Managing VMware wi.pdf 1 8/7/12 10:33 AM

VMware® Management with PowerCLI 5.1

Guest OS

Dismount-Tools
Mount-Tools
Update-Tools
Wait-Tools
Get-VMGuest
Restart-VMGuest
Shutdown-VMGuest
Suspend-VMGuest
Copy-VMGuestFile
Get-VMGuestNetworkInterface
Set-VMGuestNetworkInterface
Get-VMGuestRoute
New-VMGuestRoute
Remove-VMGuestRoute
Invoke-VMScript

Network Operations

Get-iSCSIHbaTarget
New-iSCSIHbaTarget
Remove-iSCSIHbaTarget
Set-iSCSIHbaTarget
Get-NicTeamingPolicy
Set-NicTeamingPolicy
Get-OSCustomizationNicMapping
New-OSCustomizationNicMapping
Remove-OSCustomizationNicMapping
Set-OSCustomizationNicMapping
Get-SCSIController
New-SCSIController
Set-SCSIController
Get-SCSILun
Set-SCSILun
Get-SCSILunPath
Set-SCSILunPath
Get-VirtualPortGroup
New-VirtualPortGroup
Remove-VirtualPortGroup
Set-VirtualPortGroup
Get-VirtualSwitch
New-VirtualSwitch
Remove-VirtualSwitch
Set-VirtualSwitch
Get-VMGuestNetworkInterface
Set-VMGuestNetworkInterface
Get-VMGuestRoute
New-VMGuestRoute
Remove-VMGuestRoute
Get-VMHostFirewallDefaultPolicy
Set-VMHostFirewallDefaultPolicy
Get-VMHostFirewallException
Set-VMHostFirewallException
Get-VMHostHba
Set-VMHostHba
Get-VMHostNetwork
Set-VMHostNetwork
Get-VMHostNetworkAdapter
New-VMHostNetworkAdapter
Remove-VMHostNetworkAdapter
Set-VMHostNetworkAdapter
Add-VmHostNtpServer
Get-VMHostNtpServer
Remove-VmHostNtpServer
Test-VMHostSnmp
Get-VMHostSnmp
Set-VMHostSnmp

Logs/Reporting/Configuration

Get-ErrorReport
Get-Log
Get-LogType
Get-OSCustomizationSpec
New-OSCustomizationSpec
Remove-OSCustomizationSpec
Set-OSCustomizationSpec
Get-Stat
Get-StatInterval
New-StatInterval
Remove-StatInterval
Set-StatInterval
Get-StatType
Get-VICredentialStoreItem
New-VICredentialStoreItem
Remove-VICredentialStoreItem
Get-VMHostSysLogServer
Set-VMHostSysLogServer
Get-VMResourceConguration
Get-VIEvent
Get-VIProperty
New-VIProperty

Datacenter Operations

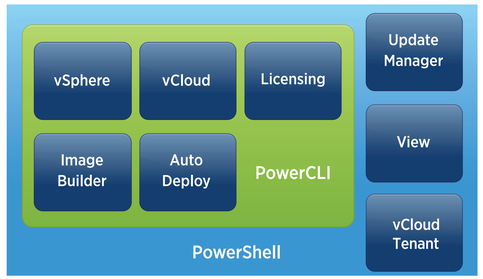
Get-Datacenter
Move-Datacenter
New-Datacenter
Remove-Datacenter
Set-Datacenter

Cluster Operations

Get-Cluster
Get-DatastoreCluster
Move-Cluster
New-Cluster
Remove-Cluster
Set-Cluster

Resource Pool Operations

Get-ResourcePool
Move-ResourcePool
New-ResourcePool
Remove-ResourcePool
Set-ResourcePool



