
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
	 Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	 Show Error Only - This option hides Info and Warning messages and displays only Error messages.
	4. Show None - Don't show any disconnect messages.
Organization ID	Enter an organization ID for the company (for example, 'mycompany.com'). This field accepts any UTF-8 character.
	Note: Specify parameter if the PCoIP Connection Manager requests it You only need to specify this parameter if the PCoIP Connection Manager requests it. The organization ID is used for certain types of PCoIP Broker Protocol authentication messages.

OSD: PCoIP Connection Manager + Auto-Logon Session Settings

Select the PCoIP Connection Manager + Auto-Logon session connection type from the Options > Configuration > Session page to configure a client to automatically enter a user's login details when a PCoIP Connection Manager is used as the PCoIP session broker.

Click the Advanced button to configure advanced settings for this option.





Caution: Take precautions to secure zero clients

Passwords are stored locally in retrievable form when zero clients are configured with this session connection type. For this reason, it should not be used in high security environments. Ensure that you take precautions to prevent theft of the zero client if you do use this session connection type.

Configuration	_			_				×
Network IPv6 Management SCEP L	abel Discovery	Session	Power	Display	Access	Audio	Reset	
teradio	C Ī.		PCoIP®	Zero Cli	ent			
Configure the connection to a peer of	device							
Connection Type:	PCoIP Connecti	ion Manag	ger + Au	to-Logon	•			
Server URI:								
User name:								
Password:								
Domain:								
								_
						Adı	/anced	
Unlock			OK		Cancel		Apply	

OSD Session Connection Type - PCoIP Connection Manager + Auto-Logon

Advanced Settings				×
terac	teradici. PColP*Zero Client			
Desktop Name to Select: Auto Connect: Auto Launch If Only One Desktop: Use OSD Logo For Login Banner: Enable Peer Loss Overlay: Enable Preparing Desktop Overlay: Disconnect Message Filter:	Disabled			
			Apply	Cancel

Advanced Settings

The following parameters can be found on the OSD PCoIP Connection Manager + Auto-Logon page.

Parameter	Description
Server URI	Enter the Uniform Resource Identifier (URI) for the PCoIP Connection Manager.
	Note: Type the URL in the form 'https:// <hostname address="" ip="">'. The URL must be in the form 'https://<hostname ip<br="">address>'.</hostname></hostname>
User name	Enter the user name for the client (maximum number of characters is 128). This user name will be sent to the specified connection server.
Password	Enter the password for the client (maximum number of characters is 128). This password will be sent to the specified connection server.
Domain	Enter the domain for the client (maximum number of characters is 256). This domain will be sent to the specified connection server.

OSD PCoIP Connection Manager + Auto-Logon Parameters

Parameter	Description
Desktop Name to Select	Enter the desktop name used by the client when starting a session.
Auto Connect	This field determines the client's auto connect behavior after startup:
	 Enabled: The client automatically connects with the connection server after startup and a PCoIP session ends, bypassing the OSD Connect page.
	• Disabled : The client does not automatically connect with the connection server.
	• Enabled With Retry On Error: The client will continuously attempt to contact the connection server. After a connection failure, the client waits before attempting to connect again. This wait time increases with each successive failure. The wait interval is not configurable.
	Note: Devices running 4.1.1 or lower do not support Retry On Error Devices running firmware 4.1.1 or lower do not support Retry On Error behavior and will always perform a single attempt to contact the connection server when this option is selected.
	Note: Restart the client after enabling Auto Connect After enabling Auto Connect, the client must be power-cycled for the change to take effect.
Auto Launch If Only One Desktop	When enabled, users are automatically connected to a provisioned desktop after user credentials are entered.
	Note: Feature applies to single desktop users This feature only applies to users who are entitled to a single desktop. It does not apply to users entitled to multiple virtual desktops.
Use OSD Logo for Login Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.



Parameter	Description
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

_	
Parameter	Description
	 You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	You can choose to display:
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
	2. Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	3. Show Error Only - This option hides Info and Warning messages and displays only Error messages.
	4. Show None - Don't show any disconnect messages.

OSD: View Connection Server Session Settings

Select the View Connection Server session connection type from the Options > Configuration > Session page to configure a client to use a View Connection Server as the broker when connecting to a VMware desktop.



Note: Connecting a View Connection Server to a workstation You can also use a View Connection Server to connect to a workstation with a PCoIP Remote Workstation Card installed. For this option, VMware View Agent must be installed on the remote workstation, and a number of other configuration requirements for both the client and host must be in place. For complete details, refer to Using PCoIP® Host Cards with VMware View.

Click the Advanced button to configure advanced settings for this option.

Configuration								×
Network IPv6 Management SCEP	Label Discovery	Session	Power	Display	Access	Audio	Reset	
vm ware [.] Horizon								
Configure the connection to a peer	device							
Connection Type:	View Connectio	n Server			-			
DNS Name or IP Address:								
						Ad	vanced	
Unlock			OK		Cancel		Apply	

OSD Session connection type - View Connection Server

Configure the advanced View Connection Ser	ver settings for the device	
Pool Name to Select:		
Port:	Leave blank for default	
Auto Connect:	Disabled	
Remember Username:	V	
Auto Launch If Only One Pool:		
Use OSD Logo For Login Banner:		
Prefer GSC-IS:	V	
Enable Peer Loss Overlay:		
Enable Preparing Desktop Overlay:		
Enable RDS Application Access:		
Enable IPv6 Address Resolution:		
Prefer IPv6 for FQDN Resolution:		
Disconnect Message Filter:	Show All	

Advanced Settings

The following parameters can be found on the OSD View Connection Server page.

OSD View Connection Server Parameters

Parameter	Description
DNS Name or IP Address	Enter the View Connection Server's DNS name or IP address. For VMware Horizon DaaS, this is the DNS name or IP address of the VMware Horizon DaaS Desktop Portal.
Pool Name to Select	Enter the pool name. When the list includes a pool with this name, the client will immediately start a session with that pool.
	Note: Field is case-insensitive This field is case-insensitive. For Tera1 PCoIP Zero Clients, this parameter is called Desktop Name to Select.
Port	By default, port 443 is used to communicate with the connection server. If your network is set up to use a non-standard port for secure connections, enter the port number.
Auto Connect	This field determines the client's auto connect behavior after startup:
	 Enabled: The client automatically connects with the connection server after startup and a PCoIP session ends, bypassing the OSD Connect page.
	• Disabled : The client does not automatically connect with the connection server.
	• Enabled With Retry On Error: The client will continuously attempt to contact the connection server. After a connection failure, the client waits before attempting to connect again. This wait time increases with each successive failure. The wait interval is not configurable.
	Note: Devices running 4.1.1 or lower do not support Retry On Error
	Devices running firmware 4.1.1 or lower do not support Retry On Error behavior and will always perform a single attempt to contact the connection server when this option is selected.
	Note: Restart the client after enabling Auto Connect After enabling Auto Connect, the client must be power-cycled for the change to take effect.
Remember Username	When enabled, the user name text box automatically populates with the last username entered.

Parameter	Description
Auto Launch If Only One Pool	When enabled, users are automatically connected to a provisioned desktop or application after user credentials are entered.
	For Tera1 PCoIP Zero Clients, this parameter is called Auto Launch If Only One Desktop.
	Note: Feature applies to single desktop users This feature only applies to users who are entitled to a single desktop. It does not apply to users entitled to multiple virtual desktops.
Use OSD Logo for Login Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.
Prefer GSC-IS	When selected, the GSC-IS interface is used if a smart card supports more than one interface such as CAC (GSC-IS) and PIV endpoint. If a smart card supports only one interface, such as either CAC or PIV endpoint, then only the CAC or PIV endpoint interface is used regardless of this setting. This only affects smart card access performed outside of PCoIP sessions.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client
	This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.

Parameter	Description	
Enable RDS Application Access	When enabled <i>and</i> users connect to a VMware Horizon View Connection Server that offers applications, a list of available applications will be presented.	
	Note: Applications open in full-screen mode but can be resized Applications open in full-screen mode, but can be re-sized once users are in session.	
Enable IPv6 Address Resolution	This setting supports VMware Horizon View 6.1 implementations, which enable View-brokered IPv6 sessions on IPv6-only networks. When enabled, clients can advertise IPv6 and FQDN capability to the View connection Server and receive IPv6 and FQDN peer addresses back.	
Prefer IPv6 for FQDN Resolution	When enabled, the client's IPv6 address is preferred for FQDN resolution when the client requests a session.	

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	 You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameter	Description
•	You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
•	You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
•	You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
•	You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
Yc	u can choose to display:
1.	Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
2.	Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
3.	Show Error Only - This option hides Info and Warning messages and displays only Error messages.
4.	Show None - Don't show any disconnect messages.

OSD: View Connection Server + Auto-Logon Session Settings

Select the View Connection Server + Auto-Logon session connection type from the Options > Configuration > Session page to configure a client to automatically enter a user's login details when a View Connection Server is used to connect to a VMware desktop.

Click the Advanced button to configure advanced settings for this option.



Caution: Take precautions to secure zero clients

Passwords are stored locally in retrievable form when zero clients are configured with this session connection type. For this reason, it should not be used in high security environments. Ensure that you take precautions to prevent theft of the zero client if you do use this session connection type.

Configuration							×
Network IPv6 Management SCEP	Label Discovery	Session F	⊃ower	Display	Access	Audio Res	ət
vmware Horizon							
Configure the connection to a peer	device						
Connection Type:	View Connectio	n Server +	Auto-L	ogon	•		
DNS Name or IP Address:							
User name:							
Password:							
Domain:							
						Advance	bd
Unlock			OK		Cancel	Ap	ply

OSD Session connection type - View Connection Server + Auto-Logon

dvanced Settings	×
vmware ' Horizon	
Configure the advanced View Connection Ser	ver settings for the device
Pool Name to Select:	
Port:	Leave blank for default
Auto Connect:	Disabled
Auto Launch If Only One Pool:	
Use OSD Logo For Login Banner:	
Enable Peer Loss Overlay:	
Enable Preparing Desktop Overlay:	
Enable RDS Application Access:	
Enable IPv6 Address Resolution:	
Prefer IPv6 for FQDN Resolution:	
Disconnect Message Filter:	Show All
	Apply Cancel

Advanced Settings

The following parameters can be found on the OSD View Connection Server + Auto-Logon page.

Parameter	Description
DNS Name or IP Address	Enter the View Connection Server's DNS name or IP address. For VMware Horizon DaaS, this is the DNS name or IP address of the VMware Horizon DaaS Desktop Portal.
User name	Enter the user name for the client (maximum number of characters is 128). This user name will be sent to the specified connection server.
Password	Enter the password for the client (maximum number of characters is 128). This password will be sent to the specified connection server.
Domain	Enter the domain for the client (maximum number of characters is 256). This domain will be sent to the specified connection server.
Pool Name to Select	Enter the pool name. When the list includes a pool with this name, the client will immediately start a session with that pool.
	Note: Field is case-insensitive This field is case-insensitive. For Tera1 PCoIP Zero Clients, this parameter is called Desktop Name to Select.
Port	By default, port 443 is used to communicate with the connection server. If your network is set up to use a non-standard port for secure connections, enter the port number.

Parameter	Description
Auto Connect	This field determines the client's auto connect behavior after startup:
	 Enabled: The client automatically connects with the connection server after startup and a PCoIP session ends, bypassing the OSD Connect page. Disabled: The client does not automatically connect with the connection server. Enabled With Retry On Error: The client will continuously attempt to contact the connection server. After a connection failure, the client waits before attempting to connect again. This wait time increases with each successive failure. The wait interval is not configurable.
	Note: Devices running 4.1.1 or lower do not support Retry On Error Devices running firmware 4.1.1 or lower do not support Retry On Error behavior and will always perform a single attempt to contact the connection server when this option is selected.
	Note: Restart the client after enabling Auto Connect After enabling Auto Connect, the client must be power-cycled for the change to take effect.
Auto Launch If Only One Pool	When enabled, users are automatically connected to a provisioned desktop or application after user credentials are entered.
	For Tera1 PCoIP Zero Clients, this parameter is called Auto Launch If Only One Desktop.
	Note: Feature only applies to single desktop users This feature only applies to users who are entitled to a single desktop. It does not apply to users entitled to multiple virtual desktops.
Use OSD Logo for Login Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.

Parameter	Description
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.
Enable RDS Application Access	When enabled <i>and</i> users connect to a VMware Horizon View Connection Server that offers applications, a list of available applications will be presented.
	Note: Applications open in full-screen mode but can be resized Applications open in full-screen mode, but can be re-sized once users are in session.
Enable IPv6 Address Resolution	This setting supports VMware Horizon View 6.1 implementations, which enable View-brokered IPv6 sessions on IPv6-only networks. When enabled, clients can advertise IPv6 and FQDN capability to the View connection Server and receive IPv6 and FQDN peer addresses back.
Prefer IPv6 for FQDN Resolution	When enabled, the client's IPv6 address is preferred for FQDN resolution when the client requests a session.

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameter	Description
•	You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
•	You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
·	You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
•	You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
Y	ou can choose to display:
1	
	Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
2.	messages including Info, Warning, and Error messages. Show Error and Warnings Only - This option hides info

OSD: View Connection Server + Kiosk Session Settings

Select the View Connection Server + Kiosk session connection type from the Options > Configuration > Session page to configure a client to use Kiosk mode when connecting to a VMware desktop via a View Connection Server.

Click the Advanced button to configure advanced settings for this option.



Caution: Take precautions to secure zero clients

Passwords are stored locally in retrievable form when zero clients are configured with this session connection type. For this reason, it should not be used in high security environments. Ensure that you take precautions to prevent theft of the zero client if you do use this session connection type.

Configuration								×
Network IPv6 Management SCE	Label	Discovery	Session	Power	Display	Access	Audio F	Reset
vmware [.] Horizon								
Configure the connection to a pe	er devic	e						
Connection Type	: Vie	w Connectic	n Server	+ Kiosk		-		
DNS Name or IP Address	:							
	ΘZ	ero Client M		Custor	1			
Username		CM-02:50:	56:97:27:9	92				
Password	:			ļ				
							Adva	anced
Unlock				OK		Cancel		Apply

OSD Session connection type - View Connection Server + Kiosk

Leave blank for default	
w All	
- 11	v All

Advanced Settings

The following parameters can be found on the OSD View Connection Server + Kiosk page.

OSD View Connection Server + Kiosk Parameters

Parameter	Description
DNS Name or IP Address	Enter the View Connection Server's DNS name or IP address.
Username	Select the type of user name that matches the naming you use for the devices on the View Connection Server.
	 Zero Client MAC: Select this option to automatically populate the Username field with the MAC address of the Tera2 PCoIP Zero Client.
	Custom: Enter the user name for the Tera2 PCoIP Zero Client. This user name has the prefix 'Custom'.
	When Custom is selected as the user name type, enter the value for this component of the custom user name. This field is limited to 13 characters.
Password	To password protect the virtual machine for the kiosk, enter a password in this field. This password must match the one entered for the device in the View Connection Server.
Port	By default, port 443 is used to communicate with the connection server. If your network is set up to use a non-standard port for secure connections, enter the port number.
Use OSD Logo for Login Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature

Console.

through the OSD, AWI, or PCoIP Management

Parameter	Description
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.
Enable RDS Application Access	When enabled <i>and</i> users connect to a VMware Horizon View Connection Server that offers applications, a list of available applications will be presented.
	Note: Applications open in full-screen mode but can be resized Applications open in full-screen mode, but can be re-sized once users are in session.
Enable IPv6 Address Resolution	This setting supports VMware Horizon View 6.1 implementations, which enable View-brokered IPv6 sessions on IPv6-only networks. When enabled, clients can advertise IPv6 and FQDN capability to the View connection Server and receive IPv6 and FQDN peer addresses back.
Prefer IPv6 for FQDN Resolution	When enabled, the client's IPv6 address is preferred for FQDN resolution when the client requests a session.

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	 You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameter	Description
•	You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
•	You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
•	You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
•	You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
Yo	u can choose to display:
1.	Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
2.	Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
3.	Show Error Only - This option hides Info and Warning
	messages and displays only Error messages.

OSD: View Connection Server + Imprivata OneSign Session Settings

Select the View Connection Server + Imprivata OneSign session connection type from the Options > Configuration > Session page to configure a client to authenticate through the Imprivata OneSign system in addition to a View Connection Server when connecting to a VMware desktop.

Click the Advanced button to configure advanced settings for this option.

Configurati	on											×
Network	IPv6	Management	SCEP	Label	Discovery	Session	Power	Display	Access	Audio	Reset	
Confid	ure th	ne connection to	o a peer	- device	9							
0.01113	yana ci					- 0	1. Januaria	-t- 00	tan 💌			
		Connectior Bootstra			v Connectio	ri Server	+ impriv	ata Ories	ign			
		Dootstra	p ore.									
										Ad	vanced	
Unloc	k]						OK		Cancel		Apply	

OSD Session connection type - View Connection Server + Imprivata OneSign

OneSign Pool Name Mode:	Ignore the Pool Name to Select field	
Pool Name to Select:		
Remember Username;	<	
Use OSD Logo For Login Banner:		
Prefer GSC-IS:		
Enable Peer Loss Overlay:		
Enable Preparing Desktop Overlay:		
Enable RDS Application Access:		
Enable IPv6 Address Resolution:		
Prefer IPv6 for FQDN Resolution:		
Disconnect Message Filter:	Show All	

Advanced Settings

The following parameters can be found on the OSD View Connection Server + Imprivata OneSign page.

Parameter	Description
Bootstrap URL	Enter the bootstrap URL used to find an initial OneSign server in a OneSign authentication deployment.
OneSign Pool Name Mode	Select whether the Pool Name to Select property is used in OneSign mode.
	 Ignore the Pool Name to Select field
	Use the Pool Name to Select field if set
	For Tera1 PCoIP Zero Clients, this parameter is called OneSign Desktop Name Mode.
Pool Name to Select	Enter the pool name. When the list includes a pool with this name, the client will immediately start a session with that pool.
	Note: Field is case-insensitive This field is case-insensitive. For Tera1 PCoIP Zero Clients, this parameter is called Desktop Name to Select.
Remember Username	When enabled, the user name text box automatically populates with the last username entered.
Use OSD Logo for Login Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.
Prefer GSC-IS	When selected, the GSC-IS interface is used if a smart card supports more than one interface such as CAC (GSC-IS) and PIV endpoint. If a smart card supports only one interface, such as either CAC or PIV endpoint, then only the CAC or PIV endpoint interface is used regardless of this setting. This only affects smart card access performed outside of PCoIP sessions.

Parameter	Description
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.
Enable RDS Application Access	When enabled <i>and</i> users connect to a VMware Horizon View Connection Server that offers applications, a list of available applications will be presented.
	Note: Applications open in full-screen mode but can be resized Applications open in full-screen mode, but can be re-sized once users are in session.
Enable IPv6 Address Resolution	This setting supports VMware Horizon View 6.1 implementations, which enable View-brokered IPv6 sessions on IPv6-only networks. When enabled, clients can advertise IPv6 and FQDN capability to the View connection Server and receive IPv6 and FQDN peer addresses back.
Prefer IPv6 for FQDN Resolution	When enabled, the client's IPv6 address is preferred for FQDN resolution when the client requests a session.

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameter	Description
•	You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
•	You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
•	You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
•	You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
v	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
1.	Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
2.	Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	messages and displays only End and warning messages.
3.	Show Error Only - This option hides Info and Warning messages. messages and displays only Error messages.

AWI: Amazon WorkSpaces

Select the Amazon WorkSpaces session connection type from the Configuration > Session page to configure the client to connect directly to your Amazon WorkSpaces desktop through multi-factor authentication. This connection type removes the need to deploy and manage the PCoIP Connection Manager for Amazon WorkSpaces in order to connect zero clients to Amazon WorkSpaces.



Info: Security

The connection manager determines the security requirements. Amazon WorkSpaces session type uses an Amazon connection manager which requires multi-factor authentication when connecting to Amazon WorkSpaces.

Log Out	PCoIP® Zero Client
Home	Configuration / Permissions / Diagnostics / Info / Upload
tour d'al	
teradici	
Session	
Configure the connection to a device	
Session Connection Type:	Amazon WorkSpaces
AWS Registration Code:	
AWS Connection Name:	
	Hide Advanced Options
Desktop Name to Select:	
Certificate Check Mode:	Warn before connecting to untrusted servers 🗸
Certificate Check Mode Lockout:	Prevent users from changing the Certificate Check Mode
Auto Connect:	Disabled V
Connection Server Cache Mode:	Last servers used 🗸 Clear cache entries
Auto Launch If Only One Desktop:	
Enable Peer Loss Overlay:	
Enable Preparing Desktop Overlay:	
Enable Session Disconnect Hotkey:	CTRL + ALT + F12
PCoIP Utility Bar Mode:	Disabled 🗸
Session Negotiation Cipher Suites:	Maximum Compatibility: TLS 1.0 or higher with RSA keys 🗸
Disconnect Message Filter:	Show All
Enable DSCP:	
Enable Congestion Notification:	2
	Apply Cancel

AWI Session Connection type - Amazon WorkSpaces

The following parameters can be found in the AWI Session tab when the Amazon WorkSpaces connection type is selected with the advanced tab showing.

AWI Amazon WorkSpaces

Parameter	Description
AWS Registration Code	Enter the registration code from the invitation email sent after creating your Amazon WorkSpace.
AWS Connection Name	Enter a name for this registered Amazon WorkSpace instance.
Desktop Name to Select	Enter the desktop name used by the client when starting a session.
	This field is case-insensitive.

Parameter	Description
Certificate Check Mode	Select the level of verification performed on the certificate presented by the connection server:
	• Never connect to untrusted servers: Configure the client to reject the connection if a trusted, valid certificate is not installed. (This is the most secure option.)
	• Warn before connecting to untrusted servers: Configure the client to display a warning if an unsigned or expired certificate is encountered, or if the certificate is not self-signed and the Tera2 PCoIP Zero Client trust store is empty. (This option is selected by default.)
	• Do not verify server identity certificates: Configure the client to enable all connections. (This option is not secure.)
Certificate Check Mode Lockout	When enabled, prevents users from changing the Certificate Check Mode settings from the OSD or AWI.
Auto Connect	This field determines the client's auto connect behavior after startup:
	• Enabled : The client automatically connects with the connection server after startup and a PCoIP session ends, bypassing the OSD Connect page.
	 Disabled: The client does not automatically connect with the connection server.
	• Enabled With Retry On Error: The client will continuously attempt to contact the connection server. After a connection failure, the client waits before attempting to connect again. This wait time increases with each successive failure. The wait interval is not configurable.
	Note: Devices running 4.1.1 or lower do not support Retry On Error
	Devices running firmware 4.1.1 or lower do not support Retry On Error behavior and will always perform a single attempt to contact the connection server when this option is selected.

Parameter	Description
Connection Server Cache Mode	This field determines whether a connection server is dynamically added to the Server drop-down menu on the OSD Connect page when a user types in a valid server URI, or whether it appears in a read-only list for the user to select.
	 Last servers used: Select this option if you want a list of cached servers that a user has typed in to appear in the Server drop-down menu on the OSD Connect page.
	• Read-only : Select this option if you want users to select a connection server from a read-only list.
	Note: Use PCoIP Management Console to pre-populate available connection servers You can use the PCoIP Management Console to pre-populate the list of available connection servers.
Auto Launch If Only One Desktop	When enabled, users are automatically connected to a provisioned desktop after user credentials are entered.
	Note: Feature only applies to single desktop users This feature only applies to users who are entitled to a single desktop. It does not apply to users entitled to multiple virtual desktops.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.

Parameter	Description
Enable Session Disconnect Hotkey	When enabled, users can press the Ctrl+Alt+F12 hotkey sequence to pop up the 'Zero Client Control Panel' overlay, which lets them disconnect the current session on the workstation or power off the workstation.
	Note: Set up configuration options before using hotkey Before users can use this disconnect hotkey sequence, certain other configuration options must be in place. See <i>Disconnecting from a</i> <i>Session</i> on page 172 for details.
PCoIP Utility Bar Mode	When enabled, the PCoIP Utility Bar appears at the top of the primary display when a user is in session and moves the cursor directly under the bar. The utility bar can be used to disconnect a session or to shut down a remote workstation. For Direct to Host session connection types, <i>Local Cursor and Keyboard</i> must be enabled in order for the Tera2 PCoIP Zero Client to process mouse events for the utility bar. For all connection types, the mouse must be locally connected (that is, not bridged).
	 Disabled: Disables the PCoIP Utility Bar. By default, the utility bar is disabled. Enabled: Enables and auto-hides the PCoIP Utility Bar. Users can show the utility bar by pointing the mouse at the top of the screen directly under the utility bar. Users can slide the utility bar to the right and left at the top of the screen. Enabled and Pinned: Enables and pins the PCoIP Utility Bar at the top of the screen. Users cannot hide the utility bar, but they can slide it to the right and left at the top of the screen.
	Note: Configure the feature from the PCoIP Management Console and AWI only This feature is configurable from the PCoIP Management Console and AWI only. It requires firmware version 4.2.0 or higher.

Parameter	Description
Session Negotiation Cipher Suites	Configure the Transport Layer Security (TLS) cipher to use for negotiating the TLS session between the PCoIP client and the PCoIP host.
	 Maximum Compatibility: TLS 1.0 or higher with RSA keys: This option provides maximum compatibility.
	 Suite B: TLS 1.2 with Suite B-compliant 192-bit elliptic curve encryption. This option provides a higher level of security.

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	 You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	• Unable to connect (0x1001). Contact your IT administrator.
	• Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameter	Description
	 You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes
	For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	You can choose to display:
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages. Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	 Show Error Only - This option hides Info and Warning messages and displays only Error messages. Show None - Don't show any disconnect messages.
Enable DSCP	When enabled, the device populates the Differentiated Services Code Point (DSCP) field in the IP header, enabling intermediate network nodes to prioritize PCoIP traffic accordingly.
Enable Congestion Notification	When enabled, transport congestion notification is enabled to enable PCoIP endpoints to react accordingly if an intermediate network node sets the congestion notification bit in either the IP header or PCoIP transport header. For more information about the PCoIP transport header, see <i>PCoIP Packet Format</i> on page 329.

AWI: Auto Detect Session Settings

Select the Auto Detect session connection type from the Configuration > Session page to let the Tera2 PCoIP Zero Client automatically detect which broker protocol a connection server is using so users in a mixed environment (for example, one that uses View Connection Servers and PCoIP Connection Managers) do not have to manually reconfigure the session type each time they switch brokers. Once a successful connection has been made, the server URI will automatically appear in the

Server drop-down list on the user's OSD **Connect** screen, along with any other desktops the user has successfully connected to.

Session Configure the connection to a device		
Session Connection Type: Server URI:		
	Apply Cancel	

AWI Session connection type - Auto Detect

The following parameters can be found on the AWI Auto Detect page.

AWI Auto Detect Parameters

Parameter	Description
Server URI	Enter the Uniform Resource Identifier (URI) of the current connection broker. Once a successful connection has been made to this server, it will appear in the Server drop-down list on the OSD Connect page if the Tera2 PCoIP Zero Client is configured to cache servers.
	Note: Type the URL in the form 'https:// <hostname address="" ip="">'. The URL must be in the form 'https://<hostname ip<br="">address>'.</hostname></hostname>

AWI: Direct to Host Session Settings

Select the **Direct to Host** session connection type from the **Configuration > Session** page to configure the client to connect directly to a host.



Session
Configure the connection to a device
Session Connection Type: Direct to Host
DNS Name or IP Address: 10.0.34.207
Hide Advanced Options
Wake Host from Low Power State: Wake-On-LAN Enabled + Peer Address
Host Wake MAC Address: 00 - 00 - 02 - 4E - A2
Enable Auto-Reconnect: 🗖
Enable Peer Loss Overlay:
Enable Preparing Desktop Overlay:
Enable Session Disconnect Hotkey: CTRL + ALT + F12
PCoIP Utility Bar Mode: Disabled
Session Negotiation Cipher Suites: Maximum Compatibility: TLS 1.0 or higher with RSA keys
Disconnect Message Filter: Show All
Enable DSCP:
Enable Congestion Notification: 🗹
Apply Cancel

AWI Session connection type - Direct to Host

The following parameters can be found on the AWI Direct to Host page.

AWI Direct to Host Parameters

Parameters	Description
DNS Name or IP Address	Enter the IP address or DNS name for the host.

Parameters	Description	
Wake Host from Low Power State	 MAC and IP address or a custom MAC and IP address when configuring the Wake-On-LAN feature on a client. This feature wakes up the host when the user presses the client's host PC button or clicks the Connect button on the Connect window. Wake-On-LAN Enabled + Peer Address: After you have successfully connected to the PCoIP Remote Workstation Card, both the card's MAC address and IP address are automatically populated in the Host Wake MAC Address and Host Wake IP Address fields. Wake-On-LAN Enabled + Custom Address: When 	
	selected, enables you to manually enter the MAC address and IP address of the device you want to wake up.	
	Note: MAC and IP address of the host PC's network interface card (NIC) will automatically be populated in certain situations If the host software is installed in the host PC and the Use host PC NIC for Wake-on-LAN setting is enabled in the Features > Power Management section of the host software GUI, the MAC address and IP address of the host PC's network interface card (NIC) will automatically be populated in the Host Wake MAC Address and Host Wake IP Address fields.	
	Note: Hardware host must support waking from low power state The hardware host must be able to support waking from low power state (off/hibernate/sleep) when it receives a wake-on-LAN packet.	
	Note: Disabling the Wake-On-LAN feature You can disable the Wake-On-LAN feature from the AWI <i>Power</i> page.	
Host Wake MAC Address	Enter the host's MAC address to complete the host wake up configuration when Wake-On-LAN Enabled + Peer Address or Wake-On-LAN Enabled + Custom Address is selected.	

The client will send a 'magic packet' to this MAC address to

wake the host computer from a low power state.

Parameters	Description	
Host Wake IP Address	Enter the host's IP address to complete the host wake up configuration when Wake-On-LAN Enabled + Custom Address is selected. The client will send a 'magic packet' to this IP address to wake the host computer from a low power state	
Enable Auto- Reconnect	When enabled, lets the client automatically reconnect with the last connected host when a session is lost.	
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.	
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.	
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.	
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.	
Enable Session Disconnect Hotkey	When enabled, users can press the Ctrl+Alt+F12 hotkey sequence to pop up the 'Zero Client Control Panel' overlay, which lets them disconnect the current session on the workstation or power off the workstation.	
	Note: Set up configuration options before using hotkey Before users can use this disconnect hotkey sequence, certain other configuration options must be in place. See <i>Disconnecting from a Session</i> on page 172 for details.	

Parameters	Description
PCoIP Utility Bar Mode	When enabled, the PCoIP Utility Bar appears at the top of the primary display when a user is in session and moves the cursor directly under the bar. The utility bar can be used to disconnect a session or to shut down a remote workstation. For Direct to Host session connection types, <i>Local Cursor and Keyboard</i> must be enabled in order for the Tera2 PCoIP Zero Client to process mouse events for the utility bar. For all connection types, the mouse must be locally connected (that is, not bridged).
	 Disabled: Disables the PCoIP Utility Bar. By default, the utility bar is disabled.
	• Enabled : Enables and auto-hides the PCoIP Utility Bar. Users can show the utility bar by pointing the mouse at the top of the screen directly under the utility bar. Users can slide the utility bar to the right and left at the top of the screen.
	• Enabled and Pinned: Enables and pins the PCoIP Utility Bar at the top of the screen. Users cannot hide the utility bar, but they can slide it to the right and left at the top of the screen.
	Note: Configure the feature from the PCoIP Management Console and AWI only This feature is configurable from the PCoIP Management Console and AWI only. It requires firmware version 4.2.0 or higher.
Session Negotiation Cipher Suites	Configure the Transport Layer Security (TLS) cipher to use for negotiating the TLS session between the PCoIP client and the PCoIP host.
	 Maximum Compatibility: TLS 1.0 or higher with RSA keys: This option provides maximum compatibility.
	• Suite B: TLS 1.2 with Suite B-compliant 192-bit elliptic curve encryption. This option provides a higher level of security.

Parameters	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameters	Description	
	 You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance. You have been disconnected due to a configuration error 	
	 (0x402). Contact your IT administrator for assistance. You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance. You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance. 	
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).	
	You can choose to display:	
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages. Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages. Show Error Only - This option hides Info and Warning messages and displays only Error messages. 	
Enable DSCP	 Show None - Don't show any disconnect messages. When enabled, the device populates the Differentiated Services Code Point (DSCP) field in the IP header, enabling intermediate network nodes to prioritize PCoIP traffic accordingly. 	
Enable Congestion Notification	When enabled, transport congestion notification is enabled to enable PCoIP endpoints to react accordingly if an intermediate network node sets the congestion notification bit in either the IP header or PCoIP transport header. For more information about the PCoIP transport header, see <i>PCoIP Packet Format</i> on page 329.	

AWI: Direct to Host + SLP Host Discovery Session Settings

Select the **Direct to Host + SLP Host Discovery** session connection type from the **Configuration > Session** page to configure the client to connect directly to a host and to use Service Location Protocol (SLP) to discover the host automatically.



ession	
onfigure the connection to a device	
Session Connection Type: Direct to Host + SLP Host Discovery	
Hide Advanced Options	
Enable Auto-Reconnect:	
Enable Peer Loss Overlay: 🗖	
Enable Preparing Desktop Overlay:	
Enable Session Disconnect Hotkey:	
PCoIP Utility Bar Mode: Disabled	
ession Negotiation Cipher Suites: Maximum Compatibility: TLS 1.0 or higher with RSA keys	•
Disconnect Message Filter: Show All	
Enable DSCP:	
Enable Congestion Notification: 🗹	
Apply Cancel	

AWI Session connection to	e - Direct to Host +	- SLP Host Discovery
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The following parameters can be found on the AWI Direct to Host + SLP Host Discovery page.

AWI Direct to Host + SLP Host Dise	covery Parameters
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Parameters	Description
Enable Auto- Reconnect	When enabled, lets the client automatically reconnect with the last connected host when a session is lost.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.

Parameters	Description
Enable Session Disconnect Hotkey	When enabled, users can press the Ctrl+Alt+F12 hotkey sequence to pop up the 'Zero Client Control Panel' overlay, which lets them disconnect the current session on the workstation or power off the workstation.
	Note: Set up configuration options before using hotkey Before users can use this disconnect hotkey sequence, certain other configuration options must be in place. See <i>Disconnecting from a Session</i> on page 172 for details.
PCoIP Utility Bar Mode	When enabled, the PCoIP Utility Bar appears at the top of the primary display when a user is in session and moves the cursor directly under the bar. The utility bar can be used to disconnect a session or to shut down a remote workstation. For Direct to Host session connection types, <i>Local Cursor and Keyboard</i> must be enabled in order for the Tera2 PCoIP Zero Client to process mouse events for the utility bar. For all connection types, the mouse must be locally connected (that is, not bridged).
	 Disabled: Disables the PCoIP Utility Bar. By default, the utility bar is disabled. Enabled: Enables and auto-hides the PCoIP Utility Bar. Users can show the utility bar by pointing the mouse at the top of the screen directly under the utility bar. Users can slide the utility bar to the right and left at the top of the screen.
	• Enabled and Pinned: Enables and pins the PCoIP Utility Bar at the top of the screen. Users cannot hide the utility bar, but they can slide it to the right and left at the top of the screen.
	Note: Configure the feature from the PCoIP Management Console and AWI only This feature is configurable from the PCoIP Management Console and AWI only. It requires firmware version 4.2.0 or higher.
Session Negotiation Cipher Suites	Configure the Transport Layer Security (TLS) cipher to use for negotiating the TLS session between the PCoIP client and the PCoIP host.
	 Maximum Compatibility: TLS 1.0 or higher with RSA keys: This option provides maximum compatibility.
	 Suite B: TLS 1.2 with Suite B-compliant 192-bit elliptic curve encryption. This option provides a higher level of security.

Parameters	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameters	Description
	 You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes
	For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	You can choose to display:
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
	 Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	 Show Error Only - This option hides Info and Warning messages and displays only Error messages.
	4. Show None - Don't show any disconnect messages.
Enable DSCP	When enabled, the device populates the Differentiated Services Code Point (DSCP) field in the IP header, enabling intermediate network nodes to prioritize PCoIP traffic accordingly.
Enable Congestion Notification	When enabled, transport congestion notification is enabled to enable PCoIP endpoints to react accordingly if an intermediate network node sets the congestion notification bit in either the IP header or PCoIP transport header. For more information about the PCoIP transport header, see <i>PCoIP Packet Format</i> on page 329.

AWI: PCoIP Connection Manager Session Settings

Select the **PCoIP Connection Manager** session connection type from the **Configuration > Session** page to configure the client to use a PCoIP Connection Manager as the PCoIP session broker.



Session	
Configure the connection to a device	
Session Connection Type:	PCoIP Connection Manager
Server URI: h	https://lterwkstn90.teradici.local
	Hide Advanced Options
Desktop Name to Select:	
	Warn before connecting to untrusted servers
L	
-	Prevent users from changing the Certificate Check Mode
Auto Connect:	Disabled 🔽
Connection Server Cache Mode:	Last servers used Clear cache entries
Enable Self Help Link:	3
Auto Launch If Only One Desktop:	7
Remember Username: R	7
Use OSD Logo For Login Banner:	3
Enable Peer Loss Overlay:	3
Enable Preparing Desktop Overlay:	
Enable Session Disconnect Hotkey:	✓ CTRL + ALT + F12
PCoIP Utility Bar Mode:	
Session Negotiation Cipher Suites:	Maximum Compatibility: TLS 1.0 or higher with RSA keys
Disconnect Message Filter:	Show All
Enable DSCP:	
Enable Congestion Notification:	7
Organization ID:	
	Apply Cancel

AWI Session connection type - PCoIP Connection Manager

The following parameters can be found on the AWI PCoIP Connection Manager page.

AWI PCoIP Connection Manager Parameters

Parameter	Description
Server URI	Enter the Uniform Resource Identifier (URI) for the PCoIP Connection Manager.
	Note: Type the URL in the form 'https:// <hostname address="" ip="">'. The URL must be in the form 'https://<hostname ip<br="">address>'.</hostname></hostname>
Desktop Name to Select	Enter the desktop name used by the client when starting a session.
	This field is case-insensitive.

Parameter	Description
Certificate Check Mode	Select the level of verification performed on the certificate presented by the connection server:
	 Never connect to untrusted servers: Configure the client to reject the connection if a trusted, valid certificate is not installed. (This is the most secure option.)
	• Warn before connecting to untrusted servers: Configure the client to display a warning if an unsigned or expired certificate is encountered, or if the certificate is not self-signed and the Tera2 PCoIP Zero Client trust store is empty. (This option is selected by default.)
	 Do not verify server identity certificates: Configure the client to enable all connections. (This option is not secure.)
Certificate Check Mode Lockout	When enabled, prevents users from changing the Certificate Check Mode settings from the OSD or AWI.
Auto Connect	This field determines the client's auto connect behavior after startup:
	 Enabled: The client automatically connects with the connection server after startup and a PCoIP session ends, bypassing the OSD Connect page.
	Disabled: The client does not automatically connect with the connection server.
	• Enabled With Retry On Error: The client will continuously attempt to contact the connection server. After a connection failure, the client waits before attempting to connect again. This wait time increases with each successive failure. The wait interval is not configurable.
	Note: Devices running 4.1.1 or lower do not support Retry On Error Devices running firmware 4.1.1 or lower do not support Retry On Error behavior and will always perform a single attempt to contact the connection server when this option is selected.
	Note: Restart client after enabling Auto Connect After enabling Auto Connect, the client must be power- cycled for the change to take effect.

Parameter	Description
Connection Server Cache Mode	This field determines whether a connection server is dynamically added to the Server drop-down menu on the OSD Connect page when a user types in a valid server URI, or whether it appears in a read-only list for the user to select.
	 Last servers used: Select this option if you want a list of cached servers that a user has typed in to appear in the Server drop-down menu on the OSD Connect page.
	 Read-only: Select this option if you want users to select a connection server from a read-only list.
	Note: Use PCoIP Management Console to pre-populate available connection servers You can use the PCoIP Management Console to pre- populate the list of available connection servers.
Enable Self Help Link	See Enabling the Self Help Link for details.
Auto Launch If Only One Desktop	When enabled, users are automatically connected to a provisioned desktop after user credentials are entered.
	Note: Feature only applies to single desktop users This feature only applies to users who are entitled to a single desktop. It does not apply to users entitled to multiple virtual desktops.
Remember Username	When enabled, the user name text box automatically populates with the last username entered.
Use OSD Logo for Login Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.

Parameter	Description
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.
Enable Session Disconnect Hotkey	When enabled, users can press the Ctrl+Alt+F12 hotkey sequence to pop up the 'Zero Client Control Panel' overlay, which lets them disconnect the current session on the workstation or power off the workstation.
	Note: Set up configuration options before using hotkey Before users can use this disconnect hotkey sequence, certain other configuration options must be in place. See <i>Disconnecting from a Session</i> on page 172 for details.
PCoIP Utility Bar Mode	When enabled, the PCoIP Utility Bar appears at the top of the primary display when a user is in session and moves the cursor directly under the bar. The utility bar can be used to disconnect a session or to shut down a remote workstation. For Direct to Host session connection types, <i>Local Cursor and Keyboard</i> must be enabled in order for the Tera2 PCoIP Zero Client to process mouse events for the utility bar. For all connection types, the mouse must be locally connected (that is, not bridged).
	 Disabled: Disables the PCoIP Utility Bar. By default, the utility bar is disabled.
	• Enabled : Enables and auto-hides the PCoIP Utility Bar. Users can show the utility bar by pointing the mouse at the top of the screen directly under the utility bar. Users can slide the utility bar to the right and left at the top of the screen.
	• Enabled and Pinned: Enables and pins the PCoIP Utility Bar at the top of the screen. Users cannot hide the utility bar, but they can slide it to the right and left at the top of the screen.
	Note: Configure the feature from the PCoIP Management Console and AWI only This feature is configurable from the PCoIP Management Console and AWI only. It requires firmware version 4.2.0 or higher.

