vSphere Command-Line Interface Reference

https://pubs.vmware.com/vsphere-50/index.jsp?topic=%2Fcom.vmware.vsphere.scripting.doc_50%2FGUID-522DB42D-78C1-4DD3-8708-E0AAA22B82BC.html

The vSphere CLI command set allows you to run common system administration commands against vSphere systems from an administration server of your choice.

Linux Installation: If you accepted the defaults during installation, you can find the installed software in the following locations:

- vSphere CLI scripts: **`/usr/bin`**
- vSphere SDK for Perl utility applications: **`/usr/lib/vmware-vcli/apps`**
- vSphere SDK for Perl sample scripts: **`/usr/share/doc/vmware-vcli/samples`**

Windows Installation: vSphere CLI commands are installed in **`C:\Program Files\VMware\VMware vSphere CLI\bin`** by default.

The vSphere CLI includes the commands listed below, as well as the **`resxtop`** and **`esxcli`** commands.

- For **`resxtop`**, see the documentation in the *Resource Management Guide*.
- For **`esxcli`**, see the online help. This command differs depending on the system you are running it on.

Contents

Table 1: vSphere CLI commands 2
esxcli command Commands 3
esxcli fcoe Commands 3
esxcli hardware Commands 3
esxcli iscsi Commands 4
esxcli license Commands 11
esxcli network Commands 12
esxcli software Commands 20
esxcli storage Commands 26
esxcli system Commands 39
esxcli vm Commands 43
svmotion 44
vicfg-advcfg - query and modify advanced VMkernel options. Use when instructed by Technical Support. 46
vicfg-authconfig - manage Active Directory authentication schemes. 48
vicfg-cfgbackup - back up and restore ESXi host configurations 49
vicfg-dns - configure DNS properties 51
vicfg-dumppart - query, set, and scan for diagnostic partitions on an ESX/ESXi system 52
vicfg-hostops - perform host-related operations. 53
vicfg-ipsec - configure IPsec properties 55
vicfg-iscsi - manage iSCSI storage. 58
vicfg-module - enable configuration of VMkernel module options 64
vicfg-mpath35 - configure multipath settings for Fibre Channel or iSCSI LUNs 65
vicfg-mpath - display path information, change path state 66
vicfg-nas - manipulate NAS file systems on an ESX/ESXi host. 68
vicfg-nics - get information, set speed and duplex for ESX/ESXi physical NICs 69
vicfg-ntp - configure the NTP server 71
vicfg-rescan - scan the LUNs 72
vicfg-route - get and set routing information for the VMkernel 73
vicfg-scsidevs - display information about available LUNs. 74
vicfg-snmp - configure the SNMP service 76
vicfg-syslog - get and set syslog server configuration 77
vicfg-user - manage users and groups 78
vicfg-vmknic - configure virtual network adapters 80
vicfg-volume - Managing LVM snapshot or replica volumes. 83
vicfg-vswitch - create and configure virtual switches and port groups 84

vifs - perform file system operations on remote hosts 87
vihostupdate35 - manage software installation packages on a VMware Infrastructure 3.5 host using vSphere CLI 4.0 and later....89
vihostupdate - manage software installation packages on an ESX/ESXi host. 90
vmkfstools - vSphere CLI for managing VMFS volumes....92
vmware-cmd - perform virtual machine operations 95

To display usage information, click the command name in the Documentation column of Table 1.

Table 1: vSphere CLI commands

Documentation	Description
esxcli command	Lists descriptions of esxcli commands.
esxcli fcoe	FCOE (Fibre Channel over Ethernet) comands
esxcli hardware	Hardware namespace. Used primarily for extracting information about the current system setup.
esxcli iscsi	iSCSI namespace for minitoring and managing hardware and software iSCSI.
esxcli license	License management commands.
esxcli network	Network namespace for managing virtual networking including virtual switches and VMkernel network interfaces.
esxcli software	Software namespace. Includes commands for managing and installing image profiles and VIBs.
esxcli storage	Includes core storage commands and other storage management commands.
esxcli system	System monitoring and management command.
esxcli vm	Namespace for listing virtual machines and shutting them down forcefully.
svmotion	Moves a virtual machine's configuration file and optionally its disks while the virtual machine is running. Must run against a vCenter Server system.
vicfg-advcfg	Performs advanced configuration including enabling and disabling CIM providers. Use this command as instructed by VMware.
vicfg-authconfig	Manages Active Directory authentication.
vicfg-cfgbackup	Backs up the configuration data of an ESXi system and restores previously saved configuration data.
vicfg-dns.pl	Specifies an ESX/ESXi host's DNS (Domain Name Server) configuration.
vicfg-dumppart	Manages diagnostic partitions.
vicfg-hostops	Allows you to start, stop, and examine ESX/ESXi hosts and to instruct them to enter maintenance mode and exit from maintenance mode.
vicfg-ipsec	Supports setup of IPSec.
vicfg-iscsi	Manages iSCSI storage.
vicfg-module	Enables VMkernel options. Use this command with the options listed, or as instructed by VMware.
vicfg-mpath	Displays information about storage array paths and allows you to change a path's state.
vicfg-mpath35	Configures multipath settings for Fibre Channel or iSCSI LUNs.
vicfg-nas	Manages NAS file systems.
vicfg-nics	Manages the ESX/ESXi host's NICs (uplink adapters).
vicfg-ntp	Specifies the NTP (Network Time Protocol) server.
vicfg-rescan	Rescans the storage configuration.

vicfg-route	Lists or changes the ESX/ESXi host's route entry (IP gateway).
vicfg-scsidevs	Finds available LUNs.
vicfg-snmp	Manages the Simple Network Management Protocol (SNMP) agent.
vicfg-syslog	Specifies the syslog server and the port to connect to that server for ESXi hosts.
vicfg-user	Creates, modifies, deletes, and lists local direct access users and groups of users.
vicfg-vmknic	Adds, deletes, and modifies virtual network adapters (VMkernel NICs).
vicfg-volume	Supports resignaturing a VMFS snapshot volume and mounting and unmounting the snapshot volume.
vicfg-vswitch	Adds or removes virtual switches or vNetwork Distributed Switches, or modifies switch settings.
vifs.pl	Performs file system operations such as retrieving and uploading files on the remote server.
vihostupdate	Manages updates of ESX/ESXi hosts. Use vihostupdate35 for ESXi 3.5 hosts.
vihostupdate35	Manages updates of ESX/ESXi version 3.5 hosts.
vmkfstools	Creates and manipulates virtual disks, file systems, logical volumes, and physical storage devices on ESX/ESXi hosts.
vmware-cmd	Performs virtual machine operations remotely. This includes, for example, creating a snapshot, powering the virtual machine on or off, and getting information about the virtual machine.

esxcli command Commands

Command	Description	Options Help
esxcli command getdetails	This command will output a detailed XML description of all the esxcli commands on this system as well as a description of each and details on all the commands parameters.	**--help | -h** Show the help message.
esxcli command list	This command will list all of the esxcli commands with their namespace, object, command name and description.	**--help | -h** Show the help message.

esxcli fcoe Commands

Command	Description	Options Help
fcoe adapter list	List FCOE-capable CNA devices.	**--help | -h** Show the help message.
fcoe nic disable	Disable rediscovery of FCOE storage on behalf of an FCOE-capable CNA upon next boot.	**--help | -h** Show the help message. **--nic-name | -n** The CNA adapter name (vmnicX)
fcoe nic discover	Initiate FCOE adapter discovery on behalf of an FCOE-capable CNA.	**--help | -h** Show the help message. **--nic-name | -n** The CNA adapter name (vmnicX)
fcoe nic list	List FCOE-capable CNA devices.	**--help | -h** Show the help message.
fcoe nic restore	Restore FCOE initiators during reboot.	**--help | -h** Show the help message.

esxcli hardware Commands

Command	Description	Options Help

hardware bootdevice list	List the boot device order, if available, for this host.	**--help | -h** Show the help message.
hardware clock get	Disply the current hardware clock time.	**--help | -h** Show the help message.
hardware clock set	Set the hardware clock time. Any missing parameters will default to the current time.	**--day | -d** Day **--help | -h** Show the help message. **--hour | -H** Hour **--min | -m** Minute **--month | -M** Month **--sec | -s** Second **--year | -y** Year
hardware cpu cpuid get	Get CPUID fields for the given CPU.	**--cpu | -c** The ID of the CPU to query for CPUID data **--help | -h** Show the help message.
hardware cpu global get	Get properties that are global to all CPUs.	**--help | -h** Show the help message.
hardware cpu global set	Set properties that are global to all CPUs.	**--help | -h** Show the help message. **--hyperthreading | -t** Enable or disable hyperthreading
hardware cpu list	List all of the CPUs on this host.	**--help | -h** Show the help message.
hardware memory get	Get information about memory.	**--help | -h** Show the help message.
hardware pci list	List all of the PCI devices on this host.	**--help | -h** Show the help message.
hardware platform get	Get information about the platform	**--help | -h** Show the help message.

esxcli iscsi Commands

Command	Description	Options Help
iscsi adapter auth chap get	Get the iSCSI CHAP authentication for the iSCSI Host Bus Adapter.	**--adapter | -A** The iSCSI adapter name. **--direction | -d** The iSCSI CHAP authentication direction ([uni, mutual]) **--help | -h** Show the help message.
iscsi adapter auth chap set	Set the iSCSI CHAP authentication for the iSCSI Host Bus Adapter.	**--adapter | -A** The iSCSI adapter name. **--authname | -N** The iSCSI CHAP authentication name **--default | -D** Resetting iSCSI CHAP authenthication setting to

		default. **--direction | -d** The iSCSI CHAP authentication direction ([uni, mutual]) **--help | -h** Show the help message. **--level | -l** The iSCSI CHAP authentication level ([prohibited, discouraged, preferred, required]) **--secret | -S** The iSCSI CHAP authentication secret
iscsi adapter capabilities get	List the iSCSI details for the iSCSI Host Bus Adapter.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message.
iscsi adapter discovery rediscover	Do the iSCSI Discovery for the iSCSI Host Bus Adapter.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message.
iscsi adapter discovery sendtarget add	Add a sendtarget address	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI sendtarget address: <ip/dns[:port]> **--help | -h** Show the help message.
iscsi adapter discovery sendtarget auth chap get	Get iSCSI CHAP authentication on a sendtarget address	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI sendtarget address: <ip/dns[:port]> **--direction | -d** The iSCSI authentication direction ([uni, mutual]) **--help | -h** Show the help message.
iscsi adapter discovery sendtarget auth chap set	Set iSCSI CHAP authentication on a sendtarget address	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI sendtarget address: <ip/dns[:port]> **--authname | -N** The iSCSI authentication name **--default | -D** Resetting iSCSI authentication setting to default. **--direction | -d** The iSCSI authentication direction ([uni, mutual]) **--help | -h** Show the help message. **--inherit | -I** Inheriting iSCSI authentication setting from parent. **--level | -l** The iSCSI authentication level ([prohibited, discouraged,

		preferred, required]) **--secret | -S** The iSCSI authentication secret
iscsi adapter discovery sendtarget list	List sendtarget addresses	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message.
iscsi adapter discovery sendtarget param get	Get iSCSI parameter on a sendtarget address	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI sendtarget address: <ip/dns[:port]> **--help | -h** Show the help message.
iscsi adapter discovery sendtarget param set	Set the iSCSI parameter for the iSCSI Sendtarget.	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI sendtarget address: <ip/dns[:port]> **--default | -D** Resetting iSCSI parameter setting to default. **--help | -h** Show the help message. **--inherit | -I** Inheriting iSCSI parameter setting from parent. **--key | -k** The iSCSI parameter key **--value | -v** The iSCSI parameter value
iscsi adapter discovery sendtarget remove	Remove a sendtarget address	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI sendtarget address: <ip/dns[:port]> **--help | -h** Show the help message.
iscsi adapter discovery statictarget add	Add a static target address	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI target address: <ip/dns[:port]> **--help | -h** Show the help message. **--name | -n** The iSCSI target name.
iscsi adapter discovery statictarget list	List static target addresses	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message.
iscsi adapter discovery statictarget remove	Remove a static target	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI target address: <ip/dns[:port]> **--help | -h** Show the help message. **--name | -n**

		The iSCSI target name.
iscsi adapter discovery status get	Get the iSCSI adapter discovery status for the iSCSI Host Bus Adapter.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message.
iscsi adapter firmware get	Validate the iSCSI firmware for the iSCSI Host Bus Adapter.	**--adapter | -A** The iSCSI adapter name. **--file | -f** Path to the firmware file to retrieve information from. **--help | -h** Show the help message.
iscsi adapter firmware set	Upload the iSCSI firmware for the iSCSI Host Bus Adapter.	**--adapter | -A** The iSCSI adapter name. **--file | -f** Path to the firmware file to download. **--help | -h** Show the help message.
iscsi adapter get	List the iSCSI information for the iSCSI Host Bus Adapter.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message.
iscsi adapter list	List all the iSCSI Host Bus Adapters on the system.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message.
iscsi adapter param get	Get the iSCSI parameters for the iSCSI Host Bus Adapter.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message.
iscsi adapter param set	Set the iSCSI parameter for the iSCSI Host Bus Adapter.	**--adapter | -A** The iSCSI adapter name. **--default | -D** Resetting iSCSI parameter setting to default. **--help | -h** Show the help message. **--key | -k** The iSCSI initiator parameter key. **--value | -v** The iSCSI initiator parameter value.
iscsi adapter set	Set the iSCSI name and alias for the iSCSI Host Bus Adapter.	**--adapter | -A** The iSCSI adapter name. **--alias | -a** The iSCSI initiator alias. **--help | -h** Show the help message. **--name | -n** The iSCSI initiator name.
iscsi adapter target list	List iSCSI targets.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message. **--name | -n** The iSCSI target name.

iscsi adapter target portal auth chap get	Get iSCSI CHAP authentication on a target	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI target address: <ip/dns[:port]> **--direction | -d** The iSCSI authentication direction ([uni, mutual]) **--help | -h** Show the help message. **--method | -m** The iSCSI authentication method ([chap]) **--name | -n** The iSCSI target name: <iqn/eui>
iscsi adapter target portal auth chap set	Set the iSCSI CHAP authentication for the iSCSI Target.	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI target address: <ip/dns[:port]> **--authname | -N** The iSCSI authentication name **--default | -D** Resetting iSCSI authentication setting to default. **--direction | -d** The iSCSI authentication direction ([uni, mutual]) **--help | -h** Show the help message. **--inherit | -I** Inheriting iSCSI authentication setting from parent. **--level | -l** The iSCSI authentication level ([prohibited, discouraged, preferred, required]) **--name | -n** The iSCSI target name: <iqn/eui> **--secret | -S** The iSCSI authentication password
iscsi adapter target portal list	List iSCSI target portals.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message. **--name | -n** The iSCSI target name.
iscsi adapter target portal param get	Get iSCSI parameter on a target	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI target address: <ip/dns[:port]> **--help | -h** Show the help message. **--name | -n** The iSCSI target name: <iqn/eui>

iscsi adapter target portal param set	Set the iSCSI parameter for the iSCSI Target.	**--adapter | -A** The iSCSI adapter name. **--address | -a** The iSCSI target address: <ip/dns[:port]> **--default | -D** Resetting iSCSI parameter setting to default. **--help | -h** Show the help message. **--inherit | -I** Inheriting iSCSI parameter setting from parent. **--key | -k** The iSCSI parameter key **--name | -n** The iSCSI target name: <iqn/eui> **--value | -v** The iSCSI parameter value
iscsi ibftboot get	Get iSCSI IBFT Boot details.	**--help | -h** Show the help message.
iscsi ibftboot import	Import iSCSI target configuration from iBFT to ESX iSCSI initiators. The boot target recorded in iBFT is added to all the eligible 'dependent' iSCSI adapters.	**--help | -h** Show the help message.
iscsi logicalnetworkportal list	List Logical Network Portals for iSCSI Adapter	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message.
iscsi networkportal add	Add a network portal for iSCSI adapter	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message. **--nic | -n** The iSCSI network portal (bound vmknic)
iscsi networkportal ipconfig get	Get iSCSI network portal ip configuration	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message. **--nic | -n** The iSCSI network portal (vmknic)
iscsi networkportal ipconfig set	Set iSCSI network portal IP configuration	**--adapter | -A** The iSCSI adapter name. **--dns1 | -1** The iSCSI network portal primary DNS address **--dns2 | -2** The iSCSI network portal secondary DNS address **--gateway | -g** The iSCSI network portal gateway address **--help | -h** Show the help message. **--ip | -i** The iSCSI network portal IP

		address **--nic | -n** The iSCSI network portal (vmknic) **--subnet | -s** The iSCSI network portal subnet mask
iscsi networkportal list	List Network Portal for iSCSI Adapter	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message.
iscsi networkportal remove	Remove a network portal for iSCSI adapter	**--adapter | -A** The iSCSI adapter name. **--force | -f** The force flag (force removal of iSCSI vmknic when sessions are active using it) **--help | -h** Show the help message. **--nic | -n** The iSCSI network portal (bound vmknic)
iscsi physicalnetworkportal list	List Physical Network Portal for iSCSI Adapter	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message.
iscsi physicalnetworkportal param get	Get network parameters on a Physical Network Portal (vmnic)	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message. **--nic | -n** The physical network portal name: <vmnic>
iscsi physicalnetworkportal param set	Set network parameter on a Physical Network Portal	**--adapter | -A** The iSCSI adapter name. **--enabled | -e** Enable or disable a Physical Network Portal option **--help | -h** Show the help message. **--nic | -n** The physical network portal name: <vmnic> **--option | -o** The network parameter option
iscsi plugin list	List IMA plugins.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message. **--plugin | -p** The IMA plugin file name.
iscsi session add	Login sessions on current iSCSI configuration.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message. **--isid | -s** The isid of a session to duplicate for login. **--name | -n**

		The iSCSI target name.
iscsi session connection list	List iSCSI connections.	**--adapter | -A** The iSCSI adapter name. **--cid | -c** The iSCSI connection identifier(CID). **--help | -h** Show the help message. **--isid | -s** The iSCSI session identifier(ISID). **--name | -n** The iSCSI target name.
iscsi session list	List iSCSI Sessions.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message. **--isid | -s** The iSCSI session identifier. **--name | -n** The iSCSI target name.
iscsi session remove	Logout sessions on current iSCSI configuration.	**--adapter | -A** The iSCSI adapter name. **--help | -h** Show the help message. **--isid | -s** The isid of a session to duplicate for login. **--name | -n** The name of the target to login to.
iscsi software get	Software iSCSI information.	**--help | -h** Show the help message.
iscsi software set	Enable or disable software iSCSI.	**--enabled | -e** Enable or disable the module. **--help | -h** Show the help message.

esxcli license Commands

Command	Description	Options Help
license oem update	Updates the license for an OEM or a third party module installed on the ESX host. The command writes a license key or a base64 encoded blob of licensing data to a file and then executes a script provided by the module vendor that activates the module license.	**--asset | -a** License asset identifier that uniquely identifies the module to be licensed. **--blob | -b** Base64 encoded blob of licensing data to activate the license asset with. Mutually exclusive with the --key parameter. **--force | -f** If set this flag will cause the license asset specific licensing data already existing to be overwritten with the one provided with either the --key or the --blob parameters. **--help | -h** Show the help message. **--key | -k** License key to activate the license asset

		with. Mutually exclusive with the --blob parameter.