Virtual Machine Host Operations

Get-HAPrimaryVMHost
Add-VMHost
Get-VMHost
Move-VMHost
Remove-VMHost
Restart-VMHost
Set-VMHost
Start-VMHost
Stop-VMHost
Suspend-VMHost
Get-VMHostAccount
New-VMHostAccount
Set-VMHostAccount
Remove-VMHostAccount
Get-VMHostAdvancedConfiguration
Set-VMHostAdvancedConfiguration
Get-VMHostAuthentication
Set-VMHostAuthentication
Get-VMHostAvailableTimeZone
Get-VMHostDiagnosticPartition
Set-VMHostDiagnosticPartition
Get-VMHostDisk
Format-VMHostDiskPartition
Get-VMHostDiskPartition
Get-VMHostFirmware
Set-VMHostFirmware
Get-VMHostModule
Set-VMHostModule
Get-VMHostPatch
Install-VMHostPatch
Get-VMHostProfileRequiredInput
Get-VMHostRoute
New-VMHostRoute
Remove-VMHostRoute
Set-VMHostRoute
Get-VMHostService
Restart-VMHostService
Set-VMHostService
Start-VMHostService
Stop-VMHostService
Get-VMHostStorage
Set-VMHostStorage
Get-VMHostStartPolicy
Set-VMHostStartPolicy
Get-VMHostSysLogServer
Set-VMHostSysLogServer

Auto Deploy Operations

Switch-ActiveDeployRuleSet
Repair-DeployImageCache
Add-DeployRule
Copy-DeployRule
Get-DeployRule
New-DeployRule
Remove-DeployRule
Set-DeployRule
Get-DeployRuleSet
Set-DeployRuleSet
Repair-DeployRuleSetCompliance
Test-DeployRuleSetCompliance
Apply-ESXImageProfile
Get-VMHostAttributes
Get-VMHostImageProfile
Get-VMHostMatchingRules

Licensing Operations

Get-LicenseDataManager

vCloud Operations

Connect-CIServer
Disconnect-CIServer
Get-Catalog
Get-CIAccessControlRule
Set-CIAccessControlRule
New-CIAccessControlRule
Remove-CIAccessControlRule
Add-CIDatastore
Get-CIDatastore
Set-CINetworkAdapter
Get-CINetworkAdapter
Get-CIRole
Get-CIUser
Start-CIVApp
Import-CIVApp
New-CIVApp
Restart-CIVApp
Remove-CIVApp
Set-CIVApp
Stop-CIVApp
Suspend-CIVApp
Get-CIVApp
Stop-CIVAppGuest
Restart-CIVAppGuest
Set-CIVAppNetwork
Get-CIVAppNetwork
Remove-CIVAppNetwork
New-CIVAppNetwork
Set-CIVAppStartRule
Get-CIVAppStartRule
Import-CIVAppTemplate
Remove-CIVAppTemplate
Set-CIVAppTemplate
Get-CIVAppTemplate
New-CIVAppTemplate
Get-CIView
Start-CIVM
Stop-CIVM
Restart-CIVM
Get-CIVM
Suspend-CIVM
Stop-CIVMGuest
Restart-CIVMGuest
Search-Cloud
New-OrgVdc
Remove-OrgVdc
Set-OrgVdc
Get-OrgVdc
Get-ProviderVdc
Get-ExternalNetwork
Get-Media
Get-NetworkPool
Get-Org
Remove-Org
Set-Org
New-Org
Get-OrgNetwork
Remove-OrgNetwork
Set-OrgNetwork
New-OrgNetwork

VMware vSphere PowerCLI is a powerful, easy-to-use scripting interface to manage the vSphere platform. Administrators can leverage more than 360 commandlets to simplify everyday tasks.

For latest documentation, sample code, and information, visit:
http://vmware.com/go/powercli

Official VMware PowerCLI Blog:
http://blogs.vmware.com/vipowershell

Image Builder Operations

Compare-EsxImageProfile
Export-EsxImageProfile
Get-EsxImageProfile
New-EsxImageProfile
Set-EsxImageProfile
Get-EsxSoftwareChannel
Add-EsxSoftwareDepot
Remove-EsxSoftwareDepot
Add-EsxSoftwarePackage
Get-EsxSoftwarePackage
Remove-EsxSoftwarePackage

PowerCLI Settings

Get-ErrorReport
Get-PowerCLICommunity
Get-PowerCLIConfiguration
Set-PowerCLIConfiguration
Get-PowerCLIDocumentation
Get-PowerCLIVersion

