

# **Teradici PCoIP® Hardware Accelerator (APEX 2800) Driver Release Notes**

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Issue 19

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PCoIP®

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## Revision History

Version	Date	Description
Issue 19	April 13, 2015	<p>Updated document for Teradici PCoIP<sup>®</sup> Hardware Accelerator (APEX 2800) release 2.5. This release contains the following new features:</p> <ul style="list-style-type: none"><li>• ESXi driver: Support for ESXi 6 and ESXi 5.1 U3</li><li>• VM driver: Support for VMware Horizon 6.1</li></ul> <p>Image caching has also been enhanced in this release for improved bandwidth utilization.</p>

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# 1 Preface

The Teradici PCoIP® Hardware Accelerator (APEX 2800) provides hardware-accelerated PCoIP® image encoding for server-hosted VMware View™ virtual desktops.

Available as a standard PCIe expansion card for industry-standard servers, and as a mezzanine card for Dell and HP blade servers, the PCoIP Hardware Accelerator monitors the graphical demands of all displays and dynamically offloads the image encoding of up to the most demanding 100 displays.

As demands change, the PCoIP Hardware Accelerator seamlessly and automatically shifts between hardware encoding on the card and software encoding on the virtual desktop's vCPU(s), ensuring the best user experience at all times to all users.

The PCoIP Hardware Accelerator is the ideal complement to GPU implementation on VMware Horizon View™ (vSGA, vDGA, and vGPU).

This document provides a summary of PCoIP Hardware Accelerator features for release 2.5. For a list of known issues, please log in to the [Teradici Support Center](#) and see [KB 15134-2579](#).

## 1.1 Audience

This document is intended for IT administrators who have deployed or plan to deploy the PCoIP Hardware Accelerator in a virtual desktop (VMware Horizon View™ VDI) environment.

## 1.2 Additional Resources

The following resources are also available:

- "Teradici PCoIP® Hardware Accelerator (APEX 2800) Administrator's Guide" (TER1109003)  
This guide is located in the **Server Solutions** section in the Teradici Support [Documentation Center](#).
- Teradici PCoIP Hardware Accelerator [installation video tutorial](#)
- [Teradici APEX 2800 Evaluation and Demo Guide](#)
- [APEX 2800 Dashboard for simple testing and evaluation of the PCoIP Hardware Accelerator](#)

Details about Teradici's End User License Agreement (EULA) are located here:

- <http://connect.teradici.com/teradici-end-user-license-agreement>

The following link contains information about the server platforms on which Teradici's program partners have tested the PCoIP Hardware Accelerator:

- <http://www.teradici.com/products-and-solutions/pcoip-products/hardware-accelerator/teradici-pcoip-hardware-accelerator-server-programs>

## 2 PCoIP Hardware Accelerator Release 2.5

This release includes the following features:

- **ESXi driver:** The ESXi driver now supports ESXi 6 and ESXi 5.1 U3.
- **VM driver:** The PCoIP Hardware Accelerator now supports VMware Horizon 6.1.

Image caching has also been enhanced in this release for improved bandwidth utilization. For more information about the ESXi and VMware Horizon versions supported in this release, see [Compatibility](#), below.

### 2.1 Drivers Package Contents

The PCoIP Hardware Accelerator drivers package includes the following software components:

- **ESXi driver:** apex2800-rel-2.5.0.45408-esxi-x.x.x.zip
- **VM driver:** apex2800-2.5.0-rel-45408.exe

### 2.2 Version

Version information for the ESXi driver can be checked using the command “pcoip-ctrl -I”, as shown in the following sample output:

```
APEX2800 Driver Information:
- SVN revision (45408), Built Apr 12 2015 : 14:14:10
- Display Manager is (ENABLED)
- Display Portrait Mode is (DISABLED)
- Maximum Resolution Supported: 1920 x 1200
- Number of displays supported: 128

APEX2800 Device Summary:
(1) APEX2800 device present
-- APEX2800-LP PCIe (Bus 14) (IN_SERVICE)
++ Serial Number (L12110006545)
++ Firmware SVN revision (45408), Built Apr 12 2015 : 14:11:27
++ CPU Temperature (55c), Ambient/Board Temperature (52c)
++ Device Util (6), Image Pipeline (20873) Kpps
-- APEX2800-LP PCIe (Bus 20) (IN_SERVICE)
++ Serial Number (L12110006546)
++ Firmware SVN revision (45408), Built Apr 12 2015 : 14:11:27
++ CPU Temperature (56c), Ambient/Board Temperature (53c)
++ Device Util (0), Image Pipeline (0) Kpps

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

## 2.3 Compatibility

### 2.3.1 Server Platform

The virtual server platform for the PCoIP Hardware Accelerator requires an available card slot for one of the following form factors:

- PCIe x4, half height, half length for the PCoIP Hardware Accelerator LP (supports PCIe Gen 2.0)
- PCoIP Hardware Accelerator MXM for HP blade servers
- Teradici PCoIP Hardware Accelerator by Amulet HotKey (DXM-A) for Dell "M" series blade servers

This release is compatible with all previous ESXi updates. It has been tested on the following platforms:

- ESXi 6.0
- ESXi 5.5 U2
- ESXi 5.1 U3
- ESXi 5.0

VMware Horizon View versions supported:

- VMware Horizon View 6.1
- VMware Horizon View 6.0
- VMware Horizon View 5.3
- VMware Horizon View 5.2
- VMware Horizon View 5.1
- VMware Horizon View 5.0

Virtual operating systems:

- Windows 8.1 64-bit (Note: Windows 8 is not supported.)
- Windows 7 32-bit/64-bit
- Windows Server 2008 R2

Maximum of two PCoIP Hardware Accelerators per server, with up to 200 displays offloaded.

### 2.3.2 Client Platform

This release has been tested on the following client platforms:

- Tera2 PCoIP Zero Client (firmware 4.7, 4.8)
- Tera1 PCoIP Zero Client (firmware 4.7)
- VMware Horizon Clients 3.2
- Displays with a maximum resolution of 2560 x 1600

## 2.4 Known Issues

For details about known issues for release 2.5, please log in to the [Teradici Support Center](#) and see [KB 15134-2579](#).

## Glossary of Definitions

**ESX/ESXi**

VMware hypervisor (virtual machine manager)

**FPS**

Frames per second

**GPU**

Graphics Processing Unit

**MXM**

Mobile PCI Express Module

**OS**

Operating System

**PCIe**

Peripheral Component Interconnect Express

**PCoIP software**

Software implementation of the PCoIP protocol that is integrated into VMware View Agent/Client release 4.0 and later

**PCoIP zero client**

Desktop (client) side of PCoIP system; e.g., PCoIP zero client or PCoIP integrated display

**PCoIP<sup>®</sup>**

Personal Computer over Internet Protocol (PC-over-IP)

**PC-over-IP<sup>®</sup>**

Personal Computer over Internet Protocol

**vCPU**

Virtual CPU within a virtual machine

**vDGA**

Virtual Dedicated Graphics Acceleration

**VDI**

Virtual Desktop Infrastructure

**vGPU**

Shared Virtual GPU

**VIB**

VMware vSphere Installation Bundle

**VM**

Virtual Machine

**vSGA**

Virtual Shared Graphics Acceleration

**zero client**

See PCoIP zero client