Parameter	Description
Session Negotiation Cipher Suites	Configure the Transport Layer Security (TLS) cipher to use for negotiating the TLS session between the PCoIP client and the PCoIP host.
	 Maximum Compatibility: TLS 1.0 or higher with RSA keys: This option provides maximum compatibility. Suite B: TLS 1.2 with Suite B-compliant 192-bit elliptic curve encryption. This option provides a higher level of security.

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	 You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	• You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	 Unable to connect (0x1001). Contact your IT administrator.
	 Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	• You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.
	• You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.

Parameter	Description
	• You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
	• You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	You can choose to display:
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
	 Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	3. Show Error Only - This option hides Info and Warning messages and displays only Error messages.
	4. Show None - Don't show any disconnect messages.
Enable DSCP	When enabled, the device populates the Differentiated Services Code Point (DSCP) field in the IP header, enabling intermediate network nodes to prioritize PCoIP traffic accordingly.
Enable Congestion Notification	When enabled, transport congestion notification is enabled to enable PCoIP endpoints to react accordingly if an intermediate network node sets the congestion notification bit in either the IP header or PCoIP transport header. For more information about the PCoIP transport header, see <i>PCoIP Packet Format</i> on page 329.
Organization ID	Enter an organization ID for the company (for example, 'mycompany.com'). This field accepts any UTF-8 character.
	Note: Specify parameter if the PCoIP Connection Manager requests it You only need to specify this parameter if the PCoIP Connection Manager requests it. The organization ID is used for certain types of PCoIP Broker Protocol

Enabling the Self Help Link

The **Self Help Link** option lets you configure a self-help link that will appear on the OSD Connect window. When users click this link, they are automatically connected to a specific desktop that can be used as a corporate resource–for example, a desktop

authentication messages.

containing IT help information. After enabling this option, you configure all the necessary details to automatically log users in to the desktop that you specify. You also configure the link text that you want to appear on the Connect window.

Enable Self Help Link: 🗵		
	Connection Server:	
	Port:	(Leave blank for default)
	Username:	
	Password:	
	Domain:	
	Pool Name to Select:	
	Link Text:	

Enable Self Help Link options

When you enable this field, the following options appear:

Parameter	Description
Connection Server	Enter the fully-qualified domain name of the connection server brokering the desktop (for example, a PCoIP Connection Manager for a PCoIP Connection Manager session connection type, or a View Connection Server for a View Connection Server session connection type).
Port	By default, port 443 is used to communicate with the connection server. If your network is set up to use a non-standard port for secure connections, enter the port number.
Username	To password protect the self-help desktop, enter a username in this field.
Password	To password protect the self-help desktop, enter a password in this field.
Domain	Enter the domain name for the self-help desktop (for example, <i>mycompany.com</i>).
Pool Name to Select	Enter the pool or desktop name for the self-help desktop.
Link Text	Enter the text that you want to appear as hyperlinked text on the Connect window.

AWI: PCoIP Connection Manager + Auto-Logon Session Settings

Select the **PCoIP Connection Manager + Auto-Logon** session connection type from the **Configuration > Session** page to configure the client to automatically enter a user's login details when a PCoIP Connection Manager is used as the PCoIP session broker.





Caution: Take precautions to secure zero clients

Passwords are stored locally in retrievable form when zero clients are configured with this session connection type. For this reason, it should not be used in high security environments. Ensure that you take precautions to prevent theft of the zero client if you do use this session connection type.

Session	
Configure the connection to a device	
Session Connection Type:	PCoIP Connection Manager + Auto-Logon 💌
Server URI: h	ttps://lterwkstn90.teradici.local
Logon Username:	
Logon Password:	
Logon Domain Name:	
	Hide Advanced Options
Desktop Name to Select:	
Certificate Check Mode:	Warn before connecting to untrusted servers
L	Prevent users from changing the Certificate Check Mode
Auto Connect:	
Connection Server Cache Mode:	Last servers used Clear cache entries
Auto Launch If Only One Desktop:	z
Use OSD Logo For Login Banner:	
Enable Peer Loss Overlay:	
Enable Preparing Desktop Overlay:	5
Enable Session Disconnect Hotkey:	CTRL + ALT + F12
PCoIP Utility Bar Mode:	Disabled 💌
Session Negotiation Cipher Suites:	Maximum Compatibility: TLS 1.0 or higher with RSA keys
Disconnect Message Filter:	
Enable DSCP:	
Enable Congestion Notification:	×
	Apply Cancel

AWI Session Connection type - PCoIP Connection Manager + Auto-Logon

The following parameters can be found on the AWI PCoIP Connection Manager + Auto-Logon page.

Parameter	Description
Server URI	Enter the Uniform Resource Identifier (URI) for the PCoIP Connection Manager. Note: Type the URL in the form 'https:// <hostname address="" ip="">'. The URL must be in the form 'https://<hostname ip<br="">address>'.</hostname></hostname>
Logon Username	Enter the user name for the client (maximum number of characters is 128). This user name will be sent to the specified connection server.
Logon Password	Enter the password for the client (maximum number of characters is 128). This password will be sent to the specified connection server.
Logon Domain Name	Enter the domain for the client (maximum number of characters is 256). This domain will be sent to the specified connection server.
Desktop Name to Select	Enter the desktop name used by the client when starting a session. This field is case-insensitive.
Certificate Check Mode	 Select the level of verification performed on the certificate presented by the connection server: Never connect to untrusted servers: Configure the client to reject the connection if a trusted, valid certificate is not installed. (This is the most secure option.) Warn before connecting to untrusted servers: Configure the client to display a warning if an unsigned or expired certificate is encountered, or if the certificate is not self-signed and the Tera2 PCoIP Zero Client trust store is empty. (This option is selected by default.) Do not verify server identity certificates: Configure the client to enable all connections. (This option is not secure.)
Certificate Check Mode Lockout	When enabled, prevents users from changing the Certificate Check Mode settings from the OSD or AWI.

AWI PCoIP Connection Manager + Auto-Logon Parameters

Parameter	Description
Auto Connect	This field determines the client's auto connect behavior after startup:
	 Enabled: The client automatically connects with the connection server after startup and a PCoIP session ends, bypassing the OSD Connect page. Disabled: The client does not automatically connect with the connection server. Enabled With Retry On Error: The client will continuously attempt to contact the connection server. After a connection failure, the client waits before attempting to connect again. This wait time increases with each successive failure. The wait interval is not configurable.
	Note: Devices running 4.1.1 or lower do not support Retry On Error Devices running firmware 4.1.1 or lower do not support Retry On Error behavior and will always perform a single attempt to contact the connection server when this option is selected.
	Note: Restart client after enabling Auto Connect After enabling Auto Connect, the client must be power-cycled for the change to take effect.
Connection Server Cache Mode	This field determines whether a connection server is dynamically added to the Server drop-down menu on the OSD Connect page when a user types in a valid server URI, or whether it appears in a read-only list for the user to select.
	 Last servers used: Select this option if you want a list of cached servers that a user has typed in to appear in the Server drop-down menu on the OSD Connect page.
	 Read-only: Select this option if you want users to select a connection server from a read-only list.
	Note: Use PCoIP Management Console to pre-populate available connection servers



Parameter	Description
Auto Launch If Only One Desktop	When enabled, users are automatically connected to a provisioned desktop after user credentials are entered.
	Note: Feature only applies to single desktop users This feature only applies to users who are entitled to a single desktop. It does not apply to users entitled to multiple virtual desktops.
Use OSD Logo for Login Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.
Enable Session Disconnect Hotkey	When enabled, users can press the Ctrl+Alt+F12 hotkey sequence to pop up the 'Zero Client Control Panel' overlay, which lets them disconnect the current session on the workstation or power off the workstation.
	Note: Set up configuration options before using hotkey Before users can use this disconnect hotkey sequence, certain other configuration options must be in place. See <i>Disconnecting from a Session</i> on page 172 for details.

Parameter	Description
PCoIP Utility Bar Mode	When enabled, the PCoIP Utility Bar appears at the top of the primary display when a user is in session and moves the cursor directly under the bar. The utility bar can be used to disconnect a session or to shut down a remote workstation. For Direct to Host session connection types, <i>Local Cursor and Keyboard</i> must be enabled in order for the Tera2 PCoIP Zero Client to process mouse events for the utility bar. For all connection types, the mouse must be locally connected (that is, not bridged).
	 Disabled: Disables the PCoIP Utility Bar. By default, the utility bar is disabled.
	• Enabled : Enables and auto-hides the PCoIP Utility Bar. Users can show the utility bar by pointing the mouse at the top of the screen directly under the utility bar. Users can slide the utility bar to the right and left at the top of the screen.
	• Enabled and Pinned: Enables and pins the PCoIP Utility Bar at the top of the screen. Users cannot hide the utility bar, but they can slide it to the right and left at the top of the screen.
	Note: Configure the feature from the PCoIP Management Console and AWI only This feature is configurable from the PCoIP Management Console and AWI only. It requires firmware version 4.2.0 or higher.
Session Negotiation Cipher Suites	Configure the Transport Layer Security (TLS) cipher to use for negotiating the TLS session between the PCoIP client and the PCoIP host.
	 Maximum Compatibility: TLS 1.0 or higher with RSA keys: This option provides maximum compatibility.
	 Suite B: TLS 1.2 with Suite B-compliant 192-bit elliptic curve encryption. This option provides a higher level of security.

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	 You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	• Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	• You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameter	Description
	 You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes
	For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	You can choose to display:
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
	 Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	3. Show Error Only - This option hides Info and Warning messages and displays only Error messages.
	4. Show None - Don't show any disconnect messages.
Enable DSCP	When enabled, the device populates the Differentiated Services Code Point (DSCP) field in the IP header, enabling intermediate network nodes to prioritize PCoIP traffic accordingly.
Enable Congestion Notification	When enabled, transport congestion notification is enabled to enable PCoIP endpoints to react accordingly if an intermediate network node sets the congestion notification bit in either the IP header or PCoIP transport header. For more information about the PCoIP transport header, see <i>PCoIP Packet Format</i> on page 329.

AWI: View Connection Server Session Settings

Select the View Connection Server session connection type from the Configuration > Session page to configure the client to use a View Connection Server as the broker when connecting to a VMware desktop.





Note: Connecting a View Connection Server to a workstation

You can also use a View Connection Server to connect to a workstation with a PCoIP Remote Workstation Card installed. For this option, VMware View Agent must be installed on the remote workstation, and a number of other configuration requirements for both the client and host must be in place. For complete details, refer to Using PCoIP® Host Cards with VMware View.

Session	
Configure the connection to a device	
Session Connection Type:	View Connection Server
DNS Name or IP Address:	view.teradici.com
	Hide Advanced Options
Pool Name to Select:	
Poor Nume to Select:	
	Warn before connecting to untrusted servers
	Prevent users from changing the Certificate Check Mode
Trusted View Connection Servers:	
Auto Connect:	Disabled v
Connection Server Cache Mode:	Last servers used Clear cache entries
Enable Self Help Link:	
Auto Launch If Only One Pool:	
Remember Username:	
Use OSD Logo For Login Banner:	
Prefer GSC-IS:	
Enable Peer Loss Overlay:	
Enable Preparing Desktop Overlay:	
Enable Session Disconnect Hotkey:	CTRL + ALT + F12
Enable RDS Application Access:	
PCoIP Utility Bar Mode:	Disabled 💌
Session Negotiation Cipher Suites:	Maximum Compatibility: TLS 1.0 or higher with RSA keys
Disconnect Message Filter:	Show All
_	
Custom Session SNI: Enable DSCP:	
Enable Congestion Notification:	
Enable IPv6 Address Resolution:	
Prefer IPv6 for FQDN Resolution:	
-	
	Apply Cancel

AWI Session Connection type - View Connection Server

The following parameters can be found on the AWI View Connection Server page.

AWI View Connection Server Parameters

Parameter	Description
DNS Name or IP Address	Enter the View Connection Server's DNS name or IP address. For VMware Horizon DaaS, this is the DNS name or IP address of the VMware Horizon DaaS Desktop Portal.
Pool Name to Select	Enter the pool name. When the list includes a pool with this name, the client will immediately start a session with that pool.
	Note: Field is case-insensitive This field is case-insensitive. For Tera1 PCoIP Zero Clients, this parameter is called Desktop Name to Select.
Port	By default, port 443 is used to communicate with the connection server. If your network is set up to use a non-standard port for secure connections, enter the port number.
Certificate Check Mode	Select the level of verification performed on the certificate presented by the connection server:
	• Never connect to untrusted servers: Configure the client to reject the connection if a trusted, valid certificate is not installed. (This is the most secure option.)
	• Warn before connecting to untrusted servers: Configure the client to display a warning if an unsigned or expired certificate is encountered, or if the certificate is not self- signed and the Tera2 PCoIP Zero Client trust store is empty. (This option is selected by default.)
	• Do not verify server identity certificates : Configure the client to enable all connections. (This option is not secure.)
Certificate Check Mode Lockout	When enabled, prevents users from changing the Certificate Check Mode settings from the OSD or AWI.
Trusted View Connection Servers	Click the Show button to display View Connection Servers for which the client has received a valid certificate.
	Click the Clear button to clear this cache.

Parameter	Description
Auto Connect	This field determines the client's auto connect behavior after startup:
	 Enabled: The client automatically connects with the connection server after startup and a PCoIP session ends, bypassing the OSD Connect page. Disabled: The client does not automatically connect with the connection server. Enabled With Retry On Error: The client will continuously attempt to contact the connection server. After a connection failure, the client waits before attempting to connect again. This wait time increases with each successive failure. The wait interval is not configurable.
	Note: Devices running 4.1.1 or lower do not support Retry On Error Devices running firmware 4.1.1 or lower do not support Retry On Error behavior and will always perform a single attempt to contact the connection server when this option is selected.
	Note: Restart client after enabling Auto Connect After enabling Auto Connect, the client must be power-cycled for the change to take effect.
Connection Server Cache Mode	This field determines whether a connection server is dynamically added to the Server drop-down menu on the OSD Connect page when a user types in a valid server address, or whether it appears in a read-only list for the user to select.
	 Last servers used: Select this option if you want a list of cached servers that a user has typed in to appear in the Server drop-down menu on the OSD Connect page.
	• Read-only : Select this option if you want users to select a connection server from a read-only list.
	Note: Use PCoIP Management Console to pre-populate available connection servers You can use the PCoIP Management Console to pre-populate the list of available connection servers.
Enable Self Help Link	See Enabling the Self Help Link for details.

Parameter	Description
Auto Launch If Only One Pool	When enabled, users are automatically connected to a provisioned desktop or application after user credentials are entered.
	For Tera2 PCoIP Zero Clients, this parameter is called Auto Launch If Only One Desktop.
	Note: Feature only applies to single desktop user
	This feature only applies to users who are entitled to a single desktop. It does not apply to users entitled to multiple virtual desktops.
Remember Username	When enabled, the user name text box automatically populates with the last username entered.
Use OSD Logo for Login Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.
Prefer GSC-IS	When selected, the GSC-IS interface is used if a smart card supports more than one interface such as CAC (GSC-IS) and PIV endpoint. If a smart card supports only one interface, such as either CAC or PIV endpoint, then only the CAC or PIV endpoint interface is used regardless of this setting. This only affects smart card access performed outside of PCoIP sessions.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client
	This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.



Parameter	Description
Enable Session Disconnect Hotkey	When enabled, users can press the Ctrl+Alt+F12 hotkey sequence to pop up the 'Zero Client Control Panel' overlay, which lets them disconnect the current session on the workstation or power off the workstation.
	Note: Set up configuration options before using hotkey Before users can use this disconnect hotkey sequence, certain other configuration options must be in place. See <i>Disconnecting from a Session</i> on page 172 for details.
Enable RDS Application Access	When enabled <i>and</i> users connect to a VMware Horizon View Connection Server that offers applications, a list of available applications will be presented.
	Note: Applications open in full-screen mode but can be resized
	Applications open in full-screen mode, but can be re-sized once users are in session.
PCoIP Utility Bar Mode	When enabled, the PCoIP Utility Bar appears at the top of the primary display when a user is in session and moves the cursor directly under the bar. The utility bar can be used to disconnect a session or to shut down a remote workstation. For Direct to Host session connection types, <i>Local Cursor and Keyboard</i> must be enabled in order for the Tera2 PCoIP Zero Client to process mouse events for the utility bar. For all connection types, the mouse must be locally connected (that is, not bridged).
	 Disabled: Disables the PCoIP Utility Bar. By default, the utility bar is disabled.
	 Enabled: Enables and auto-hides the PCoIP Utility Bar. Users can show the utility bar by pointing the mouse at the top of the screen directly under the utility bar. Users can slide the utility bar to the right and left at the top of the screen. Enabled and Pinned: Enables and pins the PCoIP Utility Bar at the top of the screen. Users cannot hide the utility bar, but they can slide it to the right and left at the top of the screen.
	Note: Configure the feature from the PCoIP Management Console and AWI only This feature is configurable from the PCoIP Management Console and AWI only. It requires firmware version 4.2.0 or higher.

Parameter	Description
Session Negotiation Cipher Suites	Configure the Transport Layer Security (TLS) cipher to use for negotiating the TLS session between the PCoIP client and the PCoIP host.
	 Maximum Compatibility: TLS 1.0 or higher with RSA keys: This option provides maximum compatibility.
	 Suite B: TLS 1.2 with Suite B-compliant 192-bit elliptic curve encryption. This option provides a higher level of security.

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	 Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

	You have been disconnected due to a configuration error
	(0x401). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	You can choose to display:
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
	2. Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	3. Show Error Only - This option hides Info and Warning messages and displays only Error messages.
	4. Show None - Don't show any disconnect messages.
Custom Session SNI	When enabled, sets a customized Server Name Indication (SNI) string on authorized man-in-the-middle-enabled clients. The SNI string is appended to the TLS HELLO when the client initiates a connection with the host.
Enable DSCP	When enabled, the device populates the Differentiated Services Code Point (DSCP) field in the IP header, enabling intermediate network nodes to prioritize PCoIP traffic accordingly.
Enable Congestion Notification	When enabled, transport congestion notification is enabled to enable PCoIP endpoints to react accordingly if an intermediate network node sets the congestion notification bit in either the IP header or PCoIP transport header. For more information about the PCoIP transport header, see <i>PCoIP Packet Format</i> on page 329.
Enable IPv6 Address Resolution	This setting supports VMware Horizon View 6.1 implementations, which enable View-brokered IPv6 sessions on IPv6-only networks. When enabled, clients can advertise IPv6 and FQDN capability to the View connection Server and receive IPv6 and FQDN peer addresses back.
Prefer IPv6 for FQDN	When enabled, the client's IPv6 address is preferred for FQDN



Enabling the Self Help Link

The **Self Help Link** option lets you configure a self-help link that will appear on the OSD Connect window. When users click this link, they are automatically connected to a specific desktop that can be used as a corporate resource—for example, a desktop containing IT help information. After enabling this option, you configure all the necessary details to automatically log users in to the desktop that you specify. You also configure the link text that you want to appear on the Connect window.

Enable Self Help Link: 🗹	
Connection Server:	
Port:	(Leave blank for default)
Username:	
Password:	
Domain:	
Pool Name to Select:	
Link Text:	

Enable Self Help Link options

Parameter	Description
Connection Server	Enter the fully-qualified domain name of the connection server brokering the desktop (for example, a PCoIP Connection Manager for a PCoIP Connection Manager session connection type, or a View Connection Server for a View Connection Server session connection type).
Port	By default, port 443 is used to communicate with the connection server. If your network is set up to use a non-standard port for secure connections, enter the port number.
Username	To password protect the self-help desktop, enter a username in this field.
Password	To password protect the self-help desktop, enter a password in this field.
Domain	Enter the domain name for the self-help desktop (for example, <i>mycompany.com</i>).
Pool Name to Select	Enter the pool or desktop name for the self-help desktop.
Link Text	Enter the text that you want to appear as hyperlinked text on the Connect window.

When you enable this field, the following options appear:

AWI: View Connection Server + Auto-Logon Session Settings

Select the View Connection Server + Auto-Logon session connection type from the Configuration > Session page to configure the client to automatically enter a user's login details when a View Connection Server is used to connect to a VMware desktop.



Caution: Take precautions to secure zero clients

Passwords are stored locally in retrievable form when zero clients are configured with this session connection type. For this reason, it should not be used in high security environments. Ensure that you take precautions to prevent theft of the zero client if you do use this session connection type.

Session	
Configure the connection to a device	
Session Connection Type:	View Connection Server + Auto-Logon
DNS Name or IP Address:	view.teradici.com
Logon Username:	
Logon Password:	
Logon Domain Name:	
	Hide Advanced Options
Pool Name to Select:	
Port:	
	Warn before connecting to untrusted servers
	Prevent users from changing the Certificate Check Mode
Trusted View Connection Servers:	
Auto Connect:	
Connection Server Cache Mode:	
Auto Launch If Only One Pool:	
Use OSD Logo For Login Banner:	
Enable Peer Loss Overlay: Enable Preparing Desktop	
Overlay:	
Enable Session Disconnect Hotkey:	CTRL + ALT + F12
Enable RDS Application Access:	
PCoIP Utility Bar Mode:	Disabled •
Session Negotiation Cipher Suites:	Maximum Compatibility: TLS 1.0 or higher with RSA keys
Disconnect Message Filter:	Show All
Custom Session SNI:	
Enable DSCP:	
Enable Congestion Notification:	
Enable IPv6 Address Resolution:	
Prefer IPv6 for FQDN Resolution:	
	Apply Cancel

AWI Session Connection type - View Connection Server + Auto-Logon

The following parameters can be found on the AWI View Connection Server + Auto-Logon page.

Parameter	Description
DNS Name or IP Address	Enter the View Connection Server's DNS name or IP address. For VMware Horizon DaaS, this is the DNS name or IP address of the VMware Horizon DaaS Desktop Portal.
Logon Username	Enter the user name for the client (maximum number of characters is 128). This user name will be sent to the specified connection server.
Logon Password	Enter the password for the client (maximum number of characters is 128). This password will be sent to the specified connection server.
Logon Domain Name	Enter the domain for the client (maximum number of characters is 256). This domain will be sent to the specified connection server.
Pool Name to Select	Enter the pool name. When the list includes a pool with this name, the client will immediately start a session with that pool. Note: Field is case-insensitive This field is case-insensitive. For Tera1 PCoIP Zero Clients, this parameter is called Desktop Name to Select.
Port	By default, port 443 is used to communicate with the connection server. If your network is set up to use a non-standard port for secure connections, enter the port number.
Certificate Check Mode	Select the level of verification performed on the certificate presented by the connection server:
	• Never connect to untrusted servers: Configure the client to reject the connection if a trusted, valid certificate is not installed. (This is the most secure option.)
	• Warn before connecting to untrusted servers: Configure the client to display a warning if an unsigned or expired certificate is encountered, or if the certificate is not self- signed and the Tera2 PCoIP Zero Client trust store is empty. (This option is selected by default.)
	 Do not verify server identity certificates: Configure the client to enable all connections. (This option is not secure.)

Parameter	Description
Certificate Check Mode Lockout	When enabled, prevents users from changing the Certificate Check Mode settings from the OSD or AWI.
Trusted View Connection Servers	Click the Show button to display View Connection Servers for which the client has received a valid certificate.
	Click the Clear button to clear this cache.
Auto Connect	This field determines the client's auto connect behavior after startup:
	 Enabled: The client automatically connects with the connection server after startup and a PCoIP session ends, bypassing the OSD Connect page.
	• Disabled : The client does not automatically connect with the connection server.
	• Enabled With Retry On Error: The client will continuously attempt to contact the connection server. After a connection failure, the client waits before attempting to connect again. This wait time increases with each successive failure. The wait interval is not configurable.
	Note: Devices running 4.1.1 or lower do not support Retry On Error Devices running firmware 4.1.1 or lower do not support Retry On Error behavior and will always perform a single attempt to contact the connection server when this option is selected.
	Note: Restart client after enabling Auto Connect After enabling Auto Connect, the client must be power-cycled for the change to take effect.

Parameter	Description
Connection Server Cache Mode	This field determines whether a connection server is dynamically added to the Server drop-down menu on the OSD Connect page when a user types in a valid server address, or whether it appears in a read-only list for the user to select.
	 Last servers used: Select this option if you want a list of cached servers that a user has typed in to appear in the Server drop-down menu on the OSD Connect page.
	• Read-only : Select this option if you want users to select a connection server from a read-only list.
	Note: Use PCoIP Management Console to pre-populate available connection servers You can use the PCoIP Management Console to pre-populate the list of available connection servers.
Auto Launch If Only One Pool	When enabled, users are automatically connected to a provisioned desktop or application after user credentials are entered.
	For Tera2 PCoIP Zero Clients, this parameter is called Auto Launch If Only One Desktop.
	Note: Feature only applies to single desktop users
	This feature only applies to users who are entitled to a single desktop. It does not apply to users entitled to multiple virtual desktops.
Jse OSD Logo for _ogin Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.

Parameter	Description
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.
Enable Session Disconnect Hotkey	When enabled, users can press the Ctrl+Alt+F12 hotkey sequence to pop up the 'Zero Client Control Panel' overlay, which lets them disconnect the current session on the workstation or power off the workstation.
	Note: Set up configuration options before using hotkey Before users can use this disconnect hotkey sequence, certain other configuration options must be in place. See <i>Disconnecting from a Session</i> on page 172 for details.
Enable RDS Application Access	When enabled <i>and</i> users connect to a VMware Horizon View Connection Server that offers applications, a list of available applications will be presented.
	Note: Applications open in full-screen mode but can be resized Applications open in full-screen mode, but can be re-sized once users are in session.

Parameter	Description
PCoIP Utility Bar Mode	When enabled, the PCoIP Utility Bar appears at the top of the primary display when a user is in session and moves the cursor directly under the bar. The utility bar can be used to disconnect a session or to shut down a remote workstation. For Direct to Host session connection types, <i>Local Cursor and Keyboard</i> must be enabled in order for the Tera2 PCoIP Zero Client to process mouse events for the utility bar. For all connection types, the mouse must be locally connected (that is, not bridged).
	 Disabled: Disables the PCoIP Utility Bar. By default, the utility bar is disabled. Enabled: Enables and auto-hides the PCoIP Utility Bar. Users can show the utility bar by pointing the mouse at the top of the screen directly under the utility bar. Users can slide
	 the utility bar to the right and left at the top of the screen. Enabled and Pinned: Enables and pins the PCoIP Utility Bar at the top of the screen. Users cannot hide the utility bar, but they can slide it to the right and left at the top of the screen.
	Note: Configure the feature from the PCoIP Management Console and AWI only This feature is configurable from the PCoIP Management Console and AWI only. It requires firmware version 4.2.0 or higher.
Session Negotiation Cipher Suites	Configure the Transport Layer Security (TLS) cipher to use for negotiating the TLS session between the PCoIP client and the PCoIP host.
	 Maximum Compatibility: TLS 1.0 or higher with RSA keys: This option provides maximum compatibility.
	 Suite B: TLS 1.2 with Suite B-compliant 192-bit elliptic curve encryption. This option provides a higher level of security.

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	 Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameter	Description
	 You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	You can choose to display:
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
	2. Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	3. Show Error Only - This option hides Info and Warning messages and displays only Error messages.
	 Show None - Don't show any disconnect messages.
Custom Session SNI	When enabled, sets a customized Server Name Indication (SNI) string on authorized man-in-the-middle-enabled clients. The SNI string is appended to the TLS HELLO when the client initiates a connection with the host.
Enable DSCP	When enabled, the device populates the Differentiated Services Code Point (DSCP) field in the IP header, enabling intermediate network nodes to prioritize PCoIP traffic accordingly.
Enable Congestion Notification	When enabled, transport congestion notification is enabled to enable PCoIP endpoints to react accordingly if an intermediate network node sets the congestion notification bit in either the IP header or PCoIP transport header. For more information about the PCoIP transport header, see <i>PCoIP Packet Format</i> on page 329.
Enable IPv6 Address Resolution	This setting supports VMware Horizon View 6.1 implementations, which enable View-brokered IPv6 sessions on IPv6-only networks. When enabled, clients can advertise IPv6 and FQDN capability to the View connection Server and receive IPv6 and FQDN peer addresses back.

AWI: View Connection Server + Kiosk Session Settings

Select the View Connection Server + Kiosk session connection type from the Configuration > Session page to configure the client to use Kiosk mode when a View Connection Server is used to connect to a VMware desktop.



Caution: Take precautions to secure zero clients

Passwords are stored locally in retrievable form when zero clients are configured with this session connection type. For this reason, it should not be used in high security environments. Ensure that you take precautions to prevent theft of the zero client if you do use this session connection type.

Session	
Configure the connection to a device	
Session Connection Type: V	/iew Connection Server + Kiosk
DNS Name or IP Address: v	iew.teradici.com
Username Type: 2	Zero Client MAC 💌
Username:	m-00:30:04:0E:47:B9
Password:	
	Hide Advanced Options
Port:	(Leave blank for default)
Certificate Check Mode: W	Warn before connecting to untrusted servers
Certificate Check Mode Lockout:	Prevent users from changing the Certificate Check Mode
Trusted View Connection Servers:	Show Clear
Use OSD Logo For Login Banner: 🗆	
Enable Peer Loss Overlay: 🗌	
Enable Preparing Desktop Overlay:	3
	CTRL + ALT + F12
Enable RDS Application Access:	
PCoIP Utility Bar Mode:	Disabled 💌
Session Negotiation Cipher Suites:	Maximum Compatibility: TLS 1.0 or higher with RSA keys
Disconnect Message Filter: S	Show All
Custom Session SNI:	
Enable DSCP:	7
Enable Congestion Notification:	
Enable IPv6 Address Resolution:	
Prefer IPv6 for FQDN Resolution:	
	Apply Cancel

AWI Session Connection type - View Connection Server + Kiosk

The following parameters can be found on the AWI Session Connection Server + Kiosk page.

AWI View Connection Server + Kiosk Parameters

Parameter	Description
DNS Name or IP Address	Enter the View Connection Server's DNS name or IP address.
Username Type	Select the type of user name that matches the naming you use for the devices on the View Connection Server.
	 Zero Client MAC: Select this option to automatically populate the Username field with the MAC address of the Tera2 PCoIP Zero Client.
	 Custom: Enter the user name for the Tera2 PCoIP Zero Client. This user name has the prefix 'Custom'.
Username	When Custom is selected as the user name type, enter the value for this component of the custom user name. This field is limited to 13 characters.
Password	To password protect the virtual machine for the kiosk, enter a password in this field. This password must match the one entered for the device in the View Connection Server.
Port	By default, port 443 is used to communicate with the connection server. If your network is set up to use a non-standard port for secure connections, enter the port number.
Certificate Check Mode	Select the level of verification performed on the certificate presented by the connection server:
	• Never connect to untrusted servers: Configure the client to reject the connection if a trusted, valid certificate is not installed. (This is the most secure option.)
	• Warn before connecting to untrusted servers: Configure the client to display a warning if an unsigned or expired certificate is encountered, or if the certificate is not self- signed and the Tera2 PCoIP Zero Client trust store is empty. (This option is selected by default.)
	• Do not verify server identity certificates : Configure the client to enable all connections. (This option is not secure.)
Certificate Check Mode Lockout	When enabled, prevents users from changing the Certificate Check Mode settings from the OSD or AWI.
Trusted View Connection Servers	Click the Show button to display View Connection Servers for
	which the client has received a valid certificate.

Parameter	Description
Use OSD Logo for Login Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.
Enable Session Disconnect Hotkey	When enabled, users can press the Ctrl+Alt+F12 hotkey sequence to pop up the 'Zero Client Control Panel' overlay, which lets them disconnect the current session on the workstation or power off the workstation.
	Note: Set up configuration options before using hotkey Before users can use this disconnect hotkey sequence, certain other configuration options must be in place. See <i>Disconnecting from a Session</i> on page 172 for details.
Enable RDS Application Access	When enabled <i>and</i> users connect to a VMware Horizon View Connection Server that offers applications, a list of available applications will be presented.
	Note: Applications open in full-screen mode but can be resized Applications open in full-screen mode, but can be re-sized once users are in session.

Parameter	Description
PCoIP Utility Bar Mode	When enabled, the PCoIP Utility Bar appears at the top of the primary display when a user is in session and moves the cursor directly under the bar. The utility bar can be used to disconnect a session or to shut down a remote workstation. For Direct to Host session connection types, <i>Local Cursor and Keyboard</i> must be enabled in order for the Tera2 PCoIP Zero Client to process mouse events for the utility bar. For all connection types, the mouse must be locally connected (that is, not bridged).
	 Disabled: Disables the PCoIP Utility Bar. By default, the utility bar is disabled.
	• Enabled: Enables and auto-hides the PCoIP Utility Bar. Users can show the utility bar by pointing the mouse at the top of the screen directly under the utility bar. Users can slide the utility bar to the right and left at the top of the screen.
	• Enabled and Pinned: Enables and pins the PCoIP Utility Bar at the top of the screen. Users cannot hide the utility bar, but they can slide it to the right and left at the top of the screen.
	Note: Configure the feature from the PCoIP Management Console and AWI only This feature is configurable from the PCoIP Management Console and AWI only. It requires firmware version 4.2.0 or higher.
Session Negotiation Cipher Suites	Configure the Transport Layer Security (TLS) cipher to use for negotiating the TLS session between the PCoIP client and the PCoIP host.
	 Maximum Compatibility: TLS 1.0 or higher with RSA keys: This option provides maximum compatibility.
	• Suite B: TLS 1.2 with Suite B-compliant 192-bit elliptic curve encryption. This option provides a higher level of security.

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameter	Description
	 You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x402). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	You can choose to display:
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
	2. Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	3. Show Error Only - This option hides Info and Warning messages and displays only Error messages.
	 Show None - Don't show any disconnect messages.
Custom Session SNI	When enabled, sets a customized Server Name Indication (SNI) string on authorized man-in-the-middle-enabled clients. The SNI string is appended to the TLS HELLO when the client initiates a connection with the host.
Enable DSCP	When enabled, the device populates the Differentiated Services Code Point (DSCP) field in the IP header, enabling intermediate network nodes to prioritize PCoIP traffic accordingly.
Enable Congestion Notification	When enabled, transport congestion notification is enabled to enable PCoIP endpoints to react accordingly if an intermediate network node sets the congestion notification bit in either the IP header or PCoIP transport header. For more information about the PCoIP transport header, see <i>PCoIP Packet Format</i> on page 329.
Enable IPv6 Address Resolution	This setting supports VMware Horizon View 6.1 implementations, which enable View-brokered IPv6 sessions on IPv6-only networks. When enabled, clients can advertise IPv6 and FQDN capability to the View connection Server and receive IPv6 and FQDN peer addresses back.

AWI: View Connection Server + Imprivata OneSign Session Settings

Select the View Connection Server + Imprivata OneSign session connection type from the Configuration > Session page to configure the client to authenticate through the Imprivata OneSign system in addition to a View Connection Server when connecting to a VMware desktop.

Session	
Configure the connection to a device	
-	
	View Connection Server + Imprivata Ones
Bootstrap URL:	https://steronesign01.teradici.local
	Hide Advanced Options
OneSign Pool Name Mode:	Ignore the Pool Name to Select field
Pool Name to Select:	
OneSign Appliance Verification:	No verification: Connect to any appliance
Direct To View Address:	
Certificate Check Mode:	Warn before connecting to untrusted servers
Certificate Check Mode Lockout:	Prevent users from changing the Certificate Check Mode
Trusted View Connection Servers:	
Remember Username:	
Use OSD Logo For Login Banner:	
Prefer GSC-IS:	
Enable Peer Loss Overlay:	
Enable Preparing Desktop Overlay:	
Enable Session Disconnect Hotkey:	CTRL + ALT + F12
Enable RDS Application Access:	
PCoIP Utility Bar Mode:	Disabled 💌
Pre-session Reader Beep:	Use Existing Setting
Invert Wiegand Data:	Use Existing Setting
Restrict Proximity Cards:	\Box Only use proximity cards for tap-in/tap-out
Session Negotiation Cipher Suites:	Maximum Compatibility: TLS 1.0 or higher with RSA keys
Disconnect Message Filter:	Show All
Custom Session SNI:	
Enable DSCP:	
Enable Congestion Notification:	
Enable IPv6 Address Resolution:	
Prefer IPv6 for FQDN Resolution:	
	Apply Cancel



The following parameters can be found on the AWI View Connection Server + Imprivata OneSign page.

AWI View Connection Server + Imprivata OneSign Parameters

Parameter	Description
Bootstrap URL	Enter the bootstrap URL used to find an initial OneSign server in a OneSign authentication deployment.
OneSign Pool Name Mode	Select whether the Pool Name to Select property is used in OneSign mode.
	 Ignore the Pool Name to Select field Use the Pool Name to Select field if set
	For Tera1 PCoIP Zero Clients, this parameter is called OneSign Desktop Name Mode.
Pool Name to Select	Enter the pool name. When the list includes a pool with this name, the client will immediately start a session with that pool.
	Note: Field is case-insensitive This field is case-insensitive. For Tera1 PCoIP Zero Clients, this parameter is called Desktop Name to Select.
Onesign Appliance Verification	Select the level of verification performed on the certificate presented by the OneSign appliance server:
	 No verification: Connect to any appliance Full verification: Only connect to appliances with verified certificates
Direct To View Address	Enter the address of the View Connection Server to use when OneSign servers cannot be reached. When configured, a Direct to View link occurs on the OSD Connect page and user authentication screens. When users click the link, it cancels the current OneSign connection or authentication flow and starts a Horizon View authentication flow instead. This feature provides a mechanism for OneSign PCoIP Zero Client users to access their View desktops when the OneSign infrastructure is unavailable.

Parameter	Description
Certificate Check Mode	Select the level of verification performed on the certificate presented by the connection server:
	• Never connect to untrusted servers: Configure the client to reject the connection if a trusted, valid certificate is not installed. (This is the most secure option.)
	• Warn before connecting to untrusted servers: Configure the client to display a warning if an unsigned or expired certificate is encountered, or if the certificate is not self- signed and the Tera2 PCoIP Zero Client trust store is empty. (This option is selected by default.)
	• Do not verify server identity certificates: Configure the client to enable all connections. (This option is not secure.)
Certificate Check Mode Lockout	When enabled, prevents users from changing the Certificate Check Mode settings from the OSD or AWI.
Trusted View Connection Servers	Click the Show button to display View Connection Servers for which the client has received a valid certificate.
	Click the Clear button to clear this cache.
Remember Username	When enabled, the user name text box automatically populates with the last username entered.
Use OSD Logo for Login Banner	When enabled, the OSD logo banner appears at the top of login screens in place of the default banner.
Prefer GSC-IS	When selected, the GSC-IS interface is used if a smart card supports more than one interface such as CAC (GSC-IS) and PIV endpoint. If a smart card supports only one interface, such as either CAC or PIV endpoint, then only the CAC or PIV endpoint interface is used regardless of this setting. This only affects smart card access performed outside of PCoIP sessions.

Parameter	Description
Enable Peer Loss Overlay	When enabled, the 'Network Connection Lost' overlay appears on the display(s) when a loss of network connectivity is detected. Normal hypervisor scheduling delays can falsely trigger this message.
	Note: Option only available for a Tera2 PCoIP Zero Client This option is only available for a Tera2 PCoIP Zero Client. Desktop applications that require the peer loss notification should re-enable the feature through the OSD, AWI, or PCoIP Management Console.
Enable Preparing Desktop Overlay	When enabled, the 'Preparing Desktop' overlay appears on the display(s) when users log in.
	Note: Preparing Desktop overlay provides notification that login is proceeding This overlay provides assurance that login is proceeding if the desktop takes more than a few seconds to appear.
Enable Session Disconnect Hotkey	When enabled, users can press the Ctrl+Alt+F12 hotkey sequence to pop up the 'Zero Client Control Panel' overlay, which lets them disconnect the current session on the workstation or power off the workstation.
	Note: Set up configuration options before using hotkey Before users can use this disconnect hotkey sequence, certain other configuration options must be in place. See <i>Disconnecting from a Session</i> on page 172 for details.
Enable RDS Application Access	When enabled <i>and</i> users connect to a VMware Horizon View Connection Server that offers applications, a list of available applications will be presented.
	Note: Applications open in full-screen mode but can be resized Applications open in full-screen mode, but can be re-sized once users are in session.

Parameter	Description
PCoIP Utility Bar Mode	When enabled, the PCoIP Utility Bar appears at the top of the primary display when a user is in session and moves the cursor directly under the bar. The utility bar can be used to disconnect a session or to shut down a remote workstation. For Direct to Host session connection types, <i>Local Cursor and Keyboard</i> must be enabled in order for the Tera2 PCoIP Zero Client to process mouse events for the utility bar. For all connection types, the mouse must be locally connected (that is, not bridged).
	 Disabled: Disables the PCoIP Utility Bar. By default, the utility bar is disabled.
	 Enabled: Enables and auto-hides the PCoIP Utility Bar. Users can show the utility bar by pointing the mouse at the top of the screen directly under the utility bar. Users can slide the utility bar to the right and left at the top of the screen. Enabled and Pinned: Enables and pins the PCoIP Utility Bar at the top of the screen. Users cannot hide the utility bar, but they can slide it to the right and left at the top of the screen.
	Note: Configure the feature from the PCoIP Management Console and AWI only This feature is configurable from the PCoIP Management Console and AWI only. It requires firmware version 4.2.0 or higher.
Pre-session Reader Beep	Configure whether the proximity card reader beeps when a valid card is tapped on the reader in OneSign mode:
	Disabled: Disables the feature.
	Enabled: Enables the feature.
	• Use Existing Setting: Uses the existing setting (affects only devices running firmware 4.1.0 or greater)

Parameter	Description
Invert Wiegand Data	Configure whether or not the RF IDeas proximity reader will invert the Wiegand bits that are read from a user's ID token. This feature is useful when some of the RF IDeas readers in your system are programmed to invert the Wiegand data and others are not. It lets you configure all readers to read the bits in a consistent manner (whether inverted or not inverted), so that all the readers behave the same way from a user's point of view.
	 Disabled: Disables the feature. Wiegand data are not inverted.
	 Enabled: Enables the feature. Wiegand data are inverted. Use Existing Setting: Uses the existing setting (affects only devices running firmware 4.2.0 or greater).
	Note: Configure the feature from the PCoIP Management Console and AWI only This feature is configurable from the PCoIP Management Console and AWI only. It requires firmware version 4.2.0 or higher.
Restrict Proximity Cards	Configure whether or not proximity cards are restricted to tap- in/tap-out only.
	When this feature is enabled, the proximity card reader is locally terminated (that is, it uses drivers in the client's firmware), and proximity cards can only be used for tap-in/tap-out.
	When this feature is disabled, the proximity card reader is bridged by default (that is, it uses drivers in the host OS), and proximity cards are not restricted. They can be used for tap- in/tap-out and also during a session—for example, when an application requires in-session authentication.
	 Only use proximity cards for tap-in/tap-out: Enables/disables the feature.
	Note: Configure the feature from the PCoIP Management Console and AWI only This feature is configurable from the PCoIP Management Console and AWI only. It requires firmware version 4.2.0 or higher.

