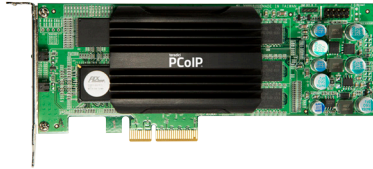


TERADICI PCoIP[®] HARDWARE ACCELERATOR

Quick Start Guide

Models: APEX2800 LP



Actual products may not be exactly as shown.

teradici[®]



Thank you for purchasing the Teradici PCoIP Hardware Accelerator.

The only product of its kind, the PCoIP Hardware Accelerator enhances VMware Horizon® performance, either View (VDI) or Published Desktop (RDS). The card is designed to dynamically offload PCoIP image encoding tasks from the server's CPU to significantly reduce CPU peaks, thus ensuring a better user experience at all times.

This guide will help you install and configure your PCoIP Hardware Accelerator.

PACKAGE CONTENTS

- Hardware Accelerator APEX2800 LP
- Standalone full height bracket
- Quick Start Guide (this document)

IMPORTANT TIPS

Please check that the card is detected by the ESXi hypervisor before installing the drivers

Download the latest ESXi and VM drivers to keep the card compatible with VMware® product releases by visiting the [Teradici Support Site](#).

SYSTEM REQUIREMENTS

System requirements may vary based on the driver versions used, check the Administrators' Guide for the latest updates.

APEX2800 LP

- PCIe slot x4, x8 or x16
- ESXi 6.0 or later
- VMware Horizon View 7.5 or later

INSTALLATION STEPS

Install the PCoIP Hardware Accelerator

1. Ensure all virtual machines hosted by the server are powered down or migrated to another server before continuing.
2. In the VMware vSphere client, right click on the ESXi server in the inventory and select **Enter Maintenance Mode**.
3. Shutdown ESXi server.
4. Make sure the server is turned off and disconnected from AC power.

⊗ WARNINGS

1. Always power down and disconnect devices from AC power before handling them, as some circuitry on the server can continue to operate even though the front panel switch is OFF. Failure to disconnect the device from AC power can result in personal injury or equipment damage. And, always ensure correct anti-static handling is observed to avoid potential ESD damage in the card (e.g. do not walk on carpet).

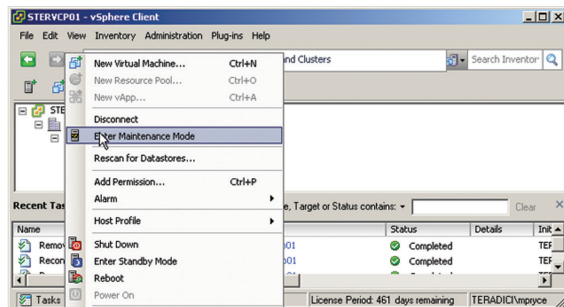


Figure 1

4. Insert the PCoIP Hardware Accelerator into a free PCI Express slot and secure the bracket.
5. Plug the server into a surge-protected AC outlet and power on.
6. Use the command "lspci |grep -i tera" to check if the card is detected by ESXi as shown below. If not, please ensure the slot is compatible

```
~ # lspci |grep -i tera
0000:03:00.0 : Teradici Corp.
0000:03:00.1 : Teradici Corp.
0000:03:00.2 : Teradici Corp.
0000:03:00.3 : Teradici Corp.
0000:03:00.4 : Teradici Corp.
0000:03:00.5 : Teradici Corp.
0000:03:00.6 : Teradici Corp.
0000:03:00.7 : Teradici Corp.
```

Install the ESXi Driver Package

1. Enable remote login on the VMware ESXi server:
 - a. Press F2 to enter customization.
 - b. Enter your Username and Password.
 - c. Enable by selecting Troubleshooting Mode Options > Enable SSH

2. Copy the driver package from your PC to the ESXi server using secure copy:
 - a. Download and install WinSCP (Windows Secure Copy) on your PC.
 - b. Start WinSCP and specify your ESXi server Host name (IP address), Username and Password.
 - c. Make sure the File protocol is SCP.
 - d. Click Login (refer to Figure 2 and 3).

