



DST

VM Build Document

VMware Team

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11/7/2016

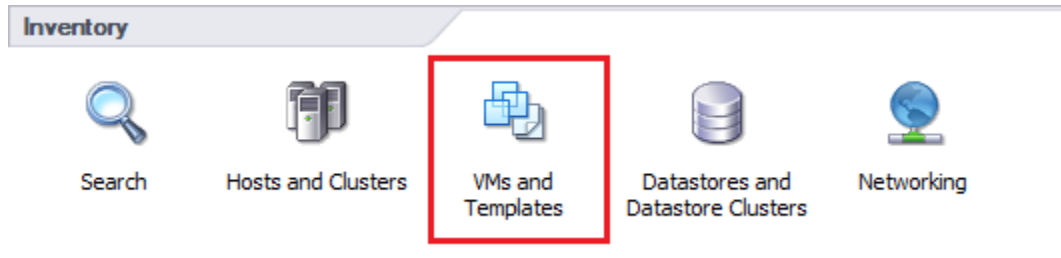
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Version

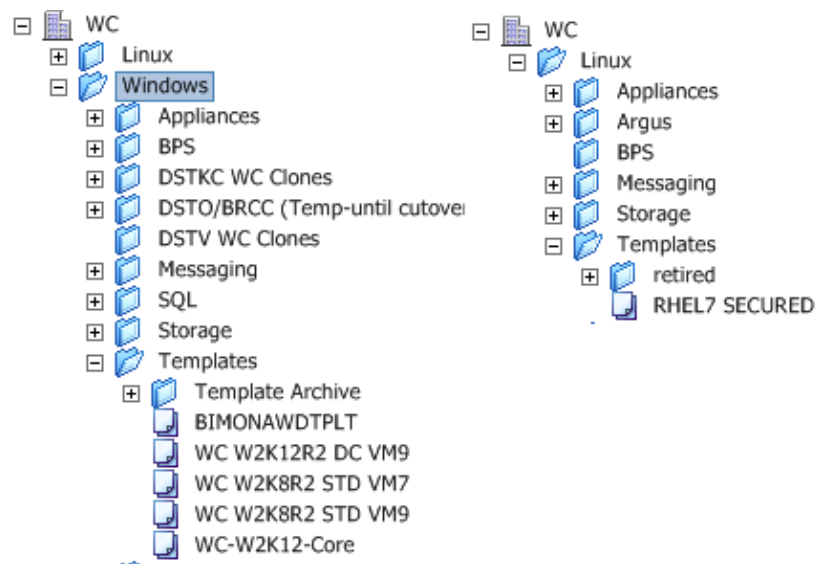
Date	Version	Description	Modified By
11/24/2016	v1.0	Submitted	Aman Sapra

VM Build Process

1. Login to vCenter Server and Select VM and Templates under Inventory section.

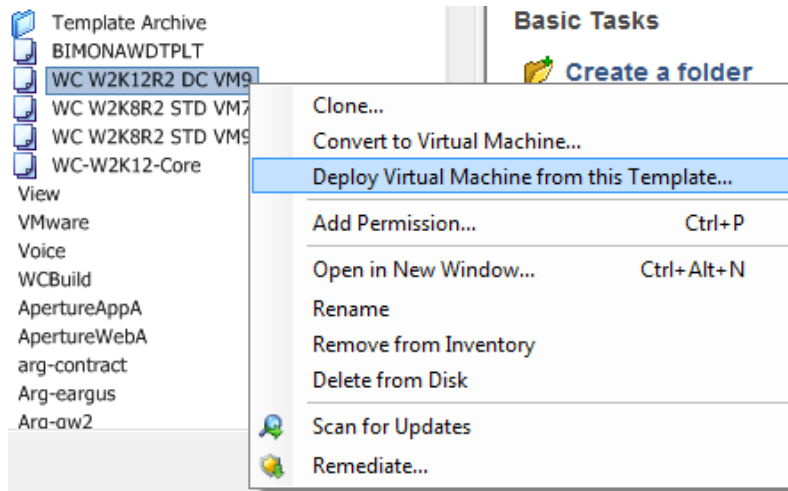


2. Select & Expand the Datacenter and Select the Template from Templates Folder. Datacenter corresponds to Host Facility and selection of Template depends on OS version mentioned in Design Document.

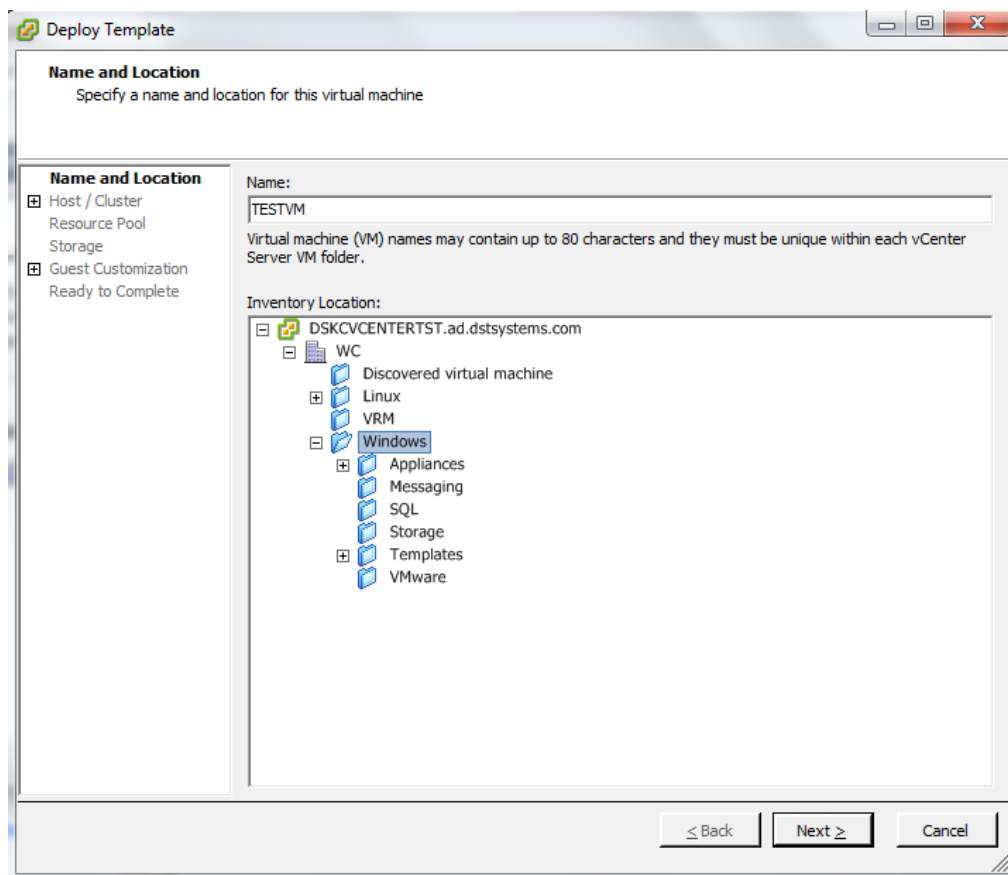


Note: Don't use templates from Retired Folder or Template Archive folder.

