

## Inside Citrix chapter fourteen – The one with the Host Connection

When you install XenDesktop and start Studio, you will first need to create a new Site or join an existing one, no other options are there. If you don't join an existing Site but create a new one, and let's call this step one, then step two and three will walk you through the Machine Catalog and Delivery Group creation processes. If your XenDesktop / XenApp Session Hosts will include virtual machines, and you would like to be able to auto-provision and manage new virtual machines, then you will also have to configure a Host Connection.z

Your Host Connection is basically nothing more than a bridge to your underlying Hypervisor and/or cloud platform of choice where your VMs (will) reside. From a Hypervisor's perspective this can be either: Microsoft's Hyper-V, VMware's vSphere or Citrix's XenServer. Since you will need to be able to start, stop, create, delete and monitor your VMs from Studio, some sort of management software will be needed, meaning SCVMM in the case of Hyper-V, Virtual Center if you go with VMware, or XenCenter if XenServer is used. Although with XenServer, technically you do not necessarily need a separate management infrastructure (advisable though), a stand-alone XenServer, or Poolmaster would be sufficient to connect to.

At least one of these needs to be in place for this to work; Studio will then use the Hypervisor's APIs to communicate and manage the virtual machines. It goes without saying that it will do the same for Azure or AWS, for example.

**FMA fact:** You might have heard about the Nutanix Acropolis Hypervisor. It will soon be available as a Host Connection within XenDesktop as well.

### No MCS and/or PVS VMs

As I already mentioned, you don't need to configure a Host Connection, it is optional. Although this is very true, it will also limit your options when it comes to VM provisioning. If you decide not to configure a Host Connection, then you won't be able to leverage XenDesktop MCS to automatically create tens, hundreds or thousands of VMs based on the same master / golden base image (single image management). So no MCS-based pooled and/or dedicated desktop Catalogs.

When there's no Host Infrastructure configured, some options will be missing from the Machine Catalog creation wizard. On the Machine Management page (when configuring a Machine Catalog) only physical hardware will be enabled by default, and virtual hardware will be unavailable since there's no underlying Hypervisor or cloud platform configured. Also, on the same page, you'll see some options with regard to image management where MCS will be completely greyed out while PVS and 'Another service or technology' are both selectable. It is also possible to import and manage other types of virtual (or physical) machines using Catalogs, without enabling and using PVS and/or MCS.

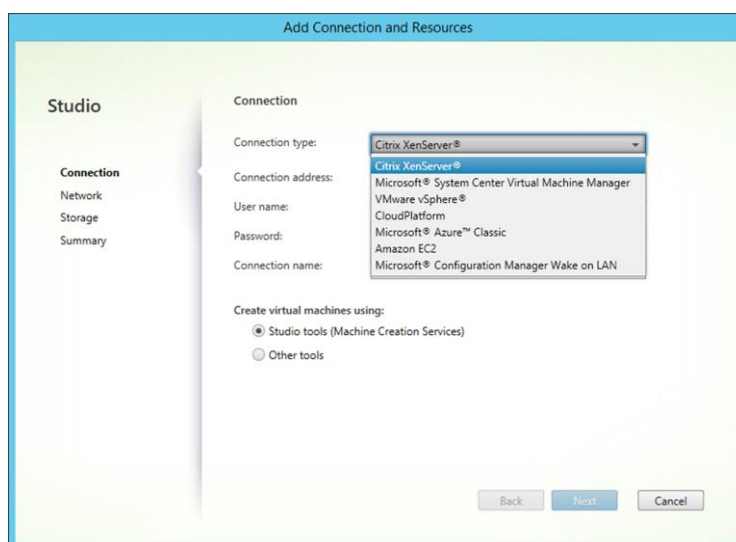
You also cannot use the ‘XenDesktop set-up wizard’ from Provisioning Services, you’ll need a Host Connection for that as well, which makes sense. When available, we then could also choose ‘virtual hardware’ in combination with PVS image management and import one or more device collections from PVS into our Catalogs with just a few clicks. The type of vDisk used (on a device collection) is managed from the PVS management console, just as pooled and dedicated desktops are managed from the XenDesktop (MCS) Studio console.

Do note that by using the PVS management console instead of Studio you will be able to provision virtual machines, even without a Host Connection configured. PVS is able to directly communicate with vCenter and/or the vSphere Host.

Host Connections can be configured during the initial Site set-up or at a later stage by selecting ‘Hosting’ at the left-hand side of the Citrix Studio console; it is located under ‘Configuration’. You have the following options:

- VMware’s vSphere.
- Microsoft’s Hyper-V.
- Citrix’s XenServer.
- Amazon Web Services.
- Microsoft Azure.
- Citrix CloudPlatform.

And as mentioned earlier in one of the FMA fact remarks, the Nutanix Acropolis Hypervisor will be added to the list shortly.



Host connection in Studio

## Key takeaways

- While in earlier releases of XenDesktop / XenApp 7.x Host Connections were limited to Hypervisor platforms, cloud environments are now supported as well.
- As it stands today, MCS can be used in combination with Azure, AWS and/or the Citrix CloudPlatform. However, PVS is not supported: it simply does not work. It also works for, or with all Hypervisors mentioned. The Nutanix Acropolis Hypervisor will be added to the list shortly.
- MCS only works with virtual machines.
- You can add multiple Host Connections if you want, also combining cloud and on-premises Hypervisors.
- When adding Hypervisor Host Connections you will have to use the addresses of your System Center Virtual Machine Manager, Virtual Center or XenCenter.
- When using Zones make sure that the Host Connection configured for a Zone is close to, or actually physically located within, that Zone.