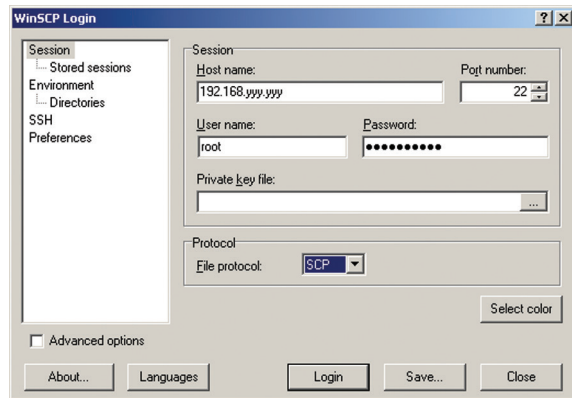


Figure 2

- Drag the apex2800-rel-<version>.<build number>.zip to the tmp directory on your ESXi server.

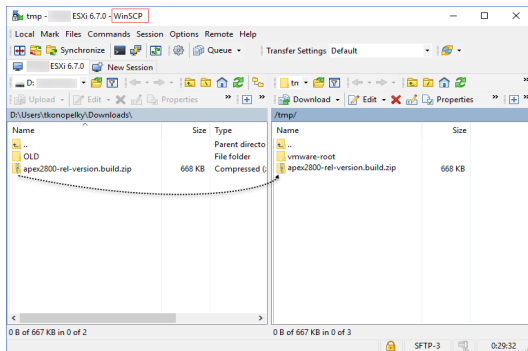


Figure 3

- Connect to the ESXi server using a SSH client (e.g. PuTTY) from your PC and install the driver package:
 - Navigate to the /tmp directory Enter the following command for ESXi 5.5 or later:
`esxcli software vib install -d /tmp/apex2800-rel-<version>.<build number>.zip`

The message in **Figure 4** appears when the installation completes:

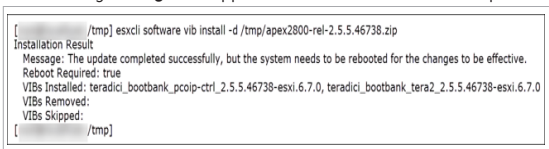


Figure 4

- Reboot the ESXi server
- In vSphere client, right click on the ESXi server in the inventory and select **Exit Maintenance Mode**.

Install the virtual machine driver

Install the PCoIP Hardware Accelerator virtual machine driver on each virtual machine.

1. Power up the virtual machine as shown below.

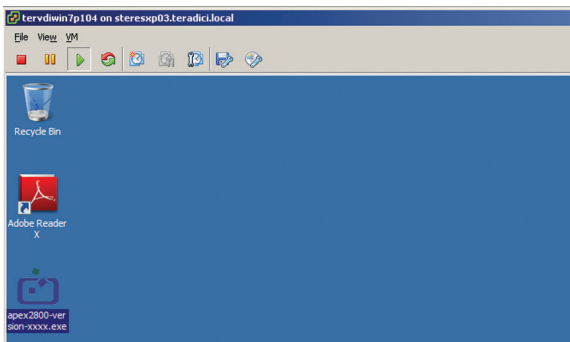


Figure 5

2. Open a console window from vSphere client.
3. Run the apex2800-version-rel-build.exe installer on the virtual machine and follow the steps that appear. (Note: This package must be installed from VM's Console in the vSphere client – it cannot be installed from within a PCoIP session to the virtual machine).
4. After the installation completes, choose to power cycle the machine.

✘ IMPORTANT

Make sure to power the virtual machine off and back on again. This ensures that ESXi will inspect the updated virtual machine image.

In a Horizon View 6 RDS environment please follow KB 15134-1145 to enable offload for multiple sessions on RDS hosts.