esxcli network Commands

Command	Description	Options Help
network fence list	Get all fence switch info on the system.	**--help | -h** Show the help message.
network fence network bte list	Get all fence network bridge table entries information	**--fence-id | -f** The fence id used to retrieve fence info. **--help | -h** Show the help message. **--vds-name | -s** The vds name used to retrieve fence info.
network fence network list	Get all fence network info on the vds.	**--fence-id | -f** The fence id used to retrieve fence info. **--help | -h** Show the help message. **--vds-name | -s** The vds name used to retrieve fence info.
network fence network port list	Get all fence port info on the fence network.	**--fence-id | -f** The fence id used to retrieve fence info. **--help | -h** Show the help message. **--vds-name | -s** The vds name used to retrieve fence info.
network firewall get	Get the firewall status.	**--help | -h** Show the help message.
network firewall load	Load firewall module and rulesets configuration.	**--help | -h** Show the help message.
network firewall refresh	Load ruleset configuration for firewall.	**--help | -h** Show the help message.
network firewall ruleset allowedip add	Add allowed ip address/range to the ruleset ruleset.	**--help | -h** Show the help message. **--ip-address | -i** Allowed ip address/range for the ruleset. **--ruleset-id | -r** The label of the ruleset.
network firewall ruleset allowedip list	list allowed ip addresses for rulesets.	**--help | -h** Show the help message. **--ruleset-id | -r** The label of the ruleset.
network firewall ruleset allowedip remove	Remove allowed ip address/range from the ruleset.	**--help | -h** Show the help message. **--ip-address | -i** Allowed ip address/range for the ruleset. **--ruleset-id | -r** The label of the ruleset.
network firewall ruleset list	List the rulesets in firewall.	**--help | -h** Show the help message. **--ruleset-id | -r** List configuration for specfic ruleset
network firewall ruleset rule	List the rules of each ruleset in firewall.	**--help | -h** Show the help message. **--ruleset-id | -r**

list		List rules for specfic ruleset
network firewall ruleset set	Set firewall ruleset status (allowedAll flag and enabled status).	**--allowed-all | -a** Set to true to allowed all ip, set to false to use allowed ip list. **--enabled | -e** Set to true to enable ruleset, set to false to disable it. **--help | -h** Show the help message. **--ruleset-id | -r** The label of the ruleset.
network firewall set	Set firewall enabled status and default action.	**--default-action | -d** Set to true to set defaultaction PASS, set to false to DROP. **--enabled | -e** Set to true to enable the firewall, set to false to disable the firewall. **--help | -h** Show the help message.
network firewall unload	Allow unload firewall module.	**--help | -h** Show the help message.
network ip connection list	List active TCP/IP connections	**--help | -h** Show the help message. **--type | -t** Connection type : [ip, tcp, udp, all]
network ip dns search add	Add a search domain to the list of domains to be searched when trying to resolve an host name on the ESXi host.	**--domain | -d** The string name of a domain to add to the list of search domains. **--help | -h** Show the help message.
network ip dns search list	List the search domains currently configured on the ESXi host in the order in which they will be used when searching.	**--help | -h** Show the help message.
network ip dns search remove	Remove a search domain from the list of domains to be searched when trying to resolve an host name on the ESXi host.	**--domain | -d** The string name of a domain to remove from the list of search domains. **--help | -h** Show the help message.
network ip dns server add	Add a new DNS server to the end of the list of DNS servers to use for this ESXi host.	**--help | -h** Show the help message. **--server | -s** The IP address (v4 or v6) of the DNS server to add to the DNS server list.
network ip dns server list	Print a list of the DNS server currently configured on the system in the order in which they will be used.	**--help | -h** Show the help message.
network ip dns server remove	Remove a DNS server from the list of DNS servers to use for this ESXi host.	**--all | -a** **--help | -h** Show the help message. **--server | -s**
network ip get	Get global IP settings	**--help | -h** Show the help message.
network ip	Add a new VMkernel	**--help | -h**

interface add	network interface.	Show the help message. **--interface-name | -i** The name of the VMkernel network interface to create. This name must be in the form vmkX, where X is a number 0-99 **--mac-address | -M** Set the MAC address for the newly created VMkernel network interface. **--mtu | -m** Set the MTU setting for a given VMkernel network interface on creation **--portgroup-name | -p** The name of the port group to add this VMkernel network interface to. This option is required.
network ip interface ipv4 get	Get IPv4 settings for VMkernel network interfaces.	**--help | -h** Show the help message. **--interface-name | -i** The name of the VMkernel network interface to limit the output of this command to.
network ip interface ipv4 set	Configure IPv4 setting for a given VMkernel network interface.	**--help | -h** Show the help message. **--interface-name | -i** The name of the VMkernel network interface to set IPv4 settings for. This name must be an interface listed in the interface list command. **--ipv4 | -I** The static IPv4 address for this interface. **--netmask | -N** The static IPv4 netmask for this interface. **--peer-dns | -P** A boolean value to indicate if the system should use the DNS settings published via DHCP for this interface. **--type | -t** IPv4 Address type : dhcp: Use DHCP to aquire IPv4 setting for this interface. none: Remove IPv4 settings form this interface. static: Set Static IPv4 information for this interface. Requires --ipv4 and --netmask options.
network ip interface ipv6 address add	Add a static IPv6 address to a given VMkernel network interface.	**--help | -h** Show the help message. **--interface-name | -i** The name of the VMkernel network interface to add a static IPv6 address to. This name must be an interface listed in the interface list command. **--ipv6 | -I** The IPv6 address to add to the given VMkernel network interface. This must be in X:X:X::/X format
network ip interface ipv6 address list	This command will list all of the IPv6 addresses currently assigned to the system	**--help | -h** Show the help message.
network ip interface ipv6 address remove	Remove an IPv6 address from a given VMkernel network interface.	**--help | -h** Show the help message. **--interface-name | -i** The name of the VMkernel network interface to remove an IPv6 address from. This name must be an interface listed in the interface list command. **--ipv6 | -I** The IPv6 address to remove from the given VMkernel network interface. This must be in X:X:X::/X format

network ip interface ipv6 get	Get IPv6 settings for VMkernel network interfaces. This does not include the IPv6 addresses which can be found in the listipv6 command	**--help | -h** Show the help message. **--interface-name | -n** The name of the VMkernel network interface to limit the output of this command to.
network ip interface ipv6 set	Configure IPv6 settings for a given VMkernel network interface.	**--enable-dhcpv6 | -d** Setting this value to true will enable DHCPv6 on this interface and attempt to aquire an IPv6 address from the network **--enable-router-adv | -r** Setting this value to true will enable IPv6 Router Advertised IPv6 addresses to be added to this interface from any routers broadcasting on the local network. **--help | -h** Show the help message. **--interface-name | -i** The name of the VMkernel network interface to set IPv6 settings for. This name must be an interface listed in the interface list command. **--peer-dns | -P** A boolean value to indicate if the system should use the DNS settings published via DHCPv6 for this interface.
network ip interface list	This command will list the VMkernel network interfaces currently known to the system.	**--help | -h** Show the help message.
network ip interface remove	Remove a new VMkernel network interface from the ESXi host.	**--help | -h** Show the help message. **--interface-name | -i** The name of the VMkernel network interface to remove. This name must be in the form vmkX, where X is a number 0-99
network ip interface set	This command sets the enabled status and MTU size of a given IP interface	**--enabled | -e** Set to true to enable the interface, set to false to disable it. **--help | -h** Show the help message. **--interface-name | -i** The name of the interface to apply the configurations. **--mtu | -m** The MTU size of the IP interface.
network ip neighbor list	List ARP table entries	**--help | -h** Show the help message. **--version | -v** IP version : [4, 6, all]
network ip set	Update global IP settings	**--help | -h** Show the help message. **--ipv6-enabled | -e** Enable or disable IPv6 (Reboot Required)
network nic down	Bring down the specified network device.	**--help | -h** Show the help message. **--nic-name | -n** The name of the NIC to configured. This must be one of the cards listed in the nic list command.
network nic get	Get the generic configuration of a network device	**--help | -h** Show the help message. **--nic-name | -n** The name of the NIC to configured. This must be one of the cards listed in the nic list command.

network nic list	This command will list the Physical NICs currently installed and loaded on the system.	**--help | -h** Show the help message.
network nic set	Set the general options for the specified ethernet device.	**--auto | -a** Set the speed and duplexity settings to autonegotiate. **--duplex | -D** The duplex to set this NIC to. Acceptable values are : [full, half] **--help | -h** Show the help message. **--message-level | -l** Sets the driver message level. Meaning differ per driver. **--nic-name | -n** The name of the NIC to configured. This must be one of the cards listed in the nic list command. **--phy-address | -P** Set the PHY address of the device **--port | -p** Selects device port. Available device ports are aui: Select aui as the device port bnc: Select bnc as the device port fibre: Select mii as the device port mii: Select mii as the device port tp: Select tp as the device port **--speed | -S** The speed to set this NIC to. Acceptable values are : [10, 100, 1000, 10000] **--transceiver-type | -t** Selects transeiver type. Currently only internal and external can be specified, in the future future types might be added. Available transeiver types are external: Set the transceiver type to external internal: Set the transceiver type to internal **--wake-on-lan | -w** Sets Wake-on-LAN options. Not all devices support this. The argument to this option is a string of characters specifying which options to enable. p Wake on phy activity u wake on unicast messages m Wake on multicast messages b wake on broadcast messages a Wake on ARP g Wake on MagicPacket(tm) s Enable SecureOn(tm) password for MagicPacket(tm)
network nic up	Bring up the specified network device.	**--help | -h** Show the help message. **--nic-name | -n** The name of the NIC to configured. This must be one of the cards listed in the nic list command.
network vswitch dvs vmware list	List the VMware vSphere Distributed Switch currently configured on the ESXi host.	**--help | -h** Show the help message. **--vds-name | -v** Limit the output of this command to only vDS with the given name.
network vswitch standard add	Add a new virtual switch to the ESXi networking system.	**--help | -h** Show the help message. **--ports | -P** The number of ports to to give this newly created virtual switch. Maximum ports per virtual switch is 4096. If no value is given the default value(128) is used. The number of ports is limited by the number of already allocated ports on the host. The system wide port count cannot be greater than 4608. **--vswitch-name | -v** The name of the virtual switch to create.
network vswitch	List the virtual switches current on the ESXi host.	**--help | -h** Show the help message.

standard list		**--vswitch-name | -v** Limit the output of this command to only virtual switches with the given name.
network vswitch standard policy failover get	Get the failover policy settings governing the given virtual switch	**--help | -h** Show the help message. **--vswitch-name | -v** The name of the virtual switch to use when fetching the switch failover policy.
network vswitch standard policy failover set	Configure the Failover policy for a virtual switch.	**--active-uplinks | -a** Configure the list of active adapters and their failover order. This list must be a comma seperated list of values with the uplink name and no spaces. Example: --active-uplinks=vmnic0,vmnic3,vmnic7,vmnic1 **--failback | -b** Configure whether a NIC will be used immediately when it comes back in service after a failover **--failure-detection | -f** Set the method of determining how a network outage is detected. beacon: Detect failures based on active beaconing to the vswitch link: Detect failures based on the NIC link state **--help | -h** Show the help message. **--load-balancing | -l** Set the load balancing policy for this policy. This can be one of the following options: explicit: Always use the highest order uplink from the list of active adapters which pass failover criteria. iphash: Route based on hashing the src and destination IP addresses mac: Route based on the MAC address of the packet source. portid: Route based on the originating virtual port ID. **--notify-switches | -n** Indicate whether to send a notification to physical switches on failover **--standby-uplinks | -s** Configure the list of standby adapters and their failover order. This list must be a comma seperated list of values with the uplink name and no spaces. Example: --standby-uplinks=vmnic2,vmnic4,vmnic8,vmnic6,vmnic11 **--vswitch-name | -v** The name of the virtual switch to use when configuring the switch failover policy.
network vswitch standard policy security get	Get the Security Policy governing the given virtual switch.	**--help | -h** Show the help message. **--vswitch-name | -v** The name of the virtual switch to use when fetching the network security policy.
network vswitch standard policy security set	Set the security policy for a given virtual switch	**--allow-forged-transmits | -f** Allow ports on the virtual switch to send packets with forged source information. **--allow-mac-change | -m** Allow ports on the virtual switch to change their MAC address. **--allow-promiscuous | -p** Allow ports on the virtual switch to enter promiscuous mode. **--help | -h** Show the help message. **--vswitch-name | -v** The name of the virtual switch to use when setting the switch security policy.
network vswitch	Get the shaping policy	**--help | -h** Show the help message.

standard policy shaping get	settings for the given virtual switch	**--vswitch-name | -v** The name of the virtual switch to use when fetching the switch shaping policy.
network vswitch standard policy shaping set	Set the shaping policy settings for the given virtual switch	**--avg-bandwidth | -b** The averge bandwidth allowed for this shaping policy. This value is in Kbps (1 Kbps = 1000 bits/s) **--burst-size | -t** The largest burst size allowed for this shaping policy. This value is in Kib (1 Kib = 1024 bits) **--enabled | -e** Indicate whether to enable traffic shaping on this policy. If this is true then the --avg-bandwidth, --peak-bandwidth and --burst-size options are required. **--help | -h** Show the help message. **--peak-bandwidth | -k** The peak bandwidth allowed for this shaping policy. This value is in Kbps (1 Kbps = 1000 bits/s) **--vswitch-name | -v** The name of the virtual switch to use when setting the switch shaping policy.
network vswitch standard portgroup add	Allows the addition of a standard port group to a virtual switch.	**--help | -h** Show the help message. **--portgroup-name | -p** The name of the port group to add **--vswitch-name | -v** The virtual switch to add the port group to.
network vswitch standard portgroup list	List all of the port groups currently on the system.	**--help | -h** Show the help message.
network vswitch standard portgroup policy failover get	Get the network failover policy settings governing the given port group	**--help | -h** Show the help message. **--portgroup-name | -p** The name of the port group to use when fetching the port group failover policy.
network vswitch standard portgroup policy failover set	Configure the Failover policy for a port group. These setting may potentially override virtual switch settings.	**--active-uplinks | -a** Configure the list of active adapters and their failover order. This list must be a comma seperated list of values with the uplink name and no spaces. Example: --active-uplinks=vmnic0,vmnic3,vmnic7,vmnic1 **--failback | -b** Configure whether a NIC will be used immediately when it comes back in service after a failover **--failure-detection | -f** Set the method of determining how a network outage is detected. beacon: Detect failures based on active beaconing to the vswitch link: Detect failures based on the NIC link state **--help | -h** Show the help message. **--load-balancing | -l** Set the load balancing policy for this policy. This can be one of the following options: explicit: Always use the highest order uplink from the list of active adapters which pass failover criteria. iphash: Route based on hashing the src and destination IP addresses mac: Route based on the MAC address of the packet source. portid: Route based on the originating virtual port ID. **--notify-switches | -n**

		Indicate whether to send a notification to physical switches on failover **--portgroup-name | -p** The name of the port group to set failover policy for. **--standby-uplinks | -s** Configure the list of standby adapters and their failover order. This list must be a comma seperated list of values with the uplink name and no spaces. Example: --standby-uplinks=vmnic2,vmnic4,vmnic8,vmnic6,vmnic11 **--use-vswitch | -u** Reset all values for this policy to use parent virtual switch's settings instead of overriding the settings for the port group. Using this in conjunction with other settings will first reset all of the fields to use the virtual switch setting and then apply the other options after the reset.
network vswitch standard portgroup policy security get	Get the Security Policy governing the given port group.	**--help | -h** Show the help message. **--portgroup-name | -p** The name of the port group to use when fetching the network security policy.
network vswitch standard portgroup policy security set	Set the security policy for a given port group	**--allow-forged-transmits | -f** Allow ports on the virtual switch to send packets with forged source information. **--allow-mac-change | -m** Allow ports on the virtual switch to change their MAC address. **--allow-promiscuous | -o** Allow ports on the virtual switch to enter promiscuous mode. **--help | -h** Show the help message. **--portgroup-name | -p** The name of the port group to set security policy for. **--use-vswitch | -u** Reset all values for this policy to use parent virtual switch's settings instead of overriding the settings for the port group. Using this in conjunction with other settings will first reset all of the fields to use the virtual switch setting and then apply the other options after the reset.
network vswitch standard portgroup policy shaping get	Get the network shaping policy settings governing the given port group	**--help | -h** Show the help message. **--portgroup-name | -p** The name of the port group to use when fetching the port group shaping policy.
network vswitch standard portgroup policy shaping set	Set the shaping policy settings for the given port group	**--avg-bandwidth | -b** The averge bandwidth allowed for this shaping policy. This value is in Kbps (1 Kbps = 1000 bits/s) **--burst-size | -t** The largest burst size allowed for this shaping policy. This value is in Kib (1 Kib = 1024 bits) **--enabled | -e** Indicate whether to enable traffic shaping on this policy. If this is true then the --avg-bandwidth, --peak-bandwidth and --burst-size options are required. **--help | -h** Show the help message. **--peak-bandwidth | -k** The peak bandwidth allowed for this shaping policy. This value is in Kbps (1 Kbps = 1000 bits/s) **--portgroup-name | -p** The name of the port group to set shaping policy for.

