



# Teradici APEX™ 2800 Server Offload Card

# Reduce peaks in server CPU utilization and ensure a consistent user experience

The Teradici APEX 2800 Server Offload Card ensures the success of VMware View™ VDI deployments by offloading PCoIP image encoding tasks, and reducing server CPU utilization. This empowers IT managers to protect and ensure a consistent user experience, while enabling increased VDI consolidation ratios. The APEX 2800 is a performance enhancement to VMware View deployments that's simple to install and setup.

The Teradici APEX 2800 can reduce server CPU utilization by up to 50%, freeing up valuable CPU cycles. IT managers can use these cycles to provide more headroom to the VDI implementation, and ensure a consistent user experience.

By constantly monitoring the graphic encoding demands of each virtual machine, the server offload card dynamically and seamlessly offloads the most active 64 displays. The APEX 2800 automatically determines - in real time which displays will benefit the most from hardware acceleration. The transitions to and from the CPU and the APEX 2800 happen instantly and transparently, protecting user experience even as loads change.

# **VDI** consolidation ratio improvements

As the Teradici APEX 2800 reduces server CPU utilization, the extra headroom can be used to enable consolidation ratio improvements. In typical office environments (5% video, 95% office), IT managers could achieve consolidation ratio improvements up to 1.2 times. In use cases with high levels of pixel changes, such as many users watching video at the same time, consolidation ratio improvements can be up to two times.

IT managers could also achieve consolidation ratio improvements by choosing to reduce overall CPU headroom. Because the APEX 2800 effectively manages unpredictable peaks in CPU utilization, the needed amount for CPU headroom is reduced.

The Teradici APEX 2800 enables overall IT cost reductions when more users are supported on each server. It provides significant cost savings compared to adding another server, and could therefore result in fewer servers overall. Reductions in data center floor space. power consumption and maintenance combine to lower overall IT cost per user.

# Simple to install and setup

Designed for use in industry standard servers, the APEX 2800 is an easy to install PCI Express card that is simple to setup. Simply insert the card in the VDI server, install the drivers and click to enable hardware acceleration in VMware View Administrator.

The Teradici APEX 2800 is compatible with all existing PCoIP zero clients and VMware View software clients. It is supported by VMware ESXi 4.1 or 5.0 and managed by VMware View 4.6 or 5.0.













## Benefits at a Glance

### **Reduce CPU utilization**

- Decrease peaks in CPU utilization by up to 50%
- Add headroom to any VDI implementation

# Protect user experience

- Protect user experience so that it's reliable and consistent as loads change
- Ensure consistent application performance

# **VDI** consolidation ratio improvements

- Consolidate more users on the same server, up to 1.2x in typical office environments (5% video, 95% office)
- Each card offloads the most active 64 displays at a maximum resolution of 1920x1200
- Up to two cards per VDI server for 128 displays offloaded



## Increased IT efficiency

- More virtual machines can be added to the same number of servers
- Decreases overall cost per user

#### Simple to setup and install

- No complex configuration required simply plug in the card, install the drivers and click to enable hardware acceleration in VMware View Administrator
- Compatible with all existing PCoIP zero clients and VMware View software clients
- Fully integrated with VMware ESXi 4.1 or 5.0 and managed by VMware View 4.6 or 5.0

#### PRODUCT SPECIFICATIONS

Server offload card type	<ul> <li>PCI Express® x8 Gen 1.1</li> <li>4.376" height x 6.6" length, single slot card compliant with PCI-SIG PCIe CEM 2.0</li> </ul>
System requirements	<ul> <li>Available PCI Express x8 or x16 slot</li> <li>ESXi 4.1 U1/U2 or ESXi 5.0</li> <li>VMware View 4.6 or 5.0</li> </ul>
Memory	<ul> <li>2 GB of onboard DDR3 SDRAM with ECC protection</li> </ul>
Display support	<ul> <li>Up to 64 displays at a maximum resolution of 1920x1200</li> </ul>
Power	<ul> <li>Power supplied to card via PCle interface: 15W typical, 20W maximum</li> </ul>
Regulatory	<ul> <li>Product safety approval: UL/cUL</li> <li>EMI and EMC approval: FCC Class B, Canada ICES / NMB-003 Class/Classe B, CE, VCCI, C-TICK, CNS, KCC, WEEE, RoHS-6</li> </ul>
Environmental	<ul> <li>Temperature: Operational (0° to 55° C) Storage (-20° C to 70° C)</li> <li>Humidity: Relative (non-condensing): 10% to 90% Storage: 5% to 95%</li> </ul>
Thermal cooling	<ul> <li>Single slot passive heat sink</li> </ul>