Parameter	Description	
Session Negotiation Cipher Suites	Configure the Transport Layer Security (TLS) cipher to use for negotiating the TLS session between the PCoIP client and the PCoIP host.	
	 Maximum Compatibility: TLS 1.0 or higher with RSA keys: This option provides maximum compatibility. 	
	 Suite B: TLS 1.2 with Suite B-compliant 192-bit elliptic curve encryption. This option provides a higher level of security. 	

Parameter	Description
Disconnect Message Filter	This field lets you control what type of messages appear when a session is disconnected. There are three categories:
	Information: User- or administrator-initiated actions affecting the session:
	 You have been disconnected because you logged in from another location or your host was shut down or restarted.
	 You have been disconnected because an administrator disconnected you.
	 You have been disconnected because you logged in from another location.
	You have been disconnected because you disconnected from your workstation.
	Warning: System-initiated, but expected actions affecting the session:
	 You have been disconnected because your session timed out.
	Error: Unexpected system-initiated actions causing session to fail:
	You have been disconnected.
	Unable to connect (0x1001). Contact your IT administrator.
	Unable to connect (0x1002). Contact your IT administrator.
	Session closed remotely.
	 Session closed remotely (unknown cause).
	 You have been disconnected due to a configuration error (0x100). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x201). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x300). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x301). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x302). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x303). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x305). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x400). Contact your IT administrator for assistance.

Parameter	Description
	 You have been disconnected due to a configuration error (0x401). Contact your IT administrator for assistance. You have been disconnected due to a configuration error
	(0x402). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x403). Contact your IT administrator for assistance.
	 You have been disconnected due to a configuration error (0x404). Contact your IT administrator for assistance.
	Related Information: Session disconnect codes For detailed information about the session disconnect codes, see What do the PCoIP server log disconnect codes mean? (KB 15134-872).
	You can choose to display:
	 Show All messages - This option shows all disconnect messages including Info, Warning, and Error messages.
	 Show Error and Warnings Only - This option hides info messages and displays only Error and Warning messages.
	 Show Error Only - This option hides Info and Warning messages and displays only Error messages.
	4. Show None - Don't show any disconnect messages.
Custom Session SNI	When enabled, sets a customized Server Name Indication (SNI) string on authorized man-in-the-middle-enabled clients. The SNI string is appended to the TLS HELLO when the client initiates a connection with the host.
Enable DSCP	When enabled, the device populates the Differentiated Services Code Point (DSCP) field in the IP header, enabling intermediate network nodes to prioritize PCoIP traffic accordingly.
Enable Congestion Notification	When enabled, transport congestion notification is enabled to enable PCoIP endpoints to react accordingly if an intermediate network node sets the congestion notification bit in either the IP header or PCoIP transport header. For more information about the PCoIP transport header, see <i>PCoIP Packet Format</i> on page 329.
Enable IPv6 Address Resolution	This setting supports VMware Horizon View 6.1 implementations, which enable View-brokered IPv6 sessions on IPv6-only networks. When enabled, clients can advertise IPv6 and FQDN capability to the View connection Server and receive IPv6 and FQDN peer addresses back.
Prefer IPv6 for FQDN Resolution	When enabled, the client's IPv6 address is preferred for FQDN resolution when the client requests a session.

Connecting to a Session

The OSD enables users to create a PCoIP session between the client and a remote resource by clicking the green **Connect** button in the center of the Connect window.

Connecting to a Session from the Connect Window

- Enter the requested information (for example, server name or IP address for Auto Detect, PCoIP Connection Manager, View Connection Server, and Connection Management Interface connection types), and click **Connect**. If your Tera2 PCoIP Zero Client is configured to cache servers in Last servers used mode, this server name will subsequently appear in the *Server* drop-down list after a successful connection is made.
- 2. If you have already connected to a server, it will appear in the *Server* drop-down list if your Tera2 PCoIP Zero Client is configured to connect to this server or if it is configured to cache servers in Last servers used mode. Select the server from the drop-down list and click **Connect**.
- 3. If your Tera2 PCoIP Zero Client is configured to connect directly to a PCoIP Remote Workstation Card, you only need to click **Connect**.

The Connect window differs slightly depending on the session connection type you configure. The following examples show the Connect window for the Auto Detect and Direct to Host session connection type.

teradici.	PCoIP [®] Zero Client
Enter the server a Detect mode.	ddress for Auto
Server: server.m	ycompany.com
	PCoIP.

OSD Auto Detect window

teradici	
Connect	
	٣ČoIP

OSD Direct to Host connect window

While the network connection is initializing, various status messages are displayed above the button to indicate the progress. If problems are experienced during startup– for example, if the connection cannot be made or a DHCP lease fails–other messages display in this area to indicate the nature of the problem.

Once the connection is established, the local GUI disappears, and the session image appears.

Connecting to a Session Using Smart Cards

Users can connect to a session using smart cards when connected to VMware View virtual desktops or a PCoIP Connection Manager that supports this feature.

This section addresses using smart cards when connected to a PCoIP Connection Manager.

For more information about the supported smart cards and USB smart card readers you can use with a PCoIP Connection Manager, see Supported Smart Cards and USB Smart Card Readers for Tera2 PCoIP Zero Clients (KB 15134-3060). For more information about the requirements to support pre-session smart card authentication with VMware View virtual desktops, see What are the requirements to support pre-session smart card authentication? (KB 15134-299).

Before connecting to a session using a smart card, connect the USB smart card reader into the Tera2 PCoIP Zero Client.

While the network connection is initializing, various status messages are displayed to indicate the progress. If problems are experienced during startup—for example, if the connection cannot be made—other messages display in this area to indicate the nature of the problem. Once the connection is established, the local GUI disappears, and the session image appears.

To connect to a session using a smart card:

1. Insert a supported smart card into a supported USB smart card reader. The Connect window appears. The Connect window may differ slightly depending on

your configuration: for example, the **User name** and **Domain** fields may be readonly.

teradici.	PCoIP® Zero Client
bttps://10.100).0.68
Insert your ID) card or enter username and password
User name:	John Doe
Password:	*****
Domain:	TERADICI
	Login Cancel
	PCoIP

2. If required, type your credentials.

Making a Trusted HTTPS Connection

After connecting to the connection server, a user authentication page displays to enable the user to enter login credentials. The banner on this page indicates the type of connection.

If the correct trusted SSL root certificate for the server has been installed in the Tera2 PCoIP Zero Client and all other certificate requirements are met for the configured certificate checking mode (see *Requirements for Trusted Server Connections* on page 330), the icon at the top of this page shows a closed padlock symbol with a green check mark, and the 'https' in the server's URI also displays in green text.

The following image shows the user authentication screen when the Tera2 PCoIP Zero Client trusts the server's certificate. When connecting to other host types, such as VMware Horizon and Amazon WorkSpaces, you will see a similar authentication screen.

teradici.	P	CoIP® Zero Client
🔞 https://w764-	v5301-au2.fwteralab.lo	cal
Enter your us	ser name and passwor	d.
User name:	teradici\jsmith	
Password:	*****	
	Login	Cancel
		PCoIP

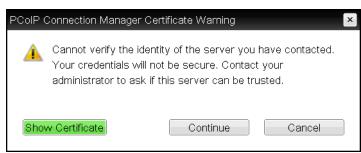
Tera2 PCoIP Zero Client trusted HTTPS connection

Making an Untrusted HTTPS Connection

If the correct trusted SSL root certificate for a connection server has not been installed in the Tera2 PCoIP Zero Client, or if other certificate requirements are not met (see *Requirements for Trusted Server Connections* on page 330), a warning such as the following appears if your Tera2 PCoIP Zero Client is configured to warn before connecting to untrusted servers.



View Connection Server Certificate Warning



PCoIP Connection Manager Certificate Warning

If the user clicks **Continue** at this warning, the connection will still be secured with HTTPS, but an open padlock icon with a red 'x' will display on the login screen, along with red 'https' text with strikethrough formatting, as seen in the top row of the following image. When connecting to other host types, such as VMware Horizon and Amazon WorkSpaces, you will see a similar screen.

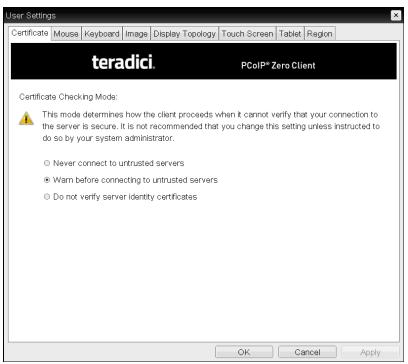
teradici.	PCoIP® Zero Client
🔞 https ://sal-po	m-be-01.autolab.local
Enter your us	ser name and password.
User name:	jsmith
Password:	
Domain:	AUTOLAB.LOCAL
	Login Cancel
	PCoIP

Tera2 PCoIP Zero Client untrusted HTTPS connection

As an administrator, you can use the *Options > User Settings > Certificate* page to prevent users from initiating untrusted server sessions by configuring the Tera2 PCoIP Zero Client to refuse a connection to a server that cannot be verified. Depending on the configured server type, this page has a different banner.

User Settings		
Certificate Mouse Keyboard Image Display Topology Touch Screen Tablet		
vm wa re [•] Horizon		
Certificate Checking Mode:		
This mode determines how the client proceeds when it cannot verify that your connection to the server is secure. It is not recommended that you change this setting unless instructed to do so by your system administrator.		
O Never connect to untrusted servers		
 Warn before connecting to untrusted servers 		
O Do not verify server identity certificates		
OK Cancel Apply		

VMware Horizon Certificate Checking Mode page



Teradici Certificate Checking Mode

Using the AWI, you can enable Certificate Check Mode Lockout from the **Session** - **View Connection Server** or **Session - PCoIP Connection Manager** page to prevent users from changing this setting.

Authenticating the User

After the user sends the login credentials, the server performs authentication. If the user name and password are not entered correctly, or if the Caps Lock key is on, a message displays on this page to indicate these problems.

vm ware: Ho	orizon
👩 https://	
Enter your us	ser name and password.
U	nknown user name or bad password.
User name:	incorrectname
Password:	
Domain:	TERADICI
	Login Cancel
	PCoIP.

Unknown user name or password

All connections support the down-level logon user name format (DOMAIN\user) in the **User name** field. If using a compatible PCoIP Connection Manager (see its release details for more information), UPN (user@domain) is also supported in the **User name** field.

teradici.	PCoIP [®] Zero Client
🔞 https://w764-	v5301-au2.fwteralab.local
Enter your us	ser name and password.
User name:	teradici\jsmith
Password:	*****
	Login Cancel
	PCoIP

Tera2 PCoIP Zero Client with domain field hidden

teradici.		PCoIP [®] Zero Client			
bttps://w764-v5301-au2.fwteralab.local					
Enter your user name and password.					
	(
User name	jsmith@teradici				
Password:	*****				
	Login	Cancel			
		PCoIP			

Tera2 PCoIP Zero Client with domain field hidden

Connecting to a Desktop

If the user is not *configured to connect automatically* to a desktop, a list of one or more desktops to which the user is entitled displays. The user may select the desired one and click **Connect**.

vmware Horizo	n
Corporate Pool	Reconnect to desktop
Connect	Reset VM Cancel

Selecting an entitlement

If the desktop is available, a message displays on the Connect screen to inform the user that the server is preparing the desktop. After a few seconds, the PCoIP session is established and the user connected.

If the desktop is not available (for example, if the desktop is in the process of rebooting), a second message also flashes on the Connect screen to inform the user that the assigned desktop source for this desktop is not currently available. The firmware continuously attempts to connect until the desktop is ready or the user clicks *Cancel* to cancel the operation.

If a PCoIP Connection Manager provides the estimated remaining time to connect to a user's desktop, the zero client will display the remaining time to the user.

teradici	PCoIP [®] Zero Client
Connecting to desktop. Estin minute(Ŭ
Canc	
5.3.0-rc4	PCoIP

Notification with estimated length of time before connecting



Related: Uploading certificates to a single device

For information on how to upload certificates to a single device using the AWI, see .



Related: OSD messages on startup or after a session has been established

For information on other OSD messages that may appear on top of a user's session during startup or after a session has been established, see *About Overlay Windows* on page 15.

Connecting to PCoIP Remote Workstation Cards

You can move high-performance Windows or Linux workstations with PCoIP Remote Workstation Cards into your data center, and configure sessions between Tera2 PCoIP Zero Clients and these workstation hosts over a LAN or WAN. This type of configuration provides a secure, reliable, and easy-to-manage solution that meets the needs of users who have dedicated computers with graphically demanding applications.

This topic includes information on the following sections:

- Prerequisites
- Configuration Options

Connection Instructions



Note: Remote Workstation Cards use firmware version 4.9

At the time of this documentation release, the current firmware version available for Remote Workstation Cards was version 4.9. Tera2 PCoIP Zero Clients running firmware 5.4 were tested with Remote Workstation Cards running version 4.9. However, Management Console 2.0 is required to manage Tera2 PCoIP Zero Clients running firmware 5.0.0 and later, and Management Console 1.x is required to manage Remote Workstation Cards running firmware version 4.9. You should take this into consideration when making the decision to upgrade Tera2 PCoIP Zero Clients to FW 5.0.0 and later.

Prerequisites

Before connecting a Tera2 PCoIP Zero Client to a PCoIP Remote Workstation Card, ensure that the following conditions are met:

- The PCoIP Remote Workstation Card and Tera2 PCoIP Zero Client have compatible firmware versions. For information on how to upload firmware, see *Uploading Firmware* on page 182.
- You are running a supported OS on the workstation and the Teradici PCoIP host software is installed. For details, see *PCoIP® Host Software for Windows User Guide* or *PCoIP® Host Software for Linux User Guide*. If you are using a VMware Connection Server as a broker, View Agent must also be installed on the host PC or workstation.
- The Host Driver Function is enabled on the PCoIP Remote Workstation Card.
- Your network resources meet bandwidth, QoS, latency, jitter, and packet loss requirements. For more information about designing PCoIP network architecture, see *PCoIP Session Planning Administrators' Guide*.

Configuration Options

The following session connection types are available for Tera2 PCoIP Zero Client-to-PCoIP Remote Workstation Card connections:

- Connecting statically
- Connecting using SLP host discovery
- Connecting using a third-party connection broker
- Connecting using the View Connection Server

Connecting Statically

To statically configure a Tera2 PCoIP Zero Client to connect directly to a specific PCoIP Remote Workstation Card, use the *Direct to Host* session connection type. You

will need to provide the DNS name or IP address of the PCoIP Remote Workstation Card for this option.

You also need to configure a *Direct from Client* session connection type on the PCoIP Remote Workstation Card. You have the option of enabling the host to accept a connection request from any client or from a specific client only. If the latter, you need to provide the client's MAC address.

For details about how to configure the session connection type, see the following topics in the GUI Reference:

- AWI: Direct to Host Session Settings on page 91
- OSD: Direct to Host Session Settings on page 41

Connecting Using SLP Host Discovery

If PCoIP Remote Workstation Cards reside on the same subnet as Tera2 PCoIP Zero Clients, you can use the *Direct to Host + SLP* session connection type to configure clients to use Service Location Protocol (SLP) to discover the PCoIP Remote Workstation Cards on the subnet. With this configuration, the client OSD will list the first 10 cards discovered. The end user can select the desired one and connect to it.



Note: Do not select SLP host discovery with more than 10 hosts SLP host discovery is not suitable for deployments with more than 10 hosts if a Tera2 PCoIP Zero Client requires an ongoing connection. In this situation, a connection broker is required.

You also need to configure a **Direct from Client** session connection type on the PCoIP Remote Workstation Card. You have the option of enabling the host to accept a connection request from any Tera2 PCoIP Zero Client or from a specific one only. If the latter, you need to provide the client's MAC address.

For details about how to configure the session connection type, see the following topics in the GUI Reference:

- AWI: Direct to Host + SLP Host Discovery Session Settings on page 97
- OSD: Direct to Host + SLP Host Discovery Session Settings on page 46

Connecting Using a Third-Party Connection Broker

A third-party connection broker is a resource manager that dynamically assigns host PCs containing PCoIP Remote Workstation Cards to Tera2 PCoIP Zero Clients based on the identity of the user establishing a connection from the Tera2 PCoIP Zero Client. Connection brokers are also used to allocate a pool of hosts to a group of Tera2 PCoIP Zero Clients. They are typically used in large PCoIP deployments, or when hosts and clients do not reside on the same subnet.

Third-party brokers use the **PCoIP Connection Manager** session connection type.

For more information, see Can I use a connection broker with PCoIP technology? (KB 15134-24)

For details about how to configure the session connection type, see the following topics in the GUI Reference:

- AWI: PCoIP Connection Manager Session Settings on page 101
- OSD: PCoIP Connection Manager Session Settings on page 50

Connecting Using the View Connection Server

You can also use a View Connection Server to broker a connection between Tera2 PCoIP Zero Clients and PCoIP Remote Workstation Cards.

For details about how to configure the session connection type, see the following topics in the GUI Reference:

- AWI: View Connection Server Session Settings on page 116
- OSD: View Connection Server Session Settings on page 61

For this option, VMware View Agent must be installed on the remote workstation, and a number of other configuration requirements for both the client and host must be in place. For complete details, refer to *Using PCoIP® Host Cards with VMware View*.

Connection Instructions

These instructions explain how to configure a Tera2 PCoIP Zero Client to connect to a PCoIP Remote Workstation Card. If you are using a broker to connect, see the documentation from your equipment supplier for instructions on how to configure the broker.

Before connecting, you will need to know the IP address or Fully Qualified Domain Name (FQDN) of your PCoIP Remote Workstation Card.

Connecting Directly Using SLP Host Discovery

After successfully completing the installation steps outlined in *PCoIP® Tera2 Zero Client Quick Start Guide*, the client will be powered on and ready to use. The next step is to initiate a PCoIP session with a PCoIP Remote Workstation Card. The easiest way to get started is to use SLP host discovery.





Note: Tera2 PCoIP Zero Client and host PC must reside on the same subnet

SLP host discovery requires the Tera2 PCoIP Zero Client and host PC to reside on the same subnet. You also need to know the IP address and/or MAC address of the PCoIP Remote Workstation Card so you can select it from the list of available hosts. In addition, the PCoIP Remote Workstation Card must be configured to accept any peer or to accept the specific MAC address of the Tera2 PCoIP Zero Client. You can configure this from the host AWI **Configuration > Session > Direct from Client** page.

To connect directly using SLP host discovery:

- From the Options > Configuration > Session menu on the Tera2 PCoIP Zero Client's OSD, select the *Direct to Host + SLP Host Discovery* connection type, and click OK.
- 2. Click the **Connect** button.
- 3. When the **Discovered Hosts** screen appears with a list of available hosts, select your PCoIP Remote Workstation Card by its IP/MAC address pair, and click **OK**.
- 4. When prompted, enter your remote workstation's login credentials.



Related Information: Advanced settings

For details about advanced settings, see *Direct to Host + SLP Host Discovery*.

Connecting Directly Without Using SLP Host Discovery

To connect directly without using SLP host discovery:

- 1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select the *Direct to Host* connection type.
- 2. Enter the DNS name or IP address of the PCoIP Remote Workstation Card, and click **OK**.
- 3. Click the **Connect** button.
- 4. When prompted, enter your remote workstation's login credentials.



Related Information: Advanced settings

For details about advanced settings, see Direct to Host.

Connecting Using a Broker:

To connect using a broker:

- 1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select one of the following connection types:
 - View Connection Server if you are using a VMware broker
 - *PCoIP Connection Manager* if you are using a third-party broker.
- 2. Enter the DNS name or IP address of the broker, and click OK.
- 3. Click the Connect button.
- 4. When prompted, enter your remote workstation's login credentials.



Related Information: Advanced settings

For details about advanced settings, see *View Connection Server* or *PCoIP Connection Manager*.

Connecting to Teradici Cloud Access Software

Teradici Cloud Access Software, also known as Cloud Access Software, is a Teradici application that enables users to remotely access a physical or virtualized remote workstation using the PCoIP protocol without having to install a PCoIP Remote Workstation Card.

The Cloud Access Software supports two deployment scenarios:

- Deskside deployment: Connecting directly to a physical workstation.
- Data center deployment: Connecting to a physical or virtualized workstation either directly or via a compatible third-party broker.

This topic includes information on the following sections:

- Prerequisites
- Configuration Options
- Connection Instructions

Prerequisites

Before connecting a Tera2 PCoIP Zero Client to a workstation running the Teradici Cloud Access Software, ensure that the following prerequisites are in place:

 You are using a Tera2 PCoIP Zero Client (TERA2321 or TERA2140 processor) to connect.

• The remote workstation has the Cloud Access Software installed. For details on how to install the Cloud Access Software in a workstation, see the *Cloud Access Software 2.9 Architecture Guide*.

For details about workstation requirements, see the *Cloud Access Software 2.9 Architecture Guide*.

Configuration Options

For both deskside and data center deployments, the following session connection types are available for PCoIP Zero Client-to-Cloud Access Software connections:

- AWI: Auto Connect
- OSD: Auto Connect
- AWI: PCoIP Connection Manager
- OSD: PCoIP Connection Manager
- AWI: PCoIP Connection Manager + Auto-Logon
- OSD: PCoIP Connection Manager + Auto-Logon

Connection Instructions

Before connecting, you will need to know the IP address or Fully Qualified Domain Name (FQDN) of your physical or virtualized workstation if you are connecting directly (deskside deployment). If you are connecting using a third-party broker (data center deployment), you will need to know the IP address or FQDN of the PCoIP Connection Manager. See the documentation from your equipment supplier for instructions on how to configure your broker.



Note: Type 'https://' before the IP address or fully qualified computer name

The syntax of the *Server URI* (uniform resource identifier) field on the Session page requires **https://** before the IP address or FQDN. If you do not enter it, **https://** will automatically be inserted when you click **OK**.

Connecting Using Auto Detect

This connection type automatically detects which broker protocol a connection server is using so users in a mixed environment (for example, one that uses View Connection Servers and PCoIP Connection Managers) do not have to manually reconfigure the session type each time they switch brokers.

To connect using Auto Detect connection type:

- 1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select the *Auto Detect* connection type.
- 2. In the **Server URI** field, enter the FQDN or IP address of one of the following and click **OK**:
 - Your workstation, if you are connecting directly
 - PCoIP Connection Manager, if you are connecting through a third-party broker
- 3. Click the **Connect** button.
- 4. When prompted, enter your login credentials.

After you make a successful connection using Auto Detect, the IP address or FQDN of your host is automatically saved in the **Server** drop-down list on the OSD Connect dialog, along with the IP address or FQDN of any other hosts to which you have connected.

Connecting Using PCoIP Connection Manager

To connect using the PCoIP Connection Manager connection type:

- 1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select the *PCoIP Connection Manager* connection type.
- 2. In the **Server URI** field, enter the FQDN or IP address of one of the following and click **OK**:
 - your workstation, if you are connecting directly
 - the PCoIP Connection Manager, if you are connecting through a third-party broker
- 3. Click the **Connect** button.
- 4. When prompted, enter your login credentials.



Related Information: Advanced settings

For details about advanced settings, see OSD: PCoIP Connection Manager Session Settings on page 50.

Connecting Using PCoIP Connection Manager + Auto-Logon To connect using the PCoIP Connection Manager and Auto-Logon connection type:

1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select the *PCoIP Connection Manager + Auto-Logon* connection type.

- 2. In the **Server URI** field, enter the FQDN or IP address of one of the following, and click **OK**:
 - · your workstation, if you are connecting directly
 - the PCoIP Connection Manager, if you are connecting through a third-party broker
- 3. Enter the user name, password, and domain name for the user to be automatically logged in.
- 4. Click the **Connect** button.



Related Information: Advanced settings

For details about advanced settings, see OSD: PCoIP Connection Manager + Auto-Logon Session Settings on page 55.

Connecting to Amazon WorkSpaces Desktops

Amazon WorkSpaces is a fully managed cloud-based desktop service that enables end users to access their documents, applications, and resources. Tera2 PCoIP Zero Clients together with Amazon WorkSpaces provide a secure, easy to manage solution for delivering users with a rich desktop experience.

This topic includes information on the following sections:

- Prerequisites
- Configuration Options
- Connection Instructions

Prerequisites

For the best user experience, Teradici recommends using firmware version 6.0 or later with Amazon WorkSpaces (hourly pricing).

Before connecting a Tera2 PCoIP Zero Client to an Amazon WorkSpaces desktop, ensure that the following prerequisites are in place:

- You are using a Tera2 PCoIP Zero Client (TERA2321 or TERA2140 processor) to connect.
- You have an AWS account with Amazon WorkSpaces up and running. For information, see AWS documentation.
- Your network has full connectivity to your Amazon WorkSpaces. For information, see AWS documentation.
- You have a PCoIP® Connection Manager for Amazon WorkSpaces appliance installed and configured. See *PCoIP Connection Manager for Amazon WorkSpaces Administrators' Guide*.

Configuration Options

The following session connection types are available for Tera2 PCoIP Zero Client-to-Amazon WorkSpaces connections:

- AWI: Amazon WorkSpaces on page 83
- OSD: Amazon WorkSpaces Session Settings on page 38
- AWI: Auto Detect Session Settings on page 90
- OSD: Auto Detect Session Settings on page 39
- AWI: PCoIP Connection Manager Session Settings on page 101
- OSD: PCoIP Connection Manager Session Settings on page 50
- AWI: PCoIP Connection Manager + Auto-Logon Session Settings on page 109
- OSD: PCoIP Connection Manager + Auto-Logon Session Settings on page 55

Connection Instructions

Connecting to Amazon WorkSpaces Directly

To connect using Amazon WorkSpaces session connection type:

- From the Options > Configuration > Session menu on the Tera2 PCoIP Zero Client's OSD, select the OSD: Amazon WorkSpaces Session Settings on page 38connection type.
- 2. Enter the registration code from the invitation email sent after creating your Amazon WorkSpace.
- 3. Enter a name for this registered Amazon WorkSpace instance.
- 4. Click the **Connect** button.

Connecting to Amazon WorkSpaces using the PCoIP Connection Manager for Amazon WorkSpaces

You will need to know the IP address of your PCoIP Connection Manager for Amazon WorkSpaces appliance when using this connection type.



Note: Type 'https://' before the IP address or fully qualified computer name

The syntax of the *Server URI* (uniform resource identifier) field on the Session page requires **https://** before the IP address or FQDN. If you do not enter it, **https://** will automatically be inserted when you click **OK**.

Connecting Using Auto Detect

This connection type automatically detects which broker protocol a connection server is using so users in a mixed environment (for example, one that uses View Connection Servers and PCoIP Connection Managers) do not have to manually reconfigure the session type each time they switch brokers.

To connect using the Auto Detect connection type:

- 1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select the *Auto Detect* connection type.
- 2. In the **Server URI** field, enter the IP address of your PCoIP Connection Manager for Amazon WorkSpaces, and click **OK**.
- 3. Click the **Connect** button.
- 4. When prompted, enter your login credentials.



Note: After connecting using Auto Detect, the system saves your host's IP address or fully qualified computer name

After you make a successful connection using Auto Detect, the IP address or FQDN of your host is automatically saved in the **Server** drop-down list on the OSD Connect dialog, along with the IP address or FQDN of any other hosts to which you have connected.

Connecting Using PCoIP Connection Manager

To connect using the PCoIP Connection Manager connection type:

- 1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select the *PCoIP Connection Manager* connection type.
- 2. In the **Server URI** field, enter the IP address of your PCoIP Connection Manager for Amazon WorkSpaces, and click **OK**.
- 3. Click the Connect button.
- 4. When prompted, enter your login credentials.



Related Information: Advanced settings

For details about advanced settings, see OSD: PCoIP Connection Manager Session Settings on page 50.

Connecting Using PCoIP Connection Manager + Auto-Logon

To connect using the PCoIP Connection Manager and Auto-Logon connection type:

1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select the *PCoIP Connection Manager + Auto-Logon* connection



type.

- 2. In the **Server URI** field, enter the IP address of your PCoIP Connection Manager for Amazon WorkSpaces, and click **OK**.
- 3. Enter the user name, password, and domain name for the user to be automatically logged in.
- 4. Click the **Connect** button.



Related Information: Advanced settings

For details about advanced settings, see OSD: PCoIP Connection Manager + Auto-Logon Session Settings on page 55.

Connecting to VMware Horizon Desktops and Applications

VMware Horizon View provides remote desktop capabilities to users using the PCoIP protocol and VMware's virtualization technology. You can configure Tera2 PCoIP Zero Clients to connect to desktops in a VMware Horizon VDI or DaaS environment, or when connecting to VMware Horizon app-remoting desktops and applications published on an RDS server.

This topic includes information on the following sections:

- Prerequisites
- Configuration Options
- Connection Instructions

Prerequisites

Before connecting a Tera2 PCoIP Zero Client to a VMware Horizon desktop, ensure that the following prerequisites are in place:

- The VMware Horizon View installation, which includes the VMware View Manager and VMware View Agent, are version 4.0.1 or newer.
- For VMware Horizon connections to RDS-hosted published desktops and applications, you are using a Tera2 PCoIP Zero Client (TERA2321 or TERA2140 processor).
- Your network resources meet bandwidth, QoS, latency, jitter, and packet loss requirements. For more information about designing PCoIP network architecture, see the *PCoIP Protocol Network Design Checklist*.

Supported Connection Types

The following session connection types are available for Tera2 PCoIP Zero Client-to-VMware Horizon connections:

- AWI: View Connection Server
- OSD: View Connection Server
- AWI: View Connection Server + Auto-Logon
- OSD: View Connection Server + Auto-Logon
- AWI: View Connection Server + Kiosk
- OSD: View Connection Server + Kiosk
- AWI: View Connection Server + Imprivata OneSign
- OSD: View Connection Server + Imprivata OneSign

Connection Instructions

Before connecting, you will need to know the DNS name or IP address of your View Connection Server. For VMware Horizon DaaS, this is the DNS name or IP address of the VMware Horizon DaaS Desktop Portal.

Connecting with Auto Detect

This connection type automatically detects which broker protocol a connection server is using so users in a mixed environment (for example, one that uses View Connection Servers and PCoIP Connection Managers) do not have to manually reconfigure the session type each time they switch brokers.

To connect using the Auto Detect connection type:

- 1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select the *Auto Detect* connection type.
- 2. In the **Server URI** field, enter the DNS name or IP address of your View Connection Server (or VMware Horizon DaaS Desktop Portal), and click **OK**.
- 3. Click the **Connect** button.
- 4. When prompted, enter your login credentials.



Note: After connecting using Auto Detect, the system saves your host's IP address or fully qualified computer name

After you make a successful connection using Auto Detect, the IP address or FQDN of your host is automatically saved in the **Server** drop-down list on the OSD Connect dialog, along with the IP address or FQDN of any other hosts to which you have connected.

Connecting with View Connection Server

To connect using the View Connection Server connection type:

- 1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select the *View Connection Server* connection type.
- 2. In the **DNS Name or IP Address** field, enter the DNS name or IP address of your View Connection Server (or VMware Horizon DaaS Desktop Portal).
- 3. If you are making a VMware Horizon RDS-hosted application connection:
 - a. Click Advanced.
 - b. Click to enable the Enable RDS Application Access option.
 - c. Click Apply and then OK.
- 4. Click the **Connect** button.
- 5. When prompted, enter your login credentials.



Related Information: Advanced settings

For details about advanced settings, see OSD: View Connection Server Session Settings on page 61.

Connecting with View Connection Server + Auto-Logon

To connect using the View Connection Server and Auto-Logon connection type:

- 1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select the *View Connection Server + Auto-Logon* connection type.
- 2. In the **DNS Name or IP Address** field, enter the DNS name or IP address of your View Connection Server (or VMware Horizon DaaS Desktop Portal).
- 3. Enter the user name, password, and domain name for the user to be automatically logged in.
- 4. If you are making a VMware Horizon RDS-hosted application connection:
 - a. Click Advanced.
 - b. Click to enable the Enable RDS Application Access option.
 - c. Click Apply and then OK.
- 5. Click the **Connect** button.



Related Information: Advanced settings

For details about advanced settings, see OSD: View Connection Server + Auto-Logon Session Settings on page 67.

Connecting with View Connection Server + Kiosk

View Connection Server + Kiosk mode enables you to configure Tera2 PCoIP Zero Clients to connect to a desktop that will be used for a kiosk implementation, such as when multiple users connect to a desktop to obtain information that is not specific to any one individual. At minimum, you will need to provide the DNS name or IP address of the View Connection Server and the kiosk user name–either a custom user name for the kiosk or its MAC address.

To connect using the View Connection Server and Kiosk connection type:

- 1. From the **Options > Configuration > Session** menu on the Tera2 PCoIP Zero Client's OSD, select the *View Connection Server + Kiosk* connection type.
- 2. In the **DNS Name or IP Address** field, enter the DNS name or IP address of your View Connection Server (or VMware Horizon DaaS Desktop Portal).
- 3. Select whether to populate the **Username** field with the MAC address of the Tera2 PCoIP Zero Client (Zero Client MAC option) or use a customer name (Custom option).
- 4. If you have selected Custom, enter the custom name of the client.
- 5. Enter the password for the kiosk virtual machine.
- 6. If you are making a VMware Horizon RDS-hosted application connection:
 - a. Click Advanced.
 - b. Click to enable the Enable RDS Application Access option.
 - c. Click Apply and then OK.
- 7. Click the **Connect** button.



Related Information: Advanced settings

For details about advanced settings, see OSD: View Connection Server + Kiosk Session Settings on page 73.

Connecting with View Connection Server + Imprivata OneSign

Imprivata OneSign enables users to access corporate networks, desktops, and applications with a single sign on. It also provides a range of authentication options that include proximity cards, smart cards, tokens, and other methods.



Note: Type 'https://' before the fully qualified computer name The syntax of the Bootstrap URL (uniform resource locator) field on the Session page requires https:// before the FQDN. If you do not enter it, https:// will automatically be inserted when you click OK. To connect using the View Connection Server and Imprivata OneSign connection type:

- From the Options > Configuration > Session menu on the Tera2 PCoIP Zero Client's OSD, select the View Connection Server + Imprivata OneSign connection type.
- 2. In the Bootstrap URL field, enter the DNS of your OneSign authentication server.
- 3. If you are making a VMware Horizon RDS-hosted application connection:
 - a. Click Advanced.
 - b. Click to enable the Enable RDS Application Access option.
 - c. Click Apply and then OK.
- 4. Click the **Connect** button.



Related Information: Advanced settings

For details about advanced settings, see OSD: View Connection Server + Imprivata OneSign Session Settings on page 78.

Disconnecting from a Session

You can disconnect from a virtual desktop session and return to the OSD by pressing the device's **Connect** or **Disconnect** button. However, if a user is in a session with a PCoIP Remote Workstation Card, pressing this button will display the Zero Client Control Panel overlay, which provides options to disconnect from the session, to power off the remote workstation, or to cancel the operation.



Zero Client Control Panel

You can select an option from this overlay in a number of ways:

- Continue to tap the Connect or Disconnect button to toggle between options until the desired one is highlighted, then wait for the four-second countdown to complete.
- Use the up/down arrow keys on the keyboard to highlight the desired option, and press the Enter key.
- Type the number of the desired option to select it immediately.

During a session, you can also use a Ctrl+Alt+F12 hotkey sequence to display this overlay, providing the following options are configured in advance:

- *Enable Session Disconnect Hotkey* must be enabled in the advanced options on the **Session View Connection Server** page.
- The Enable Local Cursor and Keyboard feature must be enabled on the PCoIP host software on the host computer.
- On the client, the keyboard must be recognized as locally connected (that is, not bridged).



Note: Selecting the disconnect option

To use the up/down arrow keys, or to type in a number to select a disconnect option on this overlay, ensure that **Enable Local Cursor and Keyboard** feature is enabled and the keyboard is locally connected.

For users to use the second overlay option (that is, to power off the workstation), the power permissions on the client must be configured to enable a 'hard' power off. You can set this parameter from the AWI *Power Permissions* page.

Managing Your Tera2 PCoIP Zero Client

This section shows you how to manage your Tera2 PCoIP Zero Client. You'll learn how to perform common tasks, view information about your Tera2 PCoIP Zero Client, configure your Tera2 PCoIP Zero Client, and perform diagnostics, such as viewing and configuring logging information, testing audio, and viewing session statistics. The topics include:

- Performing Common Tasks on page 174
- Viewing Information About your Tera2 PCoIP Zero Client on page 201
- Configuring Your Tera2 PCoIP Zero Client on page 206
- Performing Diagnostics on page 294

Performing Common Tasks

This section describes common tasks you may perform on a regular basis, such as connecting to an endpoint manager, and uploading firmware and certificates. Other tasks you may perform on a less regular basis include setting up touch screen displays, configuring the OSD to display a custom logo, and resetting the Tera2 PCoIP Zero Client to its factory default values.



Info: Additional tasks you need to perform

For tasks you need to perform to set up your Tera2 PCoIP Zero Client, see *Setting Up Your Tera2 PCoIP Zero Client* on page 30.

Connecting to an Endpoint Manager

Tera2 PCoIP Zero Clients are managed in groups by an endpoint manager, such as the PCoIP Management Console.

Before the endpoint manager can administer a client, the client must see the endpoint manager and establish a connection to it. This connection process is called *discovery*. Discovery can be automatic or manual, and can be initiated from either side; endpoint managers can discover clients, and clients can discover endpoint managers.

Available discovery methods are determined by your chosen security settings, discovery modes, and installed certificates, as described in the following sections:

- About Tera2 PCoIP Zero Client Security Levels on page 175
- About Certificates on page 177
- Endpoint Manager Discovery Methods on page 178
- Staging Clients Using an Endpoint Manager on page 181

About Tera2 PCoIP Zero Client Security Levels

There are three available security level settings in the Tera2 PCoIP Zero Client: *low*, *medium*, and *high*. These settings determine whether theTera2 PCoIP Zero Client can be discovered by an endpoint manager, how an endpoint manager can be discovered by the Tera2 PCoIP Zero Client, and also dictate whether a certificate must be installed in the Tera2 PCoIP Zero Client for discovery to succeed.

The security level is configured on the *Management* page of the OSD or AWI (see *Configuring Security Level* on page 242). Detailed instructions for allowing discovery under most scenarios, including security level settings, are described in *Endpoint Manager Discovery Methods* on page 178.

The general implications of each security mode are summarized in the following table and described in detail next.



Note: Discovery Mode definition

The *Discovery Mode* setting on the *Management* page, described here, configures how endpoint managers are discovered by the Tera2 PCoIP Zero Client.

Discovery in this context does not refer to discovery of the Tera2 PCoIP Zero Client by endpoint managers. For instructions on having an endpoint manager discover your Tera2 PCoIP Zero Client, see *Endpoint Manager Discovery Methods* on page 178.

Tera2 PCoIP Zero Client behavior in low, medium, or high security modes and using automatic or manual discovery modes

	Low		Medium		High
	Automatic	Manual	Automatic	Manual	Manual
Can be discovered by endpoint managers	~	×	×	×	×
Can automatically discover endpoint managers using DNS	✓	×	~	×	×
Can trust endpoint managers using DNS	✓	×	×	×	×
Can manually connect to endpoint managers	×	~	×	~	•
Can trust endpoint managers using an installed certificate	~	~	~	~	~



Low Security Mode

In *low* security mode, both automatic and manual discovery methods are available. Certificates are not required in automatic manager discovery mode if the DNS server is configured to provision the Tera2 PCoIP Zero Client with the URI of the endpoint manager's bootstrap server and its certificate fingerprint.

In automatic discovery mode:

- The client can use DNS to automatically discover endpoint managers.
- The client is discoverable by endpoint managers.
- The client can use DNS to trust the endpoint manager. DNS must be configured to provision your client with the URI and certificate fingerprint of the endpoint manager's bootstrap server.



Resource: DNS server configuration information For details about how to configure your DNS server for automatic discovery, see the *PCoIP® Management Console 2.5 Administrators' Guide*.

In *manual* discovery mode:

- The client must be manually configured with the endpoint manager's bootstrap server URI.
- The client is not discoverable by endpoint managers.
- The client must have an installed certificate to trust the endpoint manager.



Note: Certificates are installed by an endpoint manager If a certificate for the endpoint manager has not previously been installed by an endpoint manager in the client's certificate store, one must be installed by the endpoint manager. See *Staging Clients Using an Endpoint Manager* on page 181.

Medium Security Mode

In *medium* security mode, the Tera2 PCoIP Zero Client cannot be discovered by endpoint managers. The Tera2 PCoIP Zero Client can discover endpoint managers automatically or manually. Certificates are required in medium security mode.

In automatic discovery mode:

- The client can use DNS to automatically discover endpoint managers.
- The client is *not* discoverable by endpoint managers.
- The client must have an installed certificate to trust the endpoint manager.