Host Profiles

Apply-VMHostProfile
Export-VMHostProfile
Get-VMHostProfile
Import-VMHostProfile
New-VMHostProfile
Remove-VMHostProfile
Set-VMHostProfile
Test-VMHostProfileCompliance

PowerCLI Books

Automating vSphere Administration
ISBN-10: 0470890797

vSphere 4.0 Quick Start Guide
ISBN-10: 1439263450

Managing VMware Infrastructure with Windows PowerShell ISBN-10: 0982131402

Host Operations

Get-CDDrive
New-CDDrive
Remove-CDDrive
Set-CDDrive
Get-FloppyDrive
New-FloppyDrive
Remove-FloppyDrive
Set-FloppyDrive
Copy-HardDisk
Get-HardDisk
New-HardDisk
Remove-HardDisk
Set-HardDisk
New-NetworkAdapter
Remove-NetworkAdapter
Set-NetworkAdapter
Add-PassthroughDevice
Get-PassthroughDevice
Remove-PassthroughDevice
Get-Snapshot
New-Snapshot
Remove-Snapshot
Set-Snapshot
Get-Template
Move-Template
New-Template
Remove-Template
Set-Template
Get-UsbDevice
Remove-UsbDevice
Get-VM
Move-VM
New-VM
Restart-VM
Remove-VM
Set-VM
Start-VM
Stop-VM
Suspend-VM
Get-VMQuestion
Set-VMQuestion
Get-VMResourceConfiguration
Set-VMResourceConfiguration
Get-VMStartPolicy
Set-VMStartPolicy

vCenter Update Manager

Attach-Baseline
Detach-Baseline
Get-Baseline
Remove-Baseline
Get-Compliance
Download-Patch
Get-Patch
Stage-Patch
Get-PatchBaseline
New-PatchBaseline
Set-PatchBaseline
Remediate-Inventory
Scan-Inventory

For latest documentation, sample code, and information, visit:
http://vmware.com/go/powercliupdate

VMware vSphere Server

Get-AdvancedSetting
New-AdvancedSetting
Remove-AdvancedSetting
Set-AdvancedSetting
Get-AlarmAction
New-AlarmAction
Remove-AlarmAction
Get-AlarmActionTrigger
New-AlarmActionTrigger
Remove-AlarmActionTrigger
Get-AlarmDefinition
Set-AlarmDefinition
Get-Annotation
Set-Annotation
Get-CustomAttribute
New-CustomAttribute
Remove-CustomAttribute
Set-CustomAttribute
New-Datastore
Remove-Datastore
Get-Datastore
Set-Datastore
Copy-DatastoreItem
Apply-DrsRecommendation
Get-DrsRecommendation
Get-DrsRule
New-DrsRule
Remove-DrsRule
Set-DrsRule
Get-EsxCli
Get-EsxTop
Move-Folder
New-Folder
Get-Folder
Remove-Folder
Set-Folder
Get-Inventory
Move-Inventory
Remove-Inventory
Get-NetworkAdapter
Get-Task
Stop-Task
Wait-Task
Get-VIAccount
Get-View
Get-VIObjectByVIView
Get-VIPermission
New-VIPermission
Remove-VIPermission
Set-VIPermission
Get-VIPrivilege
New-VIProperty
Remove-VIProperty
Get-VIRole
New-VIRole
Remove-VIRole
Set-VIRole
Connect-VIServer
Disconnect-VIServer

PowerShell for View Operations

The following operations may not integrate with the core PowerCLI cmdlets as expected.