3. Right click on the Template depending upon the OS mentioned in Design Document and Select Deploy Virtual Machine from This Template.

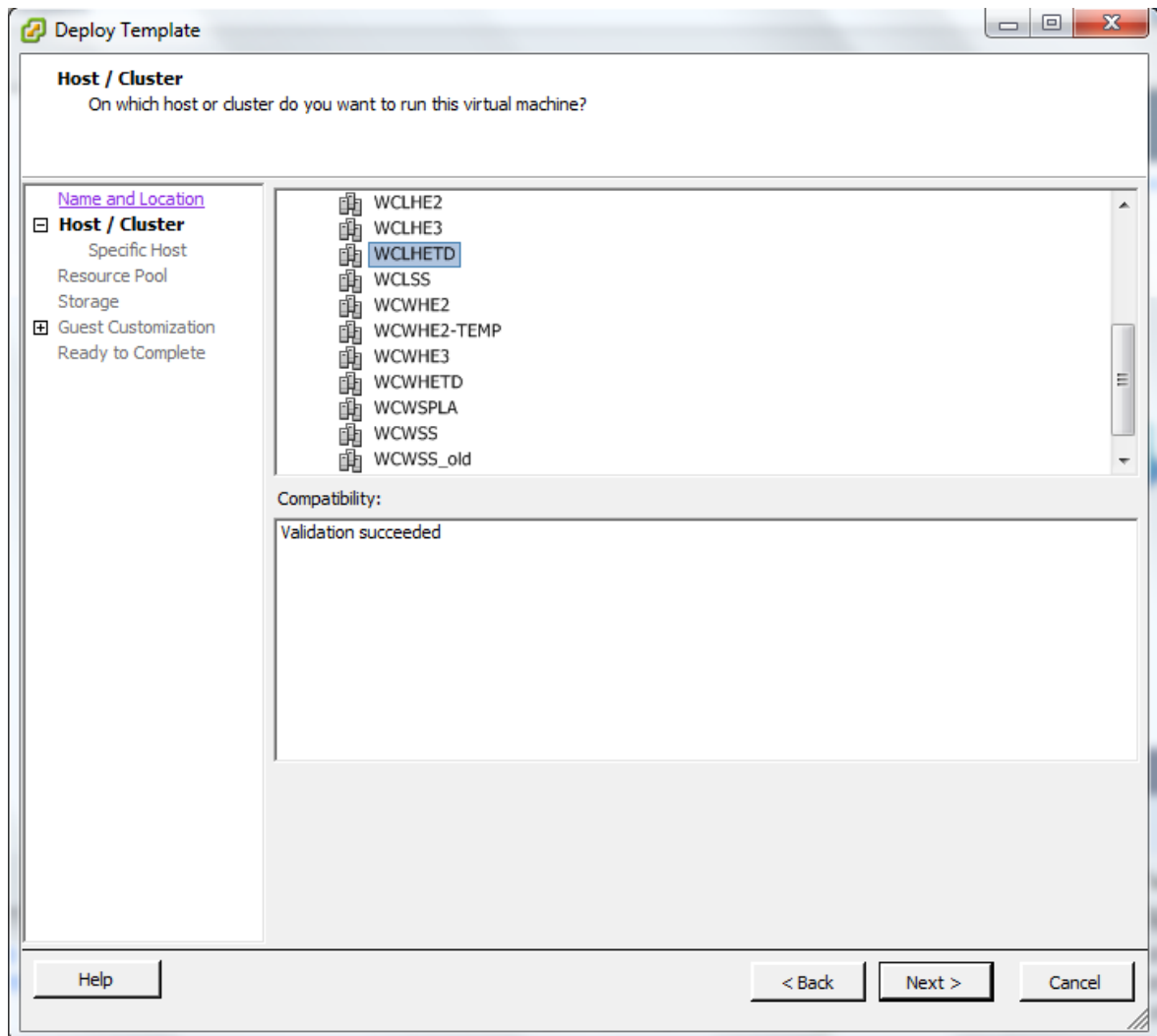


4. Type the name of Virtual Machine as mentioned in Hostname section of Design Document and select the respective Folder. Please mention only the first part of Hostname not the FQDN.



Note: Name for Windows VMs needs to be in **UPPERCASE** and for Unix VMs in **lowercase**. This is a standard naming convention which is followed for all DST VMs.

5. Select the Cluster depending on the Environment mentioned in Design Document and wait for the Compatibility check to be completed and then click Next.



6. Select Virtual Disk Format as Thick Provision Lazy Zeroed and select the Datastore cluster as per the Environment mentioned in Design document and click Next.

Storage
Select a destination storage for the virtual machine files

[Name and Location](#)
[Host / Cluster](#)
Storage
[Guest Customization](#)
Ready to Complete

Select a virtual disk format:
Same format as source
Same format as source
Thick Provision Lazy Zeroed
Thick Provision Eager Zeroed
Thin Provision

Name	Drive Type	Capacity	Provisioned	Free	Type
WC-HETD		124.99 TB	92.61 TB	32.39 TB	
WC-MGMT		3.91 TB	2.32 TB	1.58 TB	
boot-dskcvhwcheted16-0486	Non-SSD	42.50 GB	972.00 MB	41.55 GB	VMFSS
boot-dskcvhwcheted17-0500	Non-SSD	42.50 GB	972.00 MB	41.55 GB	VMFSS

☒ Disable Storage DRS for this virtual machine

Select a datastore:

Name	Drive Type	Capacity	Provisioned	Free	Type
WC-6357-WCHETD-0573	Non-SSD	3.91 TB	6.13 TB	2.11 TB	VMFSS
WC-6357-WCHETD-0574	Non-SSD	3.91 TB	3.95 TB	1.99 TB	VMFSS
WC-6357-WCHETD-057d	Non-SSD	3.91 TB	5.57 TB	1.29 TB	VMFSS