Verify global policies settings

1. Verify global policies settings in View Connection Server:

- Make sure that PCoIP Hardware Accelerator is set to 'allow' in the Global Policies, if any policies inherit from it.
- In any custom policies, make sure the option for enabling and disabling PCoIP Hardware Accelerator is set to allow as per Figure 6.

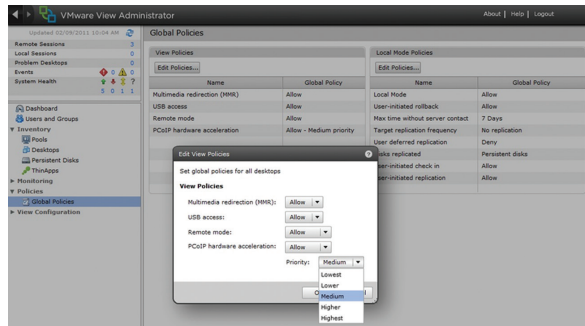


Figure 6

View the PCoIP Hardware Accelerator status

The PCoIP Hardware Accelerator is now installed and configured.

1. Verify the working status of the PCoIP Hardware Accelerator as shown in Figure 7:

- In your SSH session, enter the following command:
opt/teradici/pcoip-ctrl-1
- The output should show **Device (Bus x) (IN_SERVICE)** under APEX2800 Device Summary.

```
- # /opt/teradici/pcoip-ctrl -I
APEX2800 Driver Information:
- SVN revision (39888), Built Nov 6 2014 : 11:13:55
- Display Manager is (ENABLED)
- Display Portrait Mode is (DISABLED)
- Maximum Resolution Supported: 2560 x 1600
- Number of displays supported: 40

APEX2800 Device Summary:
(1) APEX2800 device present
-- APEX2800-LP PCIe (Bus 3) (IN_SERVICE)
++ Serial Number (L12110006231)
++ Firmware SVN revision (39888), Built Nov 6 2014 : 11:11:01
++ CPU Temperature (39c), Ambient/Board Temperature (36c)
++ Device Util (0), Image Pipeline (0) Kpps

Virtual Machine Summary:
-- (0) Virtual Machines Found
-- (0) PCoIP Sessions Found
-- (0) PCoIP Displays Offloaded
```

Figure 7

RESOURCES

- Teradici Support Site - <https://help.teradici.com/s/>
- PColP Community Forum – <https://communities.teradici.com>
- [Teradici PColP Hardware Accelerator's Guide](#)
- [PCoIP Session Planning Guide](#)

PCoIP Knowledge Base:

- [KB 15134-1145](#): "How to enable more than one offload on the PColP Hardware Accelerator (APEX2800) when using a View 6 RDS host?"
- [KB 15134-1553](#): "Dashboard and Simulation Tools"

Videos:

- [What is PColP Hardware Accelerator?](#)
- [How is the PColP Hardware Accelerator different from a GPU?](#)
- [What are the PColP Hardware Accelerator Benefits?](#)

SPECIFICATIONS

Model	APEX2800 LP		
Format	Half height, half length PCIe gen 2.0, x4		
Memory	2GB of onboard DDR3 SDRAM with ECC protection		
# of displays supported	Resolution	In Portrait	In Landscape
	2560x1600	25	40
	1920x1200	40	64
	1680x1050	50	85
	1280x1024	100	100
Power	Power supplied to card via PCIe interface, Max 15 watts		
GPU compatibility	Supports GPU options: shared GPU (vSGA), vGPU and GPU pass-through (vDGA)		
Optional add-on	PCoIP Zero Clients - coupled with PCoIP Hardware Accelerator would deliver the best user experience		

PRODUCT WARRANTY & SUPPORT

This product is covered by a three (3) year warranty period from the time of purchase.

For more information, visit [teradici.com/pcoip-product-support-maintenance](https://www.teradici.com/pcoip-product-support-maintenance) or contact your reseller.



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