Add-AutomaticPool
Update-AutomaticPool
Add-AutomaticLinkedClonePool
Update-AutomaticLinkedClonePool
Get-ComposerDomain
Get-ConnectionBroker
Update-ConnectionBroker
Get-DesktopPhysicalMachine
Get-DesktopVM
Get-EventReport
Get-EventReportList
Get-GlobalSetting
Update-GlobalSetting
Get-License
Set-License
Send-LinkedCloneRebalance
Send-LinkedCloneRecompose
Send-LinkedCloneRefresh
Get-LocalSession
Send-LocalSessionRollback
Add-ManualPool
Update-ManualPool
Add-ManualUnmanagedPool
Update-ManualUnmanagedPool
Get-Monitor
Get-Pool
Remove-Pool
Add-PoolEntitlement
Get-PoolEntitlement
Remove-PoolEntitlement
Get-ProfileDisk
Get-TerminalServer
Add-TerminalServerPool
Update-TerminalServerPool
Get-RemoteSession
Send-SessionDisconnect
Send-SessionLogoff
Get-User
Remove-UserOwnership
Update-UserOwnership
Add-ViewVC
Get-ViewVC
Remove-ViewVC
Update-ViewVC
Send-VMReset

vApps

Export-vApp
Get-vApp
Import-vApp
Move-Vapp
New-vApp
Remove-vApp
Set-vApp
Start-vApp
Stop-vApp

vCloud Tenant Operations

Get-PowerCLIVersion
Get-Task
Get-VICredentialStoreItem
Import-CIVAppTemplate
New-CIAccessControlRule
New-CIVApp
New-CIVAppNetwork
New-CIVAppTemplate
New-VICredentialStoreItem
Remove-CIAccessControlRule
Remove-CIVApp
Remove-CIVAppNetwork
Remove-CIVAppTemplate
Remove-VICredentialStoreItem
Restart-CIVApp
Restart-CIVAppGuest
Restart-CIVM
Restart-CIVMGuest
Search-Cloud
Set-CIAccessControlRule
Set-CINetworkAdapter
Set-CIVApp
Set-CIVAppNetwork
Set-CIVAppStartRule
Set-CIVAppTemplate
Set-Org
Set-PowerCLIConfiguration
Start-CIVApp
Start-CIVM
Stop-CIVApp
Stop-CIVAppGuest
Stop-CIVM
Stop-CIVMGuest
Stop-Task
Suspend-CIVApp
Suspend-CIVM
Wait-Task

VMware vSphere® PowerCLI Quick Reference

Virtual Machine Operations

To list all VMs on the connected VMware vSphere server and some of their properties: **Get-VM**

To create a new VM:
```
$esxhost = Get-VMHost "ESXHost01.mydomain.com"
New-VM -Name XPVM -VMHost $esxhost -DiskMB 4000 -MemoryMB 256
```

To remove a VM:
```
Remove-VM -VM myVM -DeleteFromDisk
```

To move a VM:
```
Get-VM -Name XP_VC_Tech | Move-VM -Destination
(Get-VMHost 192.168.0.10)
```

To change the configuration of a VM:
```
Set-VM -VM "Win XP SP1" -Name "Win XP SP2" -GuestId "winXP-
ProGuest" -Description "My updated Win XP virtual machine."
```

To run a script or command inside a VM:
```
Invoke-VMScript -VM myVM -ScriptText "dir"
```

Other VM-specific cmdlets include:

Start-VM
Stop-VM
Suspend-VM
Restart-VM

The following is a list of all other VM-related cmdlets; use the Get-Help function with the **-Examples switch for example uses**:

Get-CDDrive
New-CDDrive
Remove-CDDrive
Set-CDDrive
Get-FloppyDrive
New-FloppyDrive
Set-FloppyDrive
Get-HardDisk
New-HardDisk
Set-HardDisk
Get-NetworkAdapter
New-NetworkAdapter
Remove-NetworkAdapter
Set-NetworkAdapter
Get-VMGuest
Restart-VMGuest
Shutdown-VMGuest
Suspend-VMGuest
Copy-VMGuestFile
Get-VMGuestNetworkInterface
Set-VMGuestNetworkInterface
Get-VMGuestRoute
New-VMGuestRoute
Remove-VMGuestRoute
Set-VMGuestRoute
Get-VMQuestion
Set-VMQuestion
Get-VMResourceConfiguration
Set-VMResourceConfiguration
Get-VMStartPolicy
Set-VMStartPolicy

Virtual Switch Operations

To list all virtual switches attached to a VM and some of their properties, use:
```
Get-VirtualSwitch -VM (Get-VM -Name "MS Win XP SP2")
```