Note: Certificates are installed by an endpoint manager If a certificate for the endpoint manager has not previously been installed by an endpoint manager in the client's certificate store, one must be installed. See *Staging Clients Using an Endpoint Manager* on page 181.

In manual discovery mode:

- The client is not discoverable by endpoint managers.
- The client must be manually configured with the endpoint manager's bootstrap server URI.
- The client must have an installed certificate to trust the endpoint manager.



Note: Certificates are installed by an endpoint manager If a certificate for the endpoint manager has not previously been installed by an endpoint manager in the client's certificate store, one must be installed. See *Staging Clients Using an Endpoint Manager* on page 181.

High Security Mode

In *high* security mode, the discovery bootstrap phase is disabled. All settings must be manually configured, and certificates are required:

- The client is not discoverable by endpoint managers.
- The client must be manually configured with the endpoint managers' internal (and, optionally, external) URI.
- The client must have an installed certificate to trust the endpoint manager.



Note: Certificates are installed by an endpoint manager

If a certificate for the endpoint manager has not previously been installed by an endpoint manager in the client's certificate store, one must be installed. See *Staging Clients Using an Endpoint Manager* on page 181.

About Certificates

Certificates can be used to trust endpoint managers at all security levels, but are required when using *medium* or *high* security.

If a PCoIP Management Console certificate is required, you can use an *issuer certificate*—either the root CA certificate, or the intermediate certificate used to issue the PCoIP Management Console's public key certificate—or the PCoIP Management Console's *public key certificate*.





Related Information: PCoIP Management Console certificates For complete information about PCoIP Management Console components, including the Endpoint Bootstrap Manager and PCoIP Management Console certificates, see the *PCoIP® Management Console 2.5 Administrators' Guide*.

Endpoint Manager Discovery Methods

From the AWI *Management* page, you can set the Tera2 PCoIP Zero Client's security level and discovery method. From the OSD *Management* page, you can view these settings. To view and set these settings, see *Configuring Security Level* on page 242 and *Configuring Discovery* on page 215

There are several ways to register your Tera2 PCoIP Zero Client with an endpoint manager. These methods are outlined next.

The methods include:

- Automatic Endpoint Manager Discovery Using DNS on page 178
- Discovering the Client Manually from the Endpoint Manager on page 179
- Discovering the Endpoint Manager Manually from the Client Using Low or Medium Security Mode on page 180
- Discovering the Endpoint Manager Manually from the Client Using High Security Mode on page 181

The availability of these methods is determined by the Tera2 PCoIP Zero Client's security settings, and whether or not it has a certificate installed to trust the endpoint manager.



Note: Information about security levels

For complete information about the various security levels and discovery settings, see *About Tera2 PCoIP Zero Client Security Levels* on page 175.

Automatic Endpoint Manager Discovery Using DNS

Tera2 PCoIP Zero Clients can use DNS to automatically find an endpoint manager. To use automatic endpoint manager discovery, you must configure the environment for DNS service record discovery, and the Tera2 PCoIP Zero Client's security level must be set to *low* or *medium*.





Caution: Medium or high security requires an installed certificate In order to use medium or high security, the Tera2 PCoIP Zero Client must have been provisioned with a certificate using an endpoint manager.

For more information, see *Staging Clients Using an Endpoint Manager* on page 181.



Resource: DNS server configuration information

For details about how to configure your DNS server for automatic discovery, see the *PCoIP® Management Console 2.5 Administrators' Guide*.

To configure the Tera2 PCoIP Zero Client for automatic endpoint discovery:

- 1. From the AWI, select **Configuration > Management**. The AWI *Management* page displays.
- 2. Set the Security Level option to Low or Medium.
- 3. Set the *Manager Discovery Mode* option to Automatic.
- 4. Click Apply.

After the Tera2 PCoIP Zero Client discovers the endpoint manager, the automatic discovery results appear on the *Management* page.



Related: Configuring your system for automatic discovery For information about how to configure your system for automatic discovery from the PCoIP Management Console, see the *PCoIP® Management Console* 2.5 Administrators' Guide.

Discovering the Client Manually from the Endpoint Manager

Endpoint managers can be configured to discover endpoints like the Tera2 PCoIP Zero Client. This discovery method requires configuration on both the Tera2 PCoIP Zero Client and the endpoint manager.

To configure the Tera2 PCoIP Zero Client to be discoverable by an endpoint manager:

- 1. From the AWI, select **Configuration > Management**. The AWI *Management* page displays.
- 2. Set the *Security Level* option to Low.
- 3. Set the Manager Discovery Mode to Automatic.
- 4. Click Apply.

After the Tera2 PCoIP Zero Client is discovered, the endpoint manager topology appears on the *Management* page.



Related: Initiating discovery from the PCoIP Management Console For more information about initiating discovery from the PCoIP Management Console, see the *PCoIP® Management Console 2.5 Administrators' Guide*.

Discovering the Endpoint Manager Manually from the Client Using Low or Medium Security Mode

In *low* or *medium* security modes, you can manually discover the endpoint manager by manually providing the URI for its bootstrap server.



Caution: Manual discovery requires a certificate

When manual discovery mode is used, DNS cannot be used to trust the endpoint manager. The Tera2 PCoIP Zero Client must have been previously provisioned with a certificate using an endpoint manager.

For more information, see *Staging Clients Using an Endpoint Manager* on page 181.

To configure a PCoIP Zero Client with an endpoint manager in *low* or *medium* security mode:

- 1. From the AWI, select **Configuration > Management**. The AWI *Management* page displays.
- 2. Set the Security Level option to Low or Medium.
- 3. Set the Manager Discovery Mode to Manual.
- 4. In the Manual Discovery section, type the bootstrap server's URI.



Note: Bootstrap server URI must use a secured WebSocket prefix

URIs are in this format and require a secured WebSocket prefix:

wss://<internal EM IP address/FQDN>[:port number]

The PCoIP Management Console's listening port is 5172. If you omit the port number, port 5172 will be used by default.

5. Click Apply.

After the Tera2 PCoIP Zero Client discovers the endpoint manager, the endpoint manager topology appears on the *Management* page.

Discovering the Endpoint Manager Manually from the Client Using High Security Mode

In *high* security mode, automatic discovery is disabled entirely; you must register the Tera2 PCoIP Zero Client manually with the endpoint manager from the client.



Caution: Manual discovery requires a certificate

When manual discovery mode is used, DNS cannot be used to trust the endpoint manager. TheTera2 PCoIP Zero Client must have been previously provisioned with a certificate using an endpoint manager.

For more information, see *Staging Clients Using an Endpoint Manager* on page 181.

To configure a PCoIP Zero Client with an endpoint manager using *high* security mode:

- 1. From the AWI, select **Configuration > Management**. The AWI *Management* page displays.
- 2. Set the *Security Level* option to High.
- 3. In the *Endpoint Manager URI for Direct Connect* section, find the *Internal URI* field and type the endpoint manager's URI. You can also provide an external URI, if needed.



Note: Endpoint manager URI must use a secured WebSocket prefix

URIs are in this format and require a secured WebSocket prefix:

wss://<internal EM IP address/FQDN>[:port number]

The PCoIP Management Console's listening port is 5172. If you omit the port number, port 5172 will be used by default.

4. Click Apply.

After the Tera2 PCoIP Zero Client discovers the endpoint manager, the endpoint manager topology appears on the *Management* page.

Staging Clients Using an Endpoint Manager

An installed certificate is required to connect to an endpoint manager in *medium* or *high* security levels; however, out of the box, the Tera2 PCoIP Zero Client's local certificate store is empty and it can only connect using the *low* security level.

To deploy a system using *medium* or *high* security settings, you must stage the device by connecting to an endpoint manager in *low* security mode and installing any required certificates.

Once the certificate has been installed, you can connect using any security level.

Uploading Firmware

You can upload new firmware to your Tera2 PCoIP Zero Client from the AWI *Firmware Upload* page (shown next).

Firmware Upload			
Upload a new firmware build			
Firmware build filename:		Browse	
1	Upload		

AWI Firmware Upload page

The following parameters display on the AWI Firmware Upload page:

Firmware Upload Parameters

Parameter	Description
Firmware build filename	The filename of the firmware image to be uploaded. You can browse to the file using the Browse button. The file must be on a local or accessible network drive. The firmware image must be an .all file.
Upload	Click Upload to transfer the specified file to the device. The AWI prompts you to confirm this action to avoid accidental uploads.

To upload a firmware release to a client:

- 1. From the AWI, select **Upload > Firmware**.
- 2. Click **Browse** to browse to the folder containing the firmware file. The file will have an .all extension.
- 3. Double-click the correct *.all firmware file.
- 4. Click Upload.
- 5. Click **OK** to confirm that you want to proceed with the upload. The operation may take a few minutes. When completed, the AWI page displays two buttons:**Reset** and **Continue**.

- 6. Click Reset.
- 7. Click OK.



Note: The host and client must use the same firmware version If you're connecting to a PCoIP Remote Workstation Card, the host and client must use the same firmware release version.



Note: Tera2 PCoIP Zero Clients and PCoIP Remote Workstation Cards have separate *.all files

As of firmware 5.0.0, Tera2 PCoIP Zero Clients and PCoIP Remote Workstation Cards have separate \star .all files for uploading firmware to the device.



Note: To downgrade the firmware to an earlier version, reset the device to factory defaults

If you want to downgrade the firmware to an earlier version, Teradici recommends that you first reset the device parameters to the factory defaults, upload an earlier version of the firmware, and reconfigure your device settings. To reset the device, see *Resetting Your Tera2 PCoIP Zero Client* on page 193.

Uploading Certificates

You can upload and manage your CA root and client certificates for Tera2 PCoIP Zero Clients from the AWI's *Certificate Upload* page, shown next.

Certificate Upload						
Upload a certificate in PEM format (M	lust be < 10238 bytes). For 802.1X certific	ates, the certificate must contain th	e private key as well.			
Certificate filename:	Browse No file selected. Upload	wse. No file selected. Upload (Limit of 16 certificates)				
Available Storage:	96708 bytes					
	Erase All Certificates					
Uploaded Certificates:	Subject:	Issued By:	Expiration Date:			
	 DigiCert High Assurance EV Root CA 	DigiCert High Assurance EV Root CA	11/10/2031 Details Remove			
802.1X Client Certificate:		(Configured in Netv	vork settings)			
	Apply Cancel					

AWI Certificate Upload Page

The maximum certificate size that you can upload from the AWI is 10,237 bytes. You can upload up to 16 certificates providing you don't exceed the maximum storage size of 98,112 bytes. The available storage field lets you know how much space is left in the certificate store.

You can simplify the retrieval and installation of digital certificates by enabling devices to obtain certificates automatically from a Simple Certificate Enrollment Protocol

(SCEP) server. With SCEP enabled, you can only upload a maximum of 14 additional certificates, since two slots are reserved for SCEP server certificates. To upload certificates automatically using SCEP, see *Obtaining Certificates Automatically Using SCEP* on page 185.



Related Information: Authentication issues

If you have authentication issues after uploading a View Connection Server client certificate, see View Connection Server Client Certificates (KB 15134-1084) for troubleshooting information.



Note: Include all security information in 802.1x client certificate The PCoIP protocol reads just one 802.1x client certificate for 802.1x compliant networks. Make sure you include all the security information for your PCoIP devices in that client certificate. For more information about uploading certificates, see Certificate management for PCoIP Zero Clients and Remote Workstation Cards (KB 15134-1063). For information on 802.1x certificate authentication, see *Configuring 802.1x Network Device Authentication* on page 280.

Use the following when you use 802.1x authentication:

- 802.1x authentication requires two certificates—an 802.1x client certificate and an 802.1x server CA root certificate.
- The 802.1x client certificate must be in .pem format and contain a private key that uses RSA encryption. If the certificate is in a different format, you must first convert the certificate, including the private key, to .pem format before uploading it.
- After uploading the 802.1x client certificate from the Certificate Upload page, you
 must configure 802.1x authentication from the *Network* page. This entails
 enabling 802.1x authentication, entering an identity string for the device,
 selecting the correct 802.1x client certificate from the drop-down list, and
 applying your settings.
- The 802.1x server CA root certificate must be in .pem format, but should not need to contain a private key. If the certificate is in a different format, you must convert it to .pem format before uploading it. This certificate does not require configuration from the **Network** page.
- Both the 802.1x client certificate and the 802.1x server CA root certificate must be less than 10,238 bytes; otherwise, you will not be able to upload them. Some certificate files may contain multiple certificates. If your certificate file is too large and it has multiple certificates within, you can open the file in a text editor, copy and save each certificate to its own file.

The following settings display on the AWI Certificate Upload page.

Certificate Upload Parameters

Parameter	Description
Certificate filename	Upload up to a maximum of 16 root and client certificates.
Uploaded Certificates	This displays any uploaded certificates. To delete an uploaded certificate, click the Remove button. The deletion process occurs after the device is rebooted. To view the details of a certificate, click the Detail button. These certificates appear as options in the Client Certificate drop-down menu on the Network page.
802.1X Client Certificate	This is a read-only field. It is linked to the Client Certificate field on the Network page.

To upload a certificate to a client:

- 1. From the AWI, select the **Upload > Certificate**.
- 2. Browse to the folder containing the certificate file. This file will have a .pem extension.
- 3. Double-click the correct *.pem certificate file.
- 4. Click Upload.
- 5. Click **OK** to confirm that you want to proceed with the upload.
- 6. Click Continue.

If the certificate uploads successfully, it will appear in the *Uploaded Certificates* list on this page.

Obtaining Certificates Automatically Using SCEP

Setting	Default	AWI	OSD	Management Console
SCEP Server URL		~	✓	
Challenge Password		~	~	
Root CA		•	~	
Client Certificate		•	~	
Request Certificates (a button)		~	~	
Status		~	~	

You can simplify the retrieval and installation of digital certificates by enabling devices to obtain certificates automatically from a Simple Certificate Enrollment Protocol (SCEP) server.





Note: The Tera2 PCoIP Zero Client generates its own 2048-bit SCEP RSA private key

When a Tera2 PCoIP Zero Client boots up, the device generates its own 2048bit SCEP RSA private key. This key is used to construct a PKCS#10-formatted certificate request, which is then delivered to the SCEP server.



Note: SCEP certificate naming conventions

SCEP certificates are configured with the requested certificate Subject as the PCoIP Device Name and the Subject Alternative as the device MAC address (all in lower case and with no dashes). This naming convention is not configurable.



Related Information: SCEP scenarios and tested SCEP server setups

For information on the best SCEP scenarios and tested SCEP server setups, see What are the best scenarios and setups Teradici uses to test its implementation of SCEP? (KB 15134-1518).

Configurat	ion											×
Network	IPv6	Management	SCEP	Label	Discovery	Session	Power	Display	Access	Audio	Reset	
Confi	gure S	CEP (Simple C	ertificat	e Enrol	lment Proto	col) settin	gs and r	equest c	ertificates	5		
		SCEP Serve	r URL:									
		Challenge Pas	sword:									
		Root CA Cer	tificate:	<no< td=""><td>one></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></no<>	one>							
		Client Cert	tificate:	<n0< td=""><td>one></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></n0<>	one>							
			Status:	Re	quest Certif	icates						
Unloc	k						ОK		Cancel		Apply	/

OSD SCEP page

AWI SCEP page

The following settings display on the OSD and AWI SCEP pages:

SCEP Parameters

Parameter	Description
SCEP Server URL	Enter the URL for the SCEP server that is configured to issue certificates for the device.
Challenge Password	Enter the password to present to the SCEP server.
Root CA	Displays the name of the root CA certificate that has been installed in the device.
Client Certificate	Displays the name of the client certificate that has been installed in the device.
Request Certificates	After entering the SCEP server address and password, click this button to retrieve certificates.
Status	Displays the status of the request (for example, in progress, successful, failed).

To obtain certificates automatically from a SCEP server:

- 1. Open the SCEP page:
 - From the OSD, select **Options > Configuration > SCEP**.
 - From the AWI, select Configuration > SCEP.
- 2. Enter the URL and password for the SCEP server.
- 3. To retrieve the certificate, click **Request Certificates**. The Root CA and 802.1x certificates display after these certificates are installed.
- 4. To save your updates, click **OK** from the OSD, or click **Apply** from the AWI. The **Status** section displays the status of the request (for example, in progress, successful, or failed).

Assigning an IP Address to a Tera2 PCoIP Zero Client

When a Tera2 PCoIP Zero Client is powered on for the first time, you can display its IP address by logging into the OSD and selecting **Options > Configuration > Network**.

If you want, you can manually change the IP address either dynamically or statically.

Assigning the IP Address Dynamically

If your network supports DHCP and your Tera2 PCoIP Zero Client is enabled for DHCP, the Tera2 PCoIP Zero Client will automatically receive an IP address from your DHCP server when it's first powered on. One advantage to dynamic IP address assignment is that you can deploy multiple Tera2 PCoIP Zero Clients simultaneously in your network.



Note: The Tera2 PCoIP Zero Client may receive a different IP address when it's powered off

If the client is subsequently powered off for a period of time that exceeds its DHCP lease time, the client may receive a different IP address when it's powered on again. You can avoid this issue by using a DHCP reservation to permanently associate the IP address received from the DHCP server with the device.

Assigning the IP Address Statically

If your network doesn't support DHCP, the Tera2 PCoIP Zero Client will use its static fallback IP address the first time it's powered on. This address is set by the device's manufacturer.

You can statically assign an IP address from the Tera2 PCoIP Zero Client's OSD *Network* page. Because all Tera2 PCoIP Zero Clients from the same manufacturer will have the same default IP address, you can only deploy a single client at a time when you assign IP addresses statically.



Info: You can also configure an IP address from the AWI *Initial Setup* page

You can also assign an IP address (and other network settings) from the AWI Initial Setup page. To configure the IP address from this page, see *Configuring Initial Setup Parameters* on page 31.

To statically assign an IP address from the OSD:

- 1. From the OSD, select **Options > Configuration > Network**.
- 2. From the OSD *Network* page, select **Unlock**. If required, enter a password to make changes.



- 3. Ensure that *Enable DHCP* is not selected, and then enter the client's IP address and other network addresses.
- 4. Click **Apply**, and then click **Reset** to reset the device so the changes can take effect.

You can locate	ng the factory default IP address e the factory default IP address for a client in the <i>IN OFD:</i> (optional is) section of the the device's event log:	
IN OFD:	enable_static_ip_fallback = enabled	
IN OFD:	static_ip_fallback_timeout = 120	
IN OFD:	<pre>static_ip_fallback_ip_address = 192.168.1.50</pre>	
IN OFD:	static_ip_fallback_gateway = 192.168.1.1	
IN OFD:	<pre>static_ip_fallback_subnet_mask = 255.255.255.0</pre>	

The static fallback IP address can also be set from the PCoIP Management Console. In this case, the event log will display the address as being *IN FLASH:* rather than *IN OFD:*

IN	OFD:	enable_static_ip_fallback = enabled
IN	OFD:	<pre>static_ip_fallback_timeout = 120</pre>
IN	FLASH:	<pre>static_ip_fallback_ip_address = 192.168.1.101</pre>
IN	OFD:	<pre>static_ip_fallback_gateway = 192.168.1.1</pre>
IN	OFD:	<pre>static_ip_fallback_subnet_mask = 255.255.255.0</pre>

If you reset the client (see *Resetting Your Tera2 PCoIP Zero Client* on page 193), the static fallback IP address will revert to the factory default, even when it has been set by the PCoIP Management Console.

Assigning a Name to Your Tera2 PCoIP Zero Client

You can assign a name to your Tera2 PCoIP Zero Client, as well as add a description and additional information about the device. You can use the OSD or AWI to assign the information.

Assigning a Device Name from the OSD

You can configure a device name from the OSD Label page (shown next).

PCoIP Device Name: pcoip-portal-emu001-025056972792 Note: When DHCP is enabled the PCoIP Device Name is sent to the DHCP server as the requested hostname. PCoIP Device Description: Generic Tag:	ssion Power Display Access Audio Reset	onfiguration Network IPv6 Management SCEP Label
Note: When DHCP is enabled the PCoIP Device Name is sent to the DHCP server as the requested hostname.		Configure the device identification
PCoIP Device Description:	s enabled the PCoIP Device Name is sent to	Not
	the requested hostname.	PCoIP Device Description:
Unlock OK Cancel Apr	OK Cancel Apply	

OSD Label page

The following parameters display on the OSD Label page:

OSD Label Parameters

Parameter	Description
PCoIP Device Name	Lets you give the device a logical name. The default is pcoip-portal- $\langle MAC \rangle$, where $\langle MAC \rangle$ is the device's MAC address.
	This field is the name the device registers with the DNS server if DHCP is enabled and the system is configured to support registering the hostname with the DNS server.
	It's important to ensure that the PCoIP Device Name is unique for each endpoint in the network and follows these naming conventions:
	 The first and last character must be a letter (A-Z or a-z) or a digit (0-9). The remaining characters must be letters, digits, hyphens, or underscores. The length must be 63 characters or fewer.



Parameter	Description						
PCoIP Device Description	A description of the device or other information, such as the location of the device's endpoint.						
	Note: Field not used by firmware The firmware does not use this field. It is provided for administrator use only.						
Generic Tag	Generic tag information about the device.						
	Note: Field not used by firmware The firmware does not use this field. It is provided for administrator use only.						

To assign a device name from the OSD:

- 1. From the OSD, select **Options > Configuration > Label**.
- 2. From the OSD *Label* page, enter a device name, a description, and additional information (if necessary).
- 3. Click OK.

Assigning a Device Name from the AWI

You can assign a device name from the AWI Label page, shown next.

Label	
Change the PCoIP device labels	
PCoIP Device Name:	pcoip-portal-0030040ddbbc
	Note: When DHCP is enabled the PCoIP Device Name is sent to the DHCP server as the requested hostname.
PCoIP Device Description:	
Generic Tag:	
	Apply Cancel

AWI Label page

The following parameters display on the AWI Label page:

AWI Label Parameters

Parameter	Description
PCoIP Device Name	Lets you give the device a logical name. The default is pcoip- portal-< <i>MAC</i> >, where < <i>MAC</i> > is the device's MAC address.
	This field is the name the device registers with the DNS server if DHCP is enabled and the system is configured to support registering the hostname with the DNS server.
	It's important to ensure that the PCoIP Device Name is unique for each endpoint in the network and follows these naming conventions:
	 The first and last character must be a letter (A-Z or a-z) or a digit (0-9).
	 The remaining characters must be letters, digits, hyphens, or underscores.
	The length must be 63 characters or fewer.
PCoIP Device Description	A description of the device or other information, such as the location of the device's endpoint.
	Note: Field not used by firmware The firmware does not use this field. It is provided for administrator use only.
Generic Tag	Generic tag information about the device.
	Note: Field not used by firmware The firmware does not use this field. It is provided for administrator use only.

To assign a device name from the AWI:

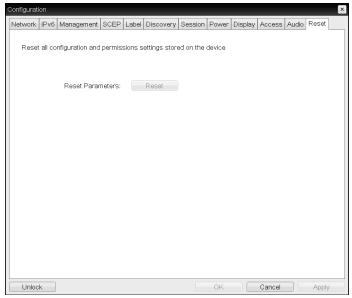
- 1. From the AWI, select **Configuration > Label**.
- 2. From the AWI *Label* page, enter a device name, a description, and additional information (if necessary).
- 3. Click Apply.

Resetting Your Tera2 PCoIP Zero Client

Setting	Default	AWI	OSD	Management Console
Reset Parameters (a button)		~	~	
Enable keyboard shortcut	Disabled	~	×	
Hide keyboard shortcut sequence in OSD	Disabled	~	×	

You can reset the Tera2 PCoIP Zero Client's parameters to the factory default values stored in flash memory. You can also enable a keyboard shortcut to reset device parameters.

You can reset parameters from both the OSD or AWI *Reset* pages (shown next). From the AWI *Reset* page, you can configure the reset shortcut.



OSD Reset page

Reset
Reset all configuration and permission settings stored on the device
Reset Parameters: Reset
Enable keyboard shortcut: CTRL + ALT + SHIFT + SPACE
Hide keyboard shortcut sequence in OSD:
Apply Cancel

AWI Reset page



Note: Resetting parameters does not revert the firmware Resetting parameters to factory default values does not revert the firmware or clear the custom OSD logo.

Resetting Parameters

From the OSD and AWI *Reset* pages, you can reset parameters to the factory default values stored in flash memory.

To reset parameters:

- 1. Open the Reset page:
 - From the OSD, select **Options > Configuration > Reset**.
 - From the AWI, select Configuration > Reset.
- 2. From the OSD or AWI *Reset* page, click **Reset**. When you click **Reset**, a prompt appears to confirm you want to reset the parameters.

Configuring a Reset Shortcut

From the AWI, you can enable a keyboard shortcut (Ctrl+Alt+Shift+Space) to reset your Tera2 PCoIP Zero Client's parameters to its factory default values. When enabled, you can use the shortcut to automatically reset device parameters.

You enable the shortcut on the AWI *Reset* page. After you enable the shortcut, you can choose to display or hide the shortcut on the OSD *Reset* page. If you choose to hide the shortcut on the OSD page, you can still use the shortcut to reset parameters.

To enable the reset keyboard shortcut:

- 1. From the AWI, select **Configuration > Reset Parameters**.
- 2. From the AWI Reset page, do the following:
 - To enable the shortcut, select the Enable keyboard shortcut check box. When enabled, you can use the shortcut to automatically reset device parameters.
 - To display the shortcut on the OSD *Reset* page, clear the **Hide keyboard shortcut sequence in OSD** check box.
 - To prevent the shortcut from displaying on the OSD *Reset* page, select the **Hide keyboard shortcut sequence in OSD** check box. Even though the shortcut doesn't display, you can still use the shortcut to reset device parameters.

Displaying an OSD Logo

From the AWI, you can upload an image to display on the OSD *Connect* page.

After you've uploaded an image, you can configure the image to display on OSD login screens (instead of the default banner). You can do this if you've configured your Tera2 PCoIP Zero Client to use a PCoIP Connection Manager as the PCoIP session broker, or a View Connection Server as the broker when connecting to a VMware desktop.

Displaying a Logo on the OSD Connect Page

From the OSD *Logo Upload* page (shown next), you can upload an image to display on the OSD *Connect* page.

OSD Logo Upload
Upload an OSD logo to be displayed on the local GUI (client only)
The OSD logo must be a 24bpp bitmap that does not exceed 256 pixels by 64 pixels. Any other images will be displayed incorrectly, or not at all.
OSD logo filename: Browse. No file selected.
Upload

To display a logo on the OSD Connect page:

- 1. From the AWI, select Upload > OSD Logo.
- 2. From the OSD Logo Upload page, click **Browse** to search for a logo file. The file must be on a local or accessible network drive.

The 24 bpp (bits per pixel) image must be in BMP format, and its dimensions cannot exceed 256 pixels in width and 64 pixels in height. If the file extension is incorrect, an error message displays.

3. Click **Upload** to transfer the specified image file to the client. A message confirming the upload displays.

Displaying a Logo on OSD Login Screens

You can configure the image you uploaded to display on the OSD *Connect* page to display at the top of OSD login screens. You can do this if you've configured your Tera2 PCoIP Zero Client to use a PCoIP Connection Manager as the PCoIP session broker, or a View Connection Server as the broker when connecting to a VMware desktop.

To enable a logo to display on OSD login screens:

- 1. If you haven't already done so, upload an image to display on the OSD *Connect* page. (To upload an image, see *Displaying a Logo on the OSD Connect Page* on page 195.)
- 2. From the AWI, select **Configuration > Session**.
- 3. Select the **Use OSD Logo for Login Banner** check box to enable the OSD logo banner to display at the top of login screens (instead of the default banner).
- 4. Click Apply.

Setting Up a Touch Screen Display

This topic explains how to install and configure an Elo TouchSystems touch screen display for your Tera2 PCoIP Zero Client. You'll learn how to:

- Install an Elo TouchSystems touch screen display (see Installing the Touch Screen Display on page 197).
- Configure and calibrate settings for an attached Elo TouchSystems touch screen display (see *Configuring the Touch Screen from the OCD* on page 197).
- Configure the firmware if you want the touch screen to be controlled by a driver running on the host (*Setting up the Touch Screen as a Bridged Device* on page 199
- Set up auto-logon to bypass authentication when users are connecting to a host with a broker (*Configuring the Tera2 PCoIP Zero Client to Automatically Log into a Host Brokered by a Connection Manager* on page 200).

Installing the Touch Screen Display

The following procedure shows you how to Install an Elo TouchSystems touch screen display.

To install an Elo TouchSystems touch screen display:

- 1. Plug in the touch screen's USB cable to the Tera2 PCoIP Zero Client's USB port.
- 2. Attach the monitor cable from the touch screen to any port on the Tera2 PCoIP Zero Client.



Note: Don't attach multiple touch screens to the PCoIP Zero Client You can't attach multiple touch screens to the Tera2 PCoIP Zero Client, but you can attach additional non-touch screens to the Tera2 PCoIP Zero Client in addition to the touch screen as long as the touch screen is attached to the port

on the Tera2 PCoIP Zero Client that is configured as the primary port.

- 3. Plug in the power.
- 4. Disconnect the Tera2 PCoIP Zero Client session. This initiates the calibration on the touch screen.



Note: Touch screen's co-ordinates are saved in flash memory Once the touch screen is calibrated, the co-ordinates are saved in flash memory. You can manually recalibrate the screen as required through the OSD *Touch Screen* page.

5. Follow the touch screen prompts. You can test the calibration with your finger (the cursor should move with your finger). If the screen is not properly calibrated, the system automatically restarts the calibration program.

Configuring the Touch Screen from the OCD

Setting	Default	AWI	OSD	Management Console
Enable right click on hold	Disabled	×	~	
Right click delay	Set for a shorter delay	×	~	
Touch screen calibration	(N/A; You must press Start to begin calibration)	×	~	

The OCD *Touch Screen* page (shown next) lets you configure and calibrate settings for an attached Elo TouchSystems touch screen display.

User Settings
Certificate Mouse Keyboard Image Display Topology Touch Screen Tablet Region
Configure the touch screen settings NOTE: The settings in this tab are applicable only when a compatible touch-capable display has been detected.
Enable right click on hold:
Long Short Right click delay:
Touch screen calibration:
OK Cancel Apply

OSD Touch Screen page



Note: Supported touch screens

Elo IntelliTouch and Elo AccuTouch are the only Elo TouchSystems touch screens supported.

The following parameters display on the OSD Touch Screen page.

OSD Touch Screen Parameters

Parameter	Description
Enable right click on hold	Select this check box to let users generate a right-click when they touch the screen and hold it for a few seconds. If disabled, right-clicking is not supported.



Parameter	Description					
Right click delay	Slide the pointer to the position (between Long and Short) to determine how long the users must touch and hold the screen to generate a right-click.					
Touch screen calibration	When you first connect the touch screen to the Tera2 PCoIP Zero Client, the calibration program starts. At the touch screen, touch each of the three targets as they appear.					
	To test the calibration, run your finger along the monitor and ensure that the cursor follows it. If it is not successful, the calibration program automatically restarts. Once calibrated, the coordinates are stored in flash.					
	To manually start the calibration program, from the OSD <i>Touch Screen</i> page, click Start . Follow the onscreen prompts.					

To configure a touch screen from the OCD:

- 1. From the OCD, select **Options > User Settings > Touch Screen**.
- 2. From the OCD *Touch Screen* page, update the touch screen settings.
- 3. Click OK.

Setting up the Touch Screen as a Bridged Device



Note: Setting up a touch screen as a bridged device is optional This procedure is optional and only necessary if you want the touch screen to be set up as a bridged device.

While a session is active a user may want the touch screen to be controlled by a driver running on the host. To set this up the touch screen must be added to the list of bridge devices.

To set up the touch screen as a bridged device:

- 1. Install the touch screen to your Tera2 PCoIP Zero Client (see *Installing the Touch Screen Display* on page 197).
- 2. Log into the Tera2 PCoIP Zero Client AWI.
- 3. From the AWI **Info** menu, click **Attached Devices**. The *Attached Devices* page displays (as shown next), showing the **PID** and **VID** information.



ached	l Device	s											
v preser	ntly connec	ted monitors	and USB devices										
Display Port	s: Model		Status	Mode	Resolu	tion	Serial		VID	PID	Date		
1 2	BenQ EW	2420	Connected Disconnected	DVI		1080 @ 60 Hz	V7B00284	067	BNQ	7923	30-2011		
3	BenQ EW:	2420	Connected Disconnected	DVI	1920x:	1080 @ 60 Hz	93B02607	026	BNQ	7923	10-2011		
USB De	vices:												
Device		Controller		Status		Device Class	Sub Class	Protocol	Serial		VID	PID	Internal/Externa
1F00	Root 3	OHCI	USB Optical Mouse	Locally Conne		00	00	00	-		046D	C05A	External
2001	Root 1	OHCI	USB Keyboard	Locally Conne		00	00	00	-		046D	C31C	External
2102	Root 0	OHCI	Elo TouchSystems 2700 IntelliTouch(r) USB Touchmonitor Interface	Locally Conne	cted	00	00	00	20E38	185	04E7	0020	External

VID and PID numbers

- 4. Write down the **PID** and the **VID** information.
- 5. From the **Permissions** menu, click **USB** to display the USB permissions page.
- 6. In the *Bridged Devices* section, click Add New.
- 7. Enter the **Vendor ID** and **Product ID** for the touch screen (as shown next), and then click **Add**.

USB				
Configure the USB permissions table	e			
Authorized Devices:	:			
	Any Device Class	Any Sub Class	Any Protocol	Remove
	Add new			
Unauthorized Devices:	Table is empty			
Bridged Devices:	: Table is empty			
Vendor ID:	04E7			
Product ID:	: 0020			
	Add Cancel			

USB permissions page

- 8. Restart the Tera2 PCoIP Zero Client session.
- 9. Install the touch screen driver from Elo TouchSystems. See the Elo TouchSystems documentation for installation and calibration instructions.

Configuring the Tera2 PCoIP Zero Client to Automatically Log into a Host Brokered by a Connection Manager

To make logging into the touch screen device easier, you can configure auto-logon to bypass the keyboard when using a broker as a connection manager.

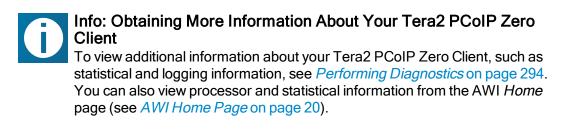
If you choose to set this up, users simply need to touch **Connect** at the Login window instead of also having to enter their login credentials.

To configure the Tera2 PCoIP Zero Client to automatically log into a host brokered by a connection manager:

- 1. Log into the AWI for the Tera2 PCoIP Zero Client.
- 2. From the Configuration menu, select Session.
- 3. In the Session Connection Type drop-down menu, select PCoIP Connection Manager + Auto-Logon or View Connection Server + Auto-Logon, depending on the connection server you're using.
- 4. Enter the connection server's DNS name or IP address.
- 5. Complete the user credentials, and then click Apply.

Viewing Information About your Tera2 PCoIP Zero Client

From time to time, you'll want to view information about your Tera2 PCoIP Zero Client so you can complete certain tasks or troubleshoot issues. Information you can view includes your Tera2 PCoIP Zero Client's IP address, hardware, firmware, and processor information, and information about attached devices, such as monitors and USB devices.



Viewing the IP Address

You can view your Tera2 PCoIP Zero Client's IP address from the OSD Network page.

To view the Tera2 PCoIP Zero Client IP address:

• From the OSD, choose **Options > Information > Network**.

The OSD *Network* page displays, as shown next, showing the device's IP address.

Information	×
Version Network	
View the IP address of the device	
IP Address: 10.0.34.8	
Close	

Viewing Information About Attached Devices

You can view information about the devices (such as keyboards, mice, monitors, and tablets) attached to your Tera2 PCoIP Zero Client. The information displays on the AWI *Attached Devices* page (shown next).

/ present	ly conne	cted monitors and	USB devices							
Display	s:									
Port		Model	Status	Mode	Resolution	VI				Serial
1		BenQ EW2420	Connected	DVI	1920x1080 @ 60				-	V7B00284067
2		BenQ EW2420	Connected	DVI	1920×1080 @ 60	HZ BN	Q /9	23 10-201	1	93B02607026
USB De	vices:									
Device	Parent	Model	Status	Controller	Internal/External	VID	PID	CSP	Local Driver	Serial
0400	Root 1	USB Optical Mouse	Locally Connected	OHCI	External	046D	C05A	00/00/00	Mouse	
0501	Root 3	USB Keyboard	Locally Connected	OHCI	External	046D	C31C	00/00/00	Keyboard, Remote Control	-
0602	Root 0	Plantronics C520-M	Locally Connected	OHCI	External	047F	C036	00/00/00	Multiple Drivers	45FC57D7A84E204EA43D73B5C8F
Hide :	Legend									
Legend Status	(Display [potentia ted [EDII	ys): Il failures] D read failure / ED	ID override]		connected and the ED		been bri	idged (host/	client)	
Legend Status Connec Disconn	(Display [potentia ted [EDII ected	l failures]		The display is No display or The display is	connected and the ED cable has been detect connected but we are following displays (ho	ed not in s				hotplug and
Legend Status Connec Disconn	(Display [potentia ted [EDII ected ession [E	I failures]) read failure / ED		The display is No display or The display is emulating the On startup or	cable has been detect connected but we are	ed not in s st) t receive	ession ed an El	(client) / we DID request	are still asserting (which determines	s the mode
Legend Status Connec Disconn Not in S Unknow	(Display [potentia ted [EDII ected ession [E m al Failure	I failures] D read failure / ED EDID read failure / EDID read failure /		The display is No display or The display is emulating the On startup or type) or have attached) Description	cable has been detect connected but we are following displays (ho the host, we have no not extracted a set of	ed not in s st) t receive timing (ession ed an El which to	(client) / we DID request ells us defini	are still asserting (which determines tively that we hav	s the mode e a cable
Legend Status Connec Disconn Not in S Unknow	(Display [potentia ted [EDII ected ession [E	I failures] D read failure / ED EDID read failure / EDID read failure /		The display is No display or The display is emulating the On startup or type) or have attached) Description	cable has been detect connected but we are following displays (ho the host, we have no	ed not in s st) t receive timing (ession ed an El which to	(client) / we DID request ells us defini	are still asserting (which determines tively that we hav	s the mode e a cable
Legend Status Connec Disconn Not in S Unknow	(Display [potentia ted [EDII ected ession [E m al Failure ad failure	I failures] D read failure / ED EDID read failure / EDID read failure /		The display is No display or The display is emulating the On startup or type) or have attached) Description There was a EDID. Even though	cable has been detect connected but we are following displays (ho the host, we have no not extracted a set of	ed not in s st) t receive timing (channel	ession ed an El which to read of	(client) / we DID request ells us defini the display	are still asserting (which determines tively that we hav EDID. Using a Tera	s the mode e a cable adici default

The following information displays on the AWI Attached Devices page:

Attached Devices Information

Statistic	Description
Displays	This section displays the model, status, mode, resolution, serial number, vendor identification (VID), product identification (PID), and date of the display attached to each port. This option is only available when the host is in a PCoIP session.
USB Devices	This section displays the port mode, model, status, device class, subclass, protocol, vendor identification (VID), and product identification (PID) of the USB device attached to the client.
USB Device Status	Status options include:
	Not Connected: No device is connected.
	 Not in Session: The device is detected outside of a PCoIP session.
	 Not Initialized: The device is detected in a PCoIP session but the host controller has not initialized the device.
	 Failed Authorization: The device is detected in a PCoIP session but is not authorized. (For more information about USB, see AWI: USB Permissions on page 1.
	 Locally Connected: The device is detected and authorized but locally terminated in a PCoIP session (for example, a local cursor).
	 Connected: The device is detected and authorized in a PCoIP session.



Note: Each USB device possesses one device descriptor and an interface descriptor for each device function

Every USB device has a single device descriptor as well as an interface descriptor for each of the device's functions. (For example, a USB device with a camera, microphone, and button would have an interface descriptor for each function.)

In the USB specification, the USB Device Class, Sub Class, and Protocol class code fields identify a device's functionality so that the correct device driver will load for the device. Depending on the device, this information can display in either the device descriptor or the interface descriptors, or in both.

If a device is authorized, the Device Class, Sub Class, and Protocol class code fields that display on the *Attached Devices* page are the same values obtained from the device descriptor

If a device is *not* authorized, the Device Class, Sub Class, and Protocol class code fields that display on the *Attached Devices* page are the same values obtained from the interface that caused the device to fail authorization.

To view device information:

- 1. From the AWI, select Info > Attached Devices.
- 2. From the AWI *Attached Devices* page, view information for the devices attached to your Tera2 PCoIP Zero Client.

Viewing Hardware and Firmware Information

You can view the device's hardware and firmware details from both the OSD and AWI. The information displays on the OSD and AWI *Version* pages (shown next).

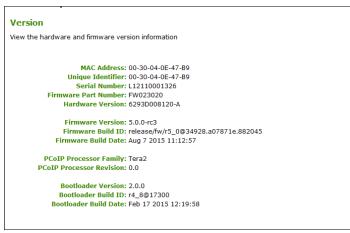


Note: Processor information is also available on the AWI *Home* page

You can view processor and statistical information about your setup from the AWI *Home* page. For more information about the AWI *Home* page, see *AWI Home* Page on page 20.