Advanced >>

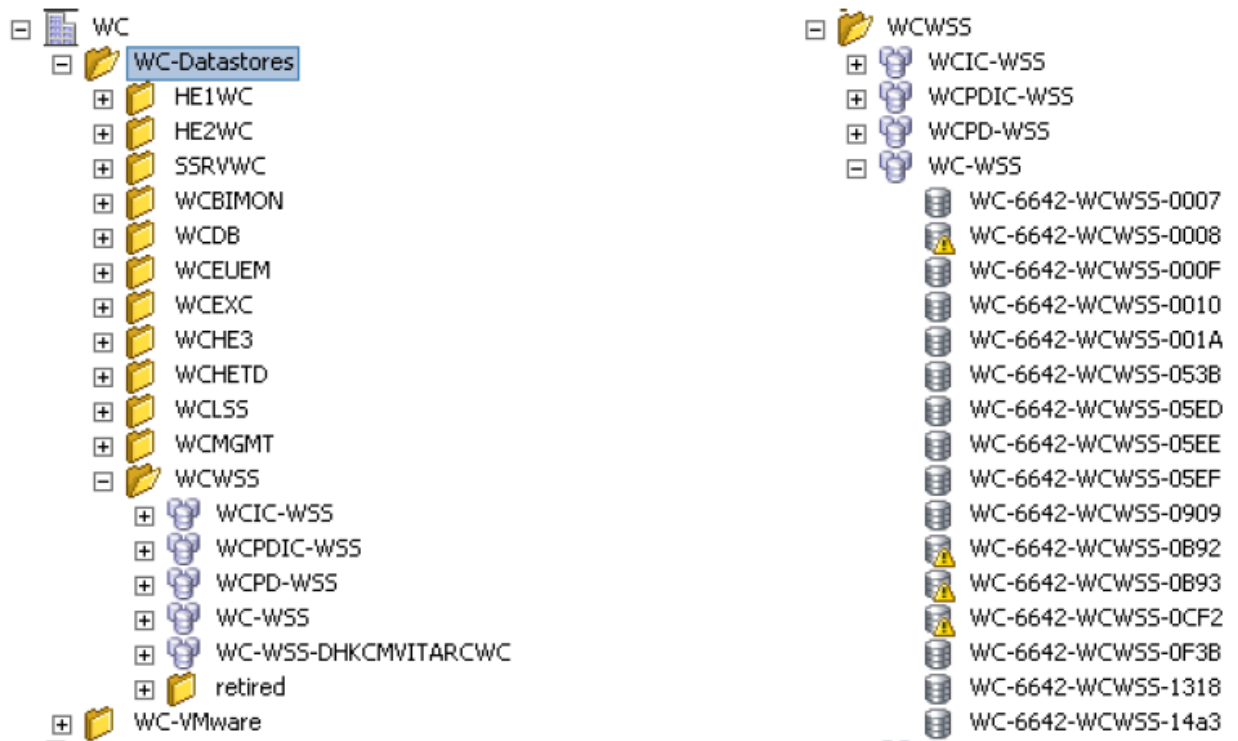
Compatibility:
Validation succeeded

Help < Back Next > Cancel

Note: Always use Thick Provisioned Lazy Zeroed as Virtual Disk Format unless there is a different Format requested in Design Document.

Select the datastore in the datastore cluster which has maximum free space and Ensure that datastore should have at least 300 GB of free space more than the size of VM. If there is no Datastore which fulfils this condition, Please reach out to VMware team to request more Storage.

Selecting the right datastore is very crucial as use of certain Datastores and Clusters will determine if VMs are replicated or not. As seen in the screenshot below, Datastore Clusters follow the following standard naming format: SiteReplication-Environment, taking WCIC-WSS for example, we know that this Datastore Cluster is replicated between Winchester and St Louis (WCIC) – and that it is presented to the Windows Share Serve Environment (WSS) and WC-WSS datastores are non-replicated datastores similarly we can place a VM on WCPDIC datastores to make them 3-way replicated.



- Under Guest Customization screen select Customize using an existing Customization specification and Select the Customization template with respect to OS of VM and click Next.

Deploy Template

Guest Customization
Select the customization option for the guest operating system

[Name and Location](#)
[Host / Cluster](#)
[Storage](#)

☒ **Guest Customization**
User Settings
Ready to Complete

☐ Power on this virtual machine after creation.

Select the option to use in customizing the guest operating system of the new virtual machine.

☐ Do not customize
☐ Customize using the Customization Wizard
☒ Customize using an existing customization specification