To create a new virtual switch:
```
New-VirtualSwitch -VMHost (Get-VMHost -Name 192.168.0.10)
-Name Switch02
```

To remove a virtual switch:
```
$vs = Get-VirtualSwitch -VMHost 192.168.0.10 -Name VS23
Remove-VirtualSwitch -VirtualSwitch $vs
```

To change the configuration of a virtual switch:
```
$vs = New-VirtualSwitch -Host 192.168.0.10 -Name VirtSwitch

Set-VirtualSwitch -VirtualSwitch $vs -MTU 500
```

Port Group Operations

To list all the port groups and some of their properties:
```
$vs = Get-VirtualSwitch -VMHost 192.168.0.10 -Name Switch02
Get-VirtualPortGroup -VirtualSwitch $vs
```

To add a new port group to a virtual switch:
```
$vs = Get-VirtualSwitch -VMHost 192.168.0.10 -Name Switch02

$vpg = New-VirtualPortGroup -VirtualSwitch $vs -Name VPG1
```

Other cmdlets include:

Remove-VirtualPortGroup
Set-VirtualPortGroup

Resource Pool Operations

To list all resource pools on the connected VMware vSphere server and some of their properties: **Get-ResourcePool**

To create a new resource pool:
```
$clusterRootRP = Get-ResourcePool -Location
(Get-Cluster ResearchAndDevelopmentCluster ) -Name Resources

New-ResourcePool -Location $clusterRootRP -Name Developmen-
tResources -CpuExpandableReservation $true -CpuReservationMhz
500 -CpuSharesLevel high -MemExpandableReservation $true
-MemReservationMB 500 -MemSharesLevel high
```

Other resource pool cmdlets:

Move-ResourcePool
Remove-ResourcePool
Set-ResourcePool

Task Information

To list all tasks for a VMware vSphere server and some of their properties:
```
Get-Task -Server (Connect-VIServer -Server 192.168.0.10) -Status Error
```

To stop a task (example: stop the task of removing the VM):
```
Stop-Task -Task (Remove-VM -VM "MS Win XP SP2" -Confirm -RunAsync)
```

To wait until a task is completed before continuing:
```
Wait-Task -Task (Remove-VM -VM "MS Win XP SP2" -Confirm -RunAsync)
```

Snapshot Operations

To list all the snapshots for all virtual machines:
Get-VM | Get-Snapshot

To snapshot a VM:
```
New-Snapshot -VM "XP SP2" -Name BeforePatch1
```

To remove a snapshot:
```
Remove-Snapshot -Snapshot $snapshot1 -RemoveChildren
```

Other cmdlets include:
Set-Snapshot

Cluster Operations

To list all the clusters on the connected VMware vSphere server and some of their properties: **Get-Cluster**

To add a new cluster:
```
New-Cluster -Name MyCluster -DRSEnabled -DRSMode FullyAutomated
```

Other cluster cmdlets include:

Move-Cluster
Remove-Cluster
Set-Cluster

API Operations

Returns a VMware vSphere.Net view object by specified search criteria.
```
$vm = Get-View -ViewType VirtualMachine -Filter @{"Name" = "MS
Win XP SP2"}

$hostView = Get-View -ID $vm.Runtime.Host

$hostView.Summary.Runtime
```

Another example:
```
(Get-View (Get-VMHost 'ESX1' | get-view).ConfigManager
.VmotionSystem).SelectVnic("vmk0")
```

API Reference:
http://www.vmware.com/support/developer/vcsdk/visdk41pubs/ApiReference/index.html

Virtual Machine Host Operations

To list all the VMware vSphere servers (VMHost) on the connected vSphere server and some of their properties:
Get-VMHost

To add a new VMHost:
```
Add-VMHost 192.168.0.10 -Location (Get-Datacenter Main) -User
root -Password MyPass
```

To remove a VMHost:
```
$myVMHost = Get-VMHost 192.168.0.10
Remove-VMHost $myHost
```

To move a VMHost:
```
Move-VMHost 192.168.0.10 -Destination (Get-Datacenter MyDatacenter)
```

