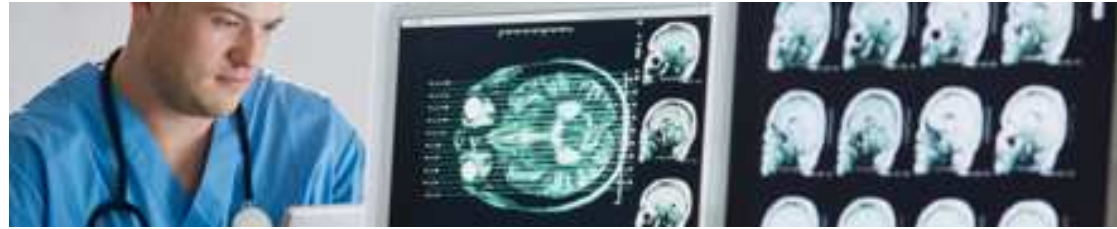


Summary

With VMware View™ 4, PCoIP® technology is now available in both virtualized software and dedicated (1:1) hardware.

Although both product lines are based on the same underlying protocol and are fully interoperable, each is designed for different users and applications and has different benefits and considerations.



High-Performance Hardware-Based Remoting

The PC-over-IP (PCoIP®) protocol was initially implemented as dedicated hardware: a custom PCoIP chip in the host computer performs all the encoding and transmission and a second custom chip in the PCoIP zero-client performs the decoding, returns user input to the host and provides USB connectivity.

Hardware-based PCoIP technology provides the highest possible performance to remote demanding graphical applications such as 3D CAD, video animation, digital content creation, geographic information systems, medical imaging and so forth.

With no x86 processor, operating system, device drivers, anti-virus software, hard drive, fan or similar components, PCoIP hardware zero-clients also virtually eliminate desktop maintenance.

The current hardware version of PCoIP technology is a 1:1 solution, meaning each user works on a dedicated computer (one PCoIP card in the host connects to one desktop client at a time; multiple PCoIP host cards can be used to enable multiple remote users to share a single session simultaneously).

Virtualized Desktops with Software-Based Remoting

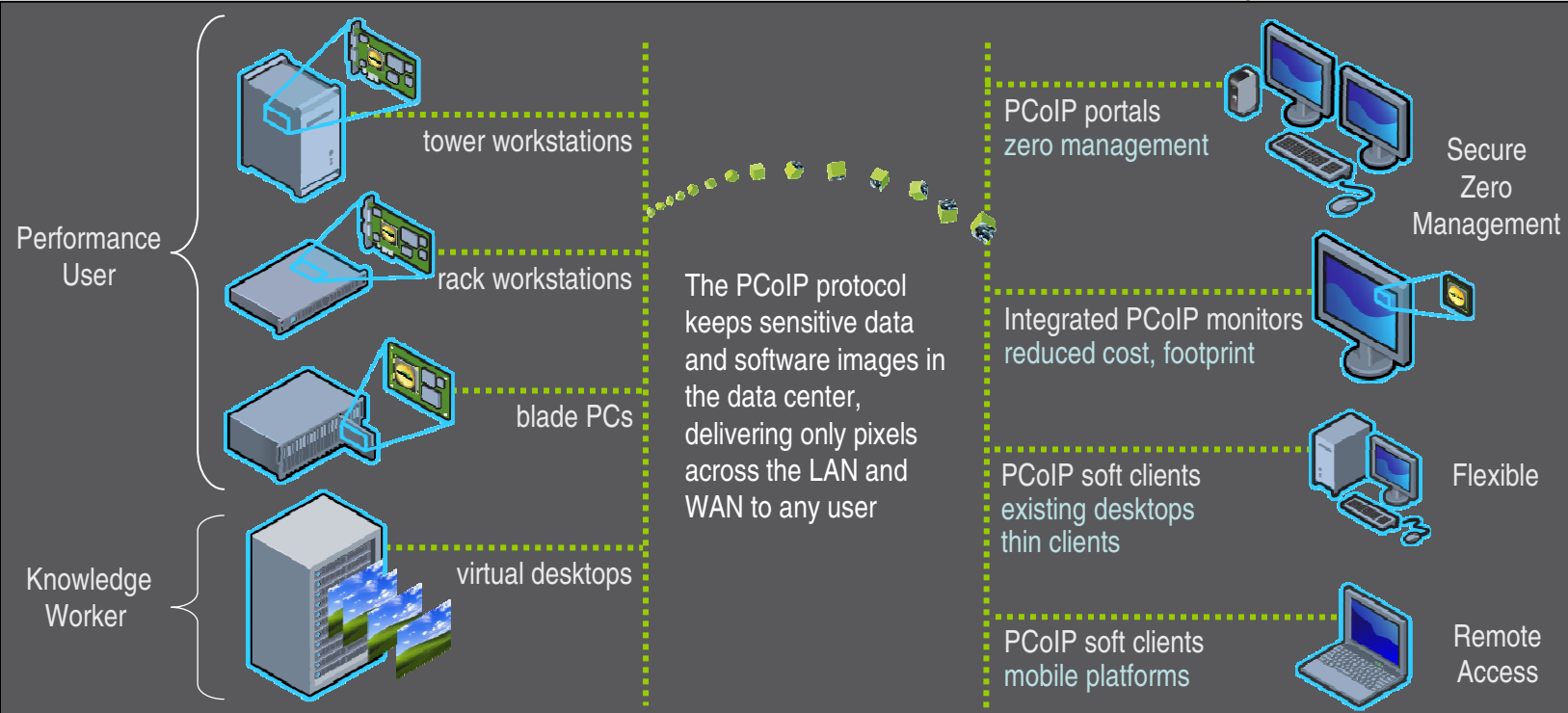
VMware View 4 provides software versions of both the PCoIP encoding algorithms (for the VMware server) and the PCoIP decoding algorithms (for the desktop client). Both these applications run on standard x86 hardware, so customers have the option to remote their VMware virtual desktops via the PCoIP protocol without requiring any specific hardware.