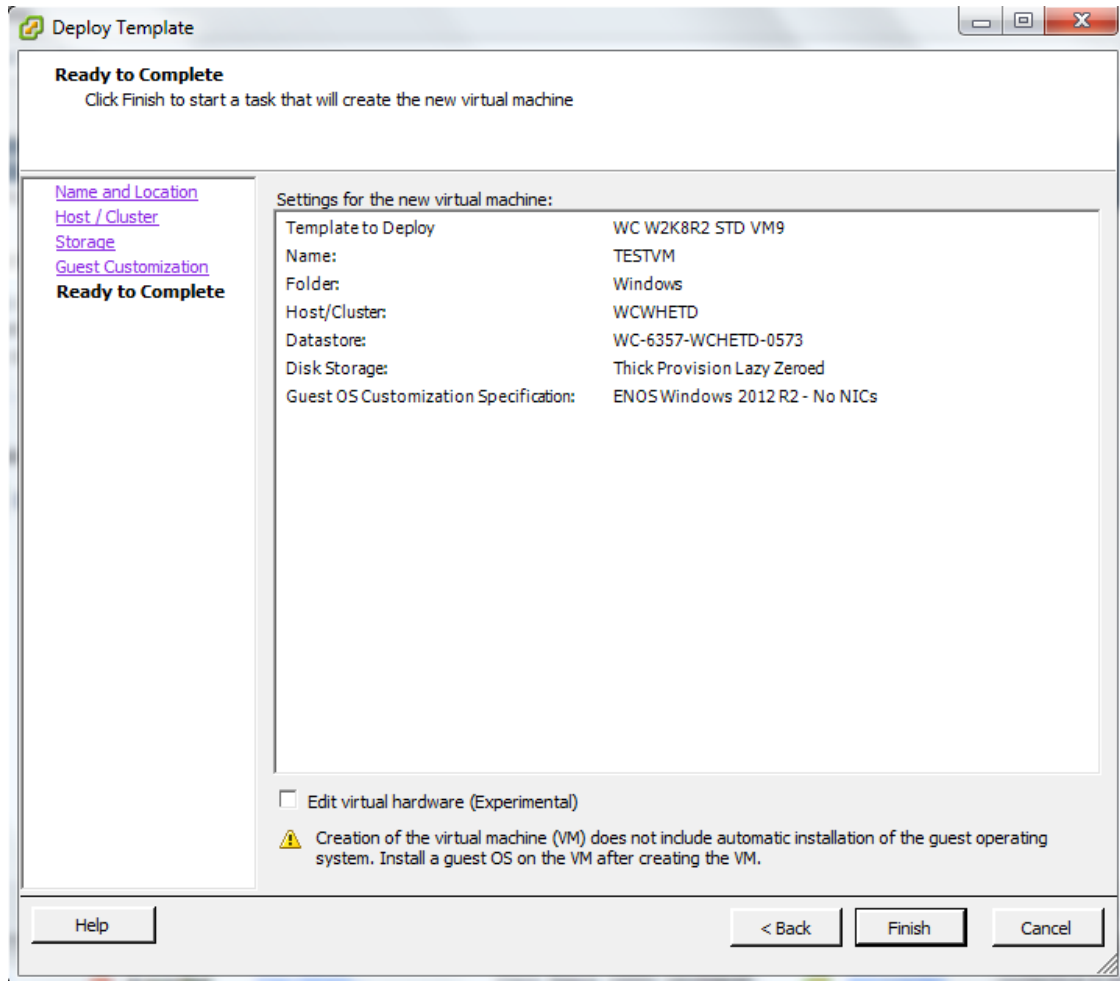
Customization Specification Manager

Name	Guest OS	Description
ENOS 2003 Upgrade Project	Windows	
ENOS Windows 2012 R2	Windows	This will ask for IPs and apply th
ENOS Windows 2012 R2 - No NICs	Windows	This will ask for IPs and apply th
ENOS Windows Server 2008 R2 STD	Windows	Standard custom spec for WIN2
ENOS Windows Server 2008 R2 STD 1 NIC	Windows	Standard custom spec for WIN2
ENOS Windows Server 2008 R2 STD 2 NICs	Windows	Standard custom spec for WIN2

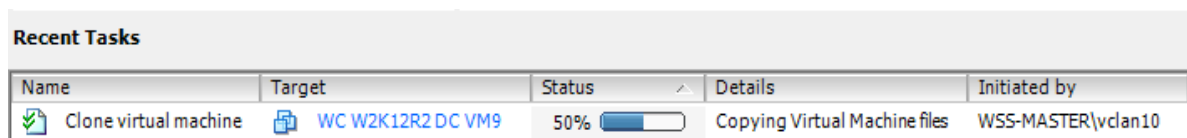
☐ Use the Customization Wizard to temporarily adjust the specification before deployment

[Help](#) [≤ Back](#) [Next ≥](#) [Cancel](#)

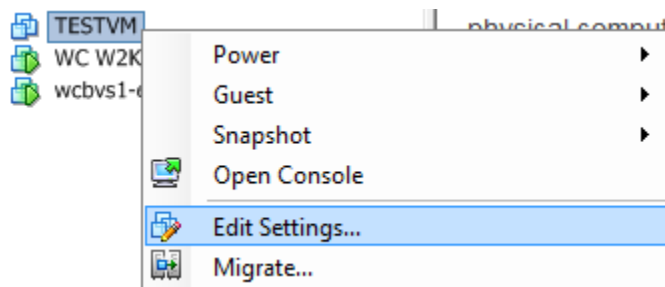
- Review all the settings on Ready to Complete screen and then Click Finish.



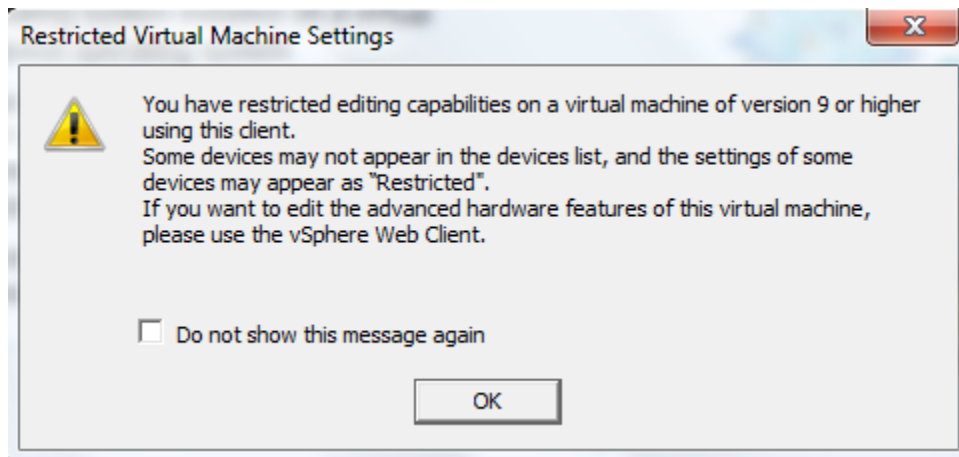
- Monitor the progress of the VM Provisioning task in Recent Tasks pane.