		--use-vswitch | -u Reset all values for this policy to use parent virtual switch's settings instead of overriding the settings for the port group. Using this in conjunction with other settings will first reset all of the fields to use the virtual switch setting and then apply the other options after the reset.
network vswitch standard portgroup remove	Remove a port group from the given virtual switch	**--help | -h** Show the help message. **--portgroup-name | -p** **--vswitch-name | -v**
network vswitch standard portgroup set	Set the vlan id for the given port group	**--help | -h** Show the help message. **--portgroup-name | -p** The name of the port group to set vlan id for. **--vlan-id | -v** The vlan id for this port group. This value is in the range (0 - 4095)
network vswitch standard remove	Remove a virtual switch from the ESXi networking system.	**--help | -h** Show the help message. **--vswitch-name | -v** The name of the virtual switch to remove.
network vswitch standard set	This command sets the MTU size and CDP status of a given virtual switch.	**--cdp-status | -c** The CDP status of the given virtual switch. It can be 'down', 'listen', 'advertise' or 'both' **--help | -h** Show the help message. **--mtu | -m** The MTU size of the given virtual switch. **--vswitch-name | -v** The name of virtual switch to apply the configurations.
network vswitch standard uplink add	Add an uplink to the given virtual switch. Note if this virtual switch has a NIC teaming policy assigned to it then the policy must also be modified to enable use of this uplink on this virtual switch	**--help | -h** Show the help message. **--uplink-name | -u** The name of the uplink to add to the virtual switch. **--vswitch-name | -v** The name of the virtual switch to add an uplink to.
network vswitch standard uplink remove	Remove an uplink from the given virtual switch. Note if this virtual switch has a NIC teaming policy assigned to it then the policy must also be modified to disable use of this uplink on this virtual switch	**--help | -h** Show the help message. **--uplink-name | -u** The name of the uplink to remove from the virtual switch. **--vswitch-name | -v** The name of the virtual switch to remove an uplink from.

esxcli software Commands

Command	Description	Options Help
software acceptance get	Gets the host acceptance level. This controls what VIBs will be allowed on a host.	**--help | -h** Show the help message.
software acceptance set	Sets the host acceptance level. This controls what VIBs will be allowed on a host.	**--help | -h** Show the help message. **--level**

		Specifies the acceptance level to set. Should be one of certified / accepted / partner / community.
software profile get	Display the installed image profile and host acceptance level.	**--help | -h** Show the help message. **--pending** Displays information for the ESXi image which becomes active after a reboot, or nothing if the pending-reboot image has not been created yet. If not specified, information from the current ESXi image in memory will be returned.
software profile install	Installs or applies an image profile from a depot to this host. This command completely replaces the installed image with the image defined by the new image profile, and may result in the loss of installed VIBs. To preserve installed VIBs, use profile update instead. WARNING: If your installation requires a reboot, you need to disable HA first.	**--depot | -d** Specifies full remote URLs of the depot index.xml or server file path pointing to an offline bundle .zip file. **--dry-run** Performs a dry-run only. Report the VIB-level operations that would be performed, but do not change anything in the system. **--force | -f** Bypasses checks for package dependencies, conflicts, obsolescence, and acceptance levels. Really not recommended unless you know what you are doing. Use of this option will result in a warning being displayed in the vSphere Client. **--help | -h** Show the help message. **--maintenance-mode** Pretends that maintenance mode is in effect. Otherwise, installation will stop for live installs that require maintenance mode. This flag has no effect for reboot required remediations. **--no-live-install** Forces an install to /altbootbank even if the VIBs are eligible for live installation or removal. Will cause installation to be skipped on PXE-booted hosts. **--no-sig-check** Bypasses acceptance level verification, including signing. Use of this option poses a large security risk and will result in a SECURITY ALERT warning being displayed in the vSphere Client. **--ok-to-remove** Allows the removal of installed VIBs as part of applying the image profile. If not specified, esxcli will error out if applying the image profile results in the removal of installed VIBs. **--profile | -p** Specifies the name of the image profile to install. **--proxy** Specifies a proxy server to use for HTTP, FTP, and HTTPS connections. The format is proxy-url:port.
software profile	Updates the host with VIBs from an image	**--allow-downgrades**

update	profile in a depot. Installed VIBs may be upgraded (or downgraded if --allow-downgrades is specified), but they will not be removed. Any VIBs in the image profile which are not related to any installed VIBs will be added to the host. WARNING: If your installation requires a reboot, you need to disable HA first.	If this option is specified, then the VIBs from the image profile which update, downgrade, or are new to the host will be installed. If the option is not specified, then the VIBs which update or are new to the host will be installed. **--depot | -d** Specifies full remote URLs of the depot index.xml or server file path pointing to an offline bundle .zip file. **--dry-run** Performs a dry-run only. Report the VIB-level operations that would be performed, but do not change anything in the system. **--force | -f** Bypasses checks for package dependencies, conflicts, obsolescence, and acceptance levels. Really not recommended unless you know what you are doing. Use of this option will result in a warning being displayed in the vSphere Client. **--help | -h** Show the help message. **--maintenance-mode** Pretends that maintenance mode is in effect. Otherwise, installation will stop for live installs that require maintenance mode. This flag has no effect for reboot required remediations. **--no-live-install** Forces an install to /altbootbank even if the VIBs are eligible for live installation or removal. Will cause installation to be skipped on PXE-booted hosts. **--no-sig-check** Bypasses acceptance level verification, including signing. Use of this option poses a large security risk and will result in a SECURITY ALERT warning being displayed in the vSphere Client. **--profile | -p** Specifies the name of the image profile to update the host with. **--proxy** Specifies a proxy server to use for HTTP, FTP, and HTTPS connections. The format is proxy-url:port.
software profile validate	Validates the current image profile on the host against an image profile in a depot.	**--depot | -d** Specifies full remote URLs of the depot index.xml or server file path pointing to an offline bundle .zip file. **--help | -h** Show the help message. **--profile | -p** Specifies the name of the image profile to validate the host with. **--proxy** Specifies a proxy server to use for HTTP, FTP, and HTTPS connections. The format is proxy-url:port.
software	Display details about an image profile from the	**--depot | -d**

sources profile get	depot.	Specifies full remote URLs of the depot index.xml or server file path pointing to an offline bundle .zip file. **--help | -h** Show the help message. **--profile | -p** Specifies the name of the image profile to display. **--proxy** Specifies a proxy server to use for HTTP, FTP, and HTTPS connections. The format is proxy-url:port.
software sources profile list	List all the image profiles in a depot.	**--depot | -d** Specifies full remote URLs of the depot index.xml or server file path pointing to an offline bundle .zip file. **--help | -h** Show the help message. **--proxy** Specifies a proxy server to use for HTTP, FTP, and HTTPS connections. The format is proxy-url:port.
software sources vib get	Displays detailed information about one or more VIB packages in the depot	**--depot | -d** Specifies full remote URLs of the depot index.xml or server file path pointing to an offline bundle .zip file. **--help | -h** Show the help message. **--proxy** Specifies a proxy server to use for HTTP, FTP, and HTTPS connections. The format is proxy-url:port. **--vibname | -n** Specifies one or more VIBs in the depot to display more information about. If this option is not specified, then all of the VIB packages from the depot will be displayed. Must be one of the following forms: name, name:version, vendor:name, or vendor:name:version. **--viburl | -v** Specifies one or more URLs to VIB packages to display information about. http:, https:, ftp:, and file: are all supported.
software sources vib list	List all the VIBs from depots.	**--depot | -d** Specifies full remote URLs of the depot index.xml or server file path pointing to an offline bundle .zip file. **--help | -h** Show the help message. **--proxy** Specifies a proxy server to use for HTTP, FTP, and HTTPS connections. The format is proxy-url:port.
software vib get	Displays detailed information about one or more installed VIBs	**--help | -h** Show the help message. **--pending** Displays information for the ESXi image which becomes active after a reboot, or nothing if the pending-reboot image has not been

		created yet. If not specified, information from the current ESXi image in memory will be returned. **--vibname | -n** Specifies one or more installed VIBs to display more information about. If this option is not specified, then all of the installed VIBs will be displayed. Must be one of the following forms: name, name:version, vendor:name, or vendor:name:version.
software vib install	Installs VIB packages from a URL or depot. VIBs may be installed, upgraded, or downgraded. WARNING: If your installation requires a reboot, you need to disable HA first.	**--depot | -d** Specifies full remote URLs of the depot index.xml or server file path pointing to an offline bundle .zip file. **--dry-run** Performs a dry-run only. Report the VIB-level operations that would be performed, but do not change anything in the system. **--force | -f** Bypasses checks for package dependencies, conflicts, obsolescence, and acceptance levels. Really not recommended unless you know what you are doing. Use of this option will result in a warning being displayed in the vSphere Client. **--help | -h** Show the help message. **--maintenance-mode** Pretends that maintenance mode is in effect. Otherwise, installation will stop for live installs that require maintenance mode. This flag has no effect for reboot required remediations. **--no-live-install** Forces an install to /altbootbank even if the VIBs are eligible for live installation or removal. Will cause installation to be skipped on PXE-booted hosts. **--no-sig-check** Bypasses acceptance level verification, including signing. Use of this option poses a large security risk and will result in a SECURITY ALERT warning being displayed in the vSphere Client. **--proxy** Specifies a proxy server to use for HTTP, FTP, and HTTPS connections. The format is proxy-url:port. **--vibname | -n** Specifies VIBs from a depot, using one of the following forms: name, name:version, vendor:name, or vendor:name:version. **--viburl | -v** Specifies one or more URLs to VIB packages to install. http:, https:, ftp:, and file: are all supported.
software vib list	Lists the installed VIB packages	**--help | -h** Show the help message. **--pending** Displays information for the ESXi image which

		becomes active after a reboot, or nothing if the pending-reboot image has not been created yet. If not specified, information from the current ESXi image in memory will be returned.
software vib remove	Removes VIB packages from the host. WARNING: If your installation requires a reboot, you need to disable HA first.	**--dry-run** Performs a dry-run only. Report the VIB-level operations that would be performed, but do not change anything in the system. **--force | -f** Bypasses checks for package dependencies, conflicts, obsolescence, and acceptance levels. Really not recommended unless you know what you are doing. Use of this option will result in a warning being displayed in the vSphere Client. **--help | -h** Show the help message. **--maintenance-mode** Pretends that maintenance mode is in effect. Otherwise, remove will stop for live removes that require maintenance mode. This flag has no effect for reboot required remediations. **--no-live-install** Forces an remove to /altbootbank even if the VIBs are eligible for live removal. Will cause installation to be skipped on PXE-booted hosts. **--vibname | -n** Specifies one or more VIBs on the host to remove. Must be one of the following forms: name, name:version, vendor:name, vendor:name:version.
software vib update	Update installed VIBs to newer VIB packages. No new VIBs will be installed, only updates. WARNING: If your installation requires a reboot, you need to disable HA first.	**--depot | -d** Specifies full remote URLs of the depot index.xml or server file path pointing to an offline bundle .zip file. **--dry-run** Performs a dry-run only. Report the VIB-level operations that would be performed, but do not change anything in the system. **--force | -f** Bypasses checks for package dependencies, conflicts, obsolescence, and acceptance levels. Really not recommended unless you know what you are doing. Use of this option will result in a warning being displayed in the vSphere Client. **--help | -h** Show the help message. **--maintenance-mode** Pretends that maintenance mode is in effect. Otherwise, installation will stop for live installs that require maintenance mode. This flag has no effect for reboot required remediations. **--no-live-install** Forces an install to /altbootbank even if the VIBs are eligible for live installation or removal. Will cause installation to be skipped on PXE-booted hosts.

		--no-sig-check Bypasses acceptance level verification, including signing. Use of this option poses a large security risk and will result in a SECURITY ALERT warning being displayed in the vSphere Client. **--proxy** Specifies a proxy server to use for HTTP, FTP, and HTTPS connections. The format is proxy-url:port. **--vibname | -n** Specifies VIBs from a depot, using one of the following forms: name, name:version, vendor:name, or vendor:name:version. VIB packages which are not updates will be skipped. **--viburl | -v** Specifies one or more URLs to VIB packages to update to. http:, https:, ftp:, and file: are all supported. VIB packages which are not updates will be skipped.

esxcli storage Commands

Command	Description	Options Help
storage core adapter list	List all the SCSI Host Bus Adapters on the system.	**--help | -h** Show the help message.
storage core adapter rescan	Rescan SCSI HBAs to search for new Devices, remove DEAD paths and update path state. This operation will also run an claim operation equivalent to the claimrule run command and a filesystem rescan.	**--adapter | -A** Select the adapter to use when rescanning SCSI adapters. This must be a SCSI HBA name as shown in the adapter list command. This cannot be used with the --all option **--all | -a** Indicate the rescan should rescan all adapters instead of a specific one. **--help | -h** Show the help message. **--skip-claim | -S** By default after an add operation a claiming session is run to find new devices and have them be claimed by the appropriate Multipath Plugin. Passing this flag will skip that claiming session. **--skip-fs-scan | -F** By default after all rescan operations a filesystem scan is performed to add newly found filesystems and remove any filesystems that are no longer available. Passing this flag will skip that filesystem scan. **--type | -t** Specify the type of rescan to perform. Available types are add: Perform rescan and only add new devices if any. all: Perform rescan and do all opertaions (this is the default action.) delete: Perform rescan and only delete DEAD devices. update: Rescan existing paths only and update path states.

storage core adapter stats get	List the SCSI stats for the SCSI Host Bus Adapters in the system.	**--adapter | -a** Limit the stats output to one adapter **--help | -h** Show the help message.
storage core claiming autoclaim	Control the automatic PSA (path/device) claiming code allowing the disabling of the automatic claiming process or re-enabling of the claiming process if it was previously disabled. By default the automatic PSA claiming process is on and should not be disabled by users unless specifically instructed to do so.	**--claimrule-class | -c** Indicate the claim rule class to use in this operation [MP, Filter, VAAI, all]. **--enabled** Set the autoclaiming enabled state for a givenPSA plugin type in the VMkernel. Default is to have this process enabled. This should not be changed by users unless specifically instructed to do so. **--help | -h** Show the help message. **--wait | -w** If the --wait flag is provided then the autoclaim enable will wait for paths to 'settle' before running the claim operation. This means that the system is reasonably sure that all paths on the system have appeared before enabling autoclaim.
storage core claiming reclaim	Attempt to unclaim all paths to a device and then run the loaded claimrules on each of the paths unclaimed to attempt to reclaim them.	**--device | -d** Reclaim requires the name of a device on which all paths will be unclaimed and then reclaimed. **--help | -h** Show the help message.
storage core claiming unclaim	1) Unclaim a path or set of paths, disassociating them from a PSA plugin. NOTES: It is normal for path claiming to fail especially when unclaiming by plugin or adapter. Only inactive paths with no I/O will be able to be unclaimed. Typically the ESXi USB partition and devices with VMFS volumes on them will not be unclaimable. Also NOTE unclaiming will not persist and periodic path claiming will reclaim these paths in the near future unless claim rules are configured to mask the path. 2) Detach a (set of) filter(s) from one or more devices.	**--adapter | -A** If the --type paramter is 'location' this value indicates the name of the host bus adapter for the paths you wish to unclaim. This parameter can be omitted to indicate unclaiming should be run on paths from all adapters. **--channel | -C** If the --type parameter is 'location' this value indicates the value of the SCSI channel number for the paths you wish to unclaim. This parameter can be omitted to indicate unclaiming should be run on paths with any channel number. **--claimrule-class | -c** Indicate the claim rule class to use in this operation [MP, Filter]. **--device | -d** If the --type parameter is 'device' attempt to unclaim all paths to a specific device (for multipathing plugins) or unclaim the device itself (for filter plugins). NOTE. For paths, if there are any active I/O operations on this device, at least 1 path will fail to unclaim. **--driver | -D** If the --type parameter is 'driver' attempt to unclaim all paths provided by a specific HBA driver. **--help | -h** Show the help message. **--lun | -L**

		If the --type paramter is 'location' this value indicates the value of the SCSI Logical Unit Number (LUN) for the paths you wish to unclaim. This parameter can be omitted to indicate unclaiming should be run on paths with any Logical Unit Number. **--model | -m** If the --type parameter is 'vendor' attempt to unclaim all paths to devices with specific model info (for multipathing plugins) or unclaim the device itself (for filter plugins). NOTE. For paths, if there are any active I/O operations on this device, at least 1 path will fail to unclaim. **--path | -p** If the --type parameter is 'path' attempt to unclaim a specific path given its path UID or runtime name. **--plugin | -P** If the --type parameter is 'plugin' attempt to unclaim all paths on for a given multipath plugin OR all devices attached to a filter plugin. **--target | -T** If the --type paramter is 'location' this value indicates the value of the SCSI target number for the paths you wish to unclaim. This parameter can be omitted to indicate unclaiming should be run on paths with any target number. **--type | -t** Indicate the type of unclaim you wish to perform. Valid values for this paramter are [location, path, driver, device, plugin, vendor] **--vendor | -v** If the --type parameter is 'vendor' attempt to unclaim all paths to devices with specific vendor info (for multipathing plugins) or unclaim the device itself (for filter plugins). NOTE. For paths, if there are any active I/O operations on this device, at least 1 path will fail to unclaim.
storage core claimrule add	Add a claimrule to the set of claimrules on the system.	**--adapter | -A** Indicate the adapter of the paths to use in this operation. **--autoassign | -u** The system will auto assign a rule id. **--channel | -C** Indicate the channel of the paths to use in this operation. **--claimrule-class | -c** Indicate the claim rule class to use in this operation [MP, Filter, VAAI]. **--device | -d** Indicate the Device Uid to use for this operation. **--driver | -D** Indicate the driver of the paths to use in

		this operation. **--force | -f** Force claim rules to ignore validity checks and install the rule anyway. **--help | -h** Show the help message. **--if-unset** Execute this command if this advanced user variable is not set to 1 **--iqn | -i** Indicate the iSCSI Qualified Name for the target to use in this operation. **--lun | -L** Indicate the LUN of the paths to use in this operation. **--model | -M** Indicate the model of the paths to use in this operation. **--plugin | -P** Indicate which PSA plugin to use for this operation. **--rule | -r** Indicate the rule ID to use for this operation. **--target | -T** Indicate the target of the paths to use in this operation. **--transport | -R** Indicate the transport of the paths to use in this operation. Valid Values are: [block, fc, iscsi, iscsivendor, ide, sas, sata, usb, parallel, unknown] **--type | -t** Indicate which type of matching used for claim/unclaim or claimrule. Valid values are: [vendor, location, driver, transport, device, target] **--vendor | -V** Indicate the vendor of the paths to user in this operation. **--wwnn** Indicate the World-Wide Node Number for the target to use in this operation. **--wwpn** Indicate the World-Wide Port Number for the target to use in this operation.
storage core claimrule convert	Convert ESX 3.x style /adv/Disk/MaskLUNs LUN masks to Claim Rule format. WARNING: This conversion will not work for all input MaskLUNs variations! Please inspect the list of generated claim rules carefuly, then if the suggested LUN mask claim rules are correct use the --commit parameter to write the list to the config file.	**--commit | -C** Force LUN mask config changes to be saved. If this parameter is omitted, config file changes will not be saved. **--help | -h** Show the help message.
storage core claimrule list	List all the claimrules on the system.	**--claimrule-class | -c** Indicate the claim rule class to use in this operation [MP, Filter, VAAI, all]. **--help | -h** Show the help message.
storage core claimrule load	Load path claiming rules from config file into the	**--claimrule-class | -c**

	VMkernel.	Indicate the claim rule class to use in this operation [MP, Filter, VAAI, all]. **--help | -h** Show the help message.
storage core claimrule move	Move a claimrule from one rule id to another	**--claimrule-class | -c** Indicate the claim rule class to use in this operation [MP, Filter, VAAI]. **--help | -h** Show the help message. **--new-rule | -n** Indicate the new rule id you wish to apply to the rule given by the --rule parameter. **--rule | -r** Indicate the rule ID to use for this operation.
storage core claimrule remove	Delete a claimrule to the set of claimrules on the system.	**--claimrule-class | -c** Indicate the claim rule class to use in this operation [MP, Filter, VAAI]. **--help | -h** Show the help message. **--plugin | -P** Indicate the plugin to use for this operation. **--rule | -r** Indicate the rule ID to use for this operation.
storage core claimrule run	Execute path claiming rules.	**--adapter | -A** If the --type parameter is 'location' this value indicates the name of the host bus adapter for the paths you wish to run claim rules on. This parameter can be omitted to indicate claim rules should be run on paths from all adapters. **--channel | -C** If the --type parameter is 'location' this value indicates the value of the SCSI channel number for the paths you wish to run claim rules on. This parameter can be omitted to indicate claim rules should be run on paths with any channel number. **--claimrule-class | -c** Indicate the claim rule class to use in this operation [MP, Filter]. **--device | -d** Indicate the Device Uid to use for this operation. **--help | -h** Show the help message. **--lun | -L** If the --type paramter is 'location' this value indicates the value of the SCSI Logical Unit Number (LUN) for the paths you wish to run claim rules on. This parameter can be omitted to indicate claim rules should be run on paths with any Logical Unit Number. **--path | -p** If the --type paramter is 'path' this value indicates the unique path identifier (UID) or the runtime name of a path which you wish to run claim rules on.