VMware View enables desktop virtualization, meaning a single server runs multiple sessions supporting multiple independent users. This solution is designed to deliver all the cost and flexibility benefits of virtualization while providing a rich desktop experience to mainstream task and knowledge workers using typical office applications.

PCoIP hardware zero-clients are compatible with VMware View, enabling companies to eliminate desktop maintenance in virtualized environments.

scalable host solutions

flexible client options



Hardware and Software Interoperability

Because the PCoIP protocol is consistent regardless of which device is performing the encoding or decoding, dedicated PCoIP hardware and VMware software are completely interoperable. This offers many deployment options:

- A typical business supporting task or knowledge workers using mainstream office applications may be served most cost-effectively by virtualized PCoIP software on the host servers and hardware zero-clients to eliminate desktop maintenance.
- Mobile employees can run VMware client software on their laptops for secure access to sensitive data instead of carrying this data on their laptop hard drives.
- A business that already has desktop PCs, laptops or traditional x86 thin clients can reduce the acquisition cost of a virtual desktop environment by running the VMware client software on the existing desktop hardware.
- Video animators or design engineers likely require the performance and 3D graphics support (and enhanced security) of dedicated hardware on both the host and client.
- A business supporting both design engineers and mainstream task or knowledge workers (such as sales, marketing and administrative staff) can build a hybrid environment with a mix of PCoIP software and hardware to support all users most effectively within one infrastructure, thereby reducing IT complexity and management costs.
- A business seeking utmost security can use PCoIP hardware on the hosts to completely separate the network carrying raw data within the datacenter from the network carrying user data to the desktops. Such a business will likely also use hardware zero-clients for ultimate security.

	Advantages / Benefits	Considerations
Hardware Host	<ul style="list-style-type: none"> • Highest possible performance (with hardware client) • Supports the most demanding applications (CAD, video animation, GIS etc.) • Places no additional load on host CPU • Extremely secure – no access to host OS via dedicated PCoIP Ethernet port 	<ul style="list-style-type: none"> • Primarily a 1:1 solution (can support limited virtualization with additional software) • Requires dedicated PCoIP hardware • Requires DVI video card and open PCI-express slot on host computer
Hardware Zero-Client	<ul style="list-style-type: none"> • Highest possible performance (with hardware host) • Eliminates desktop maintenance (no CPU, OS, drivers, anti-virus etc.) • Supports all USB devices (with hardware host); no desktop device drivers required • Impervious to hacking, viruses and spyware • Superior USB security • Samsung integrated PCoIP monitors offer minimal desktop footprint 	<ul style="list-style-type: none"> • Requires dedicated PCoIP client at desktop • Access via public internet requires VPN router
Software Host (on host CPU)	<ul style="list-style-type: none"> • Enables cost savings and flexibility of virtualized desktops • Runs on standard hardware (all supported VMware platforms) – no custom hardware required 	<ul style="list-style-type: none"> • Available only via VMware View • Designed primarily for mainstream office applications • Remote encoding places load on host CPU – may affect performance
Software Client (on x86 client)	<ul style="list-style-type: none"> • Runs on standard x86 hardware (PC, laptop or traditional x86 thin client) • Remote access via standard laptops • Can run software-based VPN client for access via public internet 	<ul style="list-style-type: none"> • Available only via VMware View • x86 client requires management (OS, drivers, anti-malware, updates etc.) • Desktop performance depends on client CPU power, memory etc.