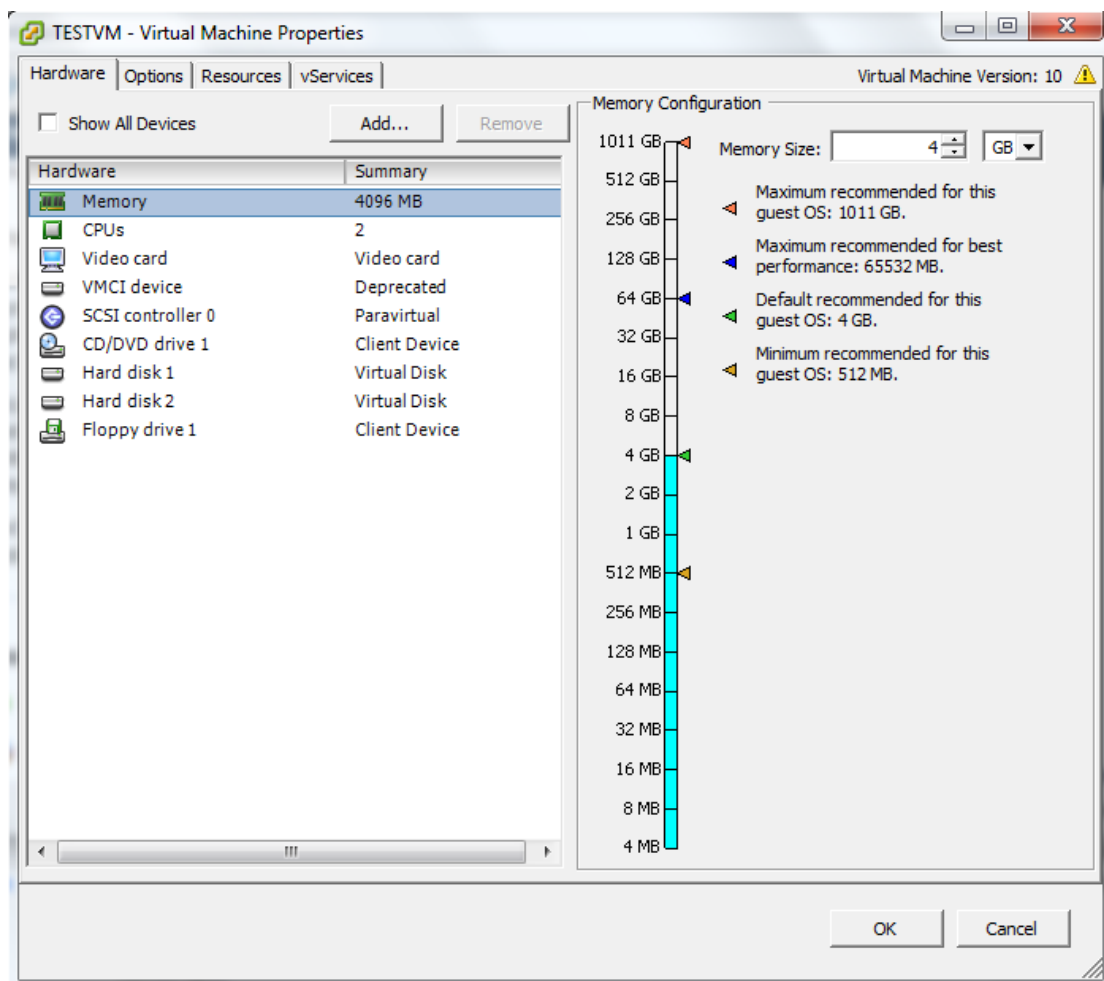
- Once VM has been provisioned successfully, Right click on the VM and select Edit Settings.



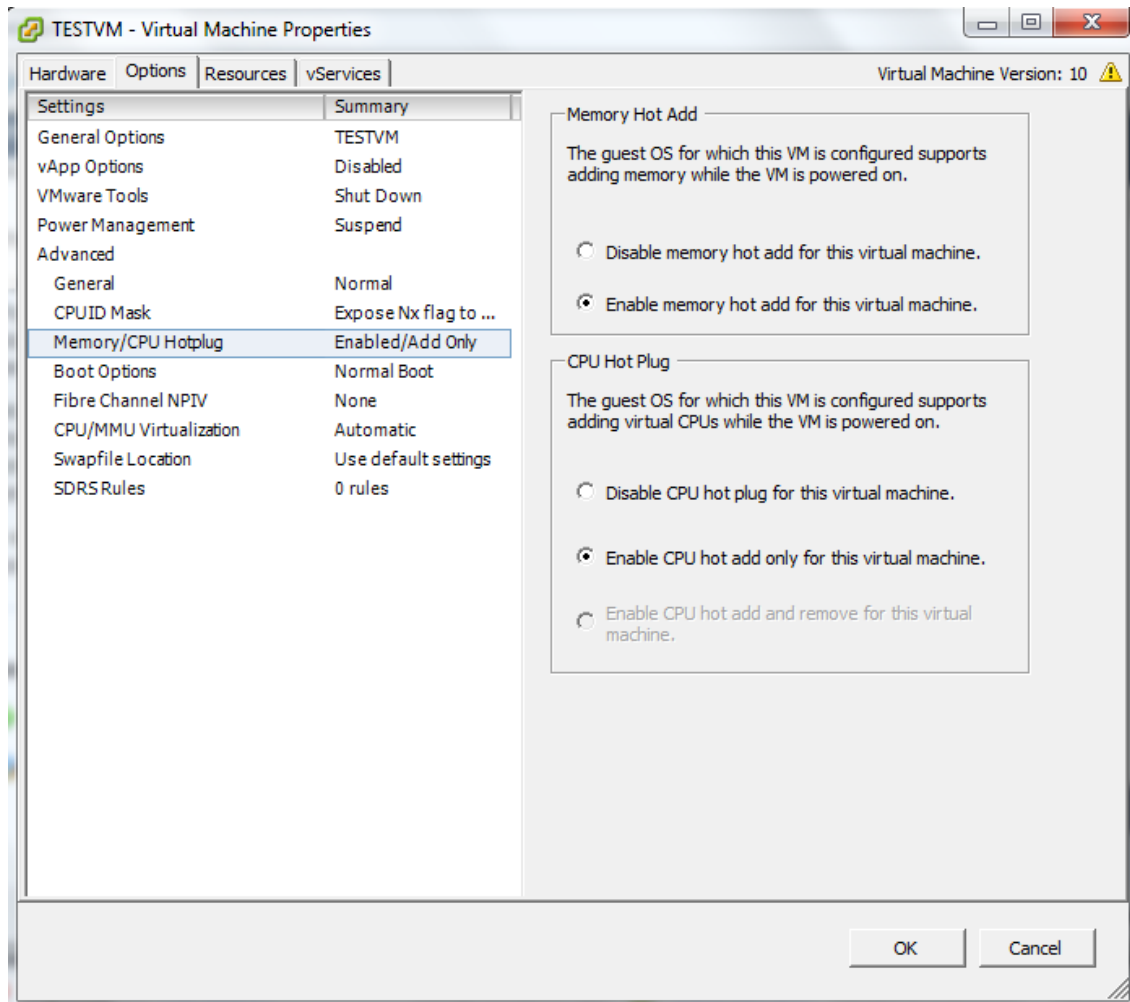
11. If you get below error for restricted editing capabilities on a virtual machine of version 9 or higher, click on Ok.