		--target | -T If the --type parameter is 'location' this value indicates the value of the SCSI target number for the paths you wish to run claim rules on. This parameter can be omitted to indicate claim rules should be run on paths with any target number. **--type | -t** Indicate the type of claim run you wish to perform. By default the value of 'all' will be used indicating you wish to run claim rules without restricting the run to specific paths or SCSI addresses. Valid values for this parameter are [location, path, device, all] **--wait | -w** If the --wait flag is provided then the claim command will wait until device registration has completed to return. This option is only valid when used with the --all option.
storage core device detached list	Lists all devices that were detached manually by changing their state on the system.	**--device | -d** Filter the output of the command to limit the output to a specific device. **--help | -h** Show the help message.
storage core device detached remove	Provide control to allow a user to remove Detached devices from the persistent detached device list.	**--device | -d** Select the detached device to remove from the Detached Device List. **--help | -h** Show the help message.
storage core device list	For devices currently registered with the PSA, list the filters attached to them.	**--device | -d** Filter the output of this command to only show a single device. **--help | -h** Show the help message.
storage core device partition list	For a given device list all of the partitions	**--device | -d** Filter the output to a specific device. **--help | -h** Show the help message.
storage core device set	Provide control to allow a user to modify a SCSI device's state.	**--device | -d** The device you wish to operate upon. This can be any of the UIDs that a device reports. **--help | -h** Show the help message. **--name | -n** The new name to assign the given device. **--no-persist | -N** Set device state non-peristently; state is lost after reboot. **--state** Set the SCSI device state for a the specific device given. Valid values are : off: Set the device's state to OFF. on: Set the device's state to ON.
storage core device setconfig	Set device configuration	**--detached** Mark device as detached. **--device | -d** Apply the command to a single device.

		--help | -h Show the help message. **--perennially-reserved** Mark device as perennially reserved.
storage core device stats get	List the SCSI stats for SCSI Devices in the system.	**--device | -d** Limit the stats output to one specific device. This device name can be any of the UIDs the device reports **--help | -h** Show the help message.
storage core device vaai status get	List VAAI properties for devices currently registered with the PSA.	**--device | -d** Filter the output of this command to only show a single device. **--help | -h** Show the help message.
storage core device world list	Get a list of the worlds that are currently using devices on the ESX host.	**--device | -d** Filter the output of the command to limit the output to a specific device. This device name can be any of the UIDs registered for a device. **--help | -h** Show the help message.
storage core path list	List all the SCSI paths on the system.	**--device | -d** Limit the output to paths to a specific device. This name can be any of the UIDs for a specific device. **--help | -h** Show the help message. **--path | -p** Limit the output to a specific path. This name can be either the UID or the runtime name of the path.
storage core path set	Provide control to allow a user to modify a single path's state. This efffectively allows a user to enable or disable SCSI paths. The user is not able to change the full range of path states, but can toggle between 'active' and 'off'. Please NOTE changing the Path state on any path that is the only path to a given device is likely to fail. The VMkernel will not change the path's state if changing the state would cause an 'All paths down' state or the device is currently in use.	**--help | -h** Show the help message. **--path | -p** Select the path to set path state on. This can be a Runtime Name or Path UID **--state** Set the SCSI path state for a the specific path given. Valid values are : active: Set the path's state to active. This may be immediately changed by the system to another state if the active state is not appropriate. off: Administratively disable this path.
storage core path stats get	List the SCSI stats for the SCSI Paths in the system.	**--help | -h** Show the help message. **--path | -p** Limit the stats output to one specific path. This path name can be the runtime name or the path UID.
storage core plugin list	List loaded PSA plugins on the system.	**--help | -h** Show the help message. **--plugin-class | -N** Indicate the class of plugin to limit the list to. Allowed values are : Filter: Filter plugins MP: MultiPathing plugins VAAI: VAAI

		plugins all: All PSA Plugins (default)
storage core plugin registration add	Register a plugin module with PSA.	**--dependencies | -d** Add the [optional] dependencies for this module to loaded **--full-path | -I** Add the [optional] full path to this module **--help | -h** Show the help message. **--module-name | -m** Select the module name to be registered **--plugin-class | -N** Indicate the class of plugin to register. Allowed values are MP, VAAI or MPP defined subplugins like PSP, SATP. **--plugin-name | -P** Select the plugin name to be registered
storage core plugin registration list	List modules currently registered with PSA.	**--help | -h** Show the help message. **--module-name | -m** Filter the output of this command to only show a single module. **--plugin-class | -N** Indicate the class of plugin to list. Allowed values are MP, VAAI or MPP defined subplugins like PSP, SATP.
storage core plugin registration remove	UnRegister a plugin module with PSA.	**--help | -h** Show the help message. **--module-name | -m** Select the module name to be unregistered
storage filesystem automount	Request mounting of known datastores not explicitly unmounted.	**--help | -h** Show the help message.
storage filesystem list	List the volumes available to the host. This includes VMFS, NAS and VFAT partitions.	**--help | -h** Show the help message.
storage filesystem mount	Connect to and mount an unmounted volume on the ESX host.	**--help | -h** Show the help message. **--no-persist | -n** Mount the volume non-peristently; the volume will not be mounted after a restart. **--volume-label | -l** The label of the volume to mount. This volume must be unmounted for this operation to succeed. **--volume-uuid | -u** The UUID of the VMFS filesystem to mount. This volume must be unmounted for this operation to succeed.
storage filesystem rescan	Issue a rescan operation to the VMkernel to have is scan storage devices for new mountable filesystems.	**--help | -h** Show the help message.
storage filesystem unmount	Disconnect and unmount and existing VMFS or NAS volume. This will not delete the configuration for the volume, but will remove the volume from the list of mounted volumes.	**--help | -h** Show the help message. **--no-persist | -n** Unmount the volume non-peristently; the volume will be automounted after a restart. **--volume-label | -l** The label of the volume to unmount.

		--volume-path | -p The path of the volume to unmount. **--volume-uuid | -u** The uuid of the volume to unmount.
storage nfs add	Add a new NAS volume to the ESX Host and mount it with the given volume name.	**--help | -h** Show the help message. **--host | -H** The hostname or IP address of the NAS volume to add and mount on the system. **--readonly | -r** If set this flag will set the mount point to be read-only. **--share | -s** The share name on the remote system to use for this NAS mount point. **--volume-name | -v** The volume name to use for the NAS mount. This must be a unique volume name and cannot conflict with existing NAS, VMFS or other volume names.
storage nfs list	List the NAS volumes currently known to the ESX host.	**--help | -h** Show the help message.
storage nfs remove	Remove an existing NAS volume from the ESX host.	**--help | -h** Show the help message. **--volume-name | -v** The volume name of the NAS volume to remove from the ESX host.
storage nmp device list	List the devices currently controlled by the VMware NMP Multipath Plugin and show the SATP and PSP information associated with that device.	**--device | -d** Filter the output of this command to only show a single device. **--help | -h** Show the help message.
storage nmp device set	Allow setting of the Path Selection Policy (PSP) for the given device to one of the loaded policies on the system.	**--default | -E** The Path selection policy is set back to the default for the assigned SATP for this device. **--device | -d** The device you wish to set the Path Selection Policy for. **--help | -h** Show the help message. **--psp | -P** The Path selection policy you wish to assign to the given device.
storage nmp path list	List the paths currently claimed by the VMware NMP Multipath Plugin and show the SATP and PSP information associated with that path.	**--device | -d** Filter the output of this command to only show paths to a single device. **--help | -h** Show the help message. **--path | -p** Filter the output of this command to only show a single path.
storage nmp psp fixed deviceconfig get	Allow retrieving of Fixed Path Selection Policy settings for a given device.	**--device | -d** The device you wish to get the Preferred path for. **--help | -h** Show the help message.

storage nmp psp fixed deviceconfig set	Allow setting of the perferred path on a given device controlled by the Fixed Path Selection Policy.	**--default | -E** Clear the preferred path selection for the given device. **--device | -d** The device you wish to set the preferred path for. This device must be controlled by the Fixed Path Selection Policy **--help | -h** Show the help message. **--path | -p** The path you wish to set as the preferred path for the given device.
storage nmp psp generic deviceconfig get	Allow retrieving of per device PSP configuration parameters.	**--device | -d** The device you wish to get PSP configuration for. **--help | -h** Show the help message.
storage nmp psp generic deviceconfig set	Allow setting of per device PSP configuration parameters. This command will set the configuration for the given device with whichever PSP it is currently configurated with.	**--config | -c** The configuration string you wish to set. **--device | -d** The device you wish to set PSP configuration for. **--help | -h** Show the help message.
storage nmp psp generic pathconfig get	Allow retrieving of per path PSP configuration parameters.	**--help | -h** Show the help message. **--path | -p** The path you wish to get PSP configuration for.
storage nmp psp generic pathconfig set	Allow setting of per path PSP configuration parameters. This command will set the configuration for the given path with whichever PSP it is currently configurated with.	**--config | -c** The configuration string you wish to set. **--help | -h** Show the help message. **--path | -p** The path you wish to set PSP configuration for.
storage nmp psp list	List the Path Selection Plugins (PSP) that are currently loaded into the NMP system and display information about those PSPs	**--help | -h** Show the help message.
storage nmp psp roundrobin deviceconfig get	Allow retrieving of Round Robin Path Selection Policy settings for a given device.	**--device | -d** The device you wish to get the Round Robin properties for. **--help | -h** Show the help message.
storage nmp psp roundrobin deviceconfig set	Allow setting of the Round Robin path options on a given device controlled by the Round Robin Selection Policy.	**--bytes | -B** When the --type option is set to 'bytes' this is the value that will be assigned to the byte limit value for this device. **--device | -d** The device you wish to set the Round Robin settings for. This device must be controlled by the Round Roubin Path Selection Policy **--help | -h** Show the help message. **--iops | -I** When the --type option is set to 'iops' this is the value that will be assigned to the I/O operation limit value for this device.

		--type | -t Set the type of the Round Robin path switching that should be enabled for this device. Valid values for type are: bytes: Set the trigger for path switching based on the number of bytes sent down a path. default: Set the trigger for path switching back to default values. iops: Set the trigger for path switching based on the number of I/O operations on a path. **--useano | -U** Set useano to true,to also include non-optimizedpaths in the set of active paths used to issue I/Os on this device,otherwise set it to false
storage nmp satp generic deviceconfig get	Allow retrieving of per device SATP configuration parameters.	**--device | -d** The device you wish to get SATP configuration for. **--help | -h** Show the help message.
storage nmp satp generic deviceconfig set	Allow setting of per device SATP configuration parameters. This command will set the configuration for the given device with whichever SATP it is currently configurated with.	**--config | -c** The configuration string you wish to set. **--device | -d** The device you wish to set SATP configuration for. **--help | -h** Show the help message.
storage nmp satp generic pathconfig get	Allow retrieving of per path SATP configuration parameters.	**--help | -h** Show the help message. **--path | -p** The path you wish to get SATP configuration for.
storage nmp satp generic pathconfig set	Allow setting of per path SATP configuration parameters. This command will set the configuration for the given path with whichever SATP it is currently configurated with.	**--config | -c** The configuration string you wish to set. **--help | -h** Show the help message. **--path | -p** The path you wish to set SATP configuration for.
storage nmp satp list	List the Storage Array Type Plugins (SATP) that are currently loaded into the NMP system and display information about those SATPs	**--help | -h** Show the help message.
storage nmp satp rule add	Add a rule to the list of claim rules for the given SATP.	**--boot | -b** This is a system default rule added at boot time. Do not modify esx.conf or add to host profile. **--claim-option | -c** Set the claim option string when adding a SATP claim rule. **--description | -e** Set the claim rule description when adding a SATP claim rule. **--device | -d** Set the device when adding SATP claim rules. Device rules are mutually exclusive with vendor/model and driver rules. **--driver | -D** Set the driver string when adding a SATP

		claim rule. Driver rules are mutually exclusive with vendor/model rules. **--force | -f** Force claim rules to ignore validity checks and install the rule anyway. **--help | -h** Show the help message. **--model | -M** Set the model string when adding SATP a claim rule. Vendor/Model rules are mutually exclusive with driver rules. **--option | -o** Set the option string when adding a SATP claim rule. **--psp | -P** Set the default PSP for the SATP claim rule. **--psp-option | -O** Set the PSP options for the SATP claim rule. **--satp | -s** The SATP for which a new rule will be added. **--transport | -R** Set the claim transport type string when adding a SATP claim rule. **--type | -t** Set the claim type when adding a SATP claim rule. **--vendor | -V** Set the vendor string when adding SATP claim rules. Vendor/Model rules are mutually exclusive with driver rules.
storage nmp satp rule list	List the claiming rules for Storage Array Type Plugins (SATP)	**--help | -h** Show the help message. **--satp | -s** Filter the SATP rules to a specific SATP
storage nmp satp rule remove	Delete a rule from the list of claim rules for the given SATP.	**--boot | -b** This is a system default rule added at boot time. Do not modify esx.conf or add to host profile. **--claim-option | -c** The claim option string for the SATP claim rule to delete. **--description | -e** The desription string for the SATP claim rule to delete. **--device | -d** The device for the SATP claim rule to delete **--driver | -D** The driver string for the SATP claim rule to delete. **--help | -h** Show the help message. **--model | -M** The model string for the SATP claim rule to delete. **--option | -o** The option string for the SATP claim rule to delete. **--psp | -P** The default PSP for the SATP claim rule to delete.

		--psp-option | -O The PSP options for the SATP claim rule to delete. **--satp | -s** The SATP for which a rule will be deleted. **--transport | -R** The transport type for the SATP claim rule to delete. **--type | -t** Set the claim type when adding a SATP claim rule. **--vendor | -V** The vendor string for the SATP claim rule to delete
storage nmp satp set	Set the default Path Selection Policy for a given Storage Array Type Plugin (SATP).	**--boot | -b** This is a system default rule added at boot time. Do not modify esx.conf or add to host profile. **--default-psp | -P** The default path selection policy to set for a given --satp **--help | -h** Show the help message. **--satp | -s** The SATP name for the Storage Array Type Plugin on which this command will operate.
storage vmfs extent list	List the VMFS extents available on the host.	**--help | -h** Show the help message.
storage vmfs snapshot extent list	List extents of unresolved snapshots/replicas of VMFS volume.	**--help | -h** Show the help message. **--volume-label | -l** The VMFS volume label of the target snapshot to enumerate. **--volume-uuid | -u** The VMFS volume uuid of the target snapshot to enumerate.
storage vmfs snapshot list	List unresolved snapshots/replicas of VMFS volume.	**--help | -h** Show the help message. **--volume-label | -l** The VMFS volume label of the snapshot to list. **--volume-uuid | -u** The VMFS volume uuid of the snapshot to list.
storage vmfs snapshot mount	Mount a snapshot/replica of a VMFS volume.	**--help | -h** Show the help message. **--no-persist | -n** Mount the volume non-peristently; the volume will not be automounted after a restart. **--volume-label | -l** The VMFS volume label of the snapshot to mount. **--volume-uuid | -u** The VMFS volume uuid of the snapshot to mount.
storage vmfs snapshot resignature	Resignature a snapshot/replica of a VMFS volume.	**--help | -h** Show the help message. **--volume-label | -l**

		The VMFS volume label of the snapshot to resignature. **--volume-uuid | -u** The VMFS volume uuid of the snapshot to resignature.
storage vmfs upgrade	Upgrade a VMFS3 volume to VMFS5.	**--help | -h** Show the help message. **--volume-label | -l** The label of the volume to upgrade. **--volume-uuid | -u** The uuid of the volume to upgrade.

esxcli system Commands

Command	Description	Options Help
storage core adapter list	List all the SCSI Host Bus Adapters on the system.	**--help | -h** Show the help message.
system boot device get	Get the systems boot device.	**--help | -h** Show the help message.
system coredump network get	Get the currently configured parameters for network coredump, if enabled.	**--help | -h** Show the help message.
system coredump network set	Set the parameters used for network core dump	**--enable | -e** Enable network dump. **--help | -h** Show the help message. **--interface-name | -v** An active interface to be used for the network core dump. **--server-ipv4 | -i** IP address of the core dump server. **--server-port | -o** Port on which the core dump server is listening.
system coredump partition get	Get one of the dump partition configured values. This command will print either the active dump partition or the configured dump partition depending on the flags passed.	**--help | -h** Show the help message.
system coredump partition list	List all of the partitions on the system that have a partition type matching the VMware Core partition type. Also indicate which partition, if any, is being used as the system's dump partition and which is configured to be used at next boot.	**--help | -h** Show the help message.
system coredump partition set	Set the specific VMkernel dump partition for this system. This will configure the dump partition for the next boot. This command will change the active dump partition to the partition specified.	**--enable | -e** Enable or disable the VMkernel dump partition. **--help | -h** Show the help message. **--partition | -p** The name of the partition to use. This should be a device name with a partition number at the end. Example: naa.xxxxx:1 **--smart | -s** If --enable=true, this flag will cause the best available partition to be selected using the smart selection algorithm. **--unconfigure | -u**

		Set the dump partition into an unconfigured state. This will remove the current configured dump partition for the next boot. This will result in the smart activate algorithm being used at the next boot.
system hostname get	Get the host, domain or fully qualified name of the ESX host.	**--help | -h** Show the help message.
system hostname set	This command allows the user to set the hostname, domain name or fully qualified domain name of the ESX host.	**--domain | -d** The domain name to set for the ESX host. This option is mutually exclusive with the --fqdn option. **--fqdn | -f** Set the fully qualified domain name of the ESX host. **--help | -h** Show the help message. **--host | -H** The host name to set for the ESX host. This name should not contain the DNS domain name of the host and can only contain letters, numbers and '-'. NOTE this is not the fully qualified name, that can be set with the --fqdn option. This option is mutually exclusive with the --fqdn option.
system module get	Show the ELF header information for the given VMkernel module.	**--help | -h** Show the help message. **--module | -m** The name of the VMkernel module to get the option string for.
system module list	List the VMkernel modules that the system knows about.	**--enabled | -e** List the enabled / disabled VMkernel modules and device drivers. **--help | -h** Show the help message. **--loaded | -l** List the loaded / not loaded VMkernel modules and device drivers.
system module load	Load a VMkernel module with the given name if it is enabled. If the module is disabled then the use of --force is required to load the module.	**--force | -f** Ignore the enabled/disabled state of this module and force it to load. **--help | -h** Show the help message. **--module | -m** The name of the VMkernel module to load.
system module parameters list	List the parameters, a descriptions of each parameter supported for a given module name and the user defined value for each parameter.	**--help | -h** Show the help message. **--module | -m** The name of the VMkernel module to get the option string for.
system module parameters set	Set the load time parameters for the given VMkernel module.	**--force | -f** Skip VMkernel module validity checks and set parameters for a module (or alias) with the given name. **--help | -h** Show the help message. **--module | -m** The name of the VMkernel module to set parameters for. **--parameter-string | -p** The string containing the parameters for this

		module.
system module set	Allow enabling and disabling of a VMkernel module.	**--enabled | -e** Set to true to enable the module, set to false to disable the module. **--force | -f** Skip VMkernel module validity checks and set options for a module (or alias) with the given name. **--help | -h** Show the help message. **--module | -m** The name of the VMkernel module to set options for.
system process list	List the VMkernel UserWorld processes currently on the host.	**--help | -h** Show the help message.
system process stats load get	System load average over the last 1, 5 and 15 minutes.	**--help | -h** Show the help message.
system process stats running get	Number of currently running processes.	**--help | -h** Show the help message.
system secpolicy domain list	List the enforcement level for each domain.	**--help | -h** Show the help message.
system secpolicy domain set	Set the enforcement level for a domain in the system. Any option specified here is not persistent and will not survive a reboot of the system.	**--all-domains | -a** All domains. **--help | -h** Show the help message. **--level | -l** The enforcement level. **--name | -n** The domain name.
system settings advanced list	List the advanced options available from the VMkernel.	**--help | -h** Show the help message. **--tree | -t** Limit the list of advanced option to a specific sub tree. **--option | -o** Only get the information for a single advanced option.
system settings advanced set	Set the value of an advanced option.	**--default | -d** Reset the option to its default value. **--help | -h** Show the help message. **--int-value | -i** If the option is an integer value use this option. **--option | -o** The name of the option to set the value of. Example: " /Misc/HostName" **--string-value | -s** If the option is a string use this option.
system settings kernel list	List VMkernel kernel settings.	**--help | -h** Show the help message.
system settings kernel set	Set a VMKernel setting.	**--help | -h** Show the help message. **--setting | -s** The name of the VMKernel setting to set.

