

Teradici APEX 2800 Software Release Notes

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Revision History

Version	Date	Description
10	June 3 rd 2013	Added support for ESXi 5.1 U1
9	March 12 th 2013	Added support for Horizon View 5.2
8	Jan 25 th , 2013	Added support for APEX-MXM and Teradici ARCH
7	Dec 4 th , 2012	Added official support for ESXi 5.1
6	Oct 12, 2012	Release Notes APEX2800 – 2.1.0 Add support for APEX 2800 LP (Low Profile card) Provide “Release Preview” for ESXi 5.1
5	Aug 20, 2012	Release Notes APEX2800 – 2.0.0

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Definitions

ESX/ESXi	VMware Hypervisor, ESXi
OS	Operating System
PCIe	Peripheral Component Interconnect Express
PCoIP®	Personal Computer over Internet Protocol (PC-over-IP®)
PCoIP Software	Software implementation of PCoIP protocol that is integrated into VMware View Agent/Client release 4.0 and newer
PCoIP Zero Client	User or client side of PCoIP system in the form of a standalone desktop device or integrated display based on a PCoIP processor

1 Preface

The Teradici APEX 2800 server offload card provides hardware-accelerated PCoIP® image encoding for server-hosted VMware View™ virtual desktops and Teradici Arch published desktops.

Available as a standard PCIe expansion card for industry-standard servers, the APEX 2800 monitors the graphical demands of all displays but automatically offloads the image encoding of up to the most demanding 100 displays from the vCPUs to the APEX 2800 card.

As demands change the card will seamlessly and automatically shift between hardware encoding on the APEX 2800 card and software encoding on the virtual desktop's vCPU(s) ensuring the best user experience at all times.

This document provides a summary of Teradici APEX 2800 software package release 2.2.1.

1.1 Audience

This document is intended for IT administrators who have deployed or plan to deploy the APEX 2800 server offload card in their virtual desktop (View) or published desktop (Arch) environments.

1.2 Additional Resources

- Teradici APEX 2800 Server Offload Card Administrator's Guide (TER1109003)
- APEX 2800 installation video (<http://techsupport.teradici.com/ics/support/default.asp?deptID=15164&task=knowledge&questionID=776>)
- Teradici APEX 2800 Evaluation and Demo Guide (<http://techsupport.teradici.com/ics/support/default.asp?deptID=15164&task=knowledge&questionID=825>)
- APEX 2800 Dashboard for simple testing and evaluation of the APEX 2800 card (<http://techsupport.teradici.com/ics/support/default.asp?deptID=15164&task=knowledge&questionID=761>)

2 Release 2.2.1

This release adds the following elements:

- Support for ESXi 5.1 Update 1

2.1 Software Package Contents

The APEX 2800 software package includes the following software components:

- ESXi Driver Package: apex2800-2.2.1-rel-esxi-<esxi version>-<APEX 2800 esxi build number>.zip

2.2 Version

The version information can be checked from the command “pcoip-ctrl -I”:

```
APEX2800 Driver Information:
- SVN revision (21664), Built May 10 2013 : 11:26:24
- Display Manager is (ENABLED)
- Display Portrait Mode is (DISABLED)
- Maximum Resolution Supported: 1920 x 1200
- Number of displays supported: 128

APEX2800 Device Summary:
(2) APEX2800 devices present
-- APEX2800-LP PCIe (Bus 7) (IN_SERVICE)
++ Serial Number (L12110006544)
++ Firmware SVN revision (21664), Built May 10 2013 : 11:23:32
++ CPU Temperature (49c), Ambient/Board Temperature (47c)
++ Device Util (0), Image Pipeline (0) Kpps
-- APEX2800 PCIe (Bus 4) (IN_SERVICE)
++ Serial Number (unknown/invalid)
++ Firmware SVN revision (21664), Built May 10 2013 : 11:23:32
++ CPU Temperature (37c), Ambient/Board Temperature (35c)
++ Device Util (0), Image Pipeline (0) Kpps

Virtual Machine Summary:
-- (3) Virtual Machines Found
-- (1) PCoIP Session Found
-- (1) PCoIP Display Offloaded
```

2.3 Compatibility

Release 2.2.1 compatibility (ESXi driver)

- ESXi 4.1 Update1, tested on build number 348481
- ESXi 4.1 Update2, tested on build number 502767
- ESXi 4.1 Update3, tested on build number 800380

- ESXi 5.0, tested on build number 469512
- ESXi 5.0 Update 1, tested on build numbers 623860,768111, 821926
- ESXi 5.0 Update 2, tested on build number 914586
- ESXi 5.1, tested on build numbers 838463, 914609
- ESXi 5.1 Update 1, tested on build number 1065491

Release 2.2.1 compatibility (View VM)

- VMware View™ 4.6, 4.6.1
- VMware View™ 5.0, 5.0.1
- VMware View™ 5.1, 5.1.1, 5.1.2
- VMware Horizon View™ 5.2

Release 2.2.1 compatibility (Teradici Arch Published Desktop)

- Deployments using Teradici Arch published desktops can support virtual server configurations for the published desktop server.
- The APEX ESXi driver is required when Teradici Arch is deployed as a virtual machine in an ESXi environment. No other drivers are needed.
- The Teradici Arch software includes support for the APEX 2800 in a published bare metal desktop environment. See “Teradici Arch Published Desktop Release Notes” (TER1211002) for more details.

Endpoint compatibility

- Deployments using zero client devices to connect to View virtual desktops should install PCoIP firmware release 4.0.3 (Tera2) or 4.0.2 (Tera1) or higher on the zero client devices.
- All VMware View soft and thin clients

APEX 2800 Hardware

- APEX 2800 PCIe card reference T2800H0100, Rev 02
- APEX 2800 Low Profile PCIe card reference T2800H0101, Rev 01

2.4 Release Features

APEX 2800 release 2.2.1 includes support for the latest ESX 5.1 update 1 release.

Summary of the packages provided and ESXi version supported:

- apex2800-2.2.1-rel-esxi-4.1.0-xxxxxx.zip
 - Supports ESX 4.1 Update 1, 2 and 3
- apex2800-2.2.1-rel-esxi-5.0.0-xxxxxx.zip
 - Supports ESX 5.0 Update 1 and 2
- apex2800-2.2.1-rel-esxi-5.1.0-xxxxxx.zip
 - Supports ESX 5.1

Release 2.2 also includes support for Teradici Arch Technology Preview 1.0.0. on virtualized ESXi hypervisor

2.5 Known Issues

Teradici Reference	Title	Description
9170, 9354, 8069	Lower frame rates when using APEX	Occasionally, with certain workload types, the display frame update rate is slightly lower with APEX offloading versus multi-vCPUs VM.
9451	Virtual Machine Driver: apex2800-2.2.0-rel-19133.exe is incompatible with 1.1 apex2800 ESXi Driver Package	Use of release 2.2 Virtual machine Driver will require an upgrade to an apex2800 ESXi Driver Package no less than release 2.0.

2.6 Resolved Issues

Teradici Reference	Title	Description
9807	PCI link training errors on select Intel PCI bridge/root complex devices.	Occasionally, the APEX card will fail to complete PCI-e link training with the root complex. This will result in the APEX card becoming unavailable until the server has been rebooted.