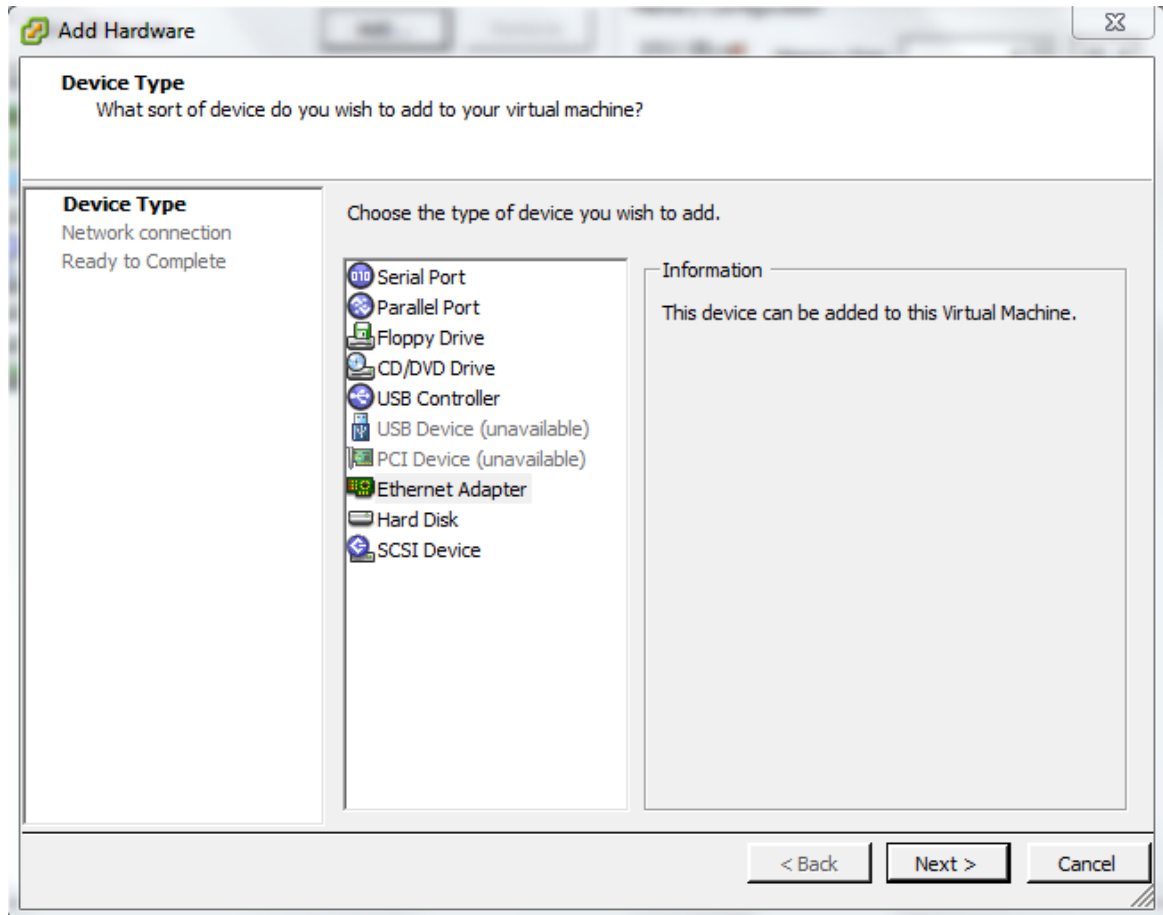
12. Select the Memory size and Number of vCPUs as requested in the Design document.



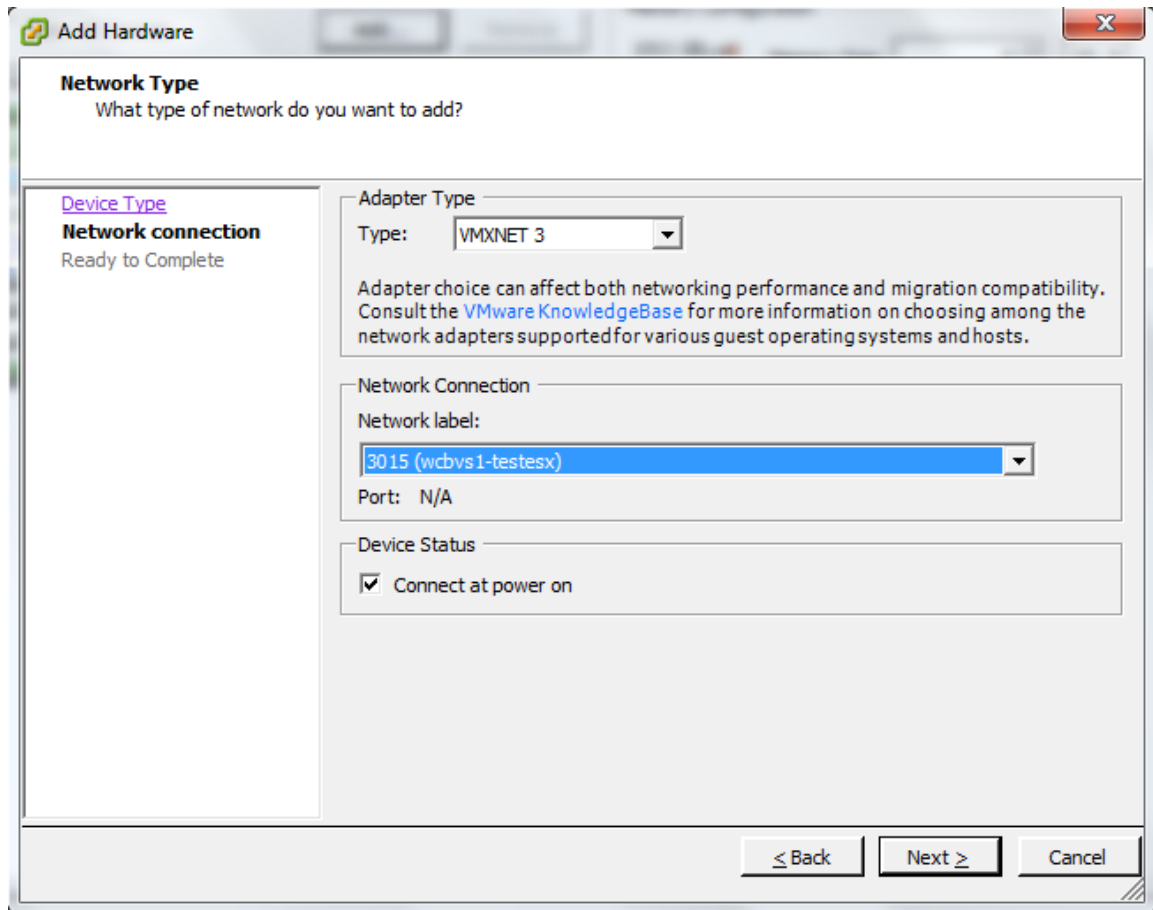
13. Click on Options, under Advanced select Memory/CPU Hotplug and then check the Radio buttons for Enable memory hot add for this Virtual machine & Enable CPU hot add for this virtual machine.