		**--value	-v** The value to set the setting to.
system stats uptime get	Disply the number of microseconds the system has been running.	**--help	-h** Show the help message.
system syslog config get	Show the current global configuration values	**--help	-h** Show the help message.
system syslog config logger list	Show the currently configured sub-loggers	**--help	-h** Show the help message.
system syslog config logger set	Set configuration options for a specific sub-logger	**--help	-h** Show the help message. **--id** The id of the logger to configure **--reset** Reset values to default **--rotate** Number of rotated logs to keep for a specific logger (requires --id) **--size** Set size of logs before rotation for a specific logger, in KiB (requires --id)
system syslog config set	Set global log configuration options	**--default-rotate** Default number of rotated logs to keep **--default-size** Default size of logs before rotation, in KiB **--help	-h** Show the help message. **--logdir** The directory to output logs to **--logdir-unique** Place logs in a unique subdirectory of logdir, based on hostname **--loghost** The remote host to output logs to **--reset** Reset values to default
system syslog mark	Mark all logs with the specified string	**--help	-h** Show the help message. **--message	-s** The message to place in the logs
system syslog reload	Reload the log daemon to apply any new configuration options	**--help	-h** Show the help message.
system time get	Disply the current system time.	**--help	-h** Show the help message.
system time set	Set the system clock time. Any missing parameters will default to the current time	**--day	-d** Day **--help	-h** Show the help message. **--hour	-H** Hour **--min	-m** Minute **--month	-M** Month **--sec	-s** Second

		**--year	-y** Year
system uuid get	Get the system UUID.	**--help	-h** Show the help message.
system version get	Display the product name, version and build information.	**--help	-h** Show the help message.
system visorfs get	Obtain status information on the memory filesystem as a whole.	**--help	-h** Show the help message.
system visorfs ramdisk add	Add a new Visorfs RAM disk to the ESXi Host and mount it.	**--help	-h** Show the help message. **--max-size	-M** Maximum size (max reservation in MB) **--min-size	-m** Minimum size (min reservation in MB) **--name	-n** Name for the ramdisk **--permissions	-p** Permissions for the root of the ramdisk (mode) **--target	-t** Mountpoint for the ramdisk
system visorfs ramdisk list	List the RAM disks used by the host.	**--help	-h** Show the help message.
system visorfs ramdisk remove	Remove a Visorfs RAM disk from the ESXi Host.	**--help	-h** Show the help message. **--target	-t** Mountpoint for the ramdisk
system visorfs tardisk list	List the tardisks used by the host.	**--help	-h** Show the help message.
system welcomemsg get	Get the Welcome Message for DCUI.	**--help	-h** Show the help message.
system welcomemsg set	Set the Welcome Message for DCUI.	**--help	-h** Show the help message. **--message	-m** Welcome Message String.

esxcli vm Commands

Command	Description	Options Help
vm process kill	Used to forcibly kill Virtual Machines that are stuck and not responding to normal stop operations.	**--help	-h** Show the help message. **--type	-t** The type of kill operation to attempt. There are three types of VM kills that can be attempted: [soft, hard, and force]. Users should always attempt 'soft' kills first, which will give the VMX process a chance to shutdown cleanly (like kill or kill -SIGTERM). If that does not work move to 'hard' kills which will shutdown the process immediately (like kill -9 or kill -SIGKILL). 'force' should be used as a last resort attempt to kill the virtual machine. If all three fail then a reboot is required. **--world-id	-w** The World ID of the virtual machine to kill. This can be obtained from the 'vm list' command
vm process list	List the virtual machines on this system. This command	**--help	-h** Show the help message.

	currently will only list running VMs on the system.	

svmotion

- NAME
- SYNOPSIS
- DESCRIPTION
  - Interactive Mode
  - Noninteractive Mode
- OPTIONS
- EXAMPLES

NAME

svmotion - move the storage of a virtual machine while it is running

---

SYNOPSIS

```
svmotion <connection_options> --interactive
svmotion <connection_options>
        --datacenter=<datacenter name>
        --vm  <VM config datastore path>:
              <new datastore name>
        [--disks <virtual disk datastore path>:
              <new datastore>,
              <virtual disk datastore path>:
              <new datastore>]
```

DESCRIPTION

The svmotion command moves a virtual machine's configuration file, and, optionally, its disks, while the virtual machine is running. The *Basic System Administration* manual discusses how to use svmotion. You can use svmotion to initiate migrations for virtual machines running on either ESX or ESXi hosts.

When you run svmotion, **--server** must point to a vCenter Server system.

The **--vm** option specifies the virtual machine and its destination. By default, svmotion relocates all virtual disks to the same datastore as the virtual machine. Use the **--disks** option to relocate individual virtual disks to different datastores. You cannot relocate a virtual disk without relocating the virtual machine configuration file.

The svmotion command supports both interactive or noninteractive mode.

Interactive Mode

To use the command in interactive mode, type **svmotion --interactive**. The command prompts you for the information necessary to complete the storage migration. Use quotes around special characters on Windows systems.

When you specify **--interactive**, all other options are ignored.

Noninteractive Mode

In noninteractive mode, the svmotion command uses the following syntax:

```
svmotion [<connection_options]
     --datacenter=<datacenter_name>
     --vm <VM config_ds_path>:<new_ds>
     [--disks <virtual_disk_ds_path>:<new_ds>, <vdisk_ds_path>:<new_ds>]
```

Square brackets indicate optional elements, not datastores.

OPTIONS

connection_options

Specifies the target server and authentication information if required. Run svmotion with **--help** for a list of all connection options.

In non-interactive mode, all vCLI common options are supported. In interactive mode, command-line options are ignored and svmotion uses user input instead.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with **--help** has the same effect.

--usage

Prints a short usage string. The usage string is also displayed when the number or format of input parameters is incorrect.

--interactive

Starts interactive mode, where svmotion prompts you for all arguments. In interactive mode, svmotion does a sanity test on each option.

Note: You must enclose strings that contain special characters in quotes when responding to prompts.

--datacenter <datacenter_name>

Datacenter that contains the virtual machine to be migrated. Surround the name in quotes if it contains white spaces or special characters.

--disks <virtual_disk_datastore_path>:<new_datastore>...

Locations of individual disks. The format is datastore path of the disk, colon, name of the destination datastore. If the path contains spaces or special characters, you must quote it. You can specify multiple datastore and destination pairs, separated by commas. If you do not specify this option, all virtual disks associated with a virtual machine are relocated to the same datastore as the virtual machine configuration file. Specify this option to locate individual virtual disks to different datastores.

To keep a virtual disk on its current datastore, use the **--disks** option for that disk, with its current datastore as the <new_datastore>.

--vm <VM_config_ds_path>:<new_ds>

Specifies which virtual machine to move and to which datastore.

<VM_config_ds_path> is the path to the virtual machine configuration file. If the path contains spaces or other special characters, you must quote it.

<new datastore> is the name of the new datastore for the virtual machine configuration file or disk.

EXAMPLES

These examples are formatted for readability. In general, the command should be all on one line.

Start the interactive version.

```
svmotion --interactive
```

Relocate a virtual machine's storage (including disks) to new_datastore:

```
svmotion --url=https://myvc.mycorp.com/sdk
         --username=me
         --password=secret
         --datacenter=DC1
         --vm='[old_datastore] myvm/myvm.vmx:
```

```
            new_datastore'
```

Relocate a virtual machine's storage to new_datastore, but leave the two disks (myvm/myvm_1.vmdk and myvm/myvm_2.vmdk) in old_datastore:

```
svmotion  --datacenter='My DC'
          --vm='[old_datastore] myvm/myvm.vmx:
                new_datastore'
          --disks='[old_datastore] myvm/myvm_1.vmdk:
                   old_datastore,
                   [old_datastore] myvm/myvm_2.vmdk:
                   old_datastore'
```

vicfg-advcfg - query and modify advanced VMkernel options. Use when instructed by Technical Support.

vicfg-advcfg - enable and disable CIM providers.

SYNOPSIS

```
vicfg-advcfg <connection_options>
  [--default <value> |
   --get <path> |
   --get-kernel <boot_parameter> |
   --quiet |
   --help |
   --set <value> <option> |
   --set 0|1 UserVars.CIMEnabled |
   --set 0|1 UserVars.CIMOEMProvidersEnabled |
   --set 0|1 UserVars.CIMCustomProvidersEnabled |
   --set-kernel <value> <boot_parameter> |
   --set-message <message> |
   --vihost <esx_target>]
```

DESCRIPTION

The vicfg-advcfg command offers a number of low-level advanced options.

Most options are not intended for customer use. You might use this command when VMware Technical Support or a VMware Knowledge Base article instruct you to do so.

You can use the vicfg-advcfg -s option to enable and disable CIM providers.

OPTIONS

connection_options

Specifies the target server and authentication information if required. Run vicfg-advcfg --help for a list of all connection options.

--default | -d <option>

Sets the value of a specific configuration item to the default value defined by the VMkernel. Use this option when VMware Technical Support or a VMware Knowledge Base article instruct you to do so.

--get | -g <config_option>

Gets the value of a configuration option based on its path, and print the value to stdout. Use this option when VMware Technical Support or a VMware Knowledge Base article instruct you to do so.

--get-kernel | -j <boot_param>

Gets the value of a VMkernel boot parameter. Use this option when VMware Technical Support or a VMware Knowledge Base article instruct you to do so.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with --help has the same effect.

--quiet | -q

No output to stdout while executing the command.

--set | -s <value> <option>

Sets the value of a configuration option based on its path. Use this option when VMware Technical Support or a VMware Knowledge Base article instruct you to do so.

--set | -s 0|1 UserVars.CIMEnabled

Enables or disables all CIM providers.

--set | -s 0|1 UserVars.CIMOEMProvidersEnabled

Enables or disables OEM CIM providers.

--set | -s 0|1 UserVars.CIMCustomProvidersEnabled

Enables or disables IHV CIM providers.

--set-kernel | -k <value> <boot_param>

Sets the value of a VMkernel boot parameter. Use this option when VMware Technical Support or a VMware Knowledge Base article instruct you to do so.

--set-message | -m <message>

Sets DCUI welcome message (valid for vSphere 4.0 and later). Use this option when VMware Technical Support or a VMware Knowledge Base article instruct you to do so.

--list | -l

Lists all VMkernel advanced config options.

--vihost | -h <esx_target<gt

>

When you execute a vSphere CLI with the --server option pointing to a vCenter Server System, you can use --vihost to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options. Run vicfg-advcfg --help for a list of common options including connection options.

Set the value of a specific configuration item given its identifying path and the value to set:

```
vicfg-advcfg <conn_options> -s 1 VMkernel.Boot.xapicForce
```

Get the value of a specific configuration item given its identifying path, and print the value to stdout:

```
vicfg-advcfg <conn_options> -g VMkernel.Boot.xapicForce
```

Set the value of a specific configuration item to the default value defined by the VMkernel:

```
vicfg-advcfg <conn_options> -d Irq.RoutingPolicy
```

Retrieve a VMkernel option:

```
vicfg-advcfg <conn_options> --get-kernel assumeCommonBusClock
```

Set a VMkernel option:

```
vicfg-advcfg <conn_options> --set-kernel 1 assumeCommonBusClock
```

Set a DCUI welcome message

```
vicfg-advcfg <conn_options> --set-message "Welcome message"
```

Enable all CIM providers:

```
vicfg-advcfg.pl <conn_options> -s 1 UserVars.CIMEnabled
```

Enable OEM CIM providers:

```
vicfg-advcfg.pl <conn_options> -s 1 UserVars.CIMOEMProvidersEnabled
```

Disable IHV CIM providers:

```
vicfg-advcfg.pl <conn_options> -s 0 UserVars.CIMCustomProvidersEnabled
```

vicfg-authconfig - manage Active Directory authentication schemes.

SYNOPSIS

```
vicfg-authconfig
   <conn_options>
  [--adpassword |
   --adusername |
   --authscheme |
   --currentdomain |
   --force |
   --getremoteauthstore |
   --help |
   --leavecurrentdomain |
   --listauthstores
   --vihost]
```

DESCRIPTION

List information about Active Directory domains for a host, join an Active Directory domain, or leave the current domain.

OPTIONS

--adpassword | -w <password>

Password with which to log into the domain controller. Use this option with the --joindomain option. If you do not specify an AD password at the command line, the system prompts you.

--adusername | -U <name>

User name with which to log in to the domain controller. Use this option with the --joindomain option. If you do not specify an AD user at the command line, the system prompts you.

--authscheme | -t AD

The authentication scheme to be configured. Currently the only supported argument is AD.

conn_options

Specifies the target server and authentication information if required. Run vicfg-authconfig --help for a list of all connection options.

--currentdomain | -c

Displays the currently joined domain. Use this option in conjunction with the --authscheme option. This option takes no arguments.

--force | -f

Use this option with the --leavecurrentdomain option to delete any AD user permissions on entities. If you run vicfig-authcfg --leavecurrentdomain, AD user permissions are present, and you do not use --force, the operation fails.

--getremoteauthstore | -a

Prints the active authentication mechanisms. This option takes no arguments.

--help

Prints a help message for each command-specific and each connection option. Calling the command with no arguments or with --help has the same effect.

--joindomain | -j <domain_FQDN>

Joins the specified Active Directory domain. Use this option with the --authscheme option. This option takes in the FQDN of the directory server as the argument.

--leavecurrentdomain | -L

Leaves the currently joined domain. Use this option with the --authscheme option. If AD user permissions on entities exist, the operation fails unless you specify --force. This option takes no arguments.

--listauthstores | -l

Prints the supported authentication mechanisms. This option takes no arguments.

--vihost | -h <esx_host>

When you execute a vSphere CLI with the --server option pointing to a vCenter Server system, use --vihost to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run vicfg-authconfig --help for a list of common options including connection options.

List the supported authentication schemes:

```
vicfg-authconfig <conn_options> --listauthstores
```

Get the currently set authentication schemes:

```
vicfg-authconfig <conn_options> --getremoteauthstore
```

Join the specified AD Domain:

```
vicfg-authconfig <conn_options> <ad_conn_options> --authscheme AD --joindomain <domain_FQDN>
```

Leave the current AD Domain:

```
vicfg-authconfig <conn_options> --authscheme AD --leavecurrentdomain [--force]
```

Display the current AD Domain:

```
vicfg-authconfig <conn_options> --authscheme AD --currentdomain
```

vicfg-cfgbackup - back up and restore ESXi host configurations

NAME

vicfg-cfgbackup - back up and restore ESXi host configurations

---

SYNOPSIS

```
vicfg-cfgbackup
   <conn_options>
   [--force |
    --help |
    --load <backupfile> |
    --reset |
    --save <backupfile>]
```

DESCRIPTION

The vicfg-cfgbackup command backs up ESXi configuration data and restores them later. You can back up the host configuration, restore the configuration to the host, force the restore of the configuration, and reset the host to factory settings.

Back up ESXi host configuration before you change the configuration or upgrade the ESXi image. The *vSphere Upgrade Guide* discusses backing up and restoring the ESXi configuration in some detail.

Important: This command is supported for ESXi hosts but not for ESX hosts.

OPTIONS

conn_options

Specifies the target server and authentication information if required. Run `vicfg-cfgbackup --help` for a list of all connection options.

--force | -f

Forces the restore of the configuration.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--load | -l <backupfile>

Restores configuration from <backupfile> onto the host.

--save | -s <backupfile>

Backs up the host configuration.

Include the number of the build that is running on the host that you are backing up in the backup filename. If you are running the vSphere CLI from vMA, the backup file is saved locally on vMA. Local storage for backup files is safe because vMA is stored in the /vmfs/volumes/<datastore> directory, which is separate from the ESXi image and configuration files.

--reset | -r

Resets the host to factory settings.

--quiet | -q

Performs all operations without prompting for confirmation.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-cfgbackup --help` for a list of common options including connection options.

Back up the host configuration to the file C:\backup.txt:

```
vicfg-cfgbackup <conn_options> -s C:\backup.txt
```

Reset the host, that is, restore to factory settings:

```
vicfg-cfgbackup <conn_options> -r
```

Restore a configuration previously saved to C:\backup.txt to the host:

```
vicfg-cfgbackup <conn_options> -l C:\backup.txt
```

Restore a configuration from C:\backup.txt without prompting for user confirmation:

```
vicfg-cfgbackup <conn_options> -l C:\backup.txt -q
```

vicfg-dns - configure DNS properties

NAME

vicfg-dns - configure DNS properties

SYNOPSIS

```
vicfg-dns <conn_options>
    [--dhcp [yes|no] |
     --dns <server_list> |
     --domain <domain_name> |
     --help |
     --hostname <dns_host> |
     --vnic <virtual_nic> |
     --refresh |
     --vihost <esx_host> ]
```

To list the existing DNS configuration, call the command without options.

DESCRIPTION

The vicfg-dns command lists and specifies the DNS configuration of your ESX/ESXi host. Call the command without command-specific options to list the existing DNS configuration.

If you attempt to change the host name, domain name, or DNS server on hosts that use DHCP (dynamic host configuration protocol), an error results.