Information	×
Version Network	
View the hardware and firmware version information	
	04-50-56-97-27-92 04-50-56-97-27-92-client-2
Serial Number: Firmware Part Number: Hardware Version:	FW023-97
	5.0.0 release/fw/r5_0@34928.a07871e.882173 Aug 7 2015 11:28:52
PCoIP Processor Family: PCoIP Processor Revision:	
Bootloader Version: Bootloader Build ID: Bootloader Build Date:	0.0.0
	Close

OSD Version page (sample data only)



AWI Version page (sample data only)

The following parameters display on the OSD and AWI Version pages:

Version Parameters

Parameters	Description
VPD Information	(Vital Product Data): Information provisioned by the factory to uniquely identify each device:
	MAC Address: Host/client unique MAC address.
	 Unique Identifier: Host/client unique identifier.
	 Serial Number: Host/client unique serial number.
	 Firmware Part Number: Part number of the current firmware.
	Hardware Version: Host/client hardware version number.
Firmware Information	This information reflects the current firmware details:
	• Firmware Version: Version of the current firmware.
	• Firmware Build ID: Revision code of the current firmware.
	• Firmware Build Date: Build date for the current firmware.
PCoIP Processor	This information provides details about the PCoIP processor.
Information	 PCoIP Processor Family: The processor family (for example, Tera2).
	PCoIP Processor Revision: The silicon revision of the
	PCoIP processor. Revision B of the silicon is denoted by a 1.0.
Bootloader	This information reflects the current firmware bootloader details:
Information	Boatloader Version: Version of the current bootloader.
	 Bootloader Build ID: Revision code of the current bootloader.
	Bootloader Build Date: Build date of the current bootloader.

To view hardware and firmware information:

- 1. Do one of the following:
 - Open the AWI Home page.
 - Open the OSD Version page: From the OSD, select Options > Information > Version.
 - Open the AWI Version page: From the AWI, select Info > Version.
- 2. From the AWI *Home* page, or the OSD or AWI *Version* pages, view the hardware and firmware information.

Configuring Your Tera2 PCoIP Zero Client

You can configure your Tera2 PCoIP Zero Client in many ways, so that it will operate in your specific setup and environment.

Configuring Access to Management Tools

Setting	Default	AWI	OSD	Management Console
Disable Management Console Interface	Disabled	~	~	
Disable Administrative Web Interface	Disabled	~	~	
Force password change on next login	Disabled	~	~	

From the OSD and AWI, you can:

- Prevent a PCoIP management tool from managing the Tera2 PCoIP Zero Client.
- Disable administrative access to the Tera2 PCoIP Zero Client's AWI.
- Force an administrative password change the next time someone accesses the AWI or OSD.



Note: Enable at least one of the configuration interfaces

At least one of the Tera2 PCoIP Zero Client's three management configuration interfaces (OSD, AWI, or PCoIP Management Console) must remain enabled at all times. For example, if you hide the OSD **Configuration** menu, you will receive an error message if you try to disable both the PCoIP Management Console interface and the AWI.





Note: Failed login attempt warning

As of firmware release 4.1.0, a warning message displays if any failed access attempts to the AWI or OSD were detected since the last successful login. The message provides the date and time of the failed attempt, as shown next.

tera	dici. PCoIP		
PCoIP® Z	ero Client		
PCoIP® devi	e status and stati	stics for the current sess	ion.
		uccessful login. The last	og in to the Administrative Web Interface failed attempt was at 03/20/2014
			21 revision 0.0 (512 MB) 1 Hours 22 Minutes 40 Seconds rtal-0030040e47b9
	Conne 802.1X Authen		
Rou Transmit B	Bytes (S) nd Trip Latency (M andwidth (Min/Av	eceived/Lost): 256743 ent/Received): 3445189 Min/Avg/Max): 1 / 1 / 2 rg/Max/Limit): 0 / 144 , Min/Avg/Max): 0 / 904 ,	90 / 298575332 ms / 296 / 8000 kbps
	Endpoint Image S Initial Image Qual Image Qual	rg/Max/Limit): 0 / 20 / rettings In Use: Host ity (Min/Max): 50 / 90 ity Preference: 50 ild To Lossless: Disabled	
Display 1 2	Maximum Rate: User Defined 24 fps 24 fps	Output Process Rate 9 fps 1 fps	Image Quality Lossy Lossy

Failed login attempt message (from AWI)

You can configure access settings from the OSD and AWI Access pages (shown next).

Configuration								×
Network IPv6 Management SCEP Label Disco	overy Se	ession	Power	Display	Access	Audio	Reset	
Change the administrative access settings								
Disable Management Console Interface:								
Disable Administrative Web Interface:								
Force password change on next login:								
Unlock			OK		Cancel		Apply	

OSD Access page

Access	
Change administrative access setting	32
Disable Management Console	
Disable Management Console Interface:	
Disable Administrative Web Interface:	
Force password change on next login:	
	Apply Cancel

AWI Access page

To configure access settings:

- 1. Open the *Access* page:
 - From the OSD, select **Options > Configuration > Access**.
 - From the AWI, select Configuration > Access.
- 2. From the OSD or AWI Access page, select one of the access settings:
 - Disable Management Console Interface When enabled, the management console interface is disabled, and the PCoIP Management Console (or any other PCoIP device management tool) can't access or manage the Tera2 PCoIP Zero Client.
 - Disable Administrative Web Interface When enabled, you can't access or manage the Tera2 PCoIP Zero Client using the AWI.
 - Force password change on next login When enabled, the administrative password must be changed the next time either the AWI or OSD is accessed. The new password may be blank.
- 3. To save your updates, click **OK** from the OSD, or click **Apply** from the AWI.

Configuring Audio

Setting	Default	AWI	OSD	Management Console
Enable HD Audio	Disabled	~	×	✓
Enable Audio	Enabled	~	×	✓
Enable Local USB Audio Driver	Enabled	~	~	✓
Enable Dual Audio Ouput		~	~	✓
Enable Opus Audio Codec	Enabled	~	~	✓
Audio Input				
Device Type	USB	~	~	✓
Preferred USB Device Vendor ID	0000	~	~	✓
Preferred USB Device Product ID	0000	~	~	✓
Attached USB Devices		~	×	✓
Audio Output				
Device Type	USB	~	~	✓
Preferred USB Device Vendor ID	0000	~	~	✓

Setting	Default	AWI	OSD	Management Console
Preferred USB Device Product ID	0000	~	~	✓
Attached USB Devices		~	×	✓

You can configure audio settings for the Tera2 PCoIP Zero Client from both the OSD and AWI.



Info: Enabling HD audio

You can enable HD audio from the AWI *Initial Setup* page. To enable HD audio from this page, see *Configuring Initial Setup Parameters* on page 31.

You configure audio parameters from the OSD and AWI Audio pages (shown next).

Configuration								×
Network IPv6 Management SCEP Label	Discovery	Session	Power	Display	Access	Audio	Reset	
Select audio input and output devices								
Enable Local USB Audio D Enable Dual Audio Ot Enable Opus Audio Ct	itput 🔲							
Audio Input								
Device T	ype: US	в						
Preferred USB Device Vende	or ID 000	00						
Preferred USB Device Produ	ot ID 000	00						
Audio Output								
Device T	ype: US	в 🔻						
Preferred USB Device Vende	or ID 000	00						
Preferred USB Device Produ	xt ID 000	00						
Unlock			OK		Cancel		Apply	

OSD Audio page

Audio
Change audio settings
Enable Audio: 🗹 Note: To enable audio, please ensure that audio is also enabled on the Host.
Enable Local USB Audio Driver: 🛛 For optimal performance, install the Teradici Audio Driver on your VM and select it as the default playback device Note: This feature is not supported when connected to PCoIP Host Cards.
Enable Dual Audio Output: 🗖 Play VM audio to USB and analog devices.
Enable Opus Audio Codec: 🗹 Use Opus audio codec for VM audio.
Audio Input
Audio Device Type: USB 💌
Preferred USB Device Vendor ID: 047E
Preferred USB Device Product ID: CO1A
Attached USB devices:
Audio Output
Audio Device Type: USB 💌
Preferred USB Device Vendor ID: 047E
Preferred USB Device Product ID: C01A
Attached USB devices:
Apply Cancel

AWI Audio page

The following parameters display on the OSD and AWI Audio pages:

operating system to enumerate.

Audio Parameters

Parameter	Description
Enable Audio <i>(AWI only)</i>	When enabled, configures audio support on the device. Note: Enable the property on both host and client This property must be enabled on both the host and the client.
	When disabled, the audio hardware is not available for the host

Parameter	Description				
Enable Local USB Audio Driver	This option locally terminates any USB audio devices that are attached to the Tera2 PCoIP Zero Client.				
	When enabled, the audio stream is moved out of the PCoIP USB data channel and into a PCoIP audio data channel that handles lost and out- of-sequence packets without retransmitting them. The audio data are also compressed, resulting in bandwidth savings and a much improved sound experience.				
	When this option is not enabled, USB audio devices are bridged to the host, and the audio stream is embedded in the PCoIP USB data channel as uncompressed audio data. This data channel retransmits lost and out-of-sequence packets, which can affect audio performance in adverse network conditions.				
	Note: Install the Teradici Audio Driver for audio support For bi-directional audio support (for example, microphone as well as playback), the Teradici Audio Driver must be installed on your VM and selected as the default playback device.				
	Caution: You can't use the local USB audio driver for all configurations If you use a USB composite device that contains audio functionality but also has one or more functions that must be bridged (that is, terminated remotely so the host OS can install the driver), you can't use the local USB audio driver for the device.				
Enable Dual Audio Output	When enabled, all VM audio is sent to both an external speaker and a USB headset.				
Enable Opus Audio Codec	When enabled, the Opus audio codec is used for audio output from software hosts to clients if supported by the host.				
Audio Input	The options in this section enable you specify the preferred device to use for audio input (recording). Teh options are available when you select Enable Local USB Audio Driver .				

Parameter	Description
Audio Device Type	This field applies when you enable the Enable Local USB Audio Driver option and both an analog input device and a USB input device are connected to the Tera2 PCoIP Zero Client. Since you can only use one audio device at a time when devices are locally terminated, select the type of device you want to use:
	 Analog: The analog input device plugged into the analog input jack on the Tera2 PCoIP Zero Client will be used for audio recording. USB: The USB input device attached to the Tera2 PCoIP Zero
	Client will be used for audio recording. If more than one is attached, the <i>Audio Input</i> options let you specify the preferred one to use.
Preferred USB Device Vendor ID	This field is automatically populated with the USB device's vendor ID (VID) after you select the preferred audio input device in the Attached USB devices list and apply your changes. You can also manually enter the VID of the preferred attached USB device.
	Note: This option doesn't apply to certain audio devices This option doesn't apply to analog audio devices.
Preferred USB Device Product ID	This field is automatically populated with the USB device's product ID (PID) after you select the preferred audio input device in the Attached USB devices drop-down list and apply your changes. You can also manually enter the PID of the preferred attached USB device.
	Note: This option doesn't apply to certain audio devices
	This option does not apply to analog audio devices.
Attached USB devices	In the list, select the preferred USB device to use for audio input.
(AWI only)	Note: This option doesn't apply to certain audio devices This option doesn't apply to analog audio devices.
Audio Output	The options in this section enable you to specify the preferred device to use for audio output (playback). Teh options are available when you select Enable Local USB Audio Driver .

Parameter	Description
Audio Device Type	This field applies when you enable the Enable Local USB Audio Driver option and both an analog output device and a USB output device are connected to the Tera2 PCoIP Zero Client. Since you can use only one audio device at a time when devices are locally terminated, select the type of device you want to use:
	 Analog: The analog output device plugged into the analog input jack on the Tera2 PCoIP Zero Client will be used for audio playback. USB: The USB output device attached to the Tera2 PCoIP Zero Client will be used for audio playback. If more than one is attached, the Audio Output options enable you specify the preferred one to use.
Preferred USB Device Vendor ID	This field is automatically populated with the USB device's vendor ID (VID) after you select the preferred audio output device in the Attached USB devices list and apply your changes. You can also manually enter the VID of the preferred attached USB device. Note: This option doesn't apply to certain audio devices. This option doesn't apply to analog audio devices.
Preferred USB Device Product ID	This field is automatically populated with the USB device's product ID (PID) after you select the preferred audio output device in the Attached USB devices drop-down list and apply your changes. You can also manually enter the PID of the preferred attached USB device. Note: This option doesn't apply to certain audio devices. Note: This option doesn't apply to analog audio devices.
Attached USB devices (AWI only)	In the list, select the preferred USB device to use for audio output.

To configure audio settings:

- 1. Open the Audio page:
 - From the OSD, select **Options > Configuration > Audio**.
 - From the AWI, select **Configuration > Audio**.
- 2. From the OSD or AWI Audio page, update the audio settings.
- 3. To save your updates, click OK from the OSD, or click Apply from the AWI.

Configuring Certificate Checking Mode

Setting	Default	AWI	OSD	Management Console
Certificate Checking Mode	Warn before connecting to untrusted servers	×	~	*
Certificate Check Mode Lockout	Disabled	~	×	✓

The *Certificate Checking Mode* option configures how the Tera2 PCoIP Zero Client behaves if it can't verify a secure connection to the server. You configure this setting from the OSD. To configure this setting, see *Setting Certificate Checking Mode* on page 34.

Enabling the *Certificate Check Mode Lockout* option prevents users from changing the *Certificate Checking Mode* option on the OSD. You enable this option from the AWI. To configure this option, see

Configuring Discovery

Setting	Default	AWI	OSD	Management Console
Internal Endpoint Manager URI		~	×	
External Endpoint Manager URI		~	×	
Manager Discovery Mode	Automatic	~	×	
Endpoint Bootstrap Manager URI		~	×	
Enable Discovery	Enabled	×	~	
Enable SLP Discovery	Enabled	~	×	
Enable DNS-SRV Discovery	Enabled	~	×	
DNS-SRV Discovery Delay	300	•	×	

You can configure discovery settings from the AWI and OSD *Management* and *Discovery* pages.

The AWI and OSD *Management* pages contain information about how the Tera2 PCoIP Zero Client is discovered by an endpoint manager. The discovery can be automatic or manual, and initiated either by the endpoint manager or the Tera2 PCoIP Zero Client.

From the AWI and OSD *Discovery* pages, you can enable Service Location Protocol (SLP) management entities to discover devices dynamically without requiring prior knowledge of their locations in the network. You can also enable DNS SRV discovery to enable and configure discovery settings for connection brokers.



Related: Detailed information about discovery methods For detailed information about discovery methods, see *Connecting to an Endpoint Manager* on page 174.

Viewing Discovery Information

From the OSD Management page (shown next), you can view the discovery mode.



Note: Clearing the Tera2 PCoIP Zero Client's management state From the *Management* page, you also have the option to remove the current endpoint manager information for the client. To clear the management information, see *Clearing the Management State* on page 223.

Configuration	×
Network IPv6 Management SCEP	Label Discovery Session Power Display Access Audio Reset
Configure how this zero client is m	anaged
Phase:	Bootstrap
Management Status:	Idle
Security Level:	Low Security Environment
Manager Discovery Mode:	Auto
	Clear Management State
Unlock	OK Cancel Apply

Management page

To view discovery information:

- 1. From the OSD, select **Configuration > Management**.
- 2. From the OSD *Management* page, view the *Manager Discovery Mode* setting. The setting will be one of the following:
 - Automatic When this option is set, the client attempts to receive the Endpoint Bootstrap Manager connection information from a DHCP server or DNS server.
 - **Manual** When this option is set, the user provisions the Endpoint Bootstrap Manager in the **Endpoint Bootstrap Manager URI** field.
- 3. Click Ok.

Configuring the Discovery Method

Using the AWI *Management* page (shown next), you can configure the discovery method to use. The information that displays on the page depends on whether the client uses automatic or manual discovery.

Ma	anagement										
Cor	nfigure how this zero client is mar	naged									
	Phase:	Managed									
	Management Status:	Connected to End	point Manager: 10.0.153.242:5172								
	Security Level:	Security Level: Low Security Environment - Zero Client is discoverable by Endpoint Managers									
	Manager Discovery Mode:	Automatic 💌									
	Discovery Information:	Discovery Method DHCP Options DNS SRV Records	Discovery Outcome Successfully found an Endpoint manag address Not used		otstrap Manager Address 2	Certificate Fingerprint 87:62:71:01:85:27:46:B8:E3:E9:5C:E2:34:2C:85:76:7D:7A:F1:7F:6A:4D:5C D8:AA:28:99:8D:D5:A9:28:91					
	EM Topology:	URI Type Internal EM URI: External EM URI:	EM URI wss://10.0.153.242:5172		Certificate Fingerprint B7:62:71:01:85:27:46:BE 91	3:E3:E9:5C:E2:34:2C:85:76:7D:7A:F1:7F:6A:4D:5C:D8:AA:28:99:8D:D5:A9:28					
		Clear Managemen	t State								

AWI Management page - automatic discovery mode

Management									
Configure how this zero client is man	naged								
Phase:	Managed								
Management Status:	Management Status: Connected to Endpoint Manager: 10.0.157.21:5172								
Security Level:	: Low Security Environment - Zero Client is discoverable by Endpoint Managers								
Manager Discovery Mode:	Manual 💌								
Endpoint Bootstrap Manager URI:	Clear Management S	tate First							
	URI Type Internal EM URI:	EM URI wss://10.0.157.21:5172		Certificate Fingerprint B7:62:71:01:85:27:46:BB:E3:E9:5C:E2:34:2C:B5:7	6-7D-7A-E1-7E-6A-4D-5C-DB-4A-3D-00-DD-D5-40-30				
EM Topology:		wss.//10.0.13/.21.31/2		91	0.70.74.11.71.04.40.30.00.04.20.99.00.03.49.20				
	External EM URI:								
	Clear Management	State							
	Apply Cancel								

AWI Management page - manual discovery mode

The following discovery parameters display on the AWI Management page:

Discovery Parameters

Parameter	Description						
Internal Endpoint Manager URI	This field displays when the security level is set to High Security Environment - Bootstrap phase disabled .						
	Enter the URI for the internal Endpoint Manager using the following format, and click Apply :						
	<pre>wss://<internal address="" em="" fqdn="" ip="">:[port number]</internal></pre>						
	Note: URL requires a secured WebSocket (wss://) prefix This URL requires a secured WebSocket (wss://) prefix. The PCoIP Management Console's listening port is 5172. Entering this port number is optional. If you do not include it, port 5172 will be used by default.						
External Endpoint	This optional field displays the security level is set to High Security Environment - Bootstrap phase disabled .						
Manager URI (optional)	If the client is unable to connect to the internal Endpoint Manager, it will attempt to connect to the external Endpoint Manager if this field is configured.						
	If desired, enter the URI for the external Endpoint Manager using the following format, and click Apply :						
	<pre>wss://<external address="" em="" fqdn="" ip="">:[port number]</external></pre>						
	Note: URL requires a secured WebSocket (wss://) prefix This URL requires a secured WebSocket (wss://) prefix. The PCoIP Management Console's listening port is 5172. Entering this port number is optional. If you do not include it, port 5172 will be used by default.						
Manager Discovery Mode	 Select the desired discovery mode: Automatic: When this option is set, the client attempts to receive the Endpoint Bootstrap Manager connection information from a DHCP server or DNS server. Manual: When this option is set, the user provisions the Endpoint Bootstrap Manager in the Endpoint Bootstrap Manager URI field. 						

Parameter	Description					
Discovery Information	When <i>Manager Discover Mode</i> is set to Automatic , this section displays the device discovery method your system is using.					
	 Discovery Method: Displays the type of automatic discovery mechanism your system is configured to use (for example, PCoIP Management Console DNS SRV record discovery, DHCP vendor-specific options discovery). Discovery Outcome: Displays the discovery result for the configured discovery methods. Endpoint Bootstrap Manager Address: If the client has been discovered using one of the discovery methods, displays the IP address for the Endpoint Bootstrap Manager. Certificate Fingerprint: Displays the certificate fingerprint (that is, the patient of the discovery) the type of the discovery of the discovery of the discovery between the patient of the discovery between the patient of the discovery methods. 					
	the certificate's digital signature) that was used to authenticate the Endpoint Bootstrap Manager.					
Endpoint Manager Topology	When the client has been automatically discovered by an Endpoint Manager, this section displays information about the connection. Note: If the client used manual discovery, information does not display					
	 If the client used manual discovery, this information does not display. URI Type: Displays whether the client is connected to an internal Endpoint Manager or an external one. 					
	 Endpoint Manager URI: Displays the URI (uniform resource identifier) for the Endpoint Manager the client is currently using. Certificate Fingerprint: Displays the certificate fingerprint (digital 					
	signature) that was used to authenticate the Endpoint Manager.					
Endpoint Bootstrap	This field displays when the discovery mode is set to Manual .					
Manager URI	Enter the URI for the Endpoint Bootstrap Manager the client will connect to for bootstrap information using the following format, and click Apply :					
	<pre>wss://<ebm address="" fqdn="" ip="">:[port number]</ebm></pre>					
	Note: URL requires a secured WebSocket (wss://) prefix This URL requires a secured WebSocket (wss://) prefix. The PCoIP Management Console's listening port is 5172. Entering this port number is optional. If you do not include it, port 5172 will be used by default.					



Configuring SLP Discovery

Enable Service Location Protocol (SLP) discovery so that SLP management entities can dynamically discover devices without requiring prior knowledge of their whereabouts on the network.



Note: Devices and PCoIP Management Console must reside on the same subnet

SLP discovery requires all PCoIP devices and the PCoIP Management Console to reside on the same network subnet. For SLP discovery to work across subnets, you must configure routers to forward multicast traffic between subnets. Because most deployments do not enable this, the recommended discovery mechanism for this case is to configure DHCP Vendor Class Options directly in the DHCP server.

You enable SLP discovery from the OSD and AWI *Discovery* pages, shown next:

 Configuration
 ×

 Network
 IPv6

 Management
 SCEP

 Label
 Discovery

 Session
 Power

 Display
 Access

Networ	rk I	IPv6	Management	SCEP	Label	Discovery	Session	Power	Display	Access	Audio	Reset	
Aut	Automatically discover other PCoIP devices												
			Enable Disc	covery:									
Unl	ock							OK		Cancel		Apply	/

OSD Discovery page

Discovery
Automatically discover other PCoIP devices
Enable SLP Discovery: 🔽
Enable DNS SRV Discovery:
DNS SRV Discovery Delay: 300 seconds
Apply Cancel

AWI Discovery page

To enable SLP discovery:

- 1. Open the Discovery page:
 - From the OSD, select **Options > Configuration > Discovery**.
 - From the AWI, select Configuration > Discovery.
- 2. From the *Discovery* page, enable SLP discovery so that SLP management entities can dynamically discover devices. Do one of the following:
 - From the OSD, select Enable Discovery.
 - From the AWI, select Enable SLP Discovery.
- 3. To save your updates, click OK from the OSD, or click Apply from the AWI.

Configuring DNS-SRV Discovery for Connection Brokers

Enable DNS-SRV discovery for connection brokers so that:

- A device can automatically advertise itself to a connection broker without the broker having prior knowledge of the device's whereabouts on the network.
- The device can download and use the DNS SRV record from the DNS server.





Note: Enabling DNS SRV Discovery option configures the discovery for connection brokers

The *Enable DNS SRV Discovery* option configures discovery for connection brokers, but doesn't affect DNS SRV functionality for the PCoIP Management Console.

You enable DNS-SRV discovery for connection brokers from the AWI *Discovery* page, shown next. From this page, you can also configure the delay between the DNS SRV discovery attempts for connection brokers and the PCoIP Management Console. DNS SRV discovery continues periodically until the device successfully contacts a connection management server.

Discovery								
Automatically discover other PCoIP devices								
Enable SLP Discovery: 🔽								
Enable DNS SRV Discovery:								
DNS SRV Discovery Delay: 300 seconds								
Apply Cancel								

AWI Discovery page



To configure DNS-SRV discovery for connection brokers:

- 1. From the AWI, select **Configuration > Discovery**. The *Discovery* page displays.
- 2. Select or clear **Enable DNS SRV Discovery**When enabled, devices automatically advertise themselves to a connection broker, and download and use the DNS SRV record from the DNS server.
- 3. For *DNS SRV Discovery Delay*, enter the amount of time (in seconds) between DNS SRV discovery attempts between connection brokers and the PCoIP Management Console.



Note: DNS SRV Discovery Delay and the PCoIP Management Console

The *Enable DNS SRV* option doesn't affect the DNS SRV functionality for the PCoIP Management Console; however, the *DNS SRV Discovery Delay* option does. When DNS SRV records are not installed, it is recommended that you set the delay to the maximum value of **9999**. This minimizes attempts by the client to contact the PCoIP Management Console.

4. To save your updates, click Apply.

Clearing the Management State

Setting	Default	AWI	OSD	Management Console
Clear Management State (a button)		~	~	

From the AWI and OSD, you can clear the Tera2 PCoIP Zero Client's management state.

Clearing the management state removes the current endpoint manager information for the client. Once the client is managed by an endpoint manager, you must clear its management state before the client can accept a new endpoint manager.

You clear the management state from the AWI and OSD *Management* pages (shown next).



Info: Discovery settings determine what displays on the AWI Management page

The information that displays on the AWI *Management* page depends on whether the client uses automatic or manual discovery.

onfiguration								×
Network IPv6 Management SCEP I	abel Discovery	Session	Power	Display	Access	Audio	Reset	
Configure how this zero client is ma	inaged							
Phase:	Bootstrap							
Management Status:	Idle							
Security Level:	Low Security Er	nvironment						
Manager Discovery Mode:	Auto							
	Clear Manager	nent State						
	<u>_</u>		_					
Unlock			OK		Cancel		Apply	

Management page

Management											
Configure how this zero client is man	aged										
Phase:	Managed										
Management Status:	Management Status: Connected to Endpoint Manager: 10.0.153.242:5172										
Security Level:	Security Level: Low Security Environment - Zero Client is discoverable by Endpoint Managers										
Manager Discovery Mode:	Automatic 💌										
	Discovery Method	Discovery Outcome	Endpoint Boo	tstrap Manager Address	Certificate Fingerprint						
Discovery Information:	DHCP Options	Successfully found an Endpoint manager address	r 10.0.153.242		B7:62:71:01:85:27:46:BB:E3:E9:5C:E2:34:2C:B5:76:7D:7A:F1:7F:6A:4D:5C DB:AA:2B:99:BD:D5:A9:28:91						
	DNS SRV Records										
	URI Type Internal EM URI:	EM URI wss://10.0.153.242:5172		Certificate Fingerprint R7:62:71:01:85:27:46:PE	E3:E9:5C:E2:34:2C:B5:76:7D:7A:E1:7E:6A:4D:5C:DB:AA:2B:99:BD:D5:A9:28						
EM Topology.		#33.//10.0.133.242.31/2		91							
	External EM URI:										
	Clear Managemen	L State									
	Apply Cancel										

AWI Management page - automatic discovery mode

Management					
Configure how this zero client is man	naged				
Phase	: Managed				
Management Status	: Connected to Endpo	int Manager: 10.0.157.21:517	2		
Security Level	: Low Security Envi	ronment - Zero Client is dis	coverable by Endpoint	: Managers	
Manager Discovery Mode	: Manual				
Endpoint Bootstrap Manager URI	Clear Management S	State First			
EM Topology	URI Type Internal EM URI:	EM URI wss://10.0.157.21:5172		Certificate Fingerprint B7:62:71:01:85:27:46:BB:E3:E9:5C:E2:34:2C:B5 91	:76:7D:7A:F1:7F:6A:4D:5C:DB:AA:2B:99:BD:D5:A9:28
	External EM URI:				
	Clear Management	State			
	Apply Cancel				

AWI Management page - manual discovery mode

To clear the management state:

- 1. From the OSD or AWI, select **Configuration > Management**.
- 2. From the OSD or AWI *Management* page, click **Clear Management State** so that the endpoint will accept a new endpoint manager.
- 3. To save your updates, click OK from the OSD, or click Apply from the AWI.

Configuring Network Settings

Setting	Default	AWI	OSD	Management Console
Enable DHCP	Enabled	~	~	
IP Address		~	~	
Subnet Mask		~	~	
Gateway		~	~	
Primary DNS Server		~	~	

Default	AWI	OSD	Management Console
	~	~	
	~	~	
	~	~	
Auto	~	~	
1200 bytes	~	×	
	~	~	
	~	~	
TLS	~	×	
	~	~	
	~	×	
	 Auto 1200 bytes 	✓ ✓ Auto ✓ 1200 ✓ bytes ✓ ✓ TLS ✓	✓ ✓ ✓ ✓ Auto ✓ ✓ 1200 ✓ ✓ bytes ✓ ✓ ✓ ✓ TLS ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓

From the OSD and AWI *Network* pages, you can manually configure network settings if DHCP is disabled, as well as configure 802.1x security to ensure that only authorized devices access the network.

From the OSD and AWI, you can also configure IPv6 network settings. To configure IPv6 settings, see *Configuring IPv6 Settings* on page 231.



Info: You can also configure a subset of network settings from the AWI *Initial Setup* page.

You can also configure network settings (DHCP, IP address, subnet mask, gateway, and primary and secondary DNS servers) from the AWI *Initial Setup* page. To configure network settings from this page, see *Configuring Initial Setup Parameters* on page 31.



Info: Setting up 802.1x authentication

For a description of all the components you need to configure 802.1x authentication, as well as the detailed steps you need to follow to configure the authentication, see *Configuring 802.1x Network Device Authentication* on page 280.

You configure network settings from the OSD and AWI Network pages (shown next).

onfiguration									
Network IPv6 Manageme	nt SCEP	Label	Discovery	Session	Power	Display	Access	Audio	Reset
Change the network settings for the device									
Enab	le DHCP:	V							
IP	Address:	10	.0.34	. 4					
Subr	net Mask:	255	. 255 . 255	i. 0					
(Gateway:	10	.0.34	. 1					
Primary DN	S Server:	192	. 168 . 1	. 50					
Secondary DN	S Server:	192	. 168 . 1	. 52					
Doma	ain Name:	tera	adici.local						
	FQDN:	pco	ip-portal-em	u001-025	0569727	92.terad	ici.local		
Etherr	net Mode:	Aut	0	•					
Enable 802.1X	Security:								
	Identity:								
Client C	ertificate:								•
Unlock					OK		Cancel		Apply

OSD Network page



Network		
Change the network settings for the	device	
Enable DHCP:		
IP Address:	10 .0 .157.39	
	255 255 255 0 10 0 157 1	
Primary DNS Server:	192.168.65.2	
Secondary DNS Server:		
Secondary Dits Server.	•••••	
Domain Name:		
FQDN:	pcoip-portal-0030040e47c0.terase.local	
Ethernet Mode:	Auto 💌	
Maximum MTU Size:	1200 bytes	
Enable 802.1X Security:		
Authentication:	TLS	
Identity:		
Client Certificate:		Choose
Enable 802.1X Support for Legacy Switches:	M	
	Apply Cancel	

AWI Network page

The following parameters display on the OSD and AWI Network pages:

Network Parameters

Parameter	Description
Enable DHCP	When enabled, the device contacts a DHCP server to be assigned an IP address, subnet mask, gateway IP address, and DNS servers, and also requests a domain name (option 15), host name (option 12), and client Fully Qualified Domain Name (FQDN).
	When disabled, you must set these parameters manually.
IP Address	The device's IP address. If DHCP is disabled, you must set this field to a valid IP address. If DHCP is enabled, you cannot edit this field.

Parameter	Description
Subnet Mask	The device's subnet mask. If DHCP is disabled, you must set this field to a valid subnet mask. If DHCP is enabled, you cannot edit this field.
	Warning: Take care when setting the subnet mask It is possible to configure an invalid IP address/subnet mask combination (for example, invalid mask) that leaves the device unreachable. Take care when setting the subnet mask.
Gateway	The device's gateway IP address. If DHCP is disabled, this field is required. If DHCP is enabled, you cannot edit this field.
Primary DNS Server	The device's primary DNS IP address. This field is optional. If the DNS server IP address is configured when using a connection manager, the connection manager address may be set as an FQDN instead of an IP address.
Secondary DNS Server	The device's secondary DNS IP address. This field is optional. If the DNS server IP address is configured when using a connection manager, the connection manager address may be set as an FQDN instead of an IP address.
Domain Name	The domain name of the device (for example, domain.local). This field is optional.
FQDN	The fully qualified domain name for the device. The default is pcoip-portal-< <i>MAC</i> > where < <i>MAC</i> > is the device's MAC address. If used, the domain name is appended (for example, pcoip-portal-< <i>MAC</i> >.domain.local). This field is read-only on this page.
	Note: DHCP option 81 must be available and configured To use the FQDN feature, the DNS server with DHCP option 81 must be available and properly configured.

Parameter	Description
Ethernet Mode	 Lets you configure the Ethernet mode of the client as follows: Auto 100 Mbps Full-Duplex 10 Mbps Full-Duplex When you choose 10 Mbps Full Duplex or 100 Mbps Full-
	Duplex and click Apply , the following warning message appears:
	Warning: Different parameters may result in a loss of network connectivity When Auto-Negotiation is disabled on the PCoIP device, it must also be disabled on the switch. Additionally, the PCoIP device and switch must be configured to use the same speed and duplex parameters. Different parameters may result in a loss of network connectivity.
	Click OK to change the parameter.
	Note: Use 10 Mbps Full-Duplex and 100 Mbps Full-Duplex with caution You should always set the Ethernet mode to Auto and only use 10 Mbps Full-Duplex or 100 Mbps Full-Duplex when the other network equipment (for example, a switch) is also configured to operate at 10 Mbps full-duplex or 100 Mbps full- duplex. An improperly set Ethernet mode may result in the network operating at half-duplex, which is not supported by the PCoIP protocol. The session will be severely degraded and eventually dropped.
Maximum MTU Size	Lets you configure the Maximum Transfer Unit packet size.
(AWI only)	A smaller MTU may be needed for situations such as VPN tunneling because PCoIP packets cannot be fragmented. Set the Maximum MTU Size to a value smaller than the network path MTU for the end-to-end connection between the host and client.
	The Maximum MTU Size range is 600 to 1500 bytes for all firmware versions. The default MTU size is 1200.

Parameter	Description
Enable 802.1X Security	Enable this field for each of your PCoIP Remote Workstation Cards and Tera2 PCoIP Zero Clients if your network uses 802.1x security to ensure that only authorized devices access the network. If enabled, configure the Authentication , Identity , and Client Certificate fields.
Authentication (AWI only)	This field is set to TLS (Transport Layer Security) and is grayed- out. TLS is currently the only authentication protocol supported.
Identity	Enter the identity string used to identify your device to the network.
Client Certificate	Click Choose to select the client certificate you want to use for your 802.1x devices. The list of certificates that appears includes the certificates uploaded from the Certificate Upload page that contain a private key. The certificate you choose from the Network page is linked to the read-only Client Certificate field on the Certificate Upload page.
	Note: 802.1x client certificate must contain all security details PCoIP only supports one 802.1x client certificate. Ensure your security details are all contained within the one file. The 802.1x certificate must contain a private key.
Enable 802.1X Support for Legacy Switches	When enabled, enables greater 802.1x compatability for older switches on the network.
(AWI only)	

To configure network settings:

- 1. Open the *Network* page:
 - From the OSD, select **Options > Configuration > Network**.
 - From the AWI, select Configuration > Network
- 2. From the OSD or AWI Network page, configure the network settings.
- 3. To save your updates, click OK from the OSD, or click Apply from the AWI.

Configuring IPv6 Settings

Setting	Default	AWI	OSD	Management Console
Enable IPv6	Disabled	~	~	

Setting	Default	AWI	OSD	Management Console
Link Local Address		~	~	
Gateway		~	~	
Enable DHCPv6		~	~	
Enable DHCPv6 Addresses		~	×	
Primary DNS		~	~	
Secondary DNS		~	~	
Domain Name		~	~	
FQDN		~	~	
Enable SLAAC		~	~	
SLAAC Addresses		~	×	
Enable Manual Address		~	~	
Manual Address		×	~	

Options on the OSD and AWI *IPv6* pages (shown next), enable you to change the network settings for your device.

Configuration								×
Network IPv6 Management SCEP	Label	Discovery	Session	Power	Display	Access	Audio	Reset
Change the IPv6 network settings	for the	device						
Enable IPv6:								
Link Local Address:								
Gateway:								
Enable DHCPv6:		64						•
Primary DNS:								
Secondary DNS:								
Domain Name:								
FQDN:								
Enable SLAAC:	Z /	64						•
Enable Manual Address:								
Manual Address:								
Unlock				OK		Cancel		Apply

OSD IPv6 page

TD.c		
IPv6		
Change the IPv6 network settings fo	r the device	
Enable IPv6:		
Link Local Address:		
Gateway:		
Enable DHCPv6:	3	
DHCPv6 Addresses:		/ 64
DITCH VO Addresses.		/ 64
		/ 64
		/ 64
		/ 04
Primary DNS:		
Secondary DNS:		
Domain Name:		
FQDN:		
	,	
Enable SLAAC:	<u>v</u>	
SLAAC Addresses:		/ 64
		/ 64
		/ 64
		/ 64
	_	
Enable Manual Address:		
	Apply Cancel	

AWI IPv6 page



Note: Restart your device

When you make a change to one of the settings on this page, you must reboot your device for the change to take effect.

The following parameters display on the OSD and AWI IPv6 pages:

IPv6 Parameters

Parameter	Description
Enable IPv6	Select the check box to enable IPv6 for your PCoIP devices.
Link Local Address	This field is automatically populated.
Gateway	Enter the IPv6 gateway address.
Enable DHCPv6	Select the check box to set up Dynamic Host Configuration Protocol version 6 (DHCPv6) for your device.

Parameter	Description
DHCPv6 Addresses	When DHCPv6 is enabled and the device is rebooted, the server automatically populates these fields with addresses for the device.
(AWI only)	
Primary DNS	The device's primary DNS IP address. If DHCPv6 is enabled, this field is automatically populated by the DHCPv6 server.
Secondary DNS	The device's secondary DNS IP address. If DHCPv6 is enabled, this field is automatically populated by the DHCPv6 server.
Domain Name	The domain name used (for example, domain.local) for the client. If DHCPv6 is enabled, this field is automatically populated by the DHCPv6 server.
FQDN	The fully qualified domain name for the client. If DHCPv6 is enabled, this field is automatically populated by the DHCPv6 server.
Enable SLAAC	Select the check box to set up Stateless Address Auto- configuration (SLAAC) for your devices.
SLAAC Addresses (AWI only)	When SLAAC is enabled and the device is rebooted, these fields are automatically populated.
Enable Manual Address	Select this check box to set up a manual (static) address for the device.
Manual Address (OSD only)	Enter the IP address for the device.

To configure IPv6 settings:

- 1. Open the *IPv6* page:
 - From the OSD, select Options > Configuration > IPv6.
 - From the AWI, select Configuration > IPv6.
- 2. From the *IPv6* page, update the IPv6 network settings.
- 3. To save your updates, click OK from the OSD, or click Apply from the AWI.
- 4. Reboot your device for the updates to take place.

Configuring OSD and AWI Password

Setting	Default	AWI	OSD	Management Console
Old Password		~	~	
New Password		~	~	
Confirm New Password		~	~	
Reset (a button)		×	✓	

From the OSD and AWI *Password* page (shown next), you can update the local administrative password for the device. This parameter affects the AWI and the local OSD GUI. Take care when updating the client password as the client may become unusable if the password is lost. From the OSD, you can also reset the password if you forget it.

Change Password	×
Old Password: New Password: Confirm New Password:	
Reset	OK Cancel

OSD Change Password page

teradici.
Password Change the local administrator password
Old Password:
New Password: Confirm New Password:
Apply Cancel

AWI Password page

The password can be a maximum of 20 characters. Some PCoIP devices have password protection disabled by default, and the *Password* page is not available on these devices. You can enable password protection for these devices from the PCoIP Management Console. For details, see *PCoIP® Management Console 2.5 Administrators' Guide*.

The following settings display on the Password page:

Password Parameters

Parameter	Description
Old Password	This field must match the current administrative password before you can update the password.
New Password	The new administrative password for both the AWI and the local OSD interface.
Confirm New Password	This field must match the New Password field for the change to take place.

Parameter	Description		
Reset	If you forget the password, you can click Reset to request a		
(OSD only)	response code from the Tera2 PCoIP Zero Client vendor. The challenge code is sent to the vendor. The vendor qualifies the request and returns a response code if authorized by Teradici. If you enter the response code correctly, the Tera2 PCoIP Zero Client's password is reset to an empty string. You must enter a new password.		
	Note: To reset a password, contact the Tera2 PCoIP Zero Client vendor for more information Contact the client vendor for more information when an authorized password reset is required. This option is not available through the AWI. It is		

To update or reset the password:

- 1. Open the Password page:
 - From the OSD, select **Options > Password**.
 - From the AWI, select Configuration > Password.
- 2. From the *Password* page, update the password settings, or click **Reset** to request a response code from the Tera2 PCoIP Zero Client vendor.

only available through the OSD.

3. Click OK from the OSD, or click Apply from the AWI.

Configuring Power Settings

Setting	Default	AWI	OSD	Management Console
OSD Screen Saver Timeout		~	~	
Display Suspend Timeout		~	~	
Auto Power-Off Timeout		~	×	
Remote Host Power Control		~	×	
Power On After Power Loss		~	×	
Enable Wake-on-USB		~	×	
Enable Wake-on-LAN		~	×	

From the OSD and AWI Power pages (shown next), you can configure timeout and power settings for the device.

