Import-Module VMware.VimAutomation.Vds

#---Connect to vCenter

Connect-VIServer <vCentername> -User <Username> -Password <Password>

#-- Create New DataCenter

$folder = get-folder -NoRecursion | New-Folder -name LABFolder

#--- Create new Datacenter

New-Datacenter -Location $folder -Name LABDC

$dc = Get-Datacenter

# ----Create Cluster with fully automated DRS eabed

New-Cluster -Location labdc -Name cluser1 -DrsEnabled -DrsAutomationLevel FullyAutomated

**# HA – SESSION II AFFINITY / ANTI AFFINITY AND HOST ASSIGNMENT**

#--- Add host

$cluster = Get-Cluster

Add-VMHost -Name 192.168.1.202 -Location $cluster -User root -Password Selva@177 -Force

$host1 = Get-VMHost

#---- Create VMs

$vmt = New-VM -Name vm1 -VMHost $host1 -DiskGB 1 -MemoryGB 1 -RunAsync

$vmt = New-VM -Name vm2 -VMHost $host1 -DiskGB 1 -MemoryGB 1 -RunAsync

#---- Create Template

New-Template -VM vm1 -Name vm1template -Location $dc

#---Create VM from Template

New-VM -Name VM2 -Template Template -VMHost $host

#--- Convert the Template to VM

Get-Template VM1Template | Set-Template -ToVM -Name VMnew

#----Create Snapshot

get-vm -Name vm1 | New-Snapshot -Name Test1

get-vm -Name vm1 | New-Snapshot -Name Test2

$vms = Get-VM

$vms

# == change all VMS to snapshot Test1

#foreach( $vm in $VMs ) { Set-VM -VM $vm –Snapshot Test1 }

#Get-VM VM1 | Move-VM -Destination (Get-VMHost ESXHost2)

#-----Host profile

$vmhost = Get-VMHost <Host name>

New-VMHostProfile -Name MyHostProfile01 -Description "This is the test profile based on Host1." -ReferenceHost $vmhost

#---Apply the test profile -- Discussion

#$vmhost2 = Get-VMHost Host2

#Set-VMHost -VMHost $vmhost2 -Profile HostProfile1

#--------------------------------

#------Standard switch

$Iscsinics = “vmnic2“,“vmnic3“ ##- Assign Nics for each port group

$vmotionnics = "vmnic4","vmnic5“ ##-

$vdnetnics = "vmnic6","vmnic7"

$iscsia="10.23.190.188“ ##- ISCSCI – Storage IP

$iscsib="10.23.190.189"

$iscsisw1 = "24“ ## - Define number of ports

$vmotisw2 = "120"

$vdtpgsw3 = "248“

$ISCSISubnet = “255.255.255.128“

# Switch Creation

New-VirtualSwitch -VMHost $host1 -Name “vSwitch1“ -NumPorts $iscsisw1 -Nic $Iscsinics

New-VirtualSwitch -VMHost $host1 -Name “vSwitch2" -NumPorts $vmotisw2 -Nic $vmotionnics

New-VirtualSwitch -VMHost $host1 -Name “vSwitch3“ -NumPorts $vdtpgsw3 -Nic $vdnetnics

Set-VMHostNetwork -HostName “host1.abcd.domain.com" -DomainName “abcd.domain.com“

# Storage adapters

New-VMHostNetworkAdapter -PortGroup “iSCSI-A" -VirtualSwitch "vSwitch1" -ip $iscsia -SubnetMask $VMotionSubnet

get-virtualportgroup -name "HK-iSCSI-A"| Get-NicTeamingPolicy | Set-NicTeamingPolicy -MakeNicActive "vmnic2" -MakeNicUnused "vmnic3"

# Domain name configuration

$vmhostnetworkinfo = Get-VMHostNetwork

Set-VMHostNetwork -Network $vmhostnetworkinfo -DomainName “domo.domain1.com" -HostName “Exi-001" -DnsFromDhcp $false -SearchDomain

# DNS Settings

$dns1 = "10.29.128.9"

$dns2 = "10.29.192.5"

Set-VMHostNetwork -Network $vmhostnetworkinfo -DnsAddress $dns1,$dns2

NTP Settings for HOST

Add-VmHostNtpServer -NtpServer 10.29.128.4, 10.29.128.5, 10.29.192.4, 10.29.128.45

Get-VmHostService -VMHost $host1 | Where-Object {$\_.key -eq “ntpd“} |Start-VMHostService

Get-VMHostService | where { $\_.key -eq "ntpd" } | Set-VMHostService -Policy on

# --------VDS ---discussion point

$dc = Get-Datacenter

$myDatacenter = Get-Datacenter -Name $dc

$vmHosts = $myDatacenter | Get-VMHost

$myVDSwitch = New-VDSwitch -Name "MyVDSwitch" -Location $dc #---Creation

Add-VDSwitchVMHost -VDSwitch $myVDSwitch -VMHost $vmHosts #---add hosts

$hostsPhysicalNic = $vmHosts | Get-VMHostNetworkAdapter -Name "vmnic2" # having physical nic

Add-VDSwitchPhysicalNetworkAdapter -VMHostNetworkAdapter $hostsPhysicalNic -DistributedSwitch $myVDSwitch # add physical

$myVDPortGroup = New-VDPortgroup -Name "MyVMsPortGroup" -VDSwitch $myVDSwitch -NumPorts 1000

$vmHosts | Get-VM | Get-NetworkAdapter | Set-NetworkAdapter -PortGroup $myVDPortGroup

#---------discussion points

**Host License**

Set-VMHost -VMHost $vmhost -LicenseKey Your\_license\_key

Set-VMHost -VMHost $vmhost -LicenseKey 111111-111111-111111-111111-111111-111111

**Host to maintenance mode:**

$vmhost = Get-VMHost -Name <Hostname>

$updateHostTask = Set-VMHost -VMHost $vmhost -State "Maintenance" -RunAsync

Get-VMHost ESXHost1 | Set-VmHostAdvancedConfiguration -Name Migrate.NetTimeout -Value ( [system.int32] 10 )

**Get the NTP Servers:**

$hosts = Get-VMHost

foreach ($ho in $hosts)

{

write-host($ho)

Get-VMHostService -VMHost $ho | Where-Object {$\_.key -eq "ntpd" } | select key, running, policy

get-vmhostntpserver -vmhost $ho

}

Vmotion :

Get-VMHost ESXIsource| Get-VM | Move-VM -Destination (Get-VMHost ESXIDestination)

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