OPTIONS

conn_options

Specifies the target server and authentication information if required. Run `vicfg-dns --help` for a list of all connection options.

--dhcp | -H [yes|no]

Specifies whether or not the ESX/ESXi host should use DHCP to determine the DNS configuration automatically. If you use this option, you must specify `yes` or `no`.

--dns | -D <server_list>

DNS server or servers to be used. Specify a comma-separated list of DNS servers, in order of preference. For vSphere 4.0 and later, IPv6 addresses are valid.

--domain | -d <domain_name>

The domain name portion of the DNS name. For example, `comp-xyz.com`.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--hostname | -n <dns_host>

Human-readable host name portion of the DNS name. For example, `esx01`.

--vnic | -V <virtual_nic>

The virtual network adapter to use in overriding the system DNS. This option is required when --dhcp is yes. For ESX systems, <virtual_nic> must be one of the Service Console network adapters. For ESXi, <virtual_nic> must be one of the VMkernel network adapters. The specified virtual network adapter must have DHCP configured.

--refresh | -r

Refresh the network system.

--vihost | -h <esx_host>

When you execute a vSphere CLI with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options. Run `vicfg-dns --help` for a list of common options including connection options.

Display DNS properties for the specified server. The information includes the host name, domain name, DHCP setting (true or false) and DNS servers on the ESX/ESXi host:

```
vicfg-dns <conn_options>
```

Configure the DNS host name property:

```
vicfg-dns <conn_options> -n <host name>
```

Configure the DNS domain name property:

```
vicfg-dns <conn_options> -d <domain name>
```

Specify that the host should use DHCP to determine the DNS configuration:

```
vicfg-dns <conn_options> --dhcp yes --vnic <virtual_nic>
```

Disable DHCP:

```
vicfg-dns <conn_options> --dhcp no
```

vicfg-dumppart - query, set, and scan for diagnostic partitions on an ESX/ESXi system

NAME

vicfg-dumppart - query, set, and scan for diagnostic partitions on an ESX/ESXi system

---

SYNOPSIS

```
vicfg-dumppart [<conn_options>]
   [--activate <partition> |
    --deactivate <partition> |
    --find |
    --get-active |
    --get-config |
    --help |
    --list |
    --set <partition> |
    --smart-activate |
    --vihost]
```

DESCRIPTION

The vicfg-dumppart command queries, sets, and scans an ESX/ESXi host's diagnostic partitions. The ESX Configuration Guide and the ESXi Configuration Guide discuss diagnostic partitions in detail and explain how to create a diagnostic partition using the vSphere Client UI.

OPTIONS

connection_options

Specifies the target server and authentication information if required. Run `vicfg-dumppart` --help for a list of all connection options.

--activate | -a <partition>

Makes the specified partition the current diagnostic partition. This option has the same effect as `--set`.

--deactivate | -d <partition>

Deactivates the active diagnostic partition. Specifying the name of the partition is optional. **WARNING**: If you run vicfg-dumppart with this option, your system cannot write errors to a file until another partition is activated. You lose any error record if errors occur.

--find | -f

Finds all diagnostic partitions on the ESX/ESXi host and prints them. The partitions can include, in order of suitability, parallel adapter, block adapter, Fibre Channel, and hardware iSCSI.

--get-active | -t

Displays the active diagnostic partition for this system. Running vicfg-dumppart with this option returns the internal name of the partition (naa.xxxxx:1) or 'none' if no partition is set.

--get-config | -c

Lists all configured partitions on the system.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--list | -l

Lists all partitions on the ESX/ESXi system that have the appropriate partition type to act as a diagnostic partition. **CAUTION**: Execution might take several minutes and slow down your ESX/ESXi host because the command scans all LUNs on the system.

--set | -s <partition>

Sets and activates the diagnostic partition, which you must specify using naa.xxx:1 or eui.xxx syntax. Specify `none` to deactivate the active diagnostic partition.

--smart-activate | -S

This option is currently not supported.

--vihost | -h

When you run a vCLI command with `--server` pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-dumppart --help` for a list of common options including connection options.

List the partitions available for diagnostic partitions: **WARNING**: This call scans all LUNs on the system and might degrade system performance:

```
vicfg-dumppart <conn_options> -l
```

Get the active diagnostic partition for this system. Return the internal name of the partition:

```
vicfg-dumppart <conn_options> -t
```

Set the diagnostic partition for this system and activate it:

```
vicfg-dumppart <conn_options> -s naa.xxxxx:1
```

Deactivate the active diagnostic partition: **WARNING**: Deactivating the diagnostic partition leaves your system without any means of reporting errors until another partition is activated.

```
vicfg-dumppart <conn_options> -d
```

vicfg-hostops - perform host-related operations.

NAME

vicfg-hostops - perform host-related operations.

SYNOPSIS

```
vicfg-hostops [<conn_options>]
      [--action [suspend|poweroff] |
       --cluster |
       --datacenter |
       --force |
       --operation [enter | exit | shutdown | reboot | info] ]
```

DESCRIPTION

vicfg-hostops provides an interface for performing operations on ESX/ESXi hosts.

- enter maintenance mode
- exit maintenance mode
- shutdown host
- reboot host

The command also displays host related information.

OPTIONS

--action | -a [suspend | poweroff]

Action to perform on powered on virtual machines (suspend | poweroff) when hosts enter maintenance mode or are rebooted. Default is suspend.

--cluster <cluster_name> | -c <cluster_name>

Specify this option to shut down all hosts in a cluster.

connection_options

Specifies the target server and authentication information if required. Run `vicfg-hostops --help` for a list of all connection options.

--datacenter <dc_name> | -d <dc_name>

Specify this option to shut down all hosts in a datacenter.

--force | -f

Use `--force` to force the shutdown of all hosts, even those that are not in maintenance mode. If you do not specify `--force`, only hosts that are in maintenance mode are shut down.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--operation | -o

Required. Operation to perform. Specify

- `enter` to enter maintenance mode.
- `exit` to exit maintenance mode.
- `shutdown` to shut down one or more hosts. By default, hosts must be in maintenance mode. Use `--force` to override that default.
- `reboot` to reboot one or more hosts. By default, hosts must be in maintenance mode. Use `--force` to override that default.
- `info` to display information about one or more hosts

--vihost | -h

When you run a vSphere CLI command with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-hostops --help` for a list of common options including connection options.

Put the host into maintenance mode:

```
vicfg-hostops <connection_options> -o enter
```

Instruct the host to exit maintenance mode:

```
vicfg-hostops <connection_options> -o exit
```

Put the host in maintenance mode and power off all powered on virtual machines:

```
vicfg-hostops <connection_options> -o enter -a  poweroff
```

Put all hosts in the specified datacenter in maintenance mode, and suspend virtual machines that are powered on on those hosts:

```
vicfg-hostops --server <VC server name> --username <user name>
   --password <password> -o enter -d <datacenter name>
   -h <esx_host_name> -a suspend
```

Shut down all hosts in a cluster. If the hosts are not in maintenance mode, power off all virtual machines and put the hosts into maintenance mode:

```
vicfg-hostops --server <VC server name> --username <user name>
   --password <password> -o shutdown
   -c <cluster_name> -h <esx_host_name> --force
```

Reboot the `host(s)` in the datacenter that belong to the specified cluster. If hosts are not in maintenance mode, wait until they are:

```
vicfg-hostops --server <VC_server-name> --username <user name>
   --password <password> --operation reboot -d <datacenter_name>
   -c <cluster_name> --vihost <esx_host_name> -f
```

Display information about a specified host:

```
vicfg-hostops --server <esx_host> --username <user name>
   --password <password> --operation info
```

vicfg-ipsec - configure IPsec properties

SYNOPSIS

```
vicfg-ipsec [<conn_options>]
    [--action [none|discard|ipsec] |
     --add-sa <sa> |
     --add-sp <sp> |
     --dir [in | out] |
     --dst-port <port> |
     --flush-sa |
     --flush-sp |
     --ealgo [null | 3des-cbc | aes128-cbc]|
     --ekey <e_key>|
```

```
--help |
--ialgo [hmac-sha1 | hmac-sha2-256] |
--ikey <i_key> |
--list-sa <sa> |
--list-sp <sp> |
--remove-sa <sa> |
--remove-sp <sp> |
--sa-dst <destination>
--sa-src <IP> |
--sa-name <name> |
--sp-dst <destination> |
--spi <spi> |
--sp-src <source> |
--spmode <mode> |
--src-port <port> |
--ulproto [any | tcp | udp | icmp6]
```

DESCRIPTION

vicfg-ipsec allows you to configure IPsec on your ESX/ESXi host. The command supports IPv6 but not IPv4 configuration.

OPTIONS

conn_options

Specifies the target server and authentication information if required. Run `vicfg-ipsec --help` for a list of all connection options.

--action [none|discard|ipsec]

Action to take. Specify none to to allow all traffic, discard to discard all traffic, or ipsec to use IPsec with the specified authentication and encryption settings.

--add-sa <sa>

Adds a security association. Use this option together with the `--sa-src`, `--sa-dst`, `--sa-mode`, and other parameters to create a security association. The last parameter is always the name of the association.

--add-sp <sp>

Adds a security policy. Use this option together with the <--sp-src>, `--sp-dst`, `--src-port`, `--dst-port` and other parameters to create a security policy. You must associate this policy with a named security association. The last argument is always the name of the security policy.

--dir [in | out]

Direction, in our out.

--dst-port <port>

Destination port (0-65535)

--ealgo [null | 3des-cbc | aes128-cbc]

Encryption algorithm.

--ekey <e_key>

Encryption key; a series of hexadecimal digits preceded with 0x (zero ex).

--ialgo [hmac-sha1 | hmac-sha2-256]

Authentication algorithm.

--ikey <i_key>

Authentication key; a series of hexadecimal digits preceded with 0x (zero ex).

--flush-sa

Clear all entries in the Security Associations (sa) database. **WARNING** This option clears all entries even if SAs are in use.

--flush-sp

Clear all entries in the Security Policy (sp) database. **WARNING** This option clears all entries even if SPs are in use.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--list-sa | -l

Display security sssociations.

--list-sp | -L

Display security policies.

--remove-sa <sa>

Removes a specified security association.

--remove-sp <sp>

Removes a specified security policy.

--sa-dst <destination_IP>

Destination IP of the Security Association.

--sa-src <source_IP>

Source IP of the Security Association.

--sa-name <name>

Security Association name. Specify `auto` to let the VMkernel choose an SA. If no suitable SA exists, the VMkernel requests one using IKE.

--sp-dst <destination>

Destination IP address and prefix length.

--spi <spi>

Security parameters index. This index identifies security parameters in combination with IP address. The index must be a hexadecimal number with a 0x prefix.

--sp-src <source>

Source IP address and prefix length.

--spmode [tunnel | transport]

Mode, either tunnel or transport.

--src-port <source_port>

Source port (0-65535)

--ulproto [any | tcp | udp | icmp6]

Upper layer protocol.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-ipsec --help` for a list of common options including connection options.

Display all current IPsec properties:

```
vicfg-ipsec <conn_options> -l | --list-sa
vicfg-ipsec <conn_options> -L | --list-sp
```

Create a security association:

```
  vicfg-ipsec <conn_options> --add-sa  --sa-src 3ffe:501:ffff:0::a --sa-dst
3ffe:501:ffff:0001:0000:0000:0000:0001
              --sa-mode transport --spi 0x1000
              --ealgo 3des-cbc --ekey 0x697076367265616479 6c6f676f33646573636f757432
              --ialgo hmac-sha1 --ikey 0x697076367265616479 6c6f67736861316f757432 sa1
```

Configure a security policy:

```
  vicfg-ipsec <conn_options> --add-sp --sp-src=2001:db8:1::/64 --sp-dst=2002:db8:1::/64
              --src-port=23 --dst-port=25 --ulproto=tcp --dir=out
              --action=ipsec --sp-mode=transport --sa-name sa1 sp1
```

Remove a security policy:

```
 vicfg-ipsec <conn_options> --remove-sp sp1
```

Remove a security association:

```
 vicfg-ipsec <conn_options> --remove-sa sa1
```

vicfg-iscsi - manage iSCSI storage.

SYNOPSIS

```
 vicfg-iscsi [<connection_options>] [option] [suboption] [parameter] [<adapter_name>]
```

Option is one of `--discovery`, `--static`,`--authentication`, `--phba`, `--target`, `--lun`, `--network` (Hardware iSCSI only), `--pnp` (Hardware iSCSI only), `--iscsiname`, `--parameter`, `--swiscsi`, `--adapter`.

Suboption is one of `--list`, `--add`, `--remove`.

Parameters differ depend on the suboption used.

<adapter_name> is required unless you specify the `--help`, `--swiscsi`, or `--adapter` option.

DESCRIPTION

vicfg-iscsi supports configuration and property retrieval for software or hardware iSCSI initiators. See the *vSphere Command-Line Interface Installation and Scripting Guide* for more information.

OPTIONS

connection_options

Specifies the target server and authentication information if required. Run `vicfg-iscsi --help` for a list of all connection options.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--chap_password

Authentication password to use for setup of CHAP. Use with the `--authentication` option.

--chap_username

Authentication user name to use for setup of CHAP. Use with the `--authentication` option.

--discovery --list

Returns a list of discovery addresses and static targets and related properties if configured.

--discovery --add --ip <ip_addr | domain_name> [:<port_num>]

Adds a discovery address, by using <ip_addr> or <domain_name> and optional <port_num>, if <port_num> is not specified, uses 3260 as default.

--discovery --remove --ip <ip_addr | domain_name> [:<port_num>]

Removes a discovery address, by using <ip_addr> or <domain_name> and optional <port_num>, if <port_num> is not specified, uses 3260 as default.

--static --list

Returns a list of static discovery `target(s)` and related properties.

--static --add --ip <ip_addr | domain_name> [:<port_num>] --name <iscsi_name>

Adds a static discovery target by using <ip_addr> or <domain_name> and optionally <port_num>. If <port_num> is not specified, uses 3260 as the default. The the target iscsi name must be in IQN or EUI format.

--static --remove --ip <ip_addr | domain_name> [:<port_num>] --name <iscsi_name>

Removes a static discovery target by using <ip_addr> or <domain_name> and optionally <port_num>. If <port_num> is not specified, uses 3260 as the default. The target iscsi name must be in IQN or EUI format.

--authentication --list

Lists authentication method settings.

If only CHAP is set:
--authentication --level <level> --method <auth_method>
--mchap_username <m_username> --mchap_password <m_password>
[--ip <ip_addr | domain_name>[:<port_num>]
[--name<iscsi_name>]]>

If both CHAP and MCHAP are set:
--authentication --level <level> --method <auth_method>
--chap_username <username> --chap_password <password>
--mchap_username <m_username> --mchap_password <m_password>
[--ip <ip_addr | domain_name>[:<port_num>]
[--name<iscsi_name>]]>

--authentication --level <level> --method <auth_method> --chap_username<username> --chap_password <password>> [--ip <ip_addr | domain_name>[:<port_num>] [--name <iscsi_name>]]

Sets iSCSI authentication properties. Sets level, authentication username and password. Supported <auth_method> is CHAP.

Level is one of [chapRequired | chapPreferred | chapDiscouraged | chapProhibited].

If `--ip` and `--name` are specified, authentication is set for per-target CHAP. If only `--ip` is specified, authentication is set for per discovery address CHAP. If neither `--ip` nor `--name` is specified, authentication is set for per adapter CHAP.

--authentication --reset_auth --method <auth_method> --ip <ip_addr | domain_name>[:<port_num>] [--name <iscsi_name>]

Resets target-level CHAP authentication properties to be inherited from the adapter level. Resetting adapter-level properties is not supported.

--authentication --level <level> --method <auth_method> --mutual --mchap_username<username> --mchap_password <password> [--ip <ip_addr | domain_name>[:<port_num>] [--name <iscsi_name>]]

Sets iSCSI authentication properties (level, authentication username and password) Specify CHAP as the value of <auth_method>. Specify `--mutual` to indicate mutual CHAP.

Level is [chapRequired | chapPreferred | chapDiscouraged | chapProhibited] for simple CHAP and [chapRequired | chapProhibited] for mutual CHAP.

If `--ip` and `--name` are specified, authentication is set for per-target mutual CHAP. If only `--ip` is specified, authentication is set for per discovery address mutual CHAP. If neither `--ip` nor `--name` is specified, authentication is set for per-adapter mutual CHAP.

--authentication --reset_auth --method <auth_method> --mutual --ip <ip_addr | domain_name>[:<port_num>] [--name <iscsi_name>]

Resets target-level mutual CHAP authentication properties to be inherited from adapter level. Resetting adapter-level properties is not supported.

--phba --list

Lists PHBA properties.

--target --list

Lists all target properties.

--lun --list

Lists LUN properties, including device name, bus number, LUN id, and size.

--lun --list --target_id <target_id>

Lists LUN properties for the specified <target_id>. Run `vicfg-iscsi --lun --list` to view the target ID.

--mchap_password

Authentication password to use for setup of mutual CHAP. Use with the `--authentication` option.

--mchap_username

Authentication user name to use for setup of mutual CHAP. Use with the `--authentication` option.

--network --list

Lists network properties, including IP, subnet mask, default gateway, etc.

--network --ip <ip_addr>

Sets the HBA IPv4 address to <ip_addr>.

--network --subnetmask <subnet_mask>

Sets the HBA network mask to <subnet_mask>.

--network --gateway <default_gateway>

Sets the HBA gateway to <default_gateway>.

--network --set ARP=true|false

Enables or disables ARP redirect.

--pnp --list

Lists physical network portal properties, including mac address info, max and current transfer rate, and MTU size.

--pnp --mtu <mtu_size>

Sets MTU size to <mtu_size>.

--iscsiname --list

Lists iSCSI initiator node properties, including iSCSI name and alias name.

--iscsiname --name <iscsi_name>

Sets the iSCSI initiator node name to <iscsi_name> in IQN or EUI format.

--iscsiname --alias <alias_name>

Sets the iSCSI initiator node alias to <alias_name>.

--parameter --list [--detail] [--ip <ip_addr | domain_name> [:<port_num>][--name <iscsi_name>]]

Lists iSCSI parameters and their current value. If `--ip` and `--name` are specified, the list is for per target parameters. If only `--ip` is specified, the list is for per discovery address parameters. If neither `--ip` nor `--name` are specified, the list is for adapter parameters. Specifying `--detail` lists detailed properties of iSCSI parameters.

--parameter --set <name>=<value> [--ip <ip_addr | domain_name>[:<port_num>] [--name <iscsi_name>]]

Sets the specified iSCSI parameter to the specified value if the parameter is settable. If `--ip` and `--name` are specified, sets per target parameters. If only `--ip` is specified, sets per discovery address parameters. If neither `--ip` nor `--name` is specified, sets adapter parameters. Run `--parameter --list --detail` for information on whether a parameter is settable or not. The following parameters are supported. See the *vSphere Command-Line Interface Installation and Scription Guide* for more information.

dataDigestType

HeaderDigest

MaxOutstandingR2T

FirstBurstLength

MaxBurstLength

MaxRecvDataSegLen

NoopInterval

NoopTimeout

RecoveryTimeout

DelayedAck

--parameter --reset <name> --ip <ip_addr | domain_name>[:<port_num>] [--name <iscsi_name>]]

Resets target-level iSCSI parameters to be inherited from the adapter level. Either `--ip` or `--ip` and `--name` are required to specify a target. Resetting adapter-level parameters is not supported.