To change the state of a VMHost:
```
Set-VMHost -VMHost Host01 -State "Disconnected"
```

The followingis a list of all other VMHost-related cmdlets: use the Get-Help function for example uses:

Restart-VMHost
Start-VMHost
Stop-VMHost
Suspend-VMHost
Get-VMHostAccount
New-VMHostAccount
Set-VMHostAccount
Remove-VMHostAccount
Set-VMHostAdvancedConfiguration
Get-VMHostAdvancedConfiguration
Get-VMHostDiagnosticPartition
Set-VMHostDiagnosticPartition
Get-VMHostFirewallDefaultPolicy
Set-VMHostFirewallDefaultPolicy
Get-VMHostFirewallException
Set-VMHostFirewallException
Get-VMHostFirmware
Set-VMHostFirmware
Get-VMHostModule
Set-VMHostModule
Get-VMHostNetwork
Set-VMHostNetwork
New-VMHostNetworkAdapter
Remove-VMHostNetworkAdapter
Set-VMHostNetworkAdapter
Add-VMHostNtpServer
Get-VMHostNtpServer
Remove-VMHostNtpServer
***-VMHostPatch**
***-VMHostRoute**
Get-VMHostService
Set-VMHostService
Restart-VMHostService
Start-VMHostService
Stop-VMHostService
Get-VMHostSnmp
Test-VMHostSnmp
Set-VMHostSnmp
Get-VMHostStartPolicy
Set-VMHostStartPolicy
Get-VMHostStorage
Set-VMHostStorage
Get-VMHostSysLogServer
Set-VMHostSysLogServer

vApp Operations

The following is a list of vApp cmdlets; use the Get-Help function for example uses:
```
New-vApp -Name MyvApp -CpuLimitMhz 4000 -CpuReservationMhz 1000
-Location (Get-VMHost MyHost)
```

Other vApp cmdlets:

Export-vApp
Get-vApp
Import-vApp
Remove-vApp
Stop-vApp
Set-vApp
Start-vApp

Getting Started

http://communities.vmware.com/docs/DOC-13700

VMware vSphere PowerCLI frequently asked questions (FAQs) link:
http://communities.vmware.com/docs/DOC-13700

To find out what cmdlets are available: **Get-VICommand**

To show documentation for all available cmdlets: **Get-PowerCLIDocumentation**

For help with a cmdlet: **Get-Help** cmdlet-name *-Full* | More

How to Connect to vCenter Server or ESX and ESXi

To connect to a VMware vSphere server. Start a new session or reestablish a previous session with a VMware vSphere server.
```
$srv = Connect-VIServer -Server 192.168.0.10 -User Admin
-Password Pass01
```

To disconnect from the connected vSphere server:
```
Disconnect-VIServer -Server $srv -Confirm:$false
```

Security Operations

The following is a list of security cmdlets; use the Get-Help function for example uses:
```
Get-VIPermission -Entity (Get-Datacenter) -Principal Administrator
```

Other security cmdlets:

New-VIPermission
Remove-VIPermission
Set-VIPermission
Get-VIPrivilege
Get-VIRole
New-VIRole
Remove-VIRole
Set-VIRole

Datacenter Operations

To list all datacenters from a VMware vSphere server:
Get-Datacenter

To add a new datacenter:
```
New-Datacenter -Name France
```

Other datastore cmdlets:

Move-Datacenter
Remove-Datacenter
Set-Datacenter

DRS Rules

Retrieve a list of DRS rules for the specified clusters:
```
Get-DrsRule -Cluster
(Get-Cluster "Production")
```

Other DRS rule cmdlets:

New-DrsRule
Remove-DrsRule
Set-DrsRule

ESXTOP through PowerCLI

```
Get-EsxTop -Counter
# View the fields available for vCPU counter:
(Get-EsxTop -Counter -CounterName VCPU).Fields
Get-EsxTop -TopologyInfo
# View the entries of a specific topology:
(Get-EsxTop -TopologyInfo -Topology SchedGroup).Entries | Format-Table
# Retrieve the counter values for "VCPU" and "SchedGroup" counters:
Get-EsxTop -CounterName VCPU | Format-Table * -AutoSize
Get-EsxTop -CounterName SchedGroup | Format-Table * -AutoSize
```