- Click on Hardware and then select Add then select Ethernet Adapter to Add PROD NIC to Virtual Machine and Click Next.



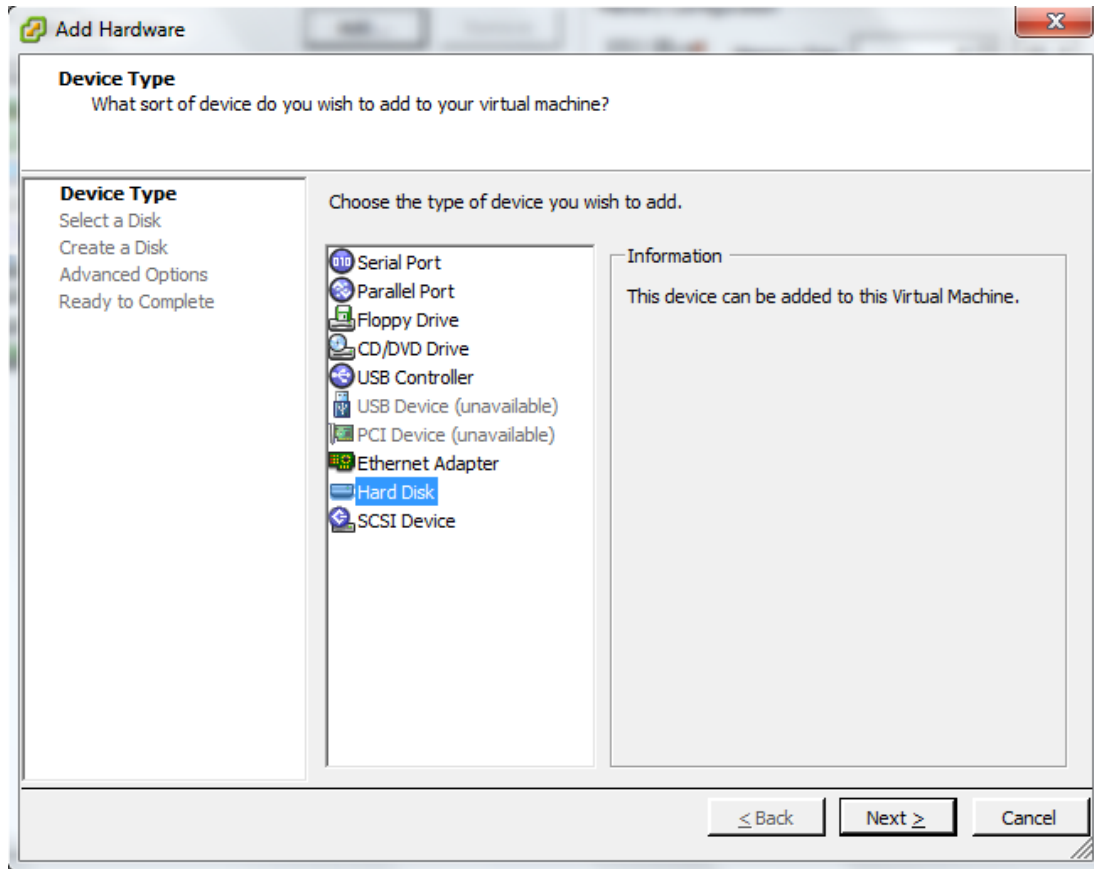
15. On Network Type screen select VMXNET3 as Adapter Type and select VLAN in Network Label as mentioned in Design Document. Click Next and Review the settings on Ready to Complete screen and then click Finish. Review the progress of task in Recent Tasks pane.



Note: For Windows 2003 servers select Adapter Type as E1000. If there are 2 VLANs with same VLAN ID and one starts with **WCSSRV** and another starts with **DSSSRVWC**. Select the VLAN which has prefix **WCSSRV**.

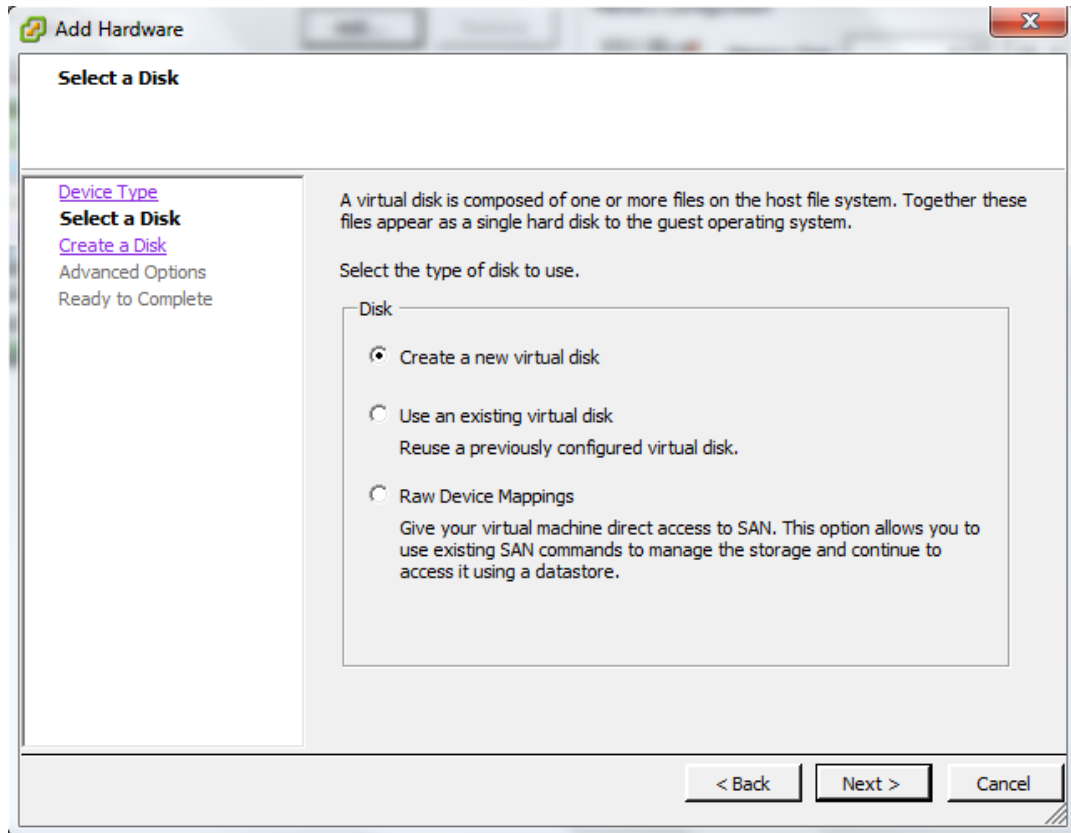
16. Repeat steps 13 & 14 for REPNET NIC.

