POWERCLI CHEAT SHEET

PowerShell SDK to manage VMware vSphere environments

VMware PowerCLI **6.5.1**

Date : **April 2017**

INSTALLATION

From Powershell Gallery

```
Install-Module -Name VMware.PowerCLI –Scope CurrentUser
```

Offline installation

```
Save-Module -Name VMware.PowerCLI -Path C:\Path\To\Desired\Folder
```

... then copy content to the target machine in folder: *"$home\Documents\WindowsPowerShell\Modules"*

Load module

```
Import-Module VMware.PowerCLI
```

CONNECTIONS

Enter credentials in a windows popup

```
Connect-VIServer -Server <server> -credential $(Get-Credential)
```

HOST MANAGEMENT

Add a new ESXi to the inventory

```
Add-VMHost <fqdn or ip> -Location (Get-Cluster <cLustername>) -User root -Password <password>
```

Set a host to maintenand mode

```
Set-VMHost -VMHost <host> -State "Maintenance"
```

Power operations on ESXi

- `Restart-VMHost -VMHost <host>`
- `Stop-VMHost -VMHost <host>`

Retrieves information about host services

```
Get-VMHostService <host>
```

Restart a specific host service

```
Get-VMHostService <host> | ? {($_.Key -eq "TSM-ssh")} | Restart-VMHostService
```

CLUSTER MANAGEMENT

Get cluster information

```
Get-Cluster -Name <clustername>
```

Enable HA on cluster

```
Set-Cluster -Cluster <cluster> -HAEnabled:$true -HAAdmissionControlEnabled:$true
```

Enable DRS on cluster

```
Set-Cluster -Cluster <cluster> -DRSEnabled:$true -DRSAutomationLevel "FullyAutomated"
```

Set EVC mode on cluster

```
Set-Cluster -Cluster <cluster> -EVCMode "intel-nehalem"
```

VAPP MANAGEMENT

Export a vApp in OVA format

```
Export-VApp -vApp <vapp> -Destination "c:\vapps\" -Format Ova
```

Import OVA file as vApp

```
Import-vApp -Source "c:\vapps\appliance.ova" -Datastore <datastore> -VMHost <vmhost>
```

Configure memory ressources for a vApp

```
Set-VApp -VApp <vapp> -MemExpandableReservation:$true -MemReservationGB 2 -MemLimitGB 4
```

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VM MANAGEMENT

Get VM information

```
Get-VM <vmname>
```

Power operations

- `Start-VM -VM <vm>`
- `Stop-VM -VM <vm>`
- `Restart-VM -VM <vm>`

Open console in the web browser

```
Get-VM <vm> | Open-VMConsoleWindow
```

Convert a VM to a template

```
Set-VM -VM <vm> -ToTemplate -Name <templatename>
```

Connect ISO file to a VM

```
New-CDDrive -VM <vm> -ISOPath "[<datastorename>] ISO\sample.iso"
```

Disconnect any CD drive from a VM

```
Get-CDDrive -VM <vm> | Set-CDDrive -connected 0 -StartConnected 0 -NoMedia
```

Attach a new persistent disk

```
New-HardDisk -VM <vm> -CapacityGB 10 -Persistence persistent
```

SNAPSHOT MANAGEMENT

Create snapshot of a VM with active memory

```
New-Snapshot -VM <vm> -Name "beforePatch" -Memory
```

List snapshots of a VM

```
$snapshot = Get-Snapshot -VM <vm>
```

Remove snapshot

```
Remove-Snapshot -Snapshot <snapshot>
```

GUEST OS OPERATIONS

Power operations

- `Shutdown-VMGuest -VM <vm>`
- `Restart-VMGuest -VM <vm>`

(dis)Mounts the VMware Tools CD installer

```
Mount-Tools -VM <vm>
```

```
Dismount-Tools -VM <vm>
```

DATASTORE

Get datastore information

```
Get-Datastore -Name <dsname>
```

Create (NFS|VMFS) datastores

```
New-Datastore -Nfs -VMHost <host> -Name <dsname> -Path </path/folder> -NfsHost <nfsserver>
```

```
New-Datastore -Vmfs -VMHost <host> -Name <dsname> -Path <scsiLun.CanonicalName>
```

NETWORK

Get vSphere distributed switch or port group

```
Get-VDSwitch -name <name>
```

```
Get-VDPortgroup -Name <name>
```

Create a vSphere distributed switch

```
New-VDSwitch -Name <dvsname> -Location <datacenter>
```

Create a distributed port group

```
New-VDPortgroup -VDSwitch <dvswitch> -Name <pgname> -NumPorts 8 -VLanId 4
```

Backup/Export of a vSphere distributed switch

```
Export-VDSwitch -VDSwitch <dvswitch> -Destination "c:\mybkp.zip" -WithoutPortGroups
```