

TERADICI APEX 2800 SoftwareRelease Notes

TER1112004-5



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Revision History

Version	Date	Description
5	Aug 17, 2012	Release Notes APEX 2800 – Software 2.0

Contents

Definitions	4
1 Release 2.0.0.....	5
1.1 Version.....	5
1.2 Compatibility	5
1.3 Resolved Issues from previous version (Rel 1.1.1).....	6
1.4 Known Issues	6

Definitions

ESX/ESXi	VMware Hypervisor
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

Preface

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

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

The APEX 2800 software package release 2.0 brings the following new benefits:

- Improved user-experience
 - Either with the next generation of zero client
 - Or when vCPU (or server CPU) is starving and doesn't allow the application to provide a great user experience
- APEX 2800 release 2.0 now supports portrait and landscape mode, up to 25x16 display resolution
 - Max display resolution supported can be configured through command line (please see "APEX Administrator's guide", document number TER1109003 -3)
 - Depending on value above, the maximum number of displays offloaded is as follow

	Max number of offloaded displays	
<i>Max Displays resolutions</i>	<i>Portrait mode</i>	<i>Landscape mode</i>
2560 x 1600	25	40
1920 x 1200	40	64
1680 x 1050	50	85
1280 x 1024	100	100

This document provides a summary of known issues in APEX 2800 software package release 2.0.

1 Release 2.0.0

1.1 Version

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

```
APEX2800 Driver Information:
- SVN revision (15907), Built Aug 16 2012 : 17:01:22
- 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 PCIe (Bus 10) (IN_SERVICE)
++ Firmware SVN revision (15907), Built Aug 16 2012 : 16:59:39
++ CPU Temperature (49c), Ambient/Board Temperature (43c)
++ Device Util (0), Image Pipeline (0) Kpps

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

1.2 Compatibility

ESXi 4.1 Update1, tested on build number 348481

ESXi 4.1 Update2, tested on build number 502767

ESXi 5.0, tested on build number 469512

ESXi 5.0 Update 1, tested on build number 623860,721882

VMware View™ 4.6, 4.6.1

VMware View™ 5.0, 5.0.1

VMware View™ 5.1

Deployments using zero client devices to connect to View virtual desktops should install PCoIP firmware release 3.5.0 or higher on the zero client devices.

APEX 2800 PCIe card reference T2800H0100, Rev 02

1.3 Resolved Issues from previous version (Rel 1.1.1)

Teradici Reference	Title	Description
FIXED	Occasional deterioration of end user experience	Under heavy pixel loads in constrained bandwidth or high packet loss environments, APEX offloading may contribute to some additional screen update latency compared to non-offloaded use.
FIXED	Occasional update pause and cancellation of APEX offloading	In very rare cases, the user's display will briefly pause and APEX offloading will be cancelled. The display will revert to CPU encoding momentarily, then return to APEX for offloading if a display is still available
FIXED	VMs are never discovered and offloaded by APEX	Occasionally, a VM can boot up and fail to be discovered by APEX as a PColP-capable VM. This results in the VM's displays never offloading with APEX. A reboot of the VM is necessary to correct this issue.

1.4 Known Issues

Teradici Reference	Title	Description
8746	Occasional display stalls and offload cancellation	<p>Sessions with multiple display topologies and certain pixel workload offloaded by APEX, may occasionally stop updating. The affected displays will revert to soft encoding but will eventually resume offloading with Apex after a few seconds. This is a very rare occurrence.</p> <p><u>Impact:</u> Limited. End user will be experience a frozen screen for 1 or 2 seconds until the offloads goes back to soft agent.</p>