17. If more disks are requested in the Design Document then Right Click on VM, select Edit Settings, Click on Add and select Hard Disk.

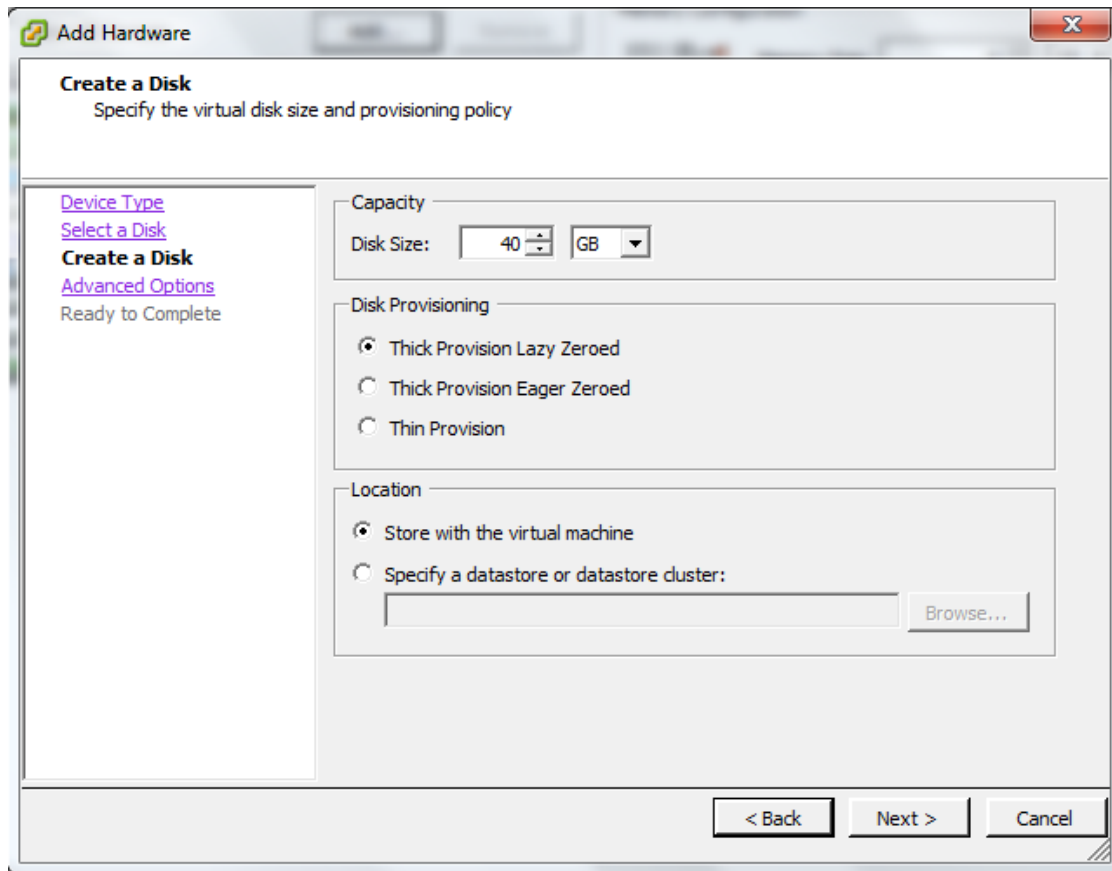


Note: Please ensure that datastore should have at least 300 GB of free space more than the size of disk which needs to be added. If there is no Datastore which fulfils this condition, Please reach out to VMware team to request more Storage.

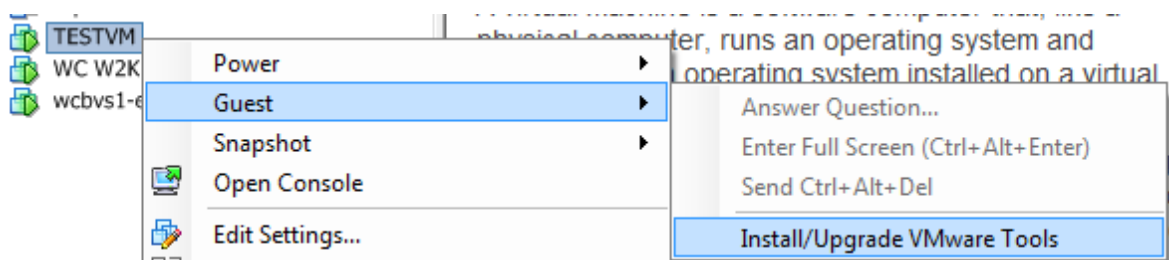
18. Select Create a new Disk.



19. Enter the size of the disk as per the Design document and Select Disk Provisioning as Thick Provision Eager Zeroed and then click Next and don't make any changes under Advanced Options and again click Next.



20. Review Options on Ready to complete screen, Click Finish and monitor the progress of the task in Recent Tasks pane.
21. Once VM Hardware has been modified as per the Design Document, Power On the Virtual Machine and wait for 15-20 mins as Customization Specification Template will take around 15-20 mins to modify the OS configuration.
22. Right click on VM, select Guest and then click on Install/Upgrade VMware Tools.



23. Login to server OS and initiate VMware Tools Installation. Monitor the progress of VMware Tools installation process from the OS end and once the Tools have been installed restart the server.
24. After the restart VM is ready for the configuration from OS end.