Configurat	on											×
Network	IPv6	Management	SCEP	Label	Discovery	Session	Power	Display	Access	Audio	Reset	
Chan	ge the	power settings	3									
		OSD Scre	en-Sav	er Time	eout: 30	0 8	econds (0 = disab	led)			
		Display	Susper	nd Time	eout: 0	s	econds (0 = disab	led)			
Unloc	k)						OK		Cancel		Apply	

OSD Power page

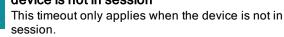
Power
Change the power settings
OSD Screen-Saver Timeout: 300 Seconds (0 = disabled)
Display Suspend Timeout: O Seconds (0 = disabled)
Auto Power-Off Timeout: O Seconds (0 = disabled)
Remote Host Power Control: Hard Power-off only
Power On After Power Loss:
Enable Wake-on-USB: 🗖
Enable Wake-on-LAN: 🗖
Apply Cancel

AWI Power page

The following settings display on the OSD and AWI Power pages:

Power Parameters

Parameter	Description
OSD Screen- Saver Timeout	Configure the number of seconds to wait after a period of inactivity (that is, no keyboard or mouse action) before the client puts its attached displays into low power mode. Valid values are 10 to 9999 , or use 0 to disable the feature.
	Note: Timeout only applies when the device is not in session This timeout only applies when the device is not in session.
Display Suspend Timeout	Configure the number of seconds to wait after a period of inactivity (that is, no keyboard or mouse action) before the client puts its attached displays into low power mode. Valid values are 10 to 14400 seconds, or use 0 to disable the feature.
	Note: The timeout setting only applies when the device is in session This timeout only applies when the device is in session.
	Note: This feature requires local mouse and keyboard When connected to a workstation, this feature requires you to enable the local mouse and keyboard feature. For more information about this feature and instructions on how to enable it, see the <i>PCoIP®</i> Host Software for Windows User Guide.
Auto Power-Off Timeout	Configure the number of seconds to wait after a period of inactivity (that is, no keyboard or mouse action) before the client powers down. Valid values are 60 to 28800 seconds, or use 0 to disable the power down.
	Note: The PCoIP client must support powering off Non-zero values are only enabled when the Tera2 PCoIP Zero Client supports powering off.
	Note: The timeout setting only applies when the device is not in session



Parameter	Description				
Remote Host	Configure the client's remote power setting.				
Power Control	Select from the following options:				
	 Power-off not permitted: Users can't remotely shut down the host PC from the Tera2 PCoIP Zero Client. When you select this option, the Zero Client Control Panel overlay window doesn't appear when you press the Tera2 PCoIP Zero Client's Connect/Disconnect button. Hard Power-off only: Users are able to remotely shut down the host from the Tera2 PCoIP Zero Client. When this option is selected, the Zero Client Control Panel overlay window appears when you press the Tera2 PCoIP Zero Client's Connect/Disconnect button. 				
	For more information about the Zero Client Control Panel overlay window, see <i>Disconnecting from a Session</i> on page 172.				
Power On After Power Loss	When enabled, the client automatically powers back on when power is supplied.				
Enable Wake- on-USB	When enabled, configures the client to power up when the user presses a key on the keyboard. Wake-on-USB applies when the client is either powered off automatically or as a result of the user holding down the power button.				
	Note: Clicking or moving mouse will not turn on client Clicking or moving the mouse won't power up the client when this feature is enabled.				
Enable Wake-	When enabled, configures the client to wake up from a low power state				

To configure power settings and permissions:

- 1. Open the *Power* page:
 - From the OSD, select **Options > Configuration > Power**.

when it receives Wake-on-LAN magic packets.

- From the AWI, select **Configuration > Power**.
- 2. Update the power settings.
- 3. To save your updates, click OK from the OSD, or click Apply from the AWI.

on-LAN

Configuring Security Level

Setting	Default	AWI	OSD	Management Console
Security Level	Low Security Environment	~	×	

Setting the security level determines if your Tera2 PCoIP Zero Client will be discoverable by endpoint managers.

You can view your Tera2 PCoIP Zero Client's security level from the OSD *Management* page. You configure the security level from the AWI *Management* page.



Caution: Security level implications

The security level setting has major implications for device discovery and connectivity with endpoint managers like the PCoIP Managment Console. For detailed information, see *About Tera2 PCoIP Zero Client Security Levels* on page 175.



Related: Configuring Discovery

For detailed information about how to connect to an endpoint manager, including information about security levels and endpoint manager discovery methods, see *Connecting to an Endpoint Manager* on page 174.

Viewing the Security Level

From the OSD *Management* page (shown next), you can view the Tera2 PCoIP Zero Client's security level.

Configurati	on											×
Network	IPv6	Management	SCEP	Label	Discovery	Session	Power	Display	Access	Audio	Reset	
Config	gure ho	ow this zero cli	ent is m	anageo	ł							
			Phase:	Boo	tstrap							
		Management :	Status:	Idle								
		Security	Level:	Low	Security Ei	nvironmer	nt					
	Mana	ager Discovery	Mode:	Auto)							
				Cle	ar Manager	ment State	Э					
Unloc	k						OK		Cancel		Apply	

OSD Management page

To view the security level using the OSD:

- 1. From the OSD, select Configuration > Management.
- 2. From the OSD *Management* page, view the *Security Level* setting. The setting will be either:
 - Low Discoverable by endpoint managers. This is the only security mode where certificates are optional.
 - **Medium** Not discoverable by endpoint manager, and the installed certificate must trust the endpoint bootstrap manager.
 - **High** Not discoverable by endpoint managers, and the bootstrap phase is disabled. All endpoint manager connection configuration is manual. The installed certificate must trust the endpoint manager.
- 3. Click Ok.

Configuring the Security Level

From the AWI *Management* page, you can configure the Tera2 PCoIP Zero Client's security level.

The information that displays on the AWI *Management* page (shown next) depends on whether the client uses automatic or manual discovery.

Management			
Configure how this zero client is managed			
Phase: Manage	ged		
Management Status: Connec	ected to Endpoint Manager: 10.0.153.242:5172		
Security Level: Low Se	Security Environment - Zero Client is discoverable by Er	dpoint Managers	<u> </u>
Manager Discovery Mode: Automa	matic 💌		
Discov Methor Discovery Information: DHCP C DNS SR	od Discovery Outcome Endpo	int Bootstrap Manager Address 53.242	Certificate Fingerprint 87:62:77:01:85:97:46:88:59:50:52:34:2C:85:76:7D:7A:F1:7F:6A:4D:5C: D8:AA:28:99:8D:D5:A9:28:91 D8:AA:28:99:8D:D5:A9:28:91
EM Topology:	Type EM URI nai EM URI: wss://10.0.153.242:5172 nai EM URI:	Certificate Fingerprint B7:62:71:01:85:27:46:E 91	88:E3:E9:5C:E2:34:2C:85:76:70:7A:F1:7F:6A:4D:5C:D8:AA:28:99:BD:D5:A9:28:
Clear	ar Management State		
Apply	Ly Cancel		

AWI Management page - automatic discovery mode

Management					
Configure how this zero client is man	naged				
Phase	: Managed				
Management Status	Connected to Endpo	int Manager: 10.0.157.21:5172	2		
Security Level	Low Security Envi	ronment - Zero Client is disc	scoverable by Endpoint	Managers 💌	
Manager Discovery Mode	Manual				
Endpoint Bootstrap Manager URI	Clear Management S	tate First			
	URI Type	EM URI		Certificate Fingerprint	
EM Topology	Internal EM URI:	wss://10.0.157.21:5172		B7:62:71:01:85:27:46:BB:E3:E9:5C:E2:34:2C:B5:70 91	5:7D:7A:F1:7F:6A:4D:5C:DB:AA:2B:99:BD:D5:A9:2
	External EM URI:				
	Clear Management	State			
	Apply Cancel				

AWI Management page - manual discovery mode

To configure the security level:

- 1. From the AWI, select **Configuration > Management**.
- 2. From the AWI *Management* page, set the *Security Level* option to one of the following:
 - Low Discoverable by endpoint managers. This is the only security mode where certificates are optional.
 - **Medium** Not discoverable by endpoint manager, and the installed certificate must trust the endpoint bootstrap manager.
 - **High** Not discoverable by endpoint managers, and the bootstrap phase is disabled. All endpoint manager connection configuration is manual. The installed certificate must trust the endpoint manager.
- 3. Click Apply.

Configuring Session Bandwidth

Setting	Default	AWI	OSD	Management Console
Device Bandwidth Limit		~	×	
Device Bandwidth Target		~	×	
Device Bandwidth Floor		~	×	

From the AWI *Bandwidth* page (shown next), you can control the bandwidth that your Tera2 PCoIP Zero Client uses during a PCoIP session.

Bandwidth							
Configure the device bandwidth limit, target and floor							
Device Bandwidth Limit: 90000 kbps (0 = no limit)							
Device Bandwidth Target: 0 kbps (0 = disabled)							
Device Bandwidth Floor: 0 kbps (0 = use default of 1000 kbps)							
Apply Cancel							

AWI Bandwidth page

The following parameters display on the AWI Bandwidth page:

Bandwidth Parameters

Parameter	Description
Device Bandwidth Limit	Enter the maximum bandwidth peak from the client to the host (for example, USB data).
	The usable range of the device bandwidth is 1,000 to 220,000 Kbps for Tera1 devices and 1,000 to 600,000 Kbps for Tera2 devices.
	The PCoIP processor only uses the required bandwidth up to the Device Bandwidth Limit maximum, and dynamically adjusts the bandwidth in response to network congestion. Setting this field to 0 configures the PCoIP processor to use the maximum rate available in the network at any time.
	We recommend setting this field to the limit of the network connected to the client and host.
	Note: Values rounded to the nearest megabit per second When applied to devices running firmware lower than 3.0, a value other than 0 is rounded to the nearest megabit per second, with a minimum value of 1 Mbps.
Device Bandwidth Target	Enter the temporary limit on the network bandwidth during periods of congestion. When the device detects packet loss, the device bandwidth is rapidly reduced to this value, and then more slowly reduced below it. This enables for a more even distribution of bandwidth between users sharing a congested network link.



Parameter	Description
Device Bandwidth Floor	Enter the minimum bandwidth when congestion is present and bandwidth is required. This enables you to optimize performance for a network with understood congestion or packet loss. If the bandwidth is not required, the bandwidth used drops below the floor.
	This setting defines the minimum bandwidth from the client to the host (for example, USB data).
	A setting of 0 configures the PCoIP processor to reduce bandwidth to 1,000 Kbps during these network impairments. You should have a good understanding of the network topology before setting this to a non-zero value.
	Note: Firmware implements algorithm that increases bandwidth The firmware implements a slow-start algorithm that increases the bandwidth used until the required bandwidth is reached, network congestion is detected, or the Device Bandwidth Limit is met. It begins at the lesser of the Device Bandwidth Limit and 8,000 Kbps, and increases the bandwidth used within seconds. The slow-start algorithm enables a graceful session startup for low bandwidth scenarios (for example, WAN scenarios). After initiating a PCoIP session, users may temporarily notice low bandwidth video artifacts as the algorithm ramps up bandwidth use.
	Note: Values rounded to the nearest megabit per second When applied to devices running firmware lower

When applied to devices running firmware lower than 3.0, a value other than 0 is rounded to the nearest megabit per second, with a minimum value of 1 Mbps.

To configure session bandwidth:

1. From the AWI, select **Configuration > Bandwidth**.

- 2. From the AWI Bandwidth page, update the bandwidth settings.
- 3. Click Apply to apply your updates immediately.

Configuring SNMP Settings

Setting	Default	AWI	OSD	Management Console
Enable SNMP	Enabled	~	×	
Community Name	public	~	×	

From the AWI *SNMP* page (shown next), you can enable or disable the device's SNMP agent.

SNMP								
Change the SNMP configuration								
Enable SNMP: 🔽								
Community Name: public								
Apply Cancel								

AWI SNMP page



Related Information: PCoIP SNMP Agent

For more information on using the PCoIP SNMP Agent, see *Using SNMP with a PCoIP® Device User Guide*.

To configure SNMP settings:

- 1. From the AWI, select Configuration > SNMP.
- 2. From the AWI SNMP page, do the following:
 - Select or clear the Enable SNMP check box.

When enabled, the device enables the PCoIP SNMP agent to respond to SNMP requests. Disabling the SNMP agent prevents it from responding to SNMP requests and from generating traps. It also ensures that the PCoIP SNMP MIB cannot be accessed.

- For Community Name, enter the SNMP community name used by the device.
- 3. Click Apply.

Configuring USB Settings and Permissions

Setting	Default	AWI	OSD	Management Console
Force Local Cursor Visible	Disabled	~	×	
Enable EHCI (USB 2.0)	Enabled	~	×	
Authorized Devices (Add new)		~	×	
Unauthorized Devices (Add new)		~	×	
Bridged Devices (Add new)		~	×	
Devices Forced to USB 1.1 (Add new)		~	×	

From the AWI, you can configure USB settings and permissions.

Configure USB settings to enable the Tera2 PCoIP Zero Client to always show the local cursor, and to configure EHCI (USB 2.0).

Configure USB permissions to authorize and unauthorize certain USB devices, configure devices that need to be bridged to the host, and enable USB 2.0 Enhanced Host Controller Interface (EHCI) mode.



Info: Configuring USB audio devices

For information about configuring USB audio devices, see *Configuring Audio* on page 209.

Configuring USB Settings

From the AWI USB settings page (shown next), you can configure parameters for devices plugged into Tera2 PCoIP Zero Client USB ports.



The following parameters display on the AWI USB parameters page:

USB Parameters

Parameter	Description					
Force Local Cursor Visible	When enabled, the Tera2 PCoIP Zero Clientalways shows the local cursor. When disabled, the local cursor is only shown when the host requests it or a locally-terminated mouse is connected.					
	For information about the local cursor feature, see <i>Local Cursor</i> and <i>Keyboard</i> on page 328.					
Enable EHCI (USB 2.0)	Enable this field to configure EHCI (USB 2.0) for devices connected directly to Tera2 PCoIP Zero Client USB ports for sessions with a host running VMware View 4.6 or newer. Note: Setting applies only to software-based PCoIP sessions This setting applies only to software-based PCoIP sessions. EHCI is automatically enabled in hardware-based PCoIP sessions if both endpoints					
	support it. If you want the device to operate in OHCI (USB 1.1) mode, add it to the <i>Devices</i> <i>Forced to USB 1.1</i> table on the AWI <i>USB</i> permissions page (see <i>Configuring USB</i> <i>Permissions from the AWI</i> on page 250).					

Note: Feature cannot be used on clients with less than 128 MB of RAM This feature cannot be enabled on clients with less than 128 MB of RAM. Devices with isochronous

endpoints will not operate at USB 2.0 speeds.

To configure USB settings:

- 1. From the AWI, select Configuration > USB.
- 2. From the AWI USB page, update the USB settings.
- 3. Click Apply.

Configuring USB Permissions from the AWI

From the AWI *USB* permissions page (shown next), you can configure USB permissions.

USB				
Configure USB device management	t			
Authorized Device	s:			
	Any Device Class	Any Sub Class	Any Protocol	Remove
	Add new			
Unauthorized Device	s: Table is empty			
	Add new			
Bridged Device	s: Table is empty			
	Add new			
Devices Forced to USB 1.	1: Table is empty			
	Add new			
	Apply Cancel			

AWI USB permissions page

From this page, you can:

- Authorize and unauthorize a list of USB devices based on ID or Class. You can
 use wildcards (or specify *any*) to reduce the number of entries needed to define
 all devices.
- Configure devices that need to be bridged to the host, and enable USB 2.0 Enhanced Host Controller Interface (EHCI) mode for certain USB devices.

If a bridged USB device that is capable of EHCI (USB 2.0) does not perform normally over PCoIP, you can use the *Devices Forced to USB 1.1* table to force the device to use OHCI (USB 1.1) instead of EHCI (USB 2.0), which may provide a better experience.

USB plug events are blocked in the Tera2 PCoIP Zero Client hardware for unauthorized USB devices. The host (PCoIP Remote Workstation Card or the host desktop) cannot see or access the device for an additional layer of security.

The USB permissions page is available on the host and client but the host USB permissions have a higher priority and update the client USB permissions. It is strongly recommended you only set the USB permissions on the host when connecting to a PCoIP Remote Workstation Card. The following rules apply:

- If the host has permissions programmed (authorized and/or unauthorized), the permissions are sent to the client. If the client has any unauthorized devices, they are added to the host's unauthorized devices and the consolidated list is used.
- If the host does not have permissions programmed, the client's permissions are used.

The factory defaults have no USB permissions configured on the host. The factory defaults for the client USB permissions are 'any, any, any' (that is, authorized USB devices). Depending on the host implementation (for example, hardware PCoIP host

or software PCoIP host), you can configure the USB permissions as required on the client and/or host.

The host USB permissions are only updated at the start of a PCoIP session. They are authorized in the following order of priority (from highest to lowest):

- Unauthorized Vendor ID/Product ID
- Authorized Vendor ID/Product ID
- Unauthorized Device Class/Sub Class/Protocol
- Authorized Device Class/Sub Class/Protocol

The following parameters display on the AWI USB permissions page:

AWI USB Permissions Parameters

Parameter	Description
Authorized Devices	Specify the authorized USB devices for the device:
	Add New: add a new device or device group to the list. This enables USB authorization by ID or Class:
	 ID: The USB device is authorized by its Vendor ID and Product ID. Class: The USB device is authorized by Device Class, Sub Class, and Protocol.
	Remove: Delete a rule for a device or device group from the list.
Unauthorized Devices	Specify the unauthorized USB devices for the device.
	Add New: add a new device or device group to the list. This enables USB devices to be unauthorized by ID or Class:
	 ID: The USB device is unauthorized by its Vendor ID and Product ID Class: The USB device is unauthorized by Device Class, Sub Class, and Protocol.
	Remove: Delete a rule for a device or device group from the list.

Parameter	Description
Bridged Devices	Tera2 PCoIP Zero Clients locally terminate HID devices when connecting to VMware Horizon virtual desktops. However, some devices advertise as HID but use different drivers. These devices may need to be bridged to the host rather than locally terminated. This setting lets you force the Tera2 PCoIP Zero Client to bridge specific USB devices so that they use the drivers on the virtual desktop.
	Add New: Add a device or device group to the list. This lets you bridge USB devices by their Vendor ID and Product ID.
	Note: Bridging requires host support Bridging requires host support; USB bridging is not supported by all PCoIP hosts. See your host's guide for more information.
	Remove: Delete a rule for a device or device group from the list.
Devices Forced to USB 1.1	If a bridged USB device that is capable of EHCI (USB 2.0) does not perform normally over PCoIP, you can use this table to force the device to use OHCI (USB 1.1) instead of EHCI (USB 2.0), which may provide a better experience.
	Add New: Add a device or device group to the list. This lets you bridge USB devices by their Vendor ID and Product ID.
	Remove: Delete a rule for a device or device group from the list.
	Note: Bridging requires host support Bridging requires host support; USB bridging is not supported by all PCoIP hosts. See your host's guide for more information.

The following figures show the parameters that display when you add a new USB authorized or unauthorized entry. The parameters that display depend on whether you describe the device by **Class** or **ID**.

Add new: Class	
Device Class: * Any	•
Sub Class: * Any	
Protocol: * Any -	
Add Cancel	

Device class parameters

Add new:	ID	•
Vendor ID:	0000	
Product ID:	0000	
	Add	Cancel

Device ID parameters

The following parameters display when you authorize or unauthorize USB device parameters:

Parameter	Description
Add new	When adding a new USB authorization or unauthorization entry, select one of the following:
	 Class: The USB device is authorized by its device class, sub-class, and protocol information.
	 ID: The USB device is authorized by its vendor ID and product ID information.
Device Class	This field is enabled when Class is selected.
	Select a supported device class from the drop-down menu, or select Any to authorize or unauthorize (disable) any device class.
Sub Class	This field is enabled when Class is selected.
	Select a supported device sub class from the drop-down menu, or select Any to authorize or unauthorize (disable) any sub-class.
Protocol	This field is enabled when Class is selected.
	Select a supported protocol from the drop-down menu, or select Any.
Vendor ID	This field is enabled when ID is selected.
	Enter the vendor ID of the authorized (or unauthorized) device. The valid range is hexadecimal 0-FFFF.
Protocol ID	This field is enabled when ID is selected.
	Enter the product ID of the (authorized or unauthorized) device. The valid range is hexadecimal 0-FFFF.

The following figure shows the parameters that display when you add a new USB bridged entry.

Vendor ID:	0000		
Product ID:	0000		
	Add	Cancel	

USB Bridged Parameters

The following parameters display when you add a new USB bridged entry:

USB Bridged Devices Parameters

Parameter	Description
Vendor ID	Enter the vendor ID of the bridged device. The valid range is hexadecimal 0-FFFF.
Protocol ID	Enter the product ID of the bridged device. The valid range is hexadecimal 0-FFFF.

To configure USB permissions from the AWI:

- 1. From the AWI, select Configuration > USB.
- 2. From the AWI USB page, update the USB permissions.
- 3. Click Apply.

Configuring User Settings

This section describes how you can customize your environment to suit your personal preferences. For example, you can configure regional settings (such as the timezone and daylight saving time), configure multiple monitors to accommodate your physical desktop, and configure the language and keyboard layout to use for the OSD user interface. You can even adjust the image quality during PCoIP sessions.

Configuring OSD Language

Setting	Default	AWI	OSD	Management Console
Language	English	~	~	✓
Keyboard Layout	US	~	~	✓
OSD Region Tab Lockout	Disabled	~	×	✓

When you configure OSD language settings, you configure the language to use for the OSD user interface, as well as the keyboard layout to use when you type information

within the OSD. Note that updating the OSD language doesn't affect the language setting for the actual PCoIP session.

You can update language settings from both the OSD and AWI. From the AWI, you can also enable a setting to prevent users from changing the language settings (as well as the time zone) from the OSD.

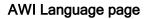
From the OSD *Region* page (shown next), you can update language and keyboard settings.

User Settings	×
Certificate Mouse Keyboard Im	age Display Topology Touch Screen Tablet Region
Configure the region settings f	or the zero client
Time Zone:	(GMT-8:00) America/Vancouver
Language:	
Keyboard Layout:	
	OK Cancel Apply

OSD Region page

From the AWI *Language* page (shown next), you can update language and keyboard settings. In addition, you can enable a setting to prevent users from changing the configuration on the OSD *Region* page.

Language	
Select a language for the local GUI (cl	lient only)
Language:	English
Keyboard Layout:	US
OSD Region Tab Lockout	\square Prevent users from changing the controls in the OSD Region tab
	Apply Cancel



To update language settings:

- 1. Do one of the following:
 - From the OSD, select **Options > User Settings > Region**.
 - From the AWI, select **Configuration > Language**.
- 2. From the OSD Region page or the AWI Language page, do the following:
 - From the *Language* list, select the language to use for the OSD user interface.
 - From the *Keyboard Layout* list, select the keyboard layout to use when you type information within the OSD. When a session starts, this setting is pushed to the virtual machine. If the *PCoIP Use Enhanced Keyboard on Windows Client if available* GPO setting is configured to enable the keyboard layout setting, the layout is used during the user's session.
 - (AWI only) Select or clear the OSD Region Tab Lockout check box. When selected, users can't change the settings on the OSD Region page.
- 3. To save your updates, click OK from the OSD, or click Apply from the AWI.

Configuring Time Settings

Setting	Default	AWI	OSD	Management Console
Enable NTP	Disabled	~	×	
Identify NTP Host by		~	×	
NTP Host DNS Name		~	×	
NTP Host Port		~	×	

Setting	Default	AWI	OSD	Management Console
NTP Query Interval		~	×	
Time Zone	Europe/London (UTC+0:00)	~	~	
Enable Daylight Saving Time	Disabled	~	×	

You can set the time zone for the Tera2 PCoIP Zero Client from both the OSD and AWI.

Additionally, from the AWI, you can:

- Enable Daylight Saving Time
- Configure Network Time Protocol (NTP) parameters to time-stamp Tera2 PCoIP Zero Client event logs to use NTP time.

You set the time zone for the Tera2 PCoIP Zero Client from the OSD *Region* page (shown next).

User Setting	IS										×
Certificate	Mouse	Keyboard	Image	Display	Topology	Touch S	Screen	Tablet	Region		
ConfigL	Configure the region settings for the zero client										
		Time Zoi	ne: (GMT-8:0	0) Americ	a/Vancoi	Jver		-		
		Langua	2	English	•						
	Key	/board Layc	ut: [JS				•			
					(OK		Ca	incel	Арр	ly

OSD Region page

From the AWI *Time* page (shown next), you can set the time zone, enable Daylight Saving Time, and configure NTP.

Time	
Change the local time configuration	
Current time: 10/20/2015 10:32:33	
Enable NTP: 🗹	
Identify NTP Host by: O IP address FODN	
NTP Host DNS Name: ntp.teradici.local	
NTP Host Port: 123	
NTP Query Interval: 15 Minute(s)	
Time Zone: (GMT-8:00) America/Vancouver	
Enable Daylight Saving Time:	
Apply Cancel	

AWI Time page

The following time parameters display on the OSD Region and AWI Time pages:

Time Parameters

Parameter	Description
Current Time (AWI only)	Displays the time based on the NTP.
Enable NTP (AWI only)	Enable or disable the NTP feature.
Identify NTP Host by (AWI only)	Select if the NTP host is identified by IP address or by Fully Qualified Domain Name (FQDN). If NTP is disabled, this field is not required and is not editable. If you enter an invalid IP address or DNS name, a message appears to prompt you to correct it. The parameter depends on which method you choose.
	 IP Address: Shows the NTP Host IP address FQDN: Shows the NTP Host DNS name
NTP Host Port (AWI only)	Configure the port number of the NTP server. The default NTP server port value is 123.
NTP Query Interval (AWI only)	Configure the query interval. The first field is for the interval period and the second field is for the time unit in minutes, hours, days, or weeks.

Parameter	Description
Time Zone	Select the local time zone.
Enable Daylight Saving Time	Enable or disable the automatic adjustment for Daylight Saving Time (DST).
(AWI only)	

To configure time settings:

- 1. Do one of the following:
 - From the OSD, select **Options > User Settings > Region**.
 - From the AWI, Configuration > Time.
- 2. From the OSD Region page or the AWI Time page, update the time settings.
- 3. To save your updates, click OK from the OSD, or click Apply from the AWI.



Note: Server address overrides manually configured server If the device is configured for DHCP and the DHCP server provides an NTP server address, this address will override any manually configured NTP server. It will also enable NTP if it is disabled.

Note: NTP server does not provide time zone information The device does not obtain time zone or Daylight Saving Time information from the NTP server.



Note: Enabling user events to correlate with log entries

To simplify system troubleshooting, set the NTP parameters to enable user events to correlate with the relevant diagnostic event log entries.

Configuring Image Quality

Setting	Default	AWI	OSD	Management Console
Minimum Image Quality	40	~	×	
Maximum Initial Image Quality	90	~	×	
Image Quality Preference	50	~	~	
Maximum Frame Rate	0 fps	~	×	
Disable Build to Lossless	Disabled	~	×	
Enable Low Bandwidth Text Codec	Disabled	~	×	

If desired, you can adjust the quality of the images you see during PCoIP sessions. You can set image quality preferences from both the OSD and AWI; however, you can configure many more settings from the AWI, including minimum image quality, maximum frame rate, and maximum initial image quality.



Note: Image quality settings only apply to sessions with PCoIP Remote Workstation Cards

Image quality settings apply only to sessions between Tera2 PCoIP Zero Clients and PCoIP Remote Workstation Cards.

You adjust the image quality setting from the OSD Image page (shown next).

User Settings		×
Certificate Mouse Keyboard Image Display Topol	ogy Touch Screen Tablet Region	
Adjust the Image Quality Preference slider to fave during a PCoIP session when network bandwidth		tion
Smoother Motic Image Quality Preference:	n Sharpe 	r Image
	OK Cancel	Apply

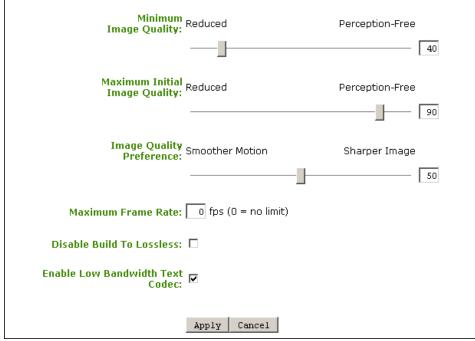
OSD Image page

You adjust the image quality setting, as well as other advanced settings, from the AWI *Image* page (shown next).

Image

Adjust the image quality. A lower minimum image quality will allow a higher frame rate when network bandwidth is limited.

Adjust the Image Quality Preference slider to favor image sharpness versus smooth motion during a PCoIP session when network bandwidth is I NOTE: These settings take effect only when the host has "Use Client Image Settings" enabled.



AWI Image page

The following image parameters display on the OSD and AWI Image pages:

Image Parameters

Parameter	Description
Minimum Image Quality <i>(AWI only)</i>	Enables you to compromise image quality and frame rate when network bandwidth is limited. Some use cases may require lower-quality images at a higher frame rate while others need higher-quality images at a lower frame rate.
	In environments where the network bandwidth is constrained, move the slider towards Reduced to enable higher frame rates. Move the slider towards Perception-Free to enable for higher image quality. When network bandwidth is not constrained, the PCoIP system maintains perception-free quality regardless of the Minimum Image Quality parameter.
	The Maximum Initial Image Quality must be greater than or equal to the Minimum Image Quality .
Maximum Initial Image Quality <i>(AWI only)</i>	Move the slider towards Reduced to reduce the network bandwidth peaks caused by screen content changes, but produce lower quality images. Move the slider towards Perception-Free to produce higher quality images but also higher bandwidth peaks.
	This parameter limits the initial quality on the first display frame of a screen change. Unchanged regions of the image are built to a lossless state regardless of this parameter.
	The Maximum Initial Image Quality must be greater than or equal to the Minimum Image Quality .
Image Quality Preference	Move the slider towards Smoother Motion to result in a higher frame rate at a lower quality level. Move the slider towards Sharper Image to result in a lower frame rate at a higher quality level. The range is from 0 to 100 in steps of 5.
	Info: The setting doesn't work with PCoIP sessions that run certain VMware Horizon virtual desktop versions This setting doesn't work in PCoIP sessions with VMware Horizon virtual desktops that run release 5.0 or earlier.
Maximum Frame Rate (AWI only)	The maximum frame rate helps you manage multiple PCoIP sessions over a single network link. This setting determines the limit that your users can reach. Set this field to 0 to set no frame limit. If you set a value, a single user is limited to that value. This helps to control the user experience for all your users.



Parameter	Description
Disable Build to Lossless <i>(AWI only)</i>	Clear this check box to retain the PCoIP protocol's build-to- lossless feature, where images continue to be refined in the background until they reach a fully lossless state (that is, identical pixel-for-pixel rendering when compared to the host image source). This is the default (recommended) setting.
	Warning: Selecting the Disable Build to Lossless check box degrades images Selecting the Disable Build to Lossless check box degrades the images presented to the user. Don't select this check box unless your administrator decides that users don't require optimal image quality to perform critical functions.
	If you select this check box, the PCoIP protocol rapidly builds the client image to a high quality image that may be perceptually lossless, but is not a fully lossless state. This may provide some bandwidth savings, but is not recommended for use cases that require images and desktop content to be truly lossless.
	Info: This setting doesn't work with PCoIP sessions that run certain VMware Horizon virtual desktop versions This setting does not work in PCoIP sessions with VMware Horizon virtual desktops that run release 5.0 or earlier.
Enable Low Bandwidth Text	When enabled, <i>Low Bandwidth Text Codec Mode</i> will be used for TERA2321 PCoIP Zero Clients.
Codec (TERA2321 PCoIP Zero Clients only)	The Low Bandwidth Text Codec is a new compression method that provides improved bandwidth usage when encoding lossless data, such as text and background. It does not apply to
(AWI only)	lossy data, such as video.

- 1. Open the *Image* page:
 - From the OSD, select **Options > User Settings > Image**.
 - From the AWI, select **Configuration > Image**.
- 2. From the OSD or AWI Image page, update the image settings.
- 3. To save your updates, click OK from the OSD, or click Apply from the AWI.

Configuring Mouse Speed

Setting	Default	AWI	OSD	Management Console
Mouse speed	40	×	~	

From the OSD *Mouse* page (shown next) you can change the mouse cursor speed.

ι	Jser Settin	gs										×
	Certificate	Mouse	Keyboard	Image	Display	Topology	Touch	Screen	Tablet	Region		
		_								_		
	Adjust	the mou	se cursor sp	beed								
				_								E t
			Mouse spee	ed:	low	1 1	- <u> </u> [1 1	1	Fast
												'
							0	K	Ca	ancel		Apply

OSD Mouse page



Note: Mouse settings only apply when you use the OSD

Mouse cursor speed only applies when you use the OSD. They have no effect on keyboard settings during PCoIP sessions.





Note: Local cursor and keyboard feature

Local cursor and keyboard is a feature of the PCoIP Host Software that improves usability for PCoIP sessions operating over WAN connections (latency > 40 ms). When enabled, the Tera2 PCoIP Zero Client can terminate input from the mouse and keyboard, and draw the cursor on the attached display(s).

For more information about this feature and instructions on how to enable it, see the *PCoIP®* Host Software for Windows User Guide.

To change the mouse cursor speed:

- 1. From the OSD, select **Options > User Settings > Mouse**.
- 2. From the OSD *Mouse* page, move the slider to adjust the mouse cursor speed.
- 3. Click OK.

Configuring Keyboard Settings

Setting	Default	AWI	OSD	Management Console
Keyboard Repeat Delay	100	×	~	
Keyboard Repeat Rate	90	×	~	
Repeat Settings Test Box	N/A	×	~	

From the OSD *Keyboard* page (shown next), you can change the keyboard character delay and character repeat settings.

User Setting	s										×
Certificate	Mouse	Keyboard	Image	Display	Topology	Touch	Screen	Tablet	Region		
Adjust t	he keyb	oard charac	ter rep	eat settir	igs						
Ke	whoard	Repeat Deli	L	.ong							Short
	-			low	I		T		I	₽ Fast	
к	eyboard	l Repeat Ra	te:	1	ı ı		I	I.	1 I	- [ı
Rep	eat Setti	ings Test Bo	эх: [
					(0	ĸ	Ca	ancel		Apply

OSD Keyboard page



Note: Keyboard settings only apply when you use the OSD

Keyboard settings only apply when you use the OSD. They have no effect on keyboard settings during PCoIP sessions.



Note: Local cursor and keyboard feature

Local cursor and keyboard is a feature of the PCoIP Host Software that improves usability for PCoIP sessions operating over WAN connections (latency > 40 ms). When enabled, the Tera2 PCoIP Zero Client can terminate input from the mouse and keyboard, and draw the cursor on the attached display(s).

For more information about this feature and instructions on how to enable it, see the *PCoIP®* Host Software for Windows User Guide.

To change keyboard parameters:

- 1. From the OSD, select **Options > User Settings > Keyboard**.
- 2. From the OSD Keyboard page, do the following:
 - For *Keyboard Repeat Delay*, move the slider to configure the time that elapses before a character begins to repeat when pressed down.
 - For *Keyboard Repeat Rate*, move the slider to configure the speed at which a character repeats when pressed down.
 - In the *Repeat Settings Test Box* box, type a character to test the delay and repeat settings.
- 3. Click OK.

Configuring Multiple Displays

Default	AWI	OSD	Management Console
Disabled	×	~	
	×	~	
	×	~	
	×	~	
	×	~	
	×	~	
	×	~	
	Disabled 	Disabled × × × × × × × × × × × × × ×	Disabled × ✓ × ✓ × ✓ × ✓ × ✓ × ✓ × ✓ × ✓ × ✓ × ✓ × ✓

Depending on the Tera2 PCoIP Zero Client you have, you can attach up to two or four displays to your device. Using the OSD *Display Topology* page, you can configure the position, rotation, and resolution of the attached displays.



Info: Before you configure multiple displays, make sure your setup has these components

- To apply the display topology feature to a PCoIP session between a client and a VMware Horizon virtual desktop, you must have VMware View 4.5 or higher.
- To apply the display topology feature to a PCoIP session between a client and a PCoIP Remote Workstation Card, you must have the PCoIP host software installed on the host.





Note: Use the OSD, not the Windows Display Settings, to configure display settings

Always change the display topology settings using the OSD *Display Topology* page. Don't change these settings from the Windows Display configuration page in a virtual machine when using VMware View.

Configuring Two Displays

If your Tera2 PCoIP Zero Client supports two attached displays, The OSD *Display Topology* page (shown next) enables you to configure the display topology for the attached displays.

User Settings								×
Certificate N	Aouse k	Keyboard Im	age Display Topo	logy Toucl	n Screen	Tablet R	tegion	
Configure t	he displa	ay position, n	otation and resolut	ion				
💽 Enable	Configur	ration:						
Layout:	Horiz	ontal	Vertical					
	Α	В	A					
	4	Ā	B					
			Ā					
Alignment:	Тор	•						
Primary:	Port:	Position:	Rotation:		Resolutio	on:		
۲	1	Α 💌	No rotation	•	Native	-		
•	2	в 🔻	No rotation	•	Native			
Reven	t							
					DK	Cano	cel	Apply

OSD Display Topology page (for two displays)

The following parameters display on the OSD Display Topology page:

Display Topology Parameters (Two-Display Configuration)

Parameter	Description						
Enable Configuration	Enable to configure a device that supports two displays per PCoIP chipset.						
Display Layout	Select the layout for the displays (A and B). This setting should reflect the physical layout of the displays on the desk.						
	 Horizontal: Select to arrange displays horizontally, as indicated in the diagram. 						
	 Vertical: Select to arrange displays vertically, as indicated in the diagram. 						
Alignment	Select how you want displays aligned when they are different sizes.						
	Note: Setting affects area of screen to use This setting affects which area of the screen to use when users move the cursor from one display to the other. The alignment options that appear in the drop-down list depend on the selected display layout.						
	Horizontal layout:						
	• Top : Select to align displays at the top. With this setting, use the top area of the screen when navigating between displays of different sizes.						
	 Center: Select to horizontally center displays. With this setting, use the center area of the screen when navigating between displays of different sizes. 						
	• Bottom : Select to align displays at the bottom. With this setting, use the bottom area of the screen when navigating between displays of different sizes.						
	Vertical layout:						
	 Left: Select to align displays on the left. With this setting, use the left area of the screen when navigating between displays of different sizes. Conter: Select to vertically conter displays. With this 						
	 Center: Select to vertically center displays. With this setting, use the center area of the screen when navigating between displays of different sizes. 						
	 Right: Select to align displays on the right. With this setting, use the right area of the screen when navigating between displays of different sizes. 						



Parameter	Description
Primary	Configure which video port on the Tera2 PCoIP Zero Client you want as the primary port.
	Note: Display connected to the primary port becomes the primary display The display that is connected to the primary port becomes the primary display (that is, the display that contains the OSD menus before you initiate a PCoIP session and the display that is requested for the Windows taskbar after you initiate the session).
	 Port 1: Select to configure port 1 on the Tera2 PCoIP Zero Client as the primary port. Port 2: Select to configure port 2 on the Tera2 PCoIP Zero
	Client as the primary port.
Position	Specify which display is physically connected to each port.
Rotation	 Configure the rotation of the display in each port: No rotation 90° clockwise 180° rotation
	90° counter-clockwise
Resolution	The display resolution can be configured for a PCoIP session between a virtual machine or host and a Tera2 PCoIP Zero Client. The Tera2 PCoIP Zero Client detects the supported display resolutions of the monitor and populates them to the drop-down menu. By default, the display's native resolution is used.

To configure display settings:

- 1. From the OSD, select **Options > User Settings > Display Topology**.
- 2. From the OSD *Display Topology* page, configure the settings for the attached displays.
- 3. Click OK.

Configuring Four Displays

If your Tera2 PCoIP Zero Client supports four attached displays, The OSD *Display Topology* page (shown next) enables you to configure the display topology for the attached displays.

User Settings	6						×
Certificate	Mouse	<eyboard in<="" th=""><th>nage Display Topolog</th><th>JY Touc</th><th>h Screen</th><th>Tablet Region</th><th></th></eyboard>	nage Display Topolog	JY Touc	h Screen	Tablet Region	
Configure	the displ	ay position, r	otation and resolution	ì			
🛛 🗹 Enable	e Configu	ration:					
Layout:	Horiz	ontal	Vertica	l O	Box		
	A	B C	DA		A B		
			В		C D		
Alignment	: Тор	-	C				
	<u> </u>						
Primary:	Port:	Position:	Rotation:		Resolution	n:	
۲	1	A 🝷	No rotation	-	Native	-	
0	2	в	No rotation	•	Native	•	
	3	C 💌	No rotation	-	Native	•	
•	4	D	No rotation	•	Native	•	
Reve	ert						
					ок 📃 🗌	Cancel	Apply

OSD Display Topology page (for four displays)

The following parameters display on the OSD *Display Topology* page:

Display Topology Parameters (Four-Display Configuration)

Parameter	Description
Enable Configuration	Enable to configure a device that supports four displays per PCoIP chipset.
Display Layout	Select the layout for the displays (A, B, C, and D). This setting should reflect the physical layout of the displays on the desk.
	 Horizontal: Select to arrange displays horizontally, as indicated in the diagram.
	 Vertical: Select to arrange displays vertically, as indicated in the diagram.
	 Box: Select to arrange displays in a box formation, as indicated in the diagram.



Parameter	Description
Alignment	Select how you want displays aligned when they are different sizes.
	Note: Setting affects area of screen to use This setting affects which area of the screen to use when users move the cursor from one display to the other. The alignment options that appear in the drop-down list depend on the selected display layout.
	Horizontal layout:
	• Top : Select to align displays at the top. With this setting, use the top area of the screen when navigating between displays of different sizes.
	 Center: Select to horizontally center displays. With this setting, use the center area of the screen when navigating between displays of different sizes.
	• Bottom : Select to align displays at the bottom. With this setting, use the bottom area of the screen when navigating between displays of different sizes.
	Vertical layout:
	 Left: Select to align displays on the left. With this setting, use the left area of the screen when navigating between displays of different sizes.
	• Center : Select to vertically center displays. With this setting, use the center area of the screen when navigating between displays of different sizes.
	 Right: Select to align displays on the right. With this setting, use the right area of the screen when navigating between displays of different sizes.



Parameter	Description
Primary	Configure which video port on the Tera2 PCoIP Zero Client that you want as the primary port.
	Note: Display connected to the primary port becomes primary display The display that is connected to the primary port becomes the primary display (that is, the display that contains the OSD menus before you initiate a PCoIP session and the display that is requested for the Windows taskbar after you initiate the session).
	 Port 1: Select to configure port 1 on the Tera2 PCoIP Zero Client as the primary port.
	 Port 2: Select to configure port 2 on the Tera2 PCoIP Zero Client as the primary port.
	 Port 3: Select to configure port 3 on the Tera2 PCoIP Zero Client as the primary port.
	 Port 4: Select to configure port 4 on the Tera2 PCoIP Zero Client as the primary port.
Position	Specify which display is physically connected to each port.
Rotation	Configure the rotation of the display in each port:
	No rotation
	90° clockwise
	180° rotation
	90° counter-clockwise
Resolution	The display resolution can be configured for a PCoIP session
	between a virtual machine or host and a Tera2 PCoIP Zero Client. The Tera2 PCoIP Zero Client detects the supported
	display resolutions of the monitor and populates them to the
	drop-down menu. By default, the display's native resolution is used.