--swiscsi --list

Lists software iSCSI information (enabled or not enabled).

--swiscsi --enable

Enables software iSCSI.

--swiscsi --disable

Disables software iSCSI.

--adapter --list

Lists iSCSI adapter(s).

--vihost | -h

When you execute a vSphere CLI with the `--server` option pointing to a vCenter Server system, you can use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-iscsi --help` for a list of common options including connection options.

List discovery addresses and static targets (if configured) and related properties:

```
vicfg-iscsi <conn_options>
--discovery --list <adapter_name>
```

Add a discovery address:

```
vicfg-iscsi <conn_options>
--discovery --add --ip <ip_addr | domain_name> <adapter_name>
```

Remove a discovery address

```
vicfg-iscsi <conn_options>
--discovery --remove --ip <ip_addr | domain_name> <adapter_name>
```

List static discovery targets and related properties:

```
vicfg-iscsi <conn_options>
--static --list <adapter_name>
```

Add a static discovery target:

```
vicfg-iscsi <conn_options>
--static --add --ip <ip_addr | domain_name> --name <iscsi_name> <adapter_name>
```

Remove a static discovery target:

```
vicfg-iscsi <conn_options>
--static --remove --ip <ip_addr | domain_name> --name <iscsi_name>
<adapter_name>
```

List authentication method settings:

```
vicfg-iscsi <conn_options>
--authentication --list <adapter_name>
```

List adapter level mutual CHAP setting:

```
vicfg-iscsi <conn_options>
--authentication --list -m CHAP -b <adapter_name>
```

List send target level CHAP setting:

```
vicfg-iscsi <conn_options>
--authentication --list -m CHAP --ip <ip address> <adapter_name>
```

List static target level CHAP setting:

```
vicfg-iscsi <conn_options>
--authentication --list -m CHAP --ip <ip address> --name <iqn name> <adapter_name>
```

Set authentication properties:

```
vicfg-iscsi <conn_options>
--authentication --method <auth_method> --level <level> --chap_username
<username> --chap_password <password> [--ip <ip_addr | domain_name>
[--name <iscsi_name>] <adapter_name>
```

Reset target level CHAP authentication properties to be inherited from adapter level:

```
vicfg-iscsi <conn_options>
--authentication --method <auth_method> --reset_auth --ip <ip_addr |
domain_name> [--name <iscsi_name>] <adapter_name>
```

List PHBA properties:

```
vicfg-iscsi <conn_options>
--phba --list <adapter_name>
```

List active targets properties:

```
vicfg-iscsi <conn_options>
--target --list <adapter_name>
```

List LUNs properties:

```
vicfg-iscsi <conn_options>
--lun --list <adapter_name>
```

List LUNs properties for target_id 0:

```
vicfg-iscsi <conn_options>
--lun --list --target_id 0 <adapter_name>
```

List network properties:

```
vicfg-iscsi <conn_options>
--network --list <adapter_name>
```

Set HBA IPv4 address:

```
vicfg-iscsi <conn_options>
--network --ip <ip_addr> <adapter_name>
```

Set HBA network mask:

```
vicfg-iscsi <conn_options>
--network --subnetmask <subnet_mask> <adapter_name>
```

Set HBA gateway:

```
vicfg-iscsi <conn_options>
--network --gateway <default_gateway> <adapter_name>
```

Set HBA IPv4 address and network mask and gateway:

```
vicfg-iscsi <conn_options>
--network --ip <ip_addr> --subnetmask <subnet_mask>
--gateway <default_gateway> <adapter_name>
```

Enable or disable ARP redirect:

```
vicfg-iscsi <conn_options>
--network --set ARP=true|false <adapter_name>
```

List PNP properties:

```
vicfg-iscsi <conn_options>
--pnp --list <adapter_name>
```

Set MTU size:

```
vicfg-iscsi <conn_options>
--pnp --mtu <mtu_size> <adapter_name>
```

List iSCSI initiator node properties:

```
vicfg-iscsi <conn_options>
--iscsiname --list <adapter_name>
```

Set iSCSI node iqn name:

```
vicfg-iscsi <conn_options>
--iscsiname --name <iscsi_name> <adapter_name>
```

Set iSCSI node alias:

```
vicfg-iscsi <conn_options>
--iscsiname --alias <alias_name> <adapter_name>
```

List iSCSI parameters:

```
vicfg-iscsi <conn_options>
--parameter --list <adapter_name>
```

List iSCSI parameters with details:

```
vicfg-iscsi <conn_options>
--parameter --list --detail <adapter_name>
```

List iSCSI parameters with details at target level:

```
vicfg-iscsi <conn_options>
--parameter --list --detail --ip <ip_addr | domain_name> <adapter_name>
```

Set adapter level iSCSI parameter:

```
vicfg-iscsi <conn_options>
--parameter --set <name>=<value> <adapter_name>
```

Set target level iSCSI parameter:

```
vicfg-iscsi <conn_options>
```

```
--parameter --set <name>=<value> --ip <ip_addr | domain_name> <adapter_name>
```

Reset target level iSCSI parameter to be inherited from the adapter level:

```
vicfg-iscsi <conn_options>
--parameter --reset <name> --ip <ip_addr | domain_name> <adapter_name>
```

List software iSCSI enabled or not enabled:

```
vicfg-iscsi <conn_options>
--swiscsi --list
```

Enable software iSCSI:

```
vicfg-iscsi <conn_options>
--swiscsi --enable
```

Disable software iSCSI:

```
vicfg-iscsi <conn_options>
--swiscsi --disable
```

List iSCSI adapter:

```
vicfg-iscsi <conn_options>
--adapter --list
```

vicfg-module - enable configuration of VMkernel module options

---

SYNOPSIS

```
vicfg-module [<connection_options>]
   [--get-options <module_name> |
    --help |
    --list |
    --set-options "<option> <value>" <module_name> |
    --vihost <esx_host> ]
```

DESCRIPTION

The vicfg-module command supports setting and retrieving VMkernel module options. This command is a vSphere CLI implementation of the esxcfg-module service console command, but it supports only some of the options esxcfg-module supports. The command is commonly used when VMware Technical Support, a Knowledge Base article, or VMware documentation instruct you to do so.

OPTIONS

connection_options

Specifies the target server and authentication information if required. Run `vicfg-module --help` for a list of all connection options.

--get-options | -g <module_name>

Returns the option string configured to be passed to the module when it is loaded. This string is not necessarily the option string currently in use by the module.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--list | -l

Lists the set of modules on the host (valid for vSphere 4.0 and later).

--set-options | -s "<option>=<value>" <module_name>

Specifies the option string to be passed to the module when the module is loaded.

--vihost | -h

When you run a vSphere CLI command with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Use `vicfg-module --help` for a list of common options including connection options.

Configure a supported NIC to use NetQueue:

```
vicfg-module <conn_options> -s "intr_type=2 rx_ring_num=8" s2io
```

Verify that NetQueue has been configured:

```
vicfg-module <conn_options> -g s2io
```

List the set of modules on the host:

```
vicfg-module <conn_options> -l
```

vicfg-mpath35 - configure multipath settings for Fibre Channel or iSCSI LUNs

---

SYNOPSIS

```
vicfg-mpath35 [OPTIONS]
```

DESCRIPTION

vicfg-mpath35 provides an interface to configure multipath settings for Fibre Channel or iSCSI LUNs on ESX/ESXi version 3.5 hosts. Use vicfg-mpath for ESX/ESXi 4.0 and later hosts.

OPTIONS

--help

Prints a help message for each command-specific and each connection option. Calling the command with no arguments or with `--help` has the same effect.

--list | -l

Lists all LUNs and the paths to these LUNs through adapters on the system. For each LUN, the command displays the type, internal name, console name, size, and paths, and the policy used for path selection.

--policy | -p

Sets the policy for a given LUN to one of "mru", "rr", or "fixed". Most Recently Used (mru) selects the path most recently used to send I/O to a device. Round Robin (rr) rotates through all available paths. Fixed (fixed) uses only the active path. This option requires that you also specify the --lun option.

--state | -s

Sets the state of a given LUN path to either "on" or "off". This option requires that you also specify the `--lun` and `--path` options.

--preferred | -f

Sets the given path to be the "preferred" path for a given LUN. This option requires that you also specify the `--lun` and `--path` options.

--query | -q

Queries a specific LUN for its information and print it. This option requires that you also specify the `--lun` option.

--path | -P

Specifies the path to use in other operations. You cannot use this option by itself.

--lun | -L

Specifies the LUN to use in other operations. You cannot use this option by itself.

--detailed | -d

Displays all information about a LUN and its paths including the vml name of the LUN.

--bulk | -b

Shows all LUNs and paths in a format easily parsed by scripts.

--hbas | -a

Prints the list of HBAs that can be identified by a unique ID. This option lists Fibre Channel and iSCSI devices. Parallel and Block devices do not appear in the list.

--vihost | -h

When you execute this command with `--server` pointing to a vCenter Server system, you can use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

List all LUNs and the paths to these LUNs through adapters on the system:

```
vicfg-mpath35 --server <servername> --username <user name>
   --password <password> -l
```

Set the policy for a specific LUN. Requires --lun is also specified to indicate the LUN to operate on:

```
vicfg-mpath35 --server <server name> --username <user name>
   --password <password> --policy mru --lun vmhba0:8:0
```

Set the state for a specific LUN path. Requires both --lun and --path are specified. This operation may appear to fail if there is active I/O on a path that is set to "off":

```
vicfg-mpath35 --server <server name> --username <user name>
   --password <password> --state <on|off> --path <path flag> --lun <lunname>
```

Set the given path to be the preferred path for the given LUN. Requires both --path and --lun are specified:

```
vicfg-mpath35 --server <server name> --username <user name>
   --password <password> --preferred --path vmhba0:8:0 --lun vmhba0:8:0
```

Query the information on a specific LUN:

```
vicfg-mpath35 --server <server name> --username <user name>
   --password <password> --query --lun vmhba0:8:0
```

Indicate which LUN to operate on. You can specify the LUN either with its internal VMkernel vmhba name (vmhbaX:X:X) or with its vml name as found in /vmfs/devices/disks:

```
vicfg-mpath35 --server <server name> --username <user name>
   --password <pasword> --policy mru --lun vmhba0:8:0
```

Return a bulk path listing suitable for parsing:

```
vicfg-mpath35 --server <server name> --username <user name>
   --password <password> -b
```

vicfg-mpath - display path information, change path state

SYNOPSIS

```
vicfg-mpath [<conn_options>]
  [--help |
   --list [--path <path> |--device <device>] |
   --list-compact [--path <path> |--device <device>] |
   --list-map [--path <path> |--device <device>] |
   --list-paths [--device <device>] |
   --list-plugins |
   --state  [active|off] ]
```

DESCRIPTION

The vicfg-mpath command supports listing information about Fibre Channel or iSCSI LUNs and changing a path's state. Use vicfg-mpath35 when running against ESX/ESXi 3.5 systems. Use the esxcli command for managing pluggable storage architecture (PSA) and native multipathing (NMP), including path policy modification.

OPTIONS

connection_options

Specifies the target server and authentication information if required. Run `vicfg-mpath --help` for a list of all connection options.

--device | -d

Used to filter the list commands to display only information about the specified device.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--list | -l <path_or_device>

Lists detailed information for all paths on the system or for the specified path or device.

--list-compact | -L <path_or_device>

Lists all paths with abbreviated information.

--list-map | -m <path_or_device>

Lists all paths and the corresponding adapter and device mappings.

--list-paths | -b <device>

Lists all devices with their corresponding paths, or lists paths for the specified device.

--list-plugins | -G

Lists all multipathing plugins loaded into the system. At a minimum, this command returns NMP (Native Multipathing Plugin). If other MPP plugins have been loaded, they are listed as well. For information about storage array plugins, see the *ESX Configuration Guide* and the *ESXi Configuration Guide*. You manage plugins with the esxcli command; run `esxcli --help` to get started and see the *vSphere Command-Line Interface Installation and Scripting Guide* for more information.

--path | -P

Used to specify a specific path for operations. The path name may be either the long path UID or the shorter runtime name of the path. Use this option to filter any of the list commands to a specific path.

--state|-s active|off

Sets the state of a given LUN path to either active or off. This option requires that the --path options is set and specifies either the path UID or the path runtime name.

If you are changing a path's state, the change operation fails if I/O is active when the path setting is changed. Reissue the command. You must issue at least one I/O operation before the change takes effect.

--vihost | -h

When you run a vCLI command with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options. Run `vicfg-mpath --help` for a list of common options including connection options.

List all paths on the system with their detailed information:

```
vicfg-mpath <conn_options> -l
```

List detailed information for the specified path:

```
vicfg-mpath <conn_options> -l -P ide.vmhba32-ide.0:1-mpx.vmhba32:C0:T1:L0
```

List a path by specifying its runtime name with its detailed information:

```
vicfg-mpath <conn_options> -l -P vmhba32:C0:T1:L0
```

List paths with its detailed information for a specific device:

```
vicfg-mpath <conn_options> -l -d mpx.vmhba32:C0:T1:L0
```

List all paths with abbreviated information:

```
vicfg-mpath <conn_options> -L
```

List all paths with adapter and device mappings:

```
vicfg-mpath <conn_options> -m
```

List all devices with their corresponding paths:

```
vicfg-mpath <conn_options> -b
```

List all multipathing plugins loaded into the system:

```
vicfg-mpath -G
```

Set the state for a specific path to off. Requires the --path option.

```
vicfg-mpath <conn_options> --state off --path <path name>
```

If you are changing a path's state, the change operation fails if I/O is active when the path setting is changed. Reissue the command. You must issue at least one I/O operation before the change takes effect.

vicfg-nas - manipulate NAS file systems on an ESX/ESXi host.

SYNOPSIS

```
vicfg-nas [<conn_options>]
    [--add --nasserver <server_name> --share <share_name> |
     --delete <share_name> |
     --help |
     --list |
     --nasserver <server_name> |
     --readonly |
     --vihost <esx_host> ]
```

DESCRIPTION

The vicfg-nas command manipulates NAS file systems associated with ESX/ESXi hosts. For more information on working with NAS file systems, see the *ESX Configuration Guide* and the *ESXi Configuration Guide*.

OPTIONS

--add | -a

Adds a new NAS file system to /vmfs/volumes on the ESX/ESXi host. The command adds an entry to the known NAS file system list, but does not mount the file system. When you use this option, you must also use the `--nasserver|-o` and `--share|-s` options, and must specify a label name for the new file system.

connection_options

Specifies the target server and authentication information if required. Run `vicfg-nas --help` for a list of all connection options.

--delete | -d <share_name>

Deletes a NAS file system. This command unmounts the NAS file system and removes it from the list of known file systems.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with --help has the same effect.

--list | -l

Optional. Lists all known NAS file systems with their mount name, share name, and host name and indicates for each file system whether it is mounted.

--nasserver | -o <server_name>

Used in conjunction with the `--add|-a` option to supply the host name for a new NAS file system.

--share | -s <share_name>

Used in conjunction with the `--add|-a` option to supply the share name of a new NAS file system.

--readonly | -y

Adds the new NAS filesystem with readonly access.

--vihost | -h

When you run a vCLI command with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-nas --help` for a list of common options including connection options.

List all known NAS file systems with their mount name, share name, and hostname and indicate whether each is mounted:

```
vicfg-nas <conn_options> -l
```

Add a new NAS file system to the ESX Server. This will add an entry to the known NAS file system list. You must supply the host name and the share name for the new NAS file system:

```
vicfg-nas <conn_options> -a -o <nasserver> -s /home FileServerHome
```

Add a new readonly NAS file system to the ESX Server. This will add an entry to the known NAS file system list. You must supply the host name and the share name for the new NAS file system:

```
vicfg-nas <conn_options> -a -y -o <nasserver> -s /home FileServerHome
```

Delete a NAS file system. The command unmounts the NAS file system and removes it from the list of known file systems:

```
vicfg-nas <conn_options> -d FileServerHome
```

vicfg-nics - get information, set speed and duplex for ESX/ESXi physical NICs

SYNOPSIS

```
vicfg-nics [<connection_options>]
   --auto <nic> |
   --duplex [full|half] <nic>
   --help |
   --list |
   --speed [10 | 100 | 1000 | 10000] <nic> |
   --vihost <esx_host>]
```

DESCRIPTION

The vicfg-nics command manages uplink adapters, that is, the Ethernet switches used by an ESX/ESXi host. You can use vicfg-nics to list the VMkernel name for the uplink adapter, its PCI ID, driver, link state, speed, duplex setting, MAC address and a short PCI description of the card. You can also specify speed and duplex settings for an uplink adapter.

OPTIONS

--auto | -a <nic>

Sets the NIC to auto-negotiate its speed and duplex settings Requires a NIC parameter.

connection_options

Specifies the target server and authentication information if required. Run `vicfg-nics --help` for a list of all connection options.

--duplex | -d [full|half] <nic>

Sets the duplex value at which a given network adapter should run to either full (transmit data in both directions at the same time) or half (transmit data in one direction at a time). Requires a NIC parameter.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--list | -l

Lists the NICs in the system and, for each NIC, the PCI bus, driver, speed, duplex information, MAC address, and a description. Also shows whether the link is up.

--speed | -s <speed> <nic>

Sets the speed at which a given network adapter should run. Valid values for <speed> are 10, 100, 1000, or 10000. Requires a NIC parameter.

--vihost | -h

When you run a vCLI command with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-nics --help` for a list of common options including connection options.

List the NICs in the system and print their current and configured speed and duplex settings:

```
vicfg-nics <conn_options> -l
```

Set vmknic02 to auto-negotiate its speed and duplex settings:

```
vicfg-nics <conn_options> -a vmnic02
```

Set the duplex setting for vmnic0 to full and the speed to 100:

```
vicfg-nics <conn_options> -d full -s 100 vmnic0
```

vicfg-ntp - configure the NTP server

SYNOPSIS

```
vicfg-ntp [connection_options]
  [--add <name_or_IP> |
   --delete <name_or_IP |
   --help |
   --list |
   --start |
   --stop |
   --vihost <esx_host>]
```

DESCRIPTION

The vicfg-ntp command supports specifying the NTP (Network Time Protocol) server for an ESX/ESXi host. Some protocols, such as Kerberos, must have accurate information about the current time.

OPTIONS

--add | -a

Adds the specified NTP server. You can use the name or IP address to specify the NTP server (IPv6 address valid for vSphere 4.0 and later).

connection_options

Specifies the target server and authentication information if required. Run `vicfg-ntp --help` for a list of all connection options.

--delete | -d

Deletes the specified NTP server. You can use the name or IP address to specify the NTP server (IPv6 address valid for vSphere 4.0 and later).

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with --help has the same effect.

--list | -l

Displays all NTP servers used by the host.

--start | -r

Starts the NTP service on the target host.

--stop | -s

Stops the NTP service on the target host.

