

Increase VDI consolidation ratios
and protect the user experience

APEX2800 PCoIP® Server Offload Card

Recover server CPU capacity

VDI implementations are typically constrained by the servers' CPUs. The many tasks a CPU performs, together with PCoIP® protocol image encoding, limits the number of virtual machines that can run on any one server. By offloading image encoding to a separate hardware encoding card CPU capacity can be recovered, resulting in multiple benefits.

The APEX2800 server offload card features a brand new TERA2800® processor designed from the ground up specifically to meet the needs of VDI.

By constantly monitoring graphic encoding demands of each virtual machine, the server offload card dynamically and seamlessly offloads the most demanding PCoIP protocol image encoding tasks from the CPU.

The server offload card automatically determines – in real time – which displays will benefit the most from hardware acceleration. The transitions to and from the CPU and server offload card happen instantly and transparently, protecting the users' experience even as loads change.

This optimal use of resources ensures that the graphical demands of each virtual machine are met and that performance scales as new virtual machines are added.

Increase VDI consolidation ratios

The APEX2800 can reduce server CPU utilization by up to 30% to 50%, freeing up valuable CPU cycles which can be used to support even more virtual machines, allow existing virtual machines to run more intensive applications, or simply to provide more headroom to your VDI implementation.

With 2 GB of onboard memory, each server offload card can support up to 64 displays at a resolution of 1920x1200, up to 32 dual displays, or up to 32 displays at a resolution of 2560x1600.

Better user experience

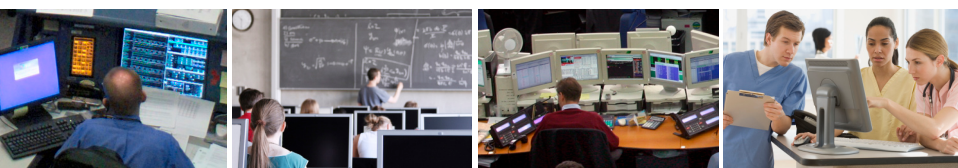
The PCoIP protocol delivers an uncompromised user experience. The increased performance provided by the server offload card enables that experience to be delivered to a greater number of users from each server, and provides a reliable and consistent level of experience regardless of the overall demand on server CPUs. In addition, the server offload card is matched to provide the highest possible performance for zero clients.

Plug and play

The APEX2800 server offload card is a true plug and play solution. The card is simply plugged into the server and hardware acceleration is selected in VMWare View™.

Increase IT efficiencies

The server offload card enables overall IT cost reductions because more users can be supported on each server. This translates into fewer servers, less data center floor space, decreased power consumption and lower maintenance.



Benefits at a Glance

Better user experience

- Protect the user experience so that it's reliable and consistent as loads change.
- Server offload card matched with PCoIP zero clients enables the highest possible zero client performance.

Increased VDI consolidation ratios

- Consolidate more users on the same server.
- Each card supports up to 64 displays at a resolution of 1920x1200.
- Additional cards can be added to support more displays.

Better CPU utilization

- Decreases CPU utilization by up to 30 – 50%.
- Dynamically and seamlessly switches image processing tasks as needed.
- More CPU power available for virtual machines to run more intensive applications.

Increased IT efficiency

- More virtual machines can be added to fewer servers.
- Adds headroom to any VDI implementation.
- Decreases data center power requirements.
- Saves data center floor space.
- Decreases overall cost per user.

Plug and play

- No complex configuration required – simply plug in the card and click to enable hardware acceleration in VMware View™.
- Compatible with all existing PCoIP zero clients and VMware View™ software clients.
- Fully integrated with VMware vSphere™ and managed by VMware View™ 4.6 (and higher).



Just plug the APEX 2800 server offload card in and click 'Allow PCoIP hardware acceleration' in VMware View

PRODUCT OVERVIEW

Server Offload Card Type	<ul style="list-style-type: none"> ● PCI Express® 1.1 x8 ● 4.736" height x 6.6" length, single slot card compliant with PCI-SIG PCIe CEM 2.0
System Requirements	<ul style="list-style-type: none"> ● Available PCI-Express x8 slots ● ESX/ESXi version 4 and higher ● VMware View™ 4.6 and higher
Memory	<ul style="list-style-type: none"> ● 2 GB of onboard DDR3 SDRAM with ECC protection
Display support	<ul style="list-style-type: none"> ● Up to 32 displays at a resolution of 2560x1600 ● Up to 64 displays at a resolution of 1920x1200
Thermal cooling	<ul style="list-style-type: none"> ● Single slot passive heat sink