To configure display settings:

- 1. From the OSD, select **Options > User Settings > Display Topology**.
- 2. From the OSD *Display Topology* page, configure the settings for the attached displays.
- 3. Click OK.

Configuring Tablet Settings

Setting	Default	AWI	OSD	Management Console
Select display or desktop to map to tablet		×	~	
Left-handed orientation	Disabled	×	~	
Revert (a button)		×	~	

From the OSD *Tablet* page, you can select whether to map an attached Wacom tablet to the entire desktop or to a specific attached monitor. You can also specify whether the tablet operates in a left-handed or right-handed orientation.

You can attach the following Wacom tablet models:

Product ID	Description
0x00B0	Wacom Intuos3 4x5
0x00B1	Wacom Intuos3 6x8
0x00B2	Wacom Intuos3 9x12
0x00B3	Wacom Intuos3 12x12
0x00B4	Wacom Intuos3 12x19
0x00B5	Wacom Intuos3 6x11
0x00B7	Wacom Intuos3 4x6
0x00B8	Wacom Intuos4 4x6
0x00B9	Wacom Intuos4 6x9
0x00BA	Wacom Intuos4 8x13
0x00BB	Wacom Intuos4 12x19
0x00BC	Wacom Intuos4 WL
0x0026	Wacom Intuos5 touch S
0x0027	Wacom Intuos5 touch M
0x0028	Wacom Intuos5 touch L
0x0029	Wacom Intuos5 S
0x002A	Wacom Intuos5 M

Product ID	Description
0x0314	Wacom Intuos Pro S
0x0315	Wacom Intuos Pro M
0x0317	Wacom Intuos Pro L
0x00F4	Wacom Cintiq 24HD
0x00F8	Wacom Cintiq 24HD touch
0x003F	Wacom Cintiq 21UX
0x00C5	Wacom Cintiq 20WSX
0x00C6	Wacom Cintiq 12WX
0x0304	Wacom Cintiq 13HD
0x0057	Wacom DTK2241
0x0059	Wacom DTK2242
0x00CC	Wacom Cintiq 21UX2
0x00FA	Wacom Cintiq 22HD
0x005B	Wacom Cintiq 22HDT

The OSD *Tablet* page (shown next) updates automatically to show the number of monitors and tablets that are connected to the Tera2 PCoIP Zero Client. You can connect up to four monitors, but your Tera2 PCoIP Zero Client only supports two locally connected tablets at a time. When just one monitor is attached, only the Desktop icon displays on the screen, and any attached tablets are mapped to the entire desktop. By default, tablets are mapped to the entire desktop.

User Setting	ļS											×
Certificate	Mouse	Keyboard	Image	Display	Topology	Touch	Screen	Tablet	Region			
Configure the mapping between tablets and displays												
Using the tablet stylus, select the display or desktop you want to map to your tablet												
	в	C D		Desktop								
Tablet M	odel		Disp	lay Map	oing		Left-	Handed	Orientat	ion		
Intuos5 t	ouch S		Des	ktop								
PTZ-431	W		Des	ktop								
Rev	rert											
					(0	K	Ca	ancel		Apply	

OSD Tablet page

Note: Changing display topology settings clears the tablet mappings Changing topology settings on the *Display Topology* page (for example, after you rearrange your display setup) automatically clears the tablet mappings. You need to reconfigure your tablet setup whenever you apply topology changes. For information about configuring display topology, see *Configuring Multiple Displays* on page 269.

Note: Tablet settings only apply in certain environments and setups Tablet settings only apply when a Wacom tablet is attached to a Tera2 PCoIP Zero Client that is connected to a remote Linux workstation, and the *local tablet driver* feature is enabled in the remote workstation's host software (PCoIP Host Software for Linux, version 4.5.0 or later). When enabled, this driver locally renders the cursor when its movement is initiated by the tablet. This feature is useful in WAN environments to help lessen the effects of high network latency. For more information, see the *PCoIP® Host Software for Linux User Guide*.

The following parameters display on the OSD Tablet page:

OSD Tablet Parameters

Parameter	Description
Display and Desktop icons	This section shows the number of displays that are currently attached to the Tera2 PCoIP Zero Client. When just one monitor is attached, only the Desktop icon appears in this area, and any attached tablets are mapped to the entire desktop.
Tablet Model	Shows the model number of each attached Wacom tablet.
Display Mapping	Shows the current mapping configuration for each attached tablet (A, B, C, or D, or Desktop).
	You can map more than one attached tablet to the desktop or to the same display, or you can map each attached tablet to a different display.
Left-Handed Orientation	Configures the tablet for a left-handed orientation. Select the check box for a left-handed orientation. Clear the check box for a right-handed orientation.
Revert	Reverts the tablet settings to the last applied configuration.

To configure tablet settings:

- 1. From the OSD, select Options > User Settings > Tablet .
- 2. From the OSD *Tablet* page, configure the tablet settings:
 - To map a tablet to a display, use the tablet's stylus to tap the desired display icon (A, B, C, or D) on the screen, and then click Apply. The Display Mapping column will update with your selection.
 - To configure the tablet for a left-handed orientation, use either a mouse or the tablet's stylus to select the tablet's Left-Handed Orientation check box, and then click Apply. Rotate the tablet 180° before using it. Clear the check box for a right-handed orientation.
 - To revert mappings to the last applied configuration, click Revert.

To return to the default tablet mappings (**Desktop**), unplug a monitor and reconnect it to the Tera2 PCoIP Zero Client. Applying topology settings (see *Configuring Multiple Displays* on page 269) will also clear the tablet configuration and reset it to the default configuration. You need to reconfigure your tablet setup whenever you apply topology changes.

3. Click OK.

Configuring 802.1x Network Device Authentication

Setting	Default	AWI	OSD	Management Console
Enable 802.1x security		~	•	
Identity		~	~	
Authentication	TLS (this is the only available setting)	~	×	
Client Certificate		•	~	
Enable 802.1x Support for Legacy Switches	-	~	×	

This section describes the components you need to configure 802.1x authentication, and the detailed steps you need to follow to configure the authentication.

Preparing for 802.1x Configuration

Before you begin the configuration process, make sure you have these components:

- Tera2 PCoIP Zero Client with firmware 4.0.3 or later
- PCoIP Management Console 1.8.1 or later
- Windows Server 2008 R2 with AD DS (Active Directory Domain Services)
- Windows Server 2008 R2 with AD CS (Active Directory Certificate Services)
- Windows Server 2008 R2 with NPS (Network Policy and Access Services)
- A switch with 802.1x support configured

Configuring Devices for 802.1x Authentication

To configure 802.1x device authentication, complete the following steps:

- 1. Create a Client User on page 281.
- 2. Export the Root CA Certificate on page 281.
- 3. Create a Certificate Template for Client Authentication on page 281.
- 4. Issue the Client Certificate on page 282.
- 5. Export the Client Certificate on page 283.
- 6. Convert the Certificate Format from .pfx to .pem on page 284.
- 7. Import the Client Certificate into the Client User Account on page 285.
- 8. Import the Certificates to the Client Device on page 285.





Note: The following sections assume you are using Windows Server 2008 R2

The instructions in the following sections are based on Windows Server 2008 R2. If you are using a newer version of Windows Server, the steps may vary slightly.

Create a Client User

In the Windows 2008 server, create a client user.

To create a client user:

- 1. Log in to the Windows 2008 server.
- 2. Click Start > Administrative Tools > Server Manager.
- 3. Navigate to Roles > Active Directory Domain Services > Active Directory Users and Computers > <domain.local> > Users.
- 4. Right-click **Users**, select **New > User**, and follow the wizard.

Export the Root CA Certificate

In the Certificate Authority (CA) server, export the root CA certificate.

To export the root CA certificate:

- 1. Log in to the Certificate Authority (CA) server.
- 2. Open a Microsoft Management Console window (for example,enter **mmc.exe** in the **Start** menu search field).
- 3. From the console window, select **File > Add/Remove Snap-in.**
- 4. Add the **Certificates** snap-in, selecting **Computer account** and then **Local computer**.
- 5. Click **Finish**, and **OK** to close the Add or Remove Snap-ins dialog.
- 6. From the console, select Certificates (Local Computer) > Trusted Root Certification Authorities > Certificates.
- 7. In the right panel, right-click the certificate, and select All Tasks > Export.
- 8. Follow the wizard to export the certificate:
 - a. Select Base-64 encoded X.509 (.CER).
 - b. Click **Browse**, specify a name and location for the certificate, and then click **Save**.
 - c. Click Finish, and then click OK.

Create a Certificate Template for Client Authentication

In the CA server, create a certificate template for client authentication.

To create a certificate template for client authentication:

- 1. From the CA server, click Start > Administrative Tools > Certification Authority.
- 2. Expand the tree for your CA.
- 3. Right-click Certificate Templates, and then click Manage.
- 4. Right-click the *Computer* template, and then click **Duplicate Template**.
- 5. Configure the template as follows:
 - a. From the Compatibility tab, select Windows Server 2003.
 - b. From the *General* tab, enter a name for the template (for example, **PCoIP Zero Client 802.1x**) and change the validity period to match the organization's security policy.
 - c. From the *Request Handling* tab, select Allow private key to be exported.
 - d. From the *Subject Name* tab, select **Supply in the request**.
 - e. From the *Security* tab, select the user who will be requesting the certificate, and give **Enroll** permission to this user.
 - f. Click **OK** and close the *Certificate Templates Console* window.
- 6. From the *Certification Authority* window, right-click **Certificate Templates**, select **New**, and then click **Certificate Template to Issue**.
- 7. Select the certificate you just created (that is, **PCoIP Zero Client 802.1x**), and then click **OK**. The template will now appear in the *Certificate Templates* list.
- 8. Close the window.

Issue the Client Certificate

From the CA Web Enrollment interface for the certificate server, issue the client certificate.

To issue the client certificate:



Note: Use Internet Explorer to log in to certificate server

Do not use any other browser except Internet Explorer to log into the certificate server.

- Using Internet Explorer on your local machine, go to your Certificate Authority URL using the format https://<server>/certsrv/ (for example, https://ca.domain.local/certsrv/).
- 2. Click Request a certificate and then click advanced certificate request.
- 3. Click Create and submit a request to this CA.
- 4. From the pop-up window, click **Yes**.

- 5. Fill out the Advanced Certificate Request form as follows:
 - a. In the *Certificate Template* section, select the certificate for clients (for example, **Zero Client 802.1x**).
 - b. In the *Identifying Information for Offline Template* section, enter the account name in the *Name* field. The other fields are not required.



Caution: Enter the same name as the universal principal name of the client user

The name you enter in the *Name* field must be the universal principal name (UPN) of the client user you created in *Create a Client User on page 281* (for example, **ZeroClient@mydomain.local**).

- c. In the Additional Options section, set the Request Format to PKCS10.
- d. If desired, enter a name in the Friendly Name field.
- e. Click Submit, and then click Yes at the pop-up window.
- f. From the Certificate Issued window, click Install this certificate.

Export the Client Certificate

From the machine on which you issued the certificate, export the client certificate.

To export the client certificate:

- 1. From the machine on which you issued the certificate, open a Microsoft Management Console window (for example, enter mmc.exe in the Start menu search field).
- 2. From the console window, select File > Add/Remove Snap-in.
- 3. Add the Certificates snap-in, selecting My user account.
- 4. Click Finish, and then click OK to close the Add or Remove Snap-ins dialog.
- 5. Select Certificates Current User > Personal > Certificates.
- 6. In the right panel, right-click the certificate, and select All Tasks > Export.
- 7. Follow the wizard to export the certificate:
 - a. Click Yes, export the private key.
 - b. Select Personal Information Exchange PKCS #12 (.PFX).
 - c. Enter a password for the certificate.
 - d. Click **Browse**, specify a name and location for the certificate, and then click **Save**.
 - e. Click Finish, and then click OK.

- 8. Repeat Steps 5 to 7 again to export the Tera2 PCoIP Zero Client certificate, but this time *without* the private key (**No, do not export the private key**), selecting the **DER encoded binary X.509 (.CER)** format instead of the PKCS format.
- 9. Save this .cer file to a location where it can be accessed by the Windows 2008 server and imported into Active Directory.

Convert the Certificate Format from .pfx to .pem Using OpenSSL, convert the certificate format from .pfx to .pem.

To convert the certificate format from .pfx to .pem:

- Download and install Windows OpenSSL from http://www.slproweb.com/products/Win32OpenSSL.html. (The light version is sufficient.)
- 2. Copy the .pfx client certificate file you saved above to the C:\OpenSSL-Win32\bin directory.
- 3. Open a command prompt window, and enter the following command to convert the certificate format from .pfx to .pem: C:\OpenSSL-Win32\bin\openssl.exe pkcs12 -in <client_cert>.pfx -out <client_cert>.pem -nodes where <client_cert> is the name of the .pfx certificate file you saved to your local machine.
- 4. When prompted, enter the password for the certificate file.
- 5. At the command prompt, enter the following command to create an RSA private key file:

```
C:\OpenSSL-Win32\bin\openssl.exe rsa -in <client_cert>.pem -out < client_cert>_rsa.pem
```

```
where <client_cert> is the name of the .pem certificate file you created in the previous step.
```

- 6. In Notepad:
 - a. Open both the original .pem file and the RSA .pem file you just created. The RSA .pem file contains only an RSA private key. Because the Tera2 PCoIP Zero Client certificate requires its private key in RSA format, you need to replace its private key with this RSA private key.
 - b. Copy the entire contents of the RSA .pem file (everything from -----BEGIN RSA PRIVATE KEY ----- to -----END RSA PRIVATE KEY-----), and paste it into the original .pem file, replacing its private key with this RSA private key.

In other words, make sure that all the text from -----BEGIN PRIVATE KEY----- to ----- END PRIVATE KEY (including the dashes) in the original .pem file is replaced with the contents of -----BEGIN RSA PRIVATE KEY ----- to -

----END RSA PRIVATE KEY----- (including the dashes) from the RSA .pem file

c. Save the original .pem file and close it. The certificate is now ready to be uploaded to the Tera2 PCoIP Zero Client.

Import the Client Certificate into the Client User Account

In the Windows 2008 server, import the client certificate into the client user account.

To import the client certificate into the client user account:

- 1. Log in to the Windows 2008 server.
- 2. Click Start > Administrative Tools > Active Directory Users and Computers.
- 3. From the View menu, select Advanced Features.
- 4. Navigate to the user you created for the Tera2 PCoIP Zero Client.
- 5. Right-click the user, and select Name Mappings.
- 6. In the *X.509 Certificates* section, click **Add**.
- 7. Locate and select the Tera2 PCoIP Zero Client certificate you exported that does not contain the private key (This file was saved to a network location in step 9 of *Export the Client Certificate* on page 283.)
- 8. Mkae sure both identity boxes are selected. Click OK, and then click OK again.

Import the Certificates to the Client Device

From the device's AWI, import the certificates.

To import the certificates into a profile using the PCoIP Management Console, see the *PCoIP® Management Console 2.5 Administrators' Guide*.

To import the certificates to a device using the AWI:

- 1. From a browser, log into the AWI for the Tera2 PCoIP Zero Client or PCoIP Remote Workstation Card.
- 2. From the AWI, select Upload > Certificate.
- 3. Upload both the Root CA certificate and the certificate with the private key, using the **Browse** button to locate each certificate and the **Upload** button to upload them.
- 4. From the OSD or AWI, select **Configuration > Network**
- 5. Select Enable 802.1x Security.
- 6. Click Choose beside the *Client Certificate* field.
- 7. Select the certificate with the private key, and then click Select.
- 8. Enter the identity name of the certificate. Typically, this is the universal principal name (UPN) that appears after *Subject*: (for example, zeroclient@mydomain.local).



Note: Windows server may be configured to use the certificate's *Subject*, the *Subject Alternative Name*, or another field For the identity name, your Windows server may be configured to use the certificate's *Subject*, the *Subject Alternative Name*, or another field. Check with your administrator.

- 9. To enable greater 802.1x compatability for older switches on the network, select Enable 802.1X Support for Legacy Switches. This setting is only available from the AWI *Network* page.
- 10. Click Apply, and then click Reset.



Related: Getting more information about 802.1x

For more information about 802.1x, see the following Knowledge Base articles, available from the Teradici Support Center:

- Do PCoIP Zero Clients support network authentication or 802.1x? (KB 15134-590)
- How to set up Windows Server 2008 R2 as an 802.1X Authentication Server (KB 15134-1245)
- PCoIP Troubleshooting Steps: IEEE 802.1x Network Authentication (KB 15134-928)

Configuring a Display Override

Under normal operation, the GPU in the host computer queries a monitor attached to the Tera2 PCoIP Zero Client to determine the monitor's capabilities. These are reported in the EDID information. In some situations, a monitor may be connected to a client in a way that prevents the client from reading the EDID information, such as when connecting through certain devices, such as keyboards and mice. You can configure the *Enable Attached Display Override* feature to enable the client to advertise default EDID information to the host's processor.

You can configure display override settings for a two-monitor setup, or a four-monitor setup.

Configuring Display Override Settings

Setting	Default	AWI	OSD	Management Console
Enable Attached Display Override		×	~	
Enable Preferred Resolution Override		×	~	
Enable Display Cloning		×	~	

From the OSD *Display* page (shown next), you can enable the Extended Display Identification Data (EDID) override mode for a setup with two or four attached displays.

Configuration	×
Network IPv6 Management SCEP Label Discovery Session Power Display Access Audio Reset	
The Enable Attached Display Override feature will force all ports to show that a display is attached. This will advertise a default EDID if no display is physically attached to a port.	
Enable Attached Display Override:	
The Preferred Resolution Override feature allows you to specify a specific resolution to use for each attached display.	
NOTE: In the case of an EDID read failure, the drop-down list may contain resolutions that are not actually supported by your display. If the display stays black or shows a 'Timing Out Of Range' message for more than 30 seconds after changing the preferred resolution, you can unplug and re-plug the video cable to reset your display resolution back to its native value.	
Enable Preferred Resolution Override:	
Preferred resolution 1: Native	
Preferred resolution 2: Native	
The Enable Display Cloning feature will duplicate the primary display to the secondary display.	
Enable Display Cloning:	
Unlock OK Cancel Apply	

OSD Display page (two-display setup)

Configuration							×
Network IPv6 Management SCEP Label Disco	very Session	Power	Display	Access	Audio	Reset	
The Enable Attached Display Override feature v will advertise a default EDID if no display is phys				display is	attach	ed. This	
Enable Attached Display Override:							
The Preferred Resolution Override feature allow attached display.	s you to specify	/ a spec	cific resol	ution to u	se for e	each	
NOTE: In the case of an EDID read failure, the actually supported by your display. If the display message for more than 30 seconds after chang the video cable to reset your display resolution l	v stays black or ing the preferre	shows d resolu	a 'Timing ition, you	I Out Of F	Range'		
Enable Preferred Resolution Override:							
Preferred resolution 1:	Native						
Preferred resolution 2:	Native						
Preferred resolution 3:	Native						
Preferred resolution 4:	Native						
Unlock		OK		Cancel		Apply	

OSD Display page (four-display setup)



Warning: Enable the *Enable Attached Display Override* feature when there is no valid EDID information

Only enable the **Enable Attached Display Override** feature when there is no valid EDID information and your monitor display characteristics are understood. In the case of an EDID read failure, the list may contain resolutions that are not actually supported by your display. If the *Enable Attached Display Override* feature is not enabled, and the display stays black or shows a **Timing Out of Range** message for more than 30 seconds after you set a preferred resolution, you can unplug and re-plug the video cable to reset your display resolution back to its previous value (that is, perform a hot plug reset).



Caution: Performing a hot plug reset won't revert the display for a custom resolution

If you have set a custom resolution, performing a hot plug reset will *not* cause the display to revert to its previous resolution if both **Enable Attached Display Override** and **Enable Preferred Resolution Override** are enabled at the same time. If you want to retain your custom resolution in the event of a hot plug (or power outage, and so on), ensure that both these fields are enabled.

The following parameters display on the OSD Display page:

Display Parameters

Parameter	Description
Enable Attached Display Override	This option is intended for legacy systems. It configures the Tera2 PCoIP Zero Client to send default EDID information to the host when a monitor cannot be detected or is not attached to the client. For Windows versions earlier than Windows 7, if the host didn't have EDID information, it would assume no monitors were attached. This option ensures that the host always has EDID information when the client is in a session.
	The following default resolutions are advertised when this option is enabled:
	• 2560x1600 @60 Hz
	• 2048x1152 @60 Hz
	• 1920x1440 @60 Hz
	• 1920x1200 @60 Hz
	• 1920x1080 @60 Hz
	• 1856x1392 @60 Hz
	• 1792x1344 @60 Hz
	• 1680x1050 @60 Hz
	• 1600x1200 @60 Hz
	• 1600x900 @60 Hz
	• 1440x900 @60 Hz
	 1400x1050 @60 Hz
	• 1366x768 @60 Hz
	• 1360x768 @60 Hz
	 1280x1024 @60 Hz
	• 1280x960 @60 Hz
	• 1280x800 @60 Hz
	• 1280x768 @60 Hz
	• 1280x720 @60 Hz
	• 1024x768 @60 Hz
	• 848x480 @60 Hz
	• 800x600 @60 Hz
	• 640x480 @60 Hz
	When this option is enabled. all displays attached to the Tera2 PCoIP Zero Client will be set to the native resolution of 1024x768.



Parameter	Description
Enable Preferred Resolution Override	Enable this option when a display is attached but can't be detected by the system, and you want to specify a preferred resolution for the display. The same default list of resolutions will be advertised, except that the display resolution you configure here will be sent as the native resolution, instead of the default native resolution of 1024x768.
	 Preferred resolution 1: Select the preferred resolution of the display connected to the Tera2 PCoIP Zero Client's port 1.
	 Preferred resolution 2: Select the preferred resolution of the display connected to the Tera2 PCoIP Zero Client's port 2.
	 Preferred resolution 3: Select the preferred resolution of the display connected to the Tera2 PCoIP Zero Client's port 3.
	 Preferred resolution 4: Select the preferred resolution of the display connected to the Tera2 PCoIP Zero Client's port 4.
	When you enable this option, all displays attached to the client will be set to their specified preferred resolution.
	Caution: Performing a hot plug reset will not cause the display to revert to previous resolution If you have set a custom resolution, performing a hot plug reset will not cause the display to revert to its previous resolution if both Enable Attached Display Override and Enable Attached

Display Override and **Enable Preferred Resolution Override** are enabled at the same time. If you want to retain your custom resolution in the event of a hot plug (or power outage, and so on), ensure that both these fields are enabled.



Parameter	Description		
Enable Display Cloning	Enable the display cloning option if you want the secondary display to mirror the primary display–for example, for digital		
(for two-display setups only)	signage or trainings. Note: Connecting a Tera2 PCoIP Zero Client to a remote workstation If you are connecting a TERA2321 PCoIP Zero Client to a remote workstation that does not have the PCoIP host software installed and the host driver function enabled, <i>and</i> you are using monitor emulation on the remote workstation, you may experience black screens on the cloned displays. To remedy the problem, you can either install and enable the host software, or you can disable monitor emulation on the video port for the secondary display only.		

To configure display override settings:

- 1. From the OSD, select **Options > Configuration > Display**.
- 2. From the *Display* page, update the display settings.
- 3. To save your updates, click OK.

Configuring a Display Override (Quad)

Setting	Default	AWI	OSD	Management Console
Enable Attached Display Override		×	~	
Enable Preferred Resolution Override		×	~	
Enable Display Cloning		×	~	

From the OSD *Display* page (shown next), you can enable the Extended Display Identification Data (EDID) override mode for a setup with two attached displays.

The Display page lets you enable the Extended Display Identification Data (EDID) override mode. You can access this page from the **Options > Configuration > Display** menu.





Caution: Performing a hot plug reset won't revert the display for a custom resolution

If you have set a custom resolution, performing a hot plug reset will *not* cause the display to revert to its previous resolution if both **Enable Attached Display Override** and **Enable Preferred Resolution Override** are enabled at the same time. If you want to retain your custom resolution in the event of a hot plug (or power outage, and so on), ensure that both these fields are enabled.

Configuration						×
Network IPv6 Management SCEP Label Disco	very Session	Power	Display	Access	Audio Reset	
			1		· · ·	
The Enable Attached Display Override feature v will advertise a default EDID if no display is phys				display is :	attached. This	
Enable Attached Display Override:						
The Preferred Resolution Override feature allow attached display.	/s you to speci	'y a spe	cific resol	lution to us	e for each	
NOTE: In the case of an EDID read failure, the actually supported by your display. If the display message for more than 30 seconds after chang the video cable to reset your display resolution I	y stays black o ging the preferr	r shows ed resolu	a 'Timing ution, you) Out Of R	ange'	
Enable Preferred Resolution Override:						
Preferred resolution 1:	Native	•				
Preferred resolution 2:	Native	•				
Preferred resolution 3:	Native	•				
Preferred resolution 4:	Native	•				
Unlock		OK		Cancel	Apply	

OSD TERA2140 Display page

The following parameters can be found on the OSD TERA2140 Display page.

OSD TERA2140 Display Parameters

Parameter	Description
Enable Attached Display Override	This option is intended for legacy systems. It configures the client to send default EDID information to the host when a monitor cannot be detected or is not attached to the client. In versions of Windows prior to Windows 7, once the host had no EDID information, it would assume no monitors were attached and would never recheck. This option ensures that the host always has EDID information when the client is in session.
	The following default resolutions are advertised when this option is enabled:
	• 2560x1600 @60 Hz
	• 2048x1152 @60 Hz
	• 1920x1440 @60 Hz
	• 1920x1200 @60 Hz
	• 1920x1080 @60 Hz
	• 1856x1392 @60 Hz
	• 1792x1344 @60 Hz
	• 1680x1050 @60 Hz
	• 1600x1200@60 Hz
	 1600x900 @60 Hz 1440x900 @60 Hz
	 1440300 @00112 1400x1050 @60 Hz
	• 1366x768 @60 Hz
	• 1360x768 @60 Hz
	• 1280x1024 @60 Hz
	• 1280x960 @60 Hz
	• 1280x800 @60 Hz
	• 1280x768 @60 Hz
	• 1280x720 @60 Hz
	• 1024x768 @60 Hz
	• 848x480 @60 Hz
	• 800x600 @60 Hz
	• 640x480 @60 Hz
	Any displays attached to the client will be set to the native resolution of 1024x768 when this option is enabled.

Parameter	Description
Enable Preferred Resolution Override	Enable this option when a display is attached but cannot be detected by the system, and you want to specify a preferred resolution for the display. The same default list of will be advertised, except the preferred resolution you configure here for a display will be sent as the native resolution instead of the default native resolution of 1024x768.
	 Preferred resolution 0: Select the preferred resolution of the display connected to port 1 on the Tera2 PCoIP Zero Client.
	 Preferred resolution 1: Select the preferred resolution of the display connected to port 2 on the Tera2 PCoIP Zero Client.
	 Preferred resolution 2: Select the preferred resolution of the display connected to port 3 on the Tera2 PCoIP Zero Client.
	 Preferred resolution 3: Select the preferred resolution of the display connected to port 4 on the Tera2 PCoIP Zero Client.
	Any displays attached to the client will be set to their specified preferred resolutions when this option is enabled.
	See <i>Important</i> note for information on how to retain a custom resolution in the event of a hot plug, power outage, and so on.

Performing Diagnostics

This section describes the tools you can use and the tasks you can perform to help you diagnose and troubleshoot issues with your Tera2 PCoIP Zero Client. Using diagnostic tools, you can also gather important information and statistics to help you optimize your environment and test your Tera2 PCoIP Zero Client's performance.

Configuring the Event Log and Syslog

Setting	Default	AWI	OSD	Management Console
Enable Event Log	Enabled	~	×	✓
Enable Syslog	Enabled	~	×	✓
Identify Syslog Host By	IP Address	~	×	✓

Setting	Default	AWI	OSD	Management Console
Syslog Host IP Address / Syslog Host DNS Name		~	×	*
Syslog Host Port	514	~	×	✓
Syslog Facility	19 - local use	~	×	✓

To view and manage logs, as well as set up other logging options such as syslog and enhanced logging mode, you need to enable the event log.

You enable the event log, as well as syslog settings, from the AWI *Event Log* page (shown next).

Event Log			
Configure diagnostic logging options			
Enable Event Log: 🗹			
Event Log Messages:Vi	iew Clear		
Enable Syslog: 🗹			
Identify Syslog Host By: 💽	IP address C FQDN		
Syslog Host IP Address:			
Syslog Host Port: 514			
Syslog Facility: 19	- local use 3	•	
Enhanced logging mode:	isable		
Ca	itegory	Enable enhanced logging	
AU	IDIO	0	
ма	ANAGEMENT CONSOLE	0	
NE	TWORKING	0	
0	VESIGN	0	
SE	SSION NEGOTIATION	0	
SM	IARTCARD	0	
SY	STEM	0	
US	6B	0	
	DEO	0	
Ap	oply Cancel		

AWI Event Log page

Enabling Event Log

Enable the event log so that logging occurs in verbose mode. When you enable the event log, you can view event logs from the OSD and AWI, as well as access and configure other logging options, such as syslog and enhanced logging mode.

When you disable the event log, you won't be able to access logging options, all existing event logs will be deleted, and logging will be disabled. If you've configured syslog settings, logs won't be sent to the syslog server.

To enable the event log:

- 1. From the AWI, select **Diagnostics > Event Log**.
- 2. From the AWI Event Log page, select the Enable Event Log check box.
- 3. Click Apply.

Enabling Syslog

To configure syslog, you'll need to enable syslog, enter the IP address or Fully Qualified Domain Name (FQDN) for the syslog server, and specify the port number and facility to use to send messages to the syslog server.



Note: Before you can enable syslog, you must enable the event log Before you can access and configure syslog settings, you need to select the Enable Event Log check box (see *Enabling Event Log* on page 296).



Note: Syslog default values

Teradici uses UDP to send syslog messages to a centralized syslog server. Because most servers use port 514 for incoming messages, Teradici recommends you configure port **514** (the default port number) as the syslog port. However, you can use a different port as long as the syslog server receives the syslog messages on the same port that the device sends the messages.

Teradici also uses **19 - local use 3** as the default facility because this facility isn't commonly used. If you use it, select a different facility.



Note: Facility values used by Cisco equipment

Cisco IOS devices, CatOS switches, and VPN 3000 concentrators use the 23 - local use 7 facility. Cisco PIX firewalls use the 20 - local use 4 facility.





Note: Ensure that the syslog server can manage the volume of messages

Ensure that your syslog server can handle the volume of messages that the Tera2 PCoIP Zero Client sends. With certain free syslog servers, messages are lost if the volume is too great.

The following syslog settings display on the AWI Event Log page:

Syslog Parameters

Parameter	Description
Enable Syslog	Enable or disable the syslog standard as the logging mechanism for the device.
	Note: You must configure all fields when syslog is enabled If you enable syslog, you must configure the remaining fields. If you disable syslog, you can't edit the fields.
Identify Syslog Host By	Choose if the syslog server host is identified by its IP address or by its Fully Qualified Domain Name (FQDN).
Syslog Host IP Address / Syslog	The parameter that displays depends on which option you choose to identify the syslog server host:
Host DNS name	 IP Address: Enter the IP address for the syslog server host.
	• FQDN: Enter the DNS name for the syslog server host.
	If you enter an invalid IP address or DNS name, a message displays to prompt you to correct it.
Syslog Host Port	Enter the port number of the syslog server. The default port number is 514 .

Parameter	Description
Syslog Facility	The facility is a number attached to every syslog message. The number categorizes the source of the syslog messages. The facility is part of the standard syslog header and all syslog servers can interpret it.
	Enter a facility to suit your logging needs. For example, you could configure devices as follows:
	 Zero clients to use facility 19 Cisco routers to use facility 20 VMware ESX hosts to use facility 21
	The default facility is set to 19 - local use 3 . Cisco routers default to 23 - local use 7 .



Note: Detailed information about the AWI *Event Log* page For more information about the settings on the AWI *Event Log* page, including information about syslog settings, see *Handling the Event Log* on page 1.

To configure syslog settings:

- 1. From the AWI, select Diagnostics > Event Log.
- 2. From the AWI Event Log page, do the following:
 - Select the Enable Syslog check box.
 - For Identify Syslog Host By, select whether you want to identify the syslog server by its IP address or FQDN.
 - In the Syslog Host IP Address / Syslog Host DNS Name box(es), enter the IP address or FQDN of the syslog server.
 - If the syslog server is configured to receive data on a port other than 514, enter another port number in the **Syslog Host Port** box.
 - If you want the device to use a facility other than the default facility, select it from the *Syslog Facility* list.
 - Click Apply.
- 3. From the *Success* page, click **Continue**.

Configuring Enhanced Logging Mode

Setting	Default	AWI	OSD	Management Console
Enhanced logging mode	Disabled	•	×	

From the AWI *Event Log* page (shown next), you can perform additional logging tasks, including enabling enhanced logging mode for specific components. Enabling this mode provides advanced information in the event log to help you troubleshoot issues you may encounter with specific devices (such as USB or video components).



Note: Before you can enable enhanced logging mode, you must enable the event log

Before you can access and configure syslog settings, you need to select the **Enable Event Log** check box (see *Configuring Enhanced Logging Mode* on page 298).

Configure diagnostic logging options Enable Event Log: Event Log Messages: Viev Clear Enable Syslog: Identify Syslog Host By: IP address: IP
Event Log Messages: View Clear Enable Syslog: Image: Clear Identify Syslog Host By: Image: P address Image: P address Syslog Host IP Address: Image: P address Image: P address Syslog Host Port: Image: P address Image: P address Syslog Host Port: Image: P address Image: P address Syslog Facility: Image: P address Image: P address Syslog Facility: Image: P address Image: P address Enhanced logging mode: Image: P address Image: P address Category Enable enhanced logging AUDIO Image: P address Image: P address MANAGEMENT CONSOLE Image: P address Image: P address
Event Log Messages: View Clear Enable Syslog: Image: Clear Identify Syslog Host By: Image: P address Image: P address Syslog Host IP Address: Image: P address Image: P address Syslog Host Port: Image: P address Image: P address Syslog Host Port: Image: P address Image: P address Syslog Facility: Image: P address Image: P address Syslog Facility: Image: P address Image: P address Enhanced logging mode: Image: P address Image: P address Category Enable enhanced logging AUDIO Image: P address Image: P address MANAGEMENT CONSOLE Image: P address Image: P address
Event Log Messages: View Clear Enable Syslog: Image: Clear Identify Syslog Host By: Image: P address Image: P address Syslog Host IP Address: Image: P address Image: P address Syslog Host Port: Image: P address Image: P address Syslog Host Port: Image: P address Image: P address Syslog Facility: Image: P address Image: P address Syslog Facility: Image: P address Image: P address Enhanced logging mode: Image: P address Image: P address Category Enable enhanced logging AUDIO Image: P address Image: P address MANAGEMENT CONSOLE Image: P address Image: P address
Event Log Messages: View Clear Enable Syslog: Image: Clear Identify Syslog Host By: Image: P address Image: P address Syslog Host IP Address: Image: P address Image: P address Syslog Host Port: Image: P address Image: P address Syslog Host Port: Image: P address Image: P address Syslog Facility: Image: P address Image: P address Syslog Facility: Image: P address Image: P address Enhanced logging mode: Image: P address Image: P address Category Enable enhanced logging AUDIO Image: P address Image: P address MANAGEMENT CONSOLE Image: P address Image: P address
Enable Syslog: Identify Syslog Host By: Identify Syslog Host By: Identify Syslog Host P Address: Syslog Host P Address: Syslog Facility: I9 - local use 3 Enhanced logging mode: Disable Category Enable enhanced logging AUDIO MANAGEMENT CONSOLE O
Enable Syslog: Identify Syslog Host By: Identify Syslog Host By: Identify Syslog Host P Address: Syslog Host P Address: Syslog Facility: I9 - local use 3 Enhanced logging mode: Disable Category Enable enhanced logging AUDIO MANAGEMENT CONSOLE O
Identify Syslog Host By: © IP address © FQDN Syslog Host IP Address: Syslog Host Port: 514 Syslog Facility: 19 - local use 3 Enhanced logging mode: Category Enable enhanced logging AUDIO © MANAGEMENT CONSOLE ©
Identify Syslog Host By: © IP address © FQDN Syslog Host IP Address: Syslog Host Port: 514 Syslog Facility: 19 - local use 3 Enhanced logging mode: Category Enable enhanced logging AUDIO © MANAGEMENT CONSOLE ©
Syslog Host IP Address:
Syslog Host Port: 514 Syslog Facility: 19 - local use 3 Enhanced logging mode: Disable Category Enable enhanced logging AUDIO MANAGEMENT CONSOLE O
Syslog Facility: 19 - local use 3 Enhanced logging mode: Disable Category Enable enhanced logging AUDIO MANAGEMENT CONSOLE O
Enhanced logging mode: Disable Category Enable enhanced logging AUDIO O MANAGEMENT CONSOLE O
Category Enable enhanced logging AUDIO O MANAGEMENT CONSOLE O
AUDIO O MANAGEMENT CONSOLE O
MANAGEMENT CONSOLE
NETWORKING O
ONESIGN C
SESSION NEGOTIATION O
SMARTCARD O
SYSTEM O
USB O
VIDEO O
Apply Cancel

AWI Event Log page





Note: You can only enable enhanced logging for one category at a time

You can only apply enhanced logging mode to one category at a time. Enhanced logging mode messages display in the event log by their Level 3 (LVL:3) designation, which indicates a debug-level message.

At any given time, you can enable enhanced logging mode for any one of the following categories:

- Audio: Provides enhanced audio-related details, such as audio compression levels and audio bandwidth. Enable this mode if you experience issues with audio quality.
- Management Console: Provides debug-level details for the connection state between the device and the PCoIP Management Console. Enable this mode if have issues connecting to or managing the device using the PCoIP Management Console.
- Networking: Provides socket-level details for a device's network connections. Enable this mode for network-related issues—for example, if the device can't connect to a peer or broker, or if it can't obtain an IP address from a DHCP server.
- **OneSign**: Provides enhanced logging for connections using Imprivata's OneSign Single Sign-On proximity cards. Enable this mode to see debug-level messages between a device and a OneSign authentication server.
- Session Negotiation: Provides pre-session messaging details, such as the full feature set advertised by each device. Enable this mode for low-level session negotiation details.
- SmartCard: Provides debug-level messages for smart cards. Enable this mode if you experience issues tapping or logging in using a smart card.
- **System**: Provides heartbeat details about the device, such as ambient temperature. Enable this mode for system-level issues.
- USB: Provides details of the traffic between the device and any connected USB devices. Enable this mode if you are experiencing issues with a connected USB device.
- Video: Displays enhanced image-related logging information. Enable this mode for image, monitor, or display topology issues.

To enable enhanced logging mode:

- 1. From the AWI, select **Diagnostics > Event Log**.
- 2. From the AWI Event Log page, select an enhanced logging mode category.

(To return to normal logging mode, click **Disable**.)

3. Click Apply.

Viewing Event Logs

Setting	Default	AWI	OSD	Management Console
View (a button on the AWI, a list of messages on the OSD)		~	~	
Refresh (a button on the OSD, 📧 from the AWI)		~	~	
Clear (a button)		~	~	

From the OSD and AWI *Event Log* pages (shown next), you can view, refresh, and clear the event log messages stored on your Tera2 PCoIP Zero Client.



Note: The event log must be enabled if you want to view event log messages

To view event log messages, make sure the event log is enabled. To enable the event log, see *Viewing Event Logs* on page 301).

Diagnostics						×
Event Log Se	ssion Statistics	PCoIP F	rocessor	Ping		
View event	t log messages					
19d, 07:59:37 19d, 07:59:37 19d, 07:59:37 19d, 07:59:37 19d, 07:59:37 19d, 07:59:37 19d, 07:59:37 19d, 07:59:37 19d, 07:59:38 19d, 07:59:38	<pre>/.85> LVL:2 RC: /.85> LVL:2 RC: /.55> LVL:2 RC: /.55> LVL:2 RC: /.55> LVL:2 RC: /.55> LVL</pre>	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MGMT_SY MGMT_SY MGMT_SY MGMT_SY MGMT_SY MGMT_SQLIT MGMT_SQLIT MGMT_SQLIT MGMT_SQLIT MGMT_SQLIT MGMT_SQLIT MGMT_SQLIT MGMT_SQLIT MGMT_SQLIT MGMT_SQLIT	SSSGSS SSEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE	radici Corporation (c)2007-2015 rmware Part Number: FW023-97 D Serial: D Version: valid persistent log - No valid headers rmware Version: 5.0.0 rmware Build ID: rmware Build date: Aug 7 2015 11:28:52 oIP processor ID: 0X0004, revision: 1.0 dio MO: version 1.0 rnection MO: version 1.0 rmware MO: version 1.0 rmware MO: version 1.0 aging MO: version 1.0 twork MO: version 1.0 StiOn WO: version 1.0 stiOn Version 1.0 stiOn Version 1.0 stiO: version 1.0 pology MO: version 1.0 B MO: version 1.0 E MO: version 1.0 B MO: version 1.0 Lite version: 3.8.1 rmal reboot	
			Refresh		Clear	
<u></u>						Close

OSD Event Log page

Event	Log

Configure diagnostic logging options

Enable Event Log			
Event Log Messages:	View Clear		
Enable Syslog: Identify Syslog Host By:			
Syslog Host IP Address:			
Syslog Host Port	514		
Syslog Facility:	19 - local use 3		
Enhanced logging mode:	Disable		
	Category	Enable enhanced logging	
	AUDIO	0	
	MANAGEMENT CONSOLE	0	
	NETWORKING	0	
	ONESIGN	0	
	SESSION NEGOTIATION	0	
	SMARTCARD	0	
	SYSTEM	0	
	USB	0	
	VIDEO	0	
	Apply Cancel		

AWI Event Log page

To view, refresh, and clear event log messages from the OSD:

- 1. From the OSD, select **Options > Diagnostics > Event Log**.
- 2. From the OSD Event Log page, you can:
 - Scroll to view all the event log messages stored on the Tera2 PCoIP Zero Client.
 - Click **Refresh** to refresh the information that displays on the page and view the most updated event log information.
 - Click Clear to delete all the event log messages stored on the Tera2 PCoIP Zero Client.
- 3. Click Close.

