

Pano System on VMware vSphere

Solution Brief

Pano System on the VMware Virtualization Platform

By integrating support for both the VMware® vSphere and View virtualization platforms Pano System provides the industry's only hypervisor-independent zero client platform for virtual desktops that also works on the Citrix and Microsoft platforms.

This makes the benefits of zero client computing available to a much broader set of customers and industries, leveraging VMware's industry-standard technologies and support channels.

How do Panos work on VMware?

The VMware hypervisors compatible with the Pano System, vSphere ESX and ESXi, host both desktop virtual machines (DVMs) and system VMs including Pano Controller and vCenter Server.

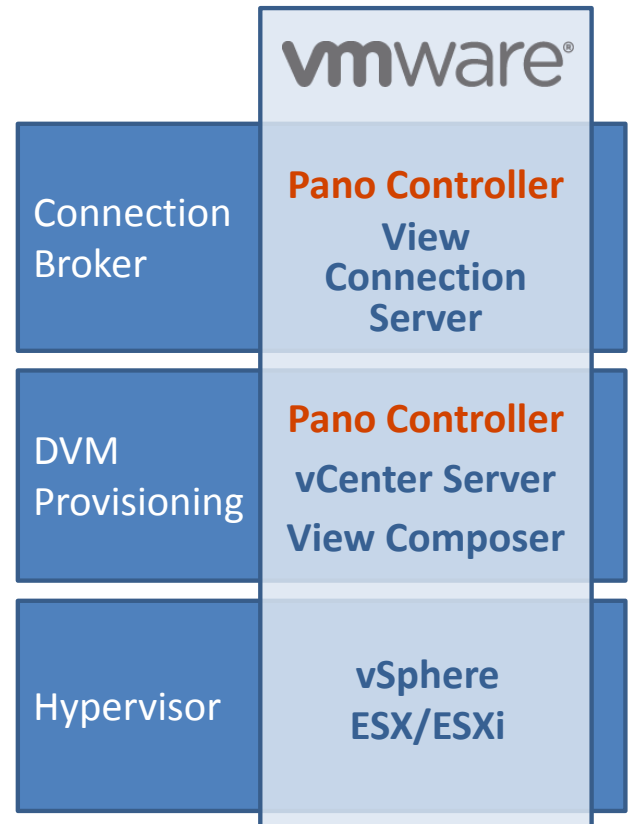
VMware's virtual machine provisioning and management tool, vCenter Server, is optional for Pano System deployments but highly recommended. Running without vCenter will limit you to one hypervisor server and one DVM collection, and it limits the use of the many automatic provisioning options provided by Pano Controller.

Panos have been certified VMware Ready™ and work on VMware View. In addition to using vSphere and vCenter components of View, it can also integrate with View Connection Server as an alternate connection broker and View Composer for storage optimization in very large or hybrid deployments. More information is available in the View Solution Brief at www.panologic.com/brief/view

When would you use the VMware platform with Panos?

Pano Logic does not recommend one hypervisor over another, preferring to provide customers with choices based on their preferences:

- You might select one hypervisor platform over another to leverage your previous experience with that platform in application or server virtualization.
- You might prefer one platform's hypervisor architecture or management tools over that of another.
- You might also have existing licenses or volume license agreements with a specific platform vendor that can be used to support Pano deployments with lower license fees.
- Customers deploying hybrid endpoints that include both Pano Zero Clients and PCs or Thin Clients might also select the VMware platform to take advantage of View's ability to manage these sorts of diverse deployments. VMware View might also be selected for the storage optimization possible with View Composer's linked clones feature.



What VMware Configurations work with the Pano System?

For Pano System deployments, the only VMware product strictly required is the ESX or ESXi hypervisor although vCenter Server is highly recommended – both are distributed either as separate licenses or bundled in the View suites. Common configurations for VMware platform software supporting Pano deployments include:

DVM Provisioning w/Pano Controller	Hypervisor	Cost/Seat
vCenter Server from VMware vSphere Essentials (\$495 for 3 servers)	ESX/ESXi from VMware vSphere Essentials (\$495 for 3 servers)	\$3/seat
vCenter Server Foundation (\$1,495 for up to 3 servers)	ESX/ESXi from VMware vSphere Standard edition (\$795/server CPU)	\$42/seat
vCenter Server from VMware View Enterprise (\$150 per concurrent DVM)	ESX/ESXi from VMware View Enterprise (\$150 per concurrent DVM)	\$150/seat
vCenter Server from VMware View Premier (\$250 per concurrent DVM)	ESX/ESXi from VMware View Premier (\$250 per concurrent DVM)	\$250/seat

The above costs for VMware platform licenses are based on list prices modeled on a 150 seat deployment. They exclude costs for the Pano System, Microsoft VDA licenses, servers and other hardware expenses.

Does Pano Support PC-over-IP?

The Pano System is a paradigm shift in desktop computing. The Pano Direct Protocol® was designed specifically for zero client virtual desktops. It acts as a low-level highly efficient bus extension protocol that assumes there is no processing being done (or even possible) on the endpoint, unlike PC-over-IP, delivering a VDI session over a local area network that typical users find equivalent to using a desktop PC. It doesn't require any protocol extensions or specialized processing on either the server or the endpoint, keeping costs and complexity down.

More Information

More information on VMware's products can be found on their website at www.vmware.com. Trial versions of most VMware software can also be downloaded from their website. For more information on the Pano System visit www.panologic.com, email sales@panologic.com or call 650-454-8940 / 877-677-PANO.