--vihost | -h

When you run a vCLI command with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-ntp --help` for a list of common options including connection options.

Display the list of NTP servers used by this host:

```
vicfg-ntp --server <server name> --username <user name>
   --password <password> --list
```

Add a remote NTP server with the specified host name or IP address:

```
vicfg-ntp --server <server name> --username <user name>
   --password <password> --add <ntp-server>
```

Delete the remote NTP server with the specified host name or IP address:

```
vicfg-ntp --server <server name> --username <user name>
   --password <password> --delete <ntp-server>
```

Start the NTP service on the host:

```
vicfg-ntp --server <server name> --username <user name>
   --password <password> --start
```

Stop the NTP service on the host:

```
vicfg-ntp --server <server name> --username <user name>
   --password <password> --stop
```

vicfg-rescan - scan the LUNs

SYNOPSIS

```
vicfg-rescan [<connection_options>]
   <adapter name>
   [--help
    --vihost <esx_host>]
```

DESCRIPTION

Perform a rescan operation each time you reconfigure your storage setup. You can use the vicfg-rescan vSphere CLI or the vSphere Client to perform a rescan.

See the *ESX Configuration Guide* and the *ESXi Configuration Guide*. The *Fibre Channel SAN Configuration Guide* discusses rescan on Fibre Channel storage. The *iSCSI SAN Configuration Guide* discusses rescan on iSCSI storage.

When you rescan an ESX/ESXi host, the command returns only an indication of success or failure and no detailed information.

OPTIONS

<adapter_name>

Name of the adapter, for example vmhba1.

connection_options

Specifies the target server and authentication information if required. Run `vicfg-rescan --help` for a list of all connection options.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--vihost | -h <esx_host>

When you run a vCLI command with `--server` pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following example assumes you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-rescan --help` for a list of common options including connection options.

Refresh adapter registration. This command needs a adapter name to work, for example, vmhba0 or vmhba1:

```
vicfg-rescan <conn_options> vmhba0
```

vicfg-route - get and set routing information for the VMkernel

---

SYNOPSIS

```
vicfg-route [<connection_options>]
  [--add <route> |
   --del <route> |
   --help |
   --list |
   --family [v4 | v6] |
   --vihost <esx_host>]
   [<gateway>]
```

DESCRIPTION

The vicfg-route command lists or sets the default IP gateway. Changing the gateway might be required if you move your ESX/ESXi host to a new physical location. The vicfg-route command supports a subset of the Linux route command's options.

If you run vicfg-route with no options, the command displays the default gateway. You can use the `--family` option to print the default IPv4 or the default IPv6 gateway. By default, the command displays the default IPv4 gateway.

OPTIONS

connection_options

Specifies the target server and authentication information if required. Run `vicfg-route --help` for a list of all connection options.

<gateway>

The IP address or the host name of the machine that should be set as the gateway for the VMkernel IP stack.

--add | -a <route>

Adds route to the VMkernel (valid for vSphere 4.0 and later).

To add a route entry and make it the default, run

```
vicfg-route --add <route> default
```

--del | -d <route>

Deletes a route entry from the VMkernel (valid for vSphere 4.0 and later).

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--list | -l

Lists configured routes for the VMkernel.

--family | -f v4 | v6

Address family, either v4 for IPv4 or v6 for IPv6. Defaults to v4.

--vihost | -h <esx_host>

When you run a vCLI command with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-route --help` for a list of common options including connection options.

List the VMkernel IP stack's default gateway entry:

```
vicfg-route <connection_options>
```

Set the VMkernel IP stack's default gateway entry, that is, change the default gateway to a different gateway:

```
vicfg-route <connection_options> <new_gateway>
```

Set the VMkernel default gateway to 192.NNN.0.1

```
vicfg-route <connection_options> 192.NNN.0.1
```

or

```
vicfg-route <connection_options> -a default 192.NNN.0.1
```

Delete a 192.NNN.100.0 route from the VMkernel:

```
vicfg-route <connection_options> -d 192.NNN.100.0/24 192.168.0.1
```

Add a route to 2001:10:20:NNN::/64 network through 2001:10:20:NNN::1

```
vicfg-route <connection_options> -f V6 -a 2001:10:20:NNN::/64 2001:10:20:NNN::1
```

Set the VMkernel default gateway to 2001:10:20:NNN::1

```
vicfg-route <connection_options> -f V6 -a default 2001:10:20:NNN::1
```

Delete the 2001:10:20:NNN:: route from the VMkernel:

```
vicfg-route <connection_options> -f V6 -d 2001:10:20:NNN::/64 2001:10:20:NNN::1
```

vicfg-scsidevs - display information about available LUNs.

SYNOPSIS

```
vicfg-scsidevs [<connection_options>]
   [--compact-list |
    --device <device> |
    --hba-device-list |
    --hbas |
    --help |
    --list |
    --query |
    --uids |
    --vihost <esx_host> |
    --vmfs]
```

DESCRIPTION

The vicfg-scsidevs command displays information about available LUNs on ESX/ESXi 4.x hosts. You can run vicfg-scsidevs --query and vicfg-scsidevs --vmfs against ESX/ESXi version 3.5. The other options are supported only against ESX/ESXi version 4.0 and later.

In previous releases of this command-line interface, the corresponding command is `vicfg-vmhbadevs`.

OPTIONS

connection_options

Specifies the target server and authentication information if required. Run `vicfg-scsidevs --help` for a list of all connection options.

--compact-list | -c

Lists all logical devices, each on a single line, with limited information. The information includes the device ID, device type, size, and plugin and device display name. You can specify the `--device` option to list information about a specific device.

--device | -d

Used with other options to specify the device for which you want information.

--hba-device-list | -A

For each HBA, prints a mapping between the HBA and the devices for which it provides paths.

--hbas | -a

Prints HBA devices with identifying information. This includes the adapter ID, driver ID, adapter UID, PCI, vendor, and model.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--list | -l

Lists device information for all logical devices on this system. The information includes the name (UUID), device type, display name, and multipathing plugin. You can specify the `--device` option to list information about a specific device.

--query | -q

Prints mappings in 2.5 compatibility mode to mimic a call to `vmkpcidivy -q vmhba_devs`.

--uids | -u

Lists the primary UID for each device and any other UIDs (aliases) for each UID. You can specify the `--device` option to list information about a specific device.

--vihost | -h

When you run a vCLI command with the --server option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

--vmfs | -m

Prints mappings for each VMFS volume to its corresponding partition, path to that partition, VMFS UUID, extent number, and volume names.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-scsidevs --help` for a list of common options including connection options.

List all logical devices known on this system with detailed information:

```
vicfg-scsidevs <conn_options> -l
```

List all logical devices with abbreviated information:

```
vicfg-scsidevs <conn_options> -c
```

List all device unique identifiers with their primary name:

```
vicfg-scsidevs <conn_options> -u
```

List a specific logical device with its detailed information:

```
vicfg-scsidevs <conn_options -l -d mpx.vmhba32:C0:T1:L0
```

Print mappings for VMFS volumes to the corresponding partition, path to that partition, VMFS uuid, extent number and volume names:

```
vicfg-scsidevs <conn_options> -m
```

Print HBA devices with identifying information:

```
vicfg-scsidevs <conn_options> -a
```

Print a mapping between HBAs and the devices it provides paths to:

```
vicfg-scsidevs <conn_options> -A
```

vicfg-snmp - configure the SNMP service

SYNOPSIS

```
vicfg-snmp [<connection_options>]
  [--communities <comm_list> |
   --disable |
   --enable |
   --help |
   --hwsrc |
   --notraps |
   --port <port_number> |
   --reset |
   --show |
   --targets <targets> |
   --test |
   --vihost <esx_host>]
```

DESCRIPTION

Simple Network Management Protocol (SNMP) allows management programs to monitor and control networked devices. The *Basic System Administration* manual discusses using SNMP in your vSphere environment in some detail. The *vSphere Command-Line Interface Scripting Guide* explains setup with vSphere CLI commands.

OPTIONS

--communities | -c <comm1>[,...]

Specifies communities, separated by commas. The settings specified using this option overwrite any previous settings.

connection_options

Specifies the target server and authentication information if required. Run `vicfg-snmp --help` for a list of all connection options.

--disable | -D

Stops the SNMP service on the host.

--enable | -E

Starts the SNMP service on the host.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--hwsrc | -y

Allows you to specify where to source hardware events originating from IPMI sensors or from CIM indications. Specify either `indications` or `sensors`.

--notraps | -n <port_number>

Comma-separated list of trap OIDs (object identifiers) for traps not to be sent by the agent. Use `--notraps reset` to clear the list.

--port | -p <port_number>

Sets the port used by the SNMP agent. The default is UDP 161. This is the port that the SNMP service uses to listen on for polling requests, such as GET requests. You can also configure the port that the SNMP agent sends data to on the target system using the `--targets` option. That port is UDP 162 by default.

--reset | -r

Clears all previously-specified communities and targets.

--show | -s

Displays the current SNMP configuration.

--targets | -t <hostname[@port]> </community>[,...]

Sets the destination for (notifications) traps. You can specify multiple targets, separated by commas.

The settings specified using this flag overwrite any previous settings. For vSphere 4.0 and later, IPv6 addresses are valid.

--test | -T

Sends a test notification that can be used to validate the SNMP configuration to the configured target or targets.

--vihost | -h

When you run a vSphere CLI command with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run vicfg-snmp --help for a list of common options including connection options.

Display the SNMP agent configuration:

```
vicfg-snmp <conn_options> -s
```

Set the community for the SNMP agent to public:

```
vicfg-snmp <conn_options> -c public
```

Set my_comm1 and my_comm2 as the communities, overwriting any existing communities.

```
vicfg-snmp <conn_options> -c my_comm1,my_comm2
```

Enable the SNMP service:

```
vicfg-snmp <conn_options> -E
```

Disable the SNMP service:

```
vicfg-snmp <conn_options> -D
```

Set the SNMP agent port to port 163:

```
vicfg-snmp <conn_options> -p 163
```

vicfg-syslog - get and set syslog server configuration

SYNOPSIS

```
vicfg-syslog [<connection_options>]
```

```
[--help |
 --setport <port> |
 --setserver <name_or_ip> |
 --show |
 --vihost <esx_host> ]
```

DESCRIPTION

The vicfg-syslog command specifies a remote syslog server for an ESXi host.

You cannot run this command against an ESX host. ESX administrators can edit the syslog configuration file to customize the syslog server.

The *Basic System Administration* manual discusses system logs in more detail and explains how to set them up using the vSphere Client

---

OPTIONS

connection_options

Specifies the target server and authentication information if required. Run `vicfg-syslog --help` for a list of all connection options.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--setport | -p <port>

Sets the port number for the syslog server. Can be used with `--setserver`.

--setserver | -s <host_or_IP>

Set the host name or IP address of the syslog server. Can be used with --setport>.

--show | -i

Displays the syslog server configuration if a syslog server has been set up.

--vihost | -h <esx_host>

When you run a vSphere CLI command with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-syslog --help` for a list of common options including connection options.

Display the syslog server configuration:

```
vicfg-syslog <conn_options> -i
```

Set the host name of the syslog server:

```
vicfg-syslog <conn_options> -s <syslog server>
```

Set the port used by the syslog server:

```
vicfg-syslog <conn_options> -p <port>
```

vicfg-user - manage users and groups

SYNOPSIS

`vicfg-user <[conn_options>] -e <user |- group> |-o <add | modify | delete | list> [options]`

Note: The syntax of this command differs from other vSphere CLI commands.

DESCRIPTION

An ESX/ESXi system grants access to its resources when a known user with appropriate permissions logs on to the system with a password that matches the one stored for that user. The vicfg-user command supports creating, modifying, deleting, and listing local direct access users and groups of users on an ESX/ESXi host. You cannot run this command against a vCenter Server system.

User management is discussed in detail in the *ESX Configuration Guide*, the *ESXi Configuration Guide*, and the *Basic System Administration* document.

OPTIONS

--addgroup | -g <group_list>

Comma-separated list of groups to add the user to.

--adduser | -u <user_list>

Comma-separated list of users to add to a specified group.

conn_options

Specifies the target server and authentication information if required. Run `vicfg-user --help` for a list of all connection options.

--entity | -e [group | user]

Required. Entity to perform the operation on (user | group).

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with --help has the same effect.

--group | -d <group_name>

Group name of the group.

--groupid | -D <group_ID>

Group ID of the group.

--login | -l <login_ID>

Login ID of the user.

--newpassword | -p <password>

Password for the target user.

--newuserid | -i <UUID>

UID for the target user.

--newusername | -n <name>

User name for the target user.

--operation | -o [add | modify | delete | list]

Required. Operation to perform. Specify `add`, `modify`, `delete`, or `list`.

--promptpassword

Prompts for a password when you make a change to a user.

--removegroup | -G <group_list>

Comma-separated list of groups to remove the target user from.

--removeuser | -U <user_list>

Comma-separated list of users to be removed from the target group.

--role | -r [admin|read-only|no-access]

Role for the target user or group. Specify `admin`, `read-only`, or `no-access`.

--shell | -s [yes|no]

Grant shell access to the target user. Default is no shell access. Use this command to change the default, or to revoke shell access rights after they have been granted. Valid values are `yes` and `no`.

This option is supported only for ESX. The option is meaningless for ESXi.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-user --help` for a list of common options including connection options.

Add a user with login ID user27:

```
vicfg-user <conn_options> -e user -o add -l user27 -p 27_password
```

Modify password, user ID, and user name for the user with login ID user27:

```
vicfg-user.pl <conn_options> -e user -o modify -l user27 -p 27_password -i <new user id> -n <new user name>Add the user with user name user27 to a group test:
```

```
vicfg-user <conn_options> -e user -o modify -l user27 -g test
```

Assign the role read-only to user27 and prompt for a password.

```
vicfg-user <conn_options> -e user -o modify -l user27 --role read-only --promptpassword
```

Remove the user with user name user27:

```
vicfg-user <conn_options> -e user -o delete -l user27
```

Add group42 as a group:

```
vicfg-user <conn_options> -e group -o add -d group42 -D 501
```

Add a user "test" to group42:

```
vicfg-user <conn_options> -e group -o modify -d group42 -u test
```

Remove group group42

```
vicfg-user <conn_options -e group -o delete -d group42
```

List groups and users:

```
vicfg-user <conn_options> -e group -o list
```

List users in group42:

```
vicfg-user <conn_options -e group -o list -d group42
```

Add group group42, with group ID 501 and role read-only:

```
vicfg-user.pl <conn_options> --entity group --operation add --group group42 - -groupid 501 --role read-only
```

vicfg-vmknic - configure virtual network adapters

SYNOPSIS

```
vicfg-vmknic [conn_options]
   [--add --ip<address> --netmask <netmask> <port-group-name> |
    --delete <nic_name> |
    --disable-vmotiion <portgroup> |
    --dvs-name <dvs> |
```

```
--dvport_id <port_id> |
--enable-ipv6 [true|false] |
--enable-vmotion <portgroup> |
--help |
--ip <address> |
--list |
--mtu <mtu> |
--netmask <netmask> |
--portgroup <port_group> |
--tso |
--unset-ip |
--vihost <esx_host> ]
```

DESCRIPTION

The vicfg-vmknic command configures VMkernel NICs (virtual network adapters).

Use the `esxcli swisis nic` command to specify NIC bindings for VMkernel NICs.

OPTIONS

conn_options

Specifies the target server and authentication information if required. Run `vicfg-vmknic --help` for a list of all connection options.

--add | -a

Adds a VMkernel NIC to the system. You must specify the IP address using --ip, the netmask, and the port group name. When the command completes successfully, the newly added VMkernel NIC is enabled.

You cannot specify the dvsName and dvportId parameters with this option.

--delete | -d <port_group>

Delete the VMkernel NIC on the given port group. The port group name is the same as the VMkernel NIC name.

--disable-vmotion | -u <port_group>

Disables VMotion for the VMkernel NIC on a specified port group.

--dvs-name | -s

Specifies the distributed virtual switch (DVS) name to use as a connection point. DVS is also known as vNetwork Distributed Switch (VDS). Requires that `--dvport-id` is also specified.

--dvport-id | -v

Specifies the distributed virtual port ID of the connection point. Requires that `--dvs-name` is also specified.

--enable-ipv6 | -6 true | false

Enables or disables IPv6 for this VMkernel NIC for the next boot. Valid for vSphere 4.0 and later.

--enable-vmotion | -E <port_group>

Enables VMotion for the VMkernel NIC on a specified port group. By default, VMotion is disabled for a port group. To perform migration with VMotion over the network, you have to enable VMotion.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--ip | -i <ip_address> | DHCP

Sets the IP address for this VMkernel NIC. If you specify DHCP, the VMkernel must support DHCP. IP address can be in one of the following format:
* <X.X.X.X> - Use the specified static IPv4 address
* DHCP - Enable IPv4 DHCP for address
* <X:X:X::/X> - Use the specified static IPv6 address (valid for vSphere 4.0 and later)

* DHCPV6 - Enable the IPv6 DHCP address (valid for vSphere 4.0 and later)
* AUTOCONF - Enable the IPv6 address advertised by the router (valid for vSphere 4.0 and later)

--list | -l

Lists all VMkernel NICs on the system. The list contains the network information, port group, MTU, and current state for each virtual network adapter in the system.

--mtu | -m <mtu>

MTU (maximum transmission unit) for the interface being created (valid for vSphere 4.0 and later).

--netmask | -n <netmask>

IP netmask (X.X.X.X) to be used for the virtual network adapter. When you set a netmask, you must specify the --ip option in the same command.

--portgroup | -p

Specifies the port group to use as connection point.

--tso | -t

Disables TCP Segment Offloading (TSO) for the VMkernel NIC being created. By default, TSO is enabled for a virtual NIC. When you specify this option, TSO is disabled for the virtual NIC that is being created (valid for vSphere 4.0 and later).

--unset-ip | -U

Unsets the IP address for this VMkernel NIC (valid for vSphere 4.0 and later). The address can have one of the following format:
* <X:X:X::/X> - Remove the specified IPv6 address
* DHCPV6 - Disable the IPv6 DHCP address
* AUTOCONF - Disable the IPv6 address advertised by the router.

--vihost | -h

When you run a vSphere CLI command with the --server option pointing to a vCenter Server system, use --vihost to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run vicfg-vmknic --help for a list of common options including connection options.

Add a VMkernel NIC to the system:

```
vicfg-vmknic <conn_options> -a --ip <IP address> -n <net mask> "VMkernel NIC Name"
```

Delete a VMkernel NIC:

```
vicfg-vmknic <conn_options> -d "VMkernel NIC 37"
```

Add a VMkernel NIC to the system:

```
vicfg-vmknic <conn_options> -a --ip <IP address> -n <net mask> --dvs-name "dvs-001" --dvport-id 1
```

Delete a VMkernel NIC:

```
vicfg-vmknic <conn_options> -d --dvs-name "dvs-001" --dvport-id 1
```

List all the VMkernel NICs:

```
vicfg-vmknic <conn_options> -l
```

Modify a VMkernel NIC's IP address and netmask:

```
vicfg-vmknic <conn_options --ip <IP address> -