To view, refresh, and clear event log messages from the AWI:

- 1. From the AWI, select **Diagnostics > Event Log**.
- 2. From the AWI *Event Log* page, you can:
 - Click **View** to open a browser page to display the event log messages (with time stamp information) stored on the Tera2 PCoIP Zero Client.
 - Press **F5** to refresh the browser page displaying the log information.
 - Click Clear to delete all the event log messages stored on the Tera2 PCoIP Zero Client.
- 3. Click Apply.

Viewing and Resetting Session Statistics

Setting	Default	AWI	OSD	Management Console
Reset Statistics (button)	N/A	~	×	

The OSD displays session statistics from the last PCoIP session.

The AWI displays session statistics for the current session. If a session isn't active, the AWI displays statistics for the previous PCoIP session.

You can view much more detailed statistical information from the AWI. In addition, you can reset the statistics for the current session from the AWI.

Viewing Session Statistics from the OSD

From the OSD *Session Statistics* page (shown next), you can view statistics from the last session.

Diagnostics	×
Event Log Session Statistics PCoIP Pro	cessor Ping
View statistics from the last session	
PCoIP Packets Sent:	5
PCoIP Packets Received:	4
PCoIP Packets Lost:	3
Bytes Sent:	2
Bytes Received:	1
Round Trip Latency:	50 ms
	Close

OSD Session Statistics page

To view session statistics from the OSD:

- 1. From the OSD, select **Options > Diagnostics > Session Statistics**.
- 2. From the OSD Session Statistics page, you can view the following information:
 - PCoIP Packets Sent The total number of PCoIP packets sent in the last session.
 - PCoIP Packets Received The total number of PCoIP packets received in the last session.
 - PCoIP Packets Lost The total number of PCoIP packets lost in the last session.
 - Bytes Sent The total number of bytes sent in the last session.
 - Bytes Received The total number of bytes received in the last session.
 - **Round Trip Latency** The minimum, average, and maximum round-trip PCoIP system and network latency in milliseconds (+/- 1 ms).
- 3. Click Close.

Viewing and Resetting Session Statistics from the AWI

The AWI *Session Statistics* page (shown next) displays statistics for the current session. If a session isn't active, the statistics from the last session display.

You can also reset session statistics from the AWI. When you reset statistics, you also reset the statistics that display on the AWI Home page (see *AWI Home Page* on page 20).

Session S	tatistics		
View statistic	s for the current s	ession	
	Co	nnection State: Connec	ted to host <u>192.168.65.103</u>
	802.1X Authen	tication Status: Disable	d
PCoIF	Packets (Sent/R	eceived/Lost): 44769	/ 68244 / 0
		ent/Received): 563849	
Rou	nd Trip Latency (Min/Avg/Max): 2 / 2 / 4	1 ms
		vg/Max/Limit): 8 / 112	
Rec	eive Bandwidth (Min/Avg/Max): 0 / 200	/ 5600 kbps
Pipeline Pr	ocessing Rate (Av	vg/Max/Limit): 1 / 37 /	297 Mpps
		Settings In Use: Client	
		lity (Min/Max): 40 / 90	
		lity Preference: 50 ild To Lossless: Enabled	
	ви	IId To Lossiess: Enabled	
		Re	set Statistics
	Maximum Rate:		
	Refresh Rate		
1	60 fps	8 fps	Lossy
2	60 fps	0 fps	Lossless
4	N/A N/A	N/A N/A	N/A N/A
4	N/A	IN/M	D/A

AWI Session Statistics page



Note: The sample AWI *Session Statistics* page shows client statistics for a two-display setup

The sample page shows session statistics for a client with two connected displays. If your deployment uses four displays, information about all four displays will display on the page.

The following information displays on the AWI Session Statistics page:

Parameters	Description
Connection State	The current (or last) state of the PCoIP session. Possible connection states are:
	AsleepCanceling
	Connected
	Connection PendingDisconnected
	Waking
802.1X Authentication Status	Indicates whether 802.1x authentication is enabled or disabled on the device.
PCoIP Packets Statistics	PCoIP Packets Sent: The total number of PCoIP packets sent in the current/last session.
	PCoIP Packets Received: The total number of PCoIP packets received in the current/last session.
	PCoIP Packets Lost: The total number of PCoIP packets lost in the current/last session.
Bytes	Bytes Sent: The total number of bytes sent in the current/last session.
	Bytes Received: The total number of bytes received in the current/last session.
Round Trip Latency	The minimum, average, and maximum round-trip PCoIP system and network latency in milliseconds (+/- 1 ms).
Bandwidth Statistics	Transmit Bandwidth: The minimum, average, and maximum traffic transmitted by the Tera processor. The active bandwidth limit is the maximum amount of network traffic the Tera processor may currently generate. The value is derived from the configured bandwidth parameters and the current (or last) network congestion levels.
	Receive Bandwidth: The minimum, average, and maximum traffic received by the Tera processor.
Pipeline Processing Rate	Shows the average and maximum amount of image data being processed by the image engine (in megapixels per second).
Endpoint Image Settings In Use	Displays if the image settings being used are configured within the client or within the host. This is based on how the <i>Use Client</i> <i>Image Settings</i> field is configured on the Image page for the host device.

Parameters	Description
Initial Image Quality	The minimum and maximum quality setting is taken from the Image page for the device.
Image Quality Preference	This setting is taken from the <i>Image Quality Preference</i> field on the Image page. The value determines if the image is set to a smoother versus a sharper image.
Build to Lossless	Options that may appear in this field include the following:
	Enabled: The <i>Disable Build to Lossless</i> field on the Image page is unchecked.
	Disabled: The Disable Build to Lossless field is checked.
Reset Statistics	Click this button to reset the statistic information on this page.
	Note: The Reset Statistics button also resets the Home page statistics The Reset Statistics button also resets the statistics that display on the AWI Home page. For more information about the AWI Home page, see AWI Home Page on page 20.
Display	The port number for the display.
Maximum Rate:	This column shows the refresh rate of the attached display.
Refresh Rate	If the <i>Maximum Rate</i> field on the Image page is set to 0 (that is, there is no limit), the maximum rate is taken from the monitor's refresh rate.
	If the <i>Maximum Rate</i> field on the Image page is set to a value greater than 0, the refresh rate shows as User Defined.
Output Process Rate	The frame rate currently being sent from the image engine on the host to the client.
Initial Image Quality	 Shows the current lossless state of the attached display: Lossy Perceptually lossless Lossless

To display session statistics:

- 1. From the AWI, select **Diagnostics > Session Statistics**.
- 2. From the AWI Session Statistics page, you can:
 - View the statistics for the current or previous PCoIP session.
 - Click Reset Statistics to reset the statistics for the current session.

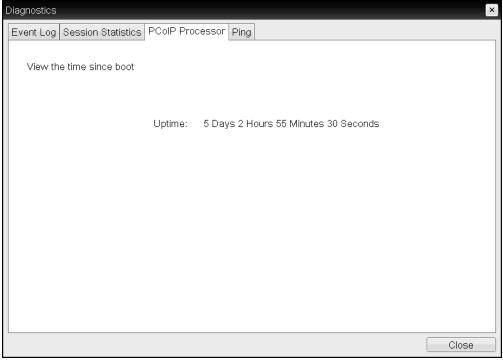
Viewing PCoIP Processor Statistics

Setting	Default	AWI	OSD	Management Console
Reset PCoIP Processor (a button)	N/A	✓	×	

From the OSD and AWI, you can view the time elapsed since the Tera2 PCoIP Zero Client's PCoIP processor last re-booted. The AWI also enables you to view the current time and reset the Tera2 PCoIP Zero Client's PCoIP processor.

Viewing PCoIP Processor Statistics from the OSD

The OSD *PCoIP Processor* page (shown next) enables you to view the time elapsed since the Tera2 PCoIP Zero Client's PCoIP processor last re-booted.



OSD PCoIP Processor page

To view PCoIP processor information:

- 1. From the OSD, select **Options > Diagnostics > PCoIP Processor**.
- 2. From the OSD *PCoIP Processor* page, view the time elapsed since the Tera2 PCoIP Zero Client's PCoIP processor last re-booted.
- 3. Click Close.



Viewing and Resetting PCoIP Processor Statistics from the AWI

From the AWI *PCoIP Processor* page (shown next), you can view the current time, as well as view the time elapsed since the Tera2 PCoIP Zero Client's PCoIP processor last re-booted. You can also reset the Tera2 PCoIP Zero Client's PCoIP processor.

PCoIP Processor Reset the PCoIP device, view the time elapsed since boot
Current Time: 08/10/2015 17:20:58
Time Since Boot: 0 Days 5 Hours 49 Minutes 49 Seconds
Reset PCoIP Processor: Reset

AWI PCoIP Processor page

To view and reset PCoIP processor information from the AWI:

- 1. From the AWI, select Diagnostics > PCoIP Processor.
- 2. From the AWI PCoIP Processor page, you can:
 - View the current time, as well as the time elapsed since the Tera2 PCoIP Zero Client's PCoIP processor last re-booted.



Note: You must enable Network Time Protocol for the current time to display

For the current time to display, you must enable Network Time Protocol (NTP) and configure NTP parameters. To enable and configure NTP, see *Configuring Time Settings* on page 257.

Click Reset to start collecting fresh statistics.

Pinging the Host

Setting	Default	AWI	OSD	Management Console
Destination		~	×	
Interval	1	~	×	
Packet Size	32	~	×	
Sent		~	×	
Received		~	×	

Setting	Default	AWI	OSD	Management Console
Start (a button)		~	×	
Stop (a button)		~	×	

From the OSD *Ping* page (shown next), you can ping a host to see if it's reachable across the IP network.

Diagnostics		×
Event Log Session Statistics PCoIP Pro	cessor Ping	
Determine if a host is reachable across	s the network	
Destination: Interval: Packet Size:	1 seconds 32 bytes	
Packets:		
Sent:	0	
Received:	0	
	Start Stop	
	Clos	se

OSD Ping page



Because firmware releases 3.2.0 and later force the *do not fragment flag* in the ping command, you can ping a host to determine the maximum MTU size.

The following parameters display on the OSD Ping page:

Ping Parameters

Parameter	Description
Destination	IP address or Fully Qualified Domain Name (FQDN) to ping.
Interval	Interval between ping packets.

Parameter	Description
Packet Size	Size of the ping packet.
Packets Sent	Number of ping packets transmitted.
Packets Received	Number of ping packets received.
Start/Stop	Press Start or Stop to start or stop the ping.

To ping a host:

- 1. From the OSD, select **Options > Diagnostics > Ping**.
- 2. Click Start to start the ping. To stop the ping, click Stop.
- 3. Click Close.

Controlling Sessions

Setting	Default	AWI	OSD	Management Console
Connect (a button)	Enabled if a session is disconnected / Disabled if a session is connected	•	×	
Disconnect (a button)	Enabled if a session is connected / Disabled if a session is disconnected	•	×	

The AWI *Session Control* page (shown next) displays current status of the session (for example, *connected*, *connection pending*, or *disconnected*), and enables you to manually disconnect from or connect to a session.

AWI Session Control page

The following parameters display on the AWI Session Control page:

Session Control Parameters

Parameter	Description
Connection State	This field displays the current state of the session. Options include the following:
	Disconnected
	Connection Pending
	Connected
	Two buttons appear below the Connection State field:
	• Connect: If the connection state is Disconnected , click this button to initiate a PCoIP session between the client and its peer device. If the connection state is Connection Pending or Connected , this button is disabled.
	 Disconnect: If the connection state is Connected or Connection Pending, click this button to end the PCoIP session for the device. If the connection state is Disconnected, this button is disabled.
Peer IP	Peer IP Address: Displays the IP address for the peer device. When not in session, this field is blank.
Peer MAC Address	Peer MAC Address: Displays the MAC address of the peer device. When not in session, this field is blank.

To manually disconnect from or connect to a session:

- 1. From the AWI, select **Diagnostics > Session Control**.
- 2. From the AWI Session Control page, you can:
 - View the connection status.
 - Click Connect to initate a PCoIP session.
 - Click **Disconnect** to end the PCoIP session.

Testing Audio

Setting	Default	AWI	OSD	Management Console
Start (a button)		✓	×	
Stop (a button		~	×	

From the AWI *Audio* page (shown next), you can generate an audio test tone from the Tera2 PCoIP Zero Client.

Audio	
Generate an audio test tone (client only)	
Start Stop	

AWI Audio page



Note: You can't perform audio tests during a PCoIP session You can only start and stop an audio test from the Tera2 PCoIP Zero Client if the client isn't in a PCoIP session.

To generate an audio test tone:

- 1. From the AWI, select **Diagnostics > Audio**.
- 2. From the AWI *Audio* page, click **Start** to start the test tone, or click **Stop** to stop the test.

Testing Attached Displays

Setting	Default	AWI	OSD	Management Console
Test mode	Video Test Pattern Generator	*	×	
Test resolution	2048x1152	•	×	
Start (a button)		•	×	
Stop (a button)		•	×	

From the AWI *Display* page (shown next), you can initiate and view a visual test pattern on the Tera2 PCoIP Zero Client's attached display(s).



Note: You can't display test patterns during PCoIP sessions The test pattern only displays when the Tera2 PCoIP Zero Client isn't in a PCoIP session. If you click **Start** when the Tera2 PCoIP Zero Client is in a session, an error message displays.

Display
Display a test pattern on the attached monitor (client only)
Test mode: Video Test Pattern Generator 💌
Test resolution: 2048x1152 💌
Start Stop

AWI Display page

To initiate a test pattern:

- 1. From the AWI, select **Diagnostics > Display**.
- 2. From the AWI Display page, do the following:
 - a. From the **Test mode** list, select the type of test pattern to display on the Tera2 PCoIP Zero Client's attached display(s).
 - b. From the Test resolution list, select the test resolution to use.
 - c. Click **Start** to display a test pattern on the Tera2 PCoIP Zero Client's attached display(s). Click **Stop** to stop the test.

Using the Packet Capture Tool

Setting	Default	AWI	OSD	Management Console
Start (a button)		✓	×	
Download (a link)		~	×	

The AWI *Packet Capture* page (shown next) provides a diagnostic tool to capture network packets on the Tera2 PCoIP Zero Client. Using the packet capture tool may be requested by Teradici support.

Packet Capture

Capture network packets for diagnostics

AWI Packet Capture page



Note: PCoIP traffic isn't included in the packet capture PCoIP traffic is not included in the packet capture. All other network traffic, is captured.

The following parameters display on the AWI Packet Capture page:

Packet Capture Parameters

Parameters	Description			
Packet Capture	Displays the status of the packet capture tool. Values include:			
Status	Idle: Packet capture has not been initiated.			
	Note: After packet capture, the status displays an Idle status after restarting the Tera2 PCoIP Zero Client After performing a packet capture, the status displays as Idle if you reboot the Tera2 PCoIP Zero Client.			
	Running: Packet capture is in progress.			
	Stopped: Packet capture has been stopped.			
Bytes (Captured/Max)	Shows the number of captured bytes over the maximum number you can capture (in numeric and percentage format) along with the number of packets captured.			



Parameters	Description		
Diagnostic Packet Capture	Click Start to start the capture and click Stop to stop the capture.		
	Note: Packet_capture.bin contains network packets Packets are captured into a binary file called packet_capture.bin. A maximum of 20 MB of data can be captured. If you don't stop the capture, it will automatically stop when it reaches the maximum size.		
Diagnostic Packet Capture	Click Download to save <pre>packet_capture.bin</pre> to the desired location on your computer.		

To capture network packets to troubleshoot an issue:

- 1. From the AWI, select Diagnostics > Packet Capture.
- 2. From the AWI Packet Capture page, clickStart to initiate the packet capture.
- 3. Repeat the steps required to reproduce the issue.
- 4. Click **Stop** to stop the packet capture.



Note: The packet_capture.bin file contains network packets Packets are captured into a binary file called packet_capture.bin. A maximum of 20 MB of data can be captured. If you do not stop the capture, it will automatically stop when it reaches the maximum size.

- 5. Click the Download link.
- 6. Save packet_capture.bin to a location on your computer.

Troubleshooting a Tera2 PCoIP Zero Client in Recovery Mode

If your Tera2 PCoIP Zero Client firmware goes into recovery mode, here are some ideas to troubleshoot the problem:

- It is possible that the Tera2 PCoIP Zero Client was forced into recovery mode by a user repeatedly tapping the power button when turning it on. If so, reboot the Tera2 PCoIP Zero Client to return it to the main firmware.
- If the Tera2 PCoIP Zero Client doesn't load the main firmware but boots into the recovery image immediately after powering up, then it's likely that a firmware upload operation was interrupted and the Tera2 PCoIP Zero Client doesn't

contain a valid firmware image. Upload a new firmware image to the Tera2 PCoIP Zero Client and reboot the client to return to working firmware. To upload new firmware, see *Uploading Firmware* on page 182

 If the Tera2 PCoIP Zero Client attempts to boot to the main firmware a few times (the splash screen will display for a short period of time) but eventually switches to the recovery image, then it's possible that the firmware configuration isn't valid. Reset the zero client parameters to factory defaults to clear the issue and reprovision the device. To reset the zero client parameters, see *Resetting Your Tera2 PCoIP Zero Client* on page 193.

Security Cipher Algorithms

The Tera2 PCoIP Zero Client exchanges information with several services while connecting to endpoint managers, connection managers, and PCoIP hosts. The various communication phases are described here, together with the set of cipher algorithms available to each phase. The topics include:

- Encrypting Browser Connections on page 318
- Encrypting Endpoint Discovery on page 319
- Encrypting Endpoint Manager Administration on page 319
- Encrypting Pre-Session Communications with VMware Horizon Environments on page 320
- Encrypting Pre-Session Communications with PCoIP Connection Managers on page 320
- Encrypting PCoIP Session Negotiation with PCoIP Hosts on page 321
- In-Session Encryption on page 322

Encrypting Browser Connections

You can manage Tera2 PCoIP Zero Clients using a browser connection to the AWI. These secure connections require Transport Layer Session (TLS) 1.1 or TLS 1.2 compliant browsers. Browsers configured to use SSLv3 and TLS 1.0 are not supported.

The following cipher suites (listed in order of preference) are used to secure a browser connection to the AWI:

- TLS_RSA_WITH_AES_256_GCM_SHA384
- TLS_RSA_WITH_AES_128_GCM_SHA256
- TLS_RSA_WITH_AES_256_CBC_SHA256
- TLS_RSA_WITH_TLS_RSA_WITH_AES_128_CBC_SHA_AES_128_CBC_ SHA256
- TLS_RSA_WITH_AES_256_CBC_SHA



Note: Recommended web browsers

Recommended web browsers are Firefox, Chrome, Internet Explorer 11, and Edge.

Encrypting Endpoint Discovery

Tera2 PCoIP Zero Clients that are not managed by an endpoint manager, such as the PCoIP Management Console, listen for incoming discovery requests.

When an endpoint discovery request from an endpoint manager is received by the Tera2 PCoIP Zero Client, communications between the endpoint manager and the Tera2 PCoIP Zero Client are established securely using one of the following cipher algorithms:

- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_RSA_WITH_AES_256_CBC_SHA256
- TLS_RSA_WITH_AES_128_CBC_SHA256
- TLS_RSA_WITH_AES_256_CBC_SHA
- TLS_RSA_WITH_AES_128_CBC_SHA



Note: Minimum SSL version

There is a minimum required SSL version of TLS 1.1.

Encrypting Endpoint Manager Administration

Once an endpoint manager discovers a Tera2 PCoIP Zero Client, it uses the PCoIP Management Protocol to administer the endpoint. Communications between endpoint managers and Tera2 PCoIP Zero Clients are secured using one of the following cipher suites:

- TLS_DHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_DHE_RSA_WITH_AES_256_CBC_SHA256
- TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
- TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384



Note: Minimum SSL version

There is a minimum required SSL version of TLS 1.1.

Encrypting Pre-Session Communications with VMware Horizon Environments

Before a PCoIP session is negotiated with a PCoIP host in a VMware Horizon environment, each user is authenticated and then selects a desktop from a list of authorized resources. To complete this authentication process, the Tera2 PCoIP Zero Client communicates with a Horizon Connection Server over port 443 using one of the following cipher suites:

- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA
- TLS_RSA_WITH_AES_256_CBC_SHA
- TLS_RSA_WITH_AES_128_CBC_SHA
- TLS_RSA_WITH_RC4_128_SHA
- TLS_RSA_WITH_3DES_EDE_CBC_SHA



Note: System configuration requirements

These cipher suites can only be configured at the host, and have a minimum required SSL version of TLS 1.0.

Encrypting Pre-Session Communications with PCoIP Connection Managers

Before a PCoIP session is negotiated with a PCoIP host using a PCoIP Connection Manager, each user is authenticated and then selects a desktop from a list of authorized resources. To complete this authentication process, the Tera2 PCoIP Zero Client communicates with a PCoIP Connection Manager over port 443 using one of the following cipher suites:

- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
- TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_RSA_WITH_AES_256_GCM_SHA384

- TLS_RSA_WITH_AES_128_GCM_SHA256
- TLS_RSA_WITH_AES_256_CBC_SHA256
- TLS_RSA_WITH_AES_128_CBC_SHA256
- TLS_RSA_WITH_AES_256_CBC_SHA
- TLS_RSA_WITH_AES_128_CBC_SHA



Note: System configuration requirements

These cipher suites can only be configured at the host, and have a minimum required SSL version of TLS 1.0.

Encrypting PCoIP Session Negotiation with PCoIP Hosts

After user authentication and resource selection, PCoIP sessions are negotiated between the Tera2 PCoIP Zero Client and the PCoIP host. These negotiations take place before the PCoIP session is established, and are secured using these Max Compatibility and Suite B cipher suites:

- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
- TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_RSA_WITH_AES_256_GCM_SHA384
- TLS_RSA_WITH_AES_128_GCM_SHA256
- TLS RSA WITH AES 256 CBC SHA256
- TLS_RSA_WITH_AES_128_CBC_SHA256
- TLS_RSA_WITH_AES_256_CBC_SHA
- TLS_RSA_WITH_AES_128_CBC_SHA



Note: Minimum SSL version

These Max Compatibility security level cipher suites have a minimum required SSL version of TLS 1.0.

The following Suite B security level cipher suite has a minimum required SSL version of TLS 1.2, and applies only to Remote Workstation Card connections:

• TLS_ECDHE_ECDSA_RSA_WITH_AES_256_GCM_SHA384

In-Session Encryption

Once a PCoIP session has been negotiated and the connection established, Tera2 PCoIP Zero Clients enable the AES-128-GCM and AES-256-GCM session encryption algorithms. These algorithms secure all PCoIP communications during an active PCoIP session. As of firmware release 5.0, these algorithms are host-only settings and can't be configured from the client's AWI.

Frequently Asked Questions

This section provides answers to some commonly-asked questions about the Tera2 PCoIP Zero Client. For additional information, see *Getting More Information* on page 10, or the Teradici Support Center at Teradici Support.

Q: What is a Tera2 PCoIP Zero Client?

A: Tera2 PCoIP Zero Clients are hardware- and firmware-based endpoints that enable users to connect remotely to PCoIP Remote Workstations, workstations running Teradici Cloud Access Software, Teradici Cloud Access Platform desktops and workstations, Amazon WorkSpaces desktops, and VMware Horizon and VMware Horizon DaaS virtual desktops. Because they do not have general purpose CPUs, local data storage, or application operating systems, Tera2 PCoIP Zero Clients are ultra secure and easy to manage. Tera2 PCoIP Zero Clients contain upgradable firmware that enables you to customize your client with various features.

Tera2 PCoIP Zero Clients come in many forms, such as small stand-alone devices, PCoIP integrated displays, and touch-screen monitors. They support multiple wide-screen formats, HD audio and local USB peripherals, and are IPv6-ready. They also have extensive USB security and authentication features, including multiple-factor authentication for use with proximity cards, smart cards, and One-Time-Passwords (OTP).

Tera2 PCoIP Zero Clients are powered by a single TERA2321 or TERA2140 processor.

For more information about your Tera2 PCoIP Zero Client, see *About the Tera2 PCoIP Zero Client* on page 12.

Q: How do I set up my Tera2 PCoIP Zero Client?

- A: For detailed instructions on how to physically set up a Tera2 PCoIP Zero Client and connect it to USB devices, monitors, and a network, see the *PCoIP® Tera2 Zero Client Quick Start Guide*. This guide has detailed instructions for each step of the installation process.
- Q: How do I configure a Tera2 PCoIP Zero Client?
- A: The following configuration and management tools are available for Tera2 PCoIP Zero Clients:

- PCoIP On-Screen Display (OSD): The Tera2 PCoIP Zero Client's pre-session built-in interface for configuring the device's firmware.
- PCoIP Administrative Web Interface (AWI): A web-based interface for configuring a specific Tera2 PCoIP Zero Client's firmware remotely after typing the client's IP address into the browser's address bar.
- Teradici zero client management software: A management tool for configuring and managing multiple PCoIP Zero Clients remotely. Teradici's management software is the PCoIP Management Console. For information about the PCoIP Management Console, see the *PCoIP® Management Console 2.5 Administrators' Guide*.

Q: How do I find my Tera2 PCoIP Zero Client's IP Address?

A: The Tera2 PCoIP Zero Client's address displays in the IP Address field when you select Options > Information > Network or Options > Configuration > Network from the client's OSD.

For more information, see How to Assign an IP Address to a PCoIP Zero Client.

Q: How do I update the Tera2 PCoIP Zero Client firmware?

A: The firmware version that is currently installed in your Tera2 PCoIP Zero Client displays in the **Firmware Version** field when you select **Options > Information** from the client's OSD or **Info > Version** from the client's AWI. For instructions on how to upload a different firmware release version, see *How to Upload Firmware to a PCoIP Zero Client*.

Q: What hosts can a Tera2 PCoIP Zero Client connect to?

A: Tera2 PCoIP Zero Clients are pre-configured to connect directly to PCoIP Connection Manager or VMware Horizon brokers, but you can easily configure them for any session connection type. Tera2 PCoIP Zero Clients can connect to PCoIP Remote Workstation Cards, Teradici Cloud Access Software, Teradici Cloud Access Platform desktops and workstations, Amazon WorkSpaces Desktops, and VMware Horizon Desktops. For more information, see *What Can You Connect To Using Your Tera2 PCoIP Zero Client?* on page 27.

Q: What devices can I attach to my Tera2 PCoIP Zero Client?

A: You can attach the following devices:

- Monitors: Depending on the Tera2 PCoIP Zero Client model, you can attach up to four monitors.
- Analog devices: You can attach analog output devices such as headphones and speakers to the Tera2 PCoIP Zero Client's analog output (line out) jack, and analog input devices such as microphones and recording devices to the client's analog input (line in) jack.
- USB devices: You can attach a variety of USB devices to your Tera2 PCoIP Zero Client. USB human interface device (HID) devices (for example, keyboards, mice, Wacom tablets) are locally terminated by the client. Non-HID devices (for example, mass storage devices, some printers, non-isochronous scanners) are automatically bridged when the USB permissions are set to allow the device. The drivers for many of these devices need to be installed in the host operating system.

Technology Reference

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PCoIP Connection Brokers

PCoIP connection brokers are resource managers that dynamically assign host PCs to Tera2 PCoIP Zero Clients based on the identity of the user establishing a connection from the Tera2 PCoIP Zero Client. Connection brokers are also used to allocate a pool of hosts to a group of Tera2 PCoIP Zero Clients. If the Tera2 PCoIP Zero Clients in a PCoIP deployment are configured to always connect to the same host (that is, a static one-to-one pairing), then a connection broker is not required.

For connecting clients and hosts, a number of third-party connection brokers support the PCoIP technology. For more information, see Can I use a connection broker with PCoIP technology? (KB 15134-24).

For VDI implementations, the View Connection Server broker is used to connect Tera2 PCoIP Zero Clients to VMware Horizon virtual desktops. You can also use the View Connection Server broker to connect PCoIP clients and host PCs. For more information, see *Using PCoIP® Host Cards with VMware View*.

DVI and DisplayPort Interfaces

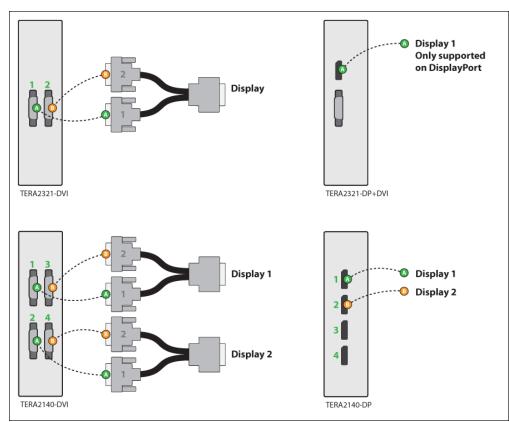
Tera2 PCoIP Zero Clients support both DVI and DisplayPort digital display interfaces. The following port options are available for these clients:

- TERA2321 DVI-I dual-display Tera2 PCoIP Zero Client: contains two DVI ports.
- TERA2321 DP+DVI-I dual-display Tera2 PCoIP Zero Client: contains one DVI port and one DisplayPort port.
- TERA2140 DVI-D quad-display Tera2 PCoIP Zero Client: contains four DVI ports.
- TERA2140 DP quad-display Tera2 PCoIP Zero Client: contains four DisplayPort ports.

Support for 2560x1600 Display Resolution

All of the previous Tera2 PCoIP Zero Clients also support 2560x1600 resolution for attached monitors with either DVI or DisplayPort interfaces. However, a custom dual-link DVI cable adapter is required to support this resolution for DVI interfaces.

The following figure illustrates how to connect video cables to each type of Tera2 PCoIP Zero Client to achieve 2560x1600 resolution on a connected display.



Connecting video cables to each type of Tera2 PCoIP Zero Client

DVI and DisplayPort Connectors for 2560x1600 Resolution

- TERA2321 DVI-I dual-display Tera2 PCoIP Zero Client: This PCoIP Zero Client supports one 2560x1600 monitor. Connect the two DVI-I cable connectors on a custom dual-link DVI-I cable adapter to the two DVI-I ports on the Tera2 PCoIP Zero Client, as shown in the previous illustration (upper left).
- TERA2321 DP+DVI-I dual-display Tera2 PCoIP Zero Client: This Tera2 PCoIP Zero Client supports one 2560x1600 monitor on the DisplayPort interface only. Connect the connector on a DisplayPort cable to the DisplayPort port on the Tera2 PCoIP Zero Client, as shown in the previous illustration (upper right).
- TERA2140 DVI-D quad-display Tera2 PCoIP Zero Client: This client supports up to two 2560x1600 resolution monitors. For each monitor, connect the two DVI-D cable connectors on a custom dual-link DVI-D cable adapter to the two DVI-D ports that are shown in the previous illustration (lower left). These connectors must be connected to ports on the client exactly as shown.
- TERA2140 DP quad-display Tera2 PCoIP Zero Client: This Tera2 PCoIP Zero Client supports up to two 2560x1600 monitors. For each one, connect the connector on a DisplayPort cable to a DisplayPort port on the Tera2 PCoIP Zero Client, as shown in the previous illustration (lower right).

Local Cursor and Keyboard

Local cursor and keyboard is a feature of the PCoIP Host Software that improves usability for PCoIP sessions operating over WAN connections (latency > 40 ms). When enabled, the Tera2 PCoIP Zero Client can terminate input from the mouse and keyboard, and draw the cursor on the attached display(s).

For more information about this feature and instructions on how to enable it, see the *PCoIP® Host Software for Windows User Guide*.

Remote Workstation Cards

PCoIP Remote Workstation Cards are small add-in cards that can be integrated into tower PCs, rack mount PCs, PC blades, and server blades. The card's TERA-series processor performs advanced display compression algorithms to encode a user's full desktop environment. This information is communicated in real time over an IP network to the user's Tera2 PCoIP Zero Client.

For complete details about PCoIP Remote Workstation Cards, see the Teradici website at www.teradici.com.

Teradici Cloud Access Platform

The Teradici Cloud Access Platform is an extensible platform developed by Teradici that solution providers can integrate into their offerings to deliver secure virtual desktops and workstations using PCoIP technology.

For information about the Cloud Access Platform, you can find the set of Teradici Cloud Access Platform documents in the Teradici Support Center.

PCoIP Software Session Variables

The PCoIP software session variables in Microsoft's Group Policy Object (GPO) editor let you configure users' desktops with a collection of parameters that affect PCoIP sessions with soft hosts. These variables are defined in a GPO administrative template file called pcoip.adm, which is located on the View Connection Server installation directory (\\'servername'\c\$\Program Files\VMware\VMware View\Server\extras\GroupPolicyFiles\pcoip.adm).

You can enable and configure PCoIP software session variables in either the Group Policy Object editor's **PCoIP Session Variables > Overridable Administrator Defaults** list to enable users to override settings or the **PCoIP Session Variables > Overridable Administrator Defaults** list to prevent users from overriding settings.





Note: Applying Group Policy Object administrative template file for large workplace environments

For large environments, you can apply pcoip.adm to a Windows Active Directory organizational unit (OU) or to a machine that you are configuring as a template for a desktop pool. For further details, see VMware View 5 with PCoIP Network Optimization Guide from the VMware Documentation website.

For instructions on how to load the PCoIP session variables template to a virtual machine's GPO editor, see How do I set up or override PCoIP software session variables on a virtual machine? (KB 15134-349). For detailed information on each PCoIP session variable, see What are PCoIP session variable GPOs? (KB 15134-348).

PCoIP Packet Format

PCoIP is a real-time technology that uses UDP as the transport-layer protocol. PCoIP supports two encryption types–UDP-encapsulated ESP and native IPsec ESP. An unencrypted PCoIP transport header field is also present for devices with firmware 4.1.0 or later installed and/or for scenarios using View 5.1 or later. The PCoIP transport header enables network devices to make better QoS decisions for PCoIP traffic.



Note: TCP/UDP port 4172 assigned to the PCoIP protocol

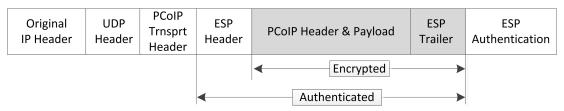
TCP/UDP port 4172 is the Internet Assigned Numbers Authority (IANA) port assigned to the PCoIP protocol. UDP port 4172 is used for the session data, and TCP port 4172 is used for the session handshake. For more information about TCP/UDP ports that are used for PCoIP technology, see What are the required TCP/UDP ports for PCoIP technology? (KB 15134-114)

UDP-encapsulated ESP Packet Format

UDP-encapsulated ESP is the default packet format for Tera2 devices with firmware 4.1.0 installed. It is also used for Tera1 devices with firmware 3.x+ installed that connect remotely via a View Security Gateway.

The UDP-encapsulated ESP packet format is illustrated in the following figure. This figure also shows the location of the PCoIP transport header in a UDP-encapsulated ESP packet.



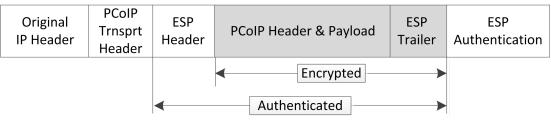


UDP-encapsulated ESP Packet Format

IPsec ESP Packet Format

IPsec ESP encapsulation is the default packet format for direct connections that involve a Tera1 PCoIP Zero Client and/or Tera1 PCoIP Remote Workstation Card.

The IPsec ESP packet format is illustrated in the following figure. This figure also shows the location of the PCoIP transport header in an IPsec ESP packet.



IPsec ESP Packet Format

Tera2 PCoIP Zero Clients

Tera2 PCoIP Zero Clients are secure client endpoints that enable users to connect to a virtual desktop or remote host workstation over a local or wide area IP network. They can take many form factors, such as small stand-alone devices, PCoIP integrated displays, VoIP phones, and touch-screen monitors. Zero clients support multiple wide-screen formats, HD audio and local USB peripherals, and are IPv6-ready. They also have extensive USB security and authentication features, including multiple-factor authentication for use with proximity cards and smart cards.

Powered by a single TERA-series processor, Tera2 PCoIP Zero Clients provide a rich multi-media experience for users, who can interact with their desktops from any type of Tera2 PCoIP Zero Client, and even continue the same session as they move between Tera2 PCoIP Zero Client devices.

For complete details about Tera2 PCoIP Zero Clients, see the Teradici website at www.teradici.com.

Requirements for Trusted Server Connections

When connecting a Tera2 PCoIP Zero Client to a PCoIP endpoint using a **View Connection Server** or **PCoIP Connection Manager** session connection type, the

padlock icon and 'https' text on the user login screen indicates whether the HTTPS connection is trusted or untrusted (see *Making a Trusted HTTPS Connection* and *Making an Untrusted HTTPS Connection* for examples).

- Closed padlock with green 'https' text: The connection is secured with HTTPS and the server's certificate is trusted by the Tera2 PCoIP Zero Client.
- Open padlock with red strikethrough 'https:' text: The connection is secured with HTTPS, but the server's certificate is not trusted by the Tera2 PCoIP Zero Client.

This section explains the certificate requirements that must be in place for each server type in order to have a *trusted HTTPS connection*. The following tables show which requirements are necessary for each Tera2 PCoIP Zero Client *certificate checking mode*.



Note: Criteria applied for Auto Detect mode

If you use Auto Detect mode to connect, either the View Connection Server or PCoIP Connection Manager criteria are applied, depending on the server type.

View Connection Server Requirements

When connecting to a View Connection Server, the certificate requirements are as follows:

Certificate Requirement	Never connect to untrusted servers	Warn before connecting to untrusted servers	Do not verify server certificates
Valid according to computer clock (not expired and not valid only in the future).	Required	The certificate is accepted if the time is not valid but all other requirements are met. Warn the user before proceeding.	Not checked
Certificate subject or a subject alternative name must match the VCS address.	Required	Not required if the server certificate is self-signed. Warn the user before proceeding.	Not checked
		Required for all CA- signed certificates.	

View Connection Server Certificate Requirements

Certificate Requirement	Never connect to untrusted servers	Warn before connecting to untrusted servers	Do not verify server certificates
Certificate must have the serverAuth enhanced key usage.	Required	Required	Not checked
Certificate chain of trust must be rooted in device's local certificate store.	Required	Not required if the server certificate is self-signed. Warn the user before proceeding.	Not checked
		Required for all CA- signed certificates.	
Certificate must not be revoked (checked using OCSP (Offensive Security Certified Professional) only if there is a OCSP responder address in the certificate).	Required	Required	Not checked

PCoIP Connection Manager Requirements

When connecting to a PCoIP Connection Manager, the certificate requirements are as follows:

PCoIP Connection Manager Certificate Requirements

Certificate Requirement	Never connect to untrusted servers	Warn before connecting to untrusted servers	Do not verify server certificates
Valid according to computer clock (not expired and not valid only in the future).	Required	Required	Not checked

Certificate Requirement	Never connect to untrusted servers	Warn before connecting to untrusted servers	Do not verify server certificates
Certificate subject or a subject alternative name must match the VCS address.	Required	Not required if the server certificate is self-signed. Warn the user before proceeding.	Not checked
		Required for all CA- signed certificates.	
Certificate must have the serverAuth enhanced key usage.	Required	Required	Not checked
Certificate chain of trust must be rooted in device's local certificate store.	Required	Warn the user when certificate is not trusted.	Not checked
Certificate must not be revoked (checked using Offensive Security Certified Professional (OSCP) only if there is a OCSP responder address in the certificate).	Required	Required	Not checked
RSA Key Length must be at least 1024 bits.	Required	Required	Not checked

Syslog

The syslog protocol is a standard for logging program messages to a database. It is commonly used to monitor devices that do not have a large amount of storage capacity, such as networking devices, ESX servers, *PCoIP Zero Clients*, and *PCoIP Remote Workstation Cards*. Using syslog for logging enables you to centralize the storage of log messages and to capture and maintain a longer history of log data. It also provides a set of tools to filter and report on syslog data.

Syslog messages include a facility level (from decimal 0 to 23) that indicates the application or operating system component that is generating the log message. For example, a facility level of '0' indicates a kernel message, a facility level of '1' indicates a user-level message, and a facility level of '2' indicates a message from a mail system. Processes and daemons that have not been explicitly assigned a facility may

use any of the eight 'local use' facilities ('16 - local use 0' to '23 - local use 7') or they may use the '1 - user-level' facility. Facilities enable for easy filtering of messages generated by a device.

Syslog messages are also assigned a severity level from 0 to 7, where a severity level of '0' indicates an emergency panic condition and a severity level of '7' indicates a debug-level message useful to developers but not for operations.

See *Configuring Syslog Settings* in the 'How To' section for information on how to configure syslog from the AWI and PCoIP Management Console.

Teradici PCoIP Hardware Accelerator (APEX 2800)

The Teradici PCoIP Hardware Accelerator card provides hardware-accelerated PCoIP image encoding for virtual desktop infrastructure (VDI) implementations. The card constantly monitors the graphic encoding demands of each virtual machine, dynamically switching the image compression tasks from software image encoding in the CPU to hardware image encoding, and back again. This offloading is performed instantly and seamlessly, as needed, without the user noticing the switch.

For complete details about PCoIP Hardware Accelerator, see the Teradici website at www.teradici.com.