Managing Events Alarms

```
Get-AlarmDefinition # Returns all the defined alarms on the servers
you're connected to.
Get-AlarmDefinition -Name "virtual machine*" -Enabled $false
# Returns all the disabled alarm definitions with names starting with
"virtual machine."
Get-VMHost hostname | Get-AlarmDefinition # Returns all alarms that
apply to the host "hostname". Includes alarms defined on this host and
alarms inherited from the parent entity, or from any ancestors in the
inventory hierarchy.
Modify an alarm definition: Get-AlarmDefinition "Host memory status" |
Set-AlarmDefinition -Name "Host memory" -Enabled $false
# This will rename the alarm to "Host memory" and disable it.
```

Datastore Operations

For a list of datastores and other properties:
Get-Datastore

Other datastore cmdlets include:

New-Datastore
Remove-Datastore
Set-Datastore

Folder Operations

The following is a list of all folder-related cmdlets; use the Get-Help function for example uses:

Get-Folder
Move-Folder
New-Folder
Remove-Folder
Set-Folder

Image Builder

Connect to a depot:
```
Add-EsxSoftwareDepot https://hostupdate.vmware.com/software/VUM/PRODUCTION/main/vmw-depot-index.xml
```

Add a package by name to an image profile:
```
Add-EsxSoftwarePackage -ImageProfile "My custom profile" -SoftwarePackage net-bnx2
```

Clone an image profile, then add a package by name:
```
New-EsxImageProfile -CloneProfile "ESX-5.0-234567-standard" -Name "My custom profile" | Add-EsxSoftwarePackage net-bnx2
```

Export an ISO image
```
Export-EsxImageProfile -ImageProfile "Evan's Profile" -ExportToIso -FilePath c:\isos\evans-iso.iso
```

Clone an image profile, add a software package, then export to offline bundle.
```
New-EsxImageProfile -CloneProfile "ESXi-5.0.0-234567-standard" -Name "Evan's Profile"
Add-EsxSoftwarePackage -ImageProfile "Evan's Profile" -SoftwarePackage cisco-vem-v140
Export-EsxImageProfile -ImageProfile "Evan's Profile" -ExportToBundle -FilePath c:\isos\base-plus-vem.zip
```

Display all image profiles from depots and all image profiles the user created during this PowerCLI session:
```
Get-EsxImageProfile
```

List all the VIBs, sorted by date:
```
Get-EsxSoftwarePackage | Sort-Object ReleaseDate | Format-Table -Property Name,Version,Vendor
```

List all the VIBs from VMware and Cisco released after Jan 1, 2010:
```
Get-EsxSoftwarePackage -Vendor "VMware","Cisco" -ReleasedAfter 1/1/2010
```

List all the VIBs from vendors other than VMware
```
Get-EsxSoftwarePackage | ? {$_.Vendor -ne "VMware"}
```

Clone an image profile, give it a new name, and change the acceptance level.
```
New-EsxImageProfile -CloneProfile "ESX-5.0-234567-standard" -Name "My custom profile" -AcceptanceLevel CommunitySupported
```

Connect to a depot, then disconnect from it by URL:
```
Add-EsxSoftwareDepot https://hostupdate.vmware.com/software/VUM/PRODUCTION/main/vmw-depot-index.xml
```

Remove package foo from my custom profile:
```
Remove-EsxSoftwarePackage -ImageProfile "My custom profile" -SoftwarePackage foo
```

Modify the VIB list of an existing image profile
```
Set-EsxImageProfile -ImageProfile "Profile of a Fool" -SoftwarePackage esx-base,scsi-ips,esx-tboot
```

Resources

VMware scripting support - http://vmware.com/go/sdksupport
vSphere PowerCLI training - http://vmware.com/go/vsphereautomation
Third-party PowerCLI training from Trainsignal: http://trainsignal.com
Special thanks to our PowerCLI VIP community members for helping us improve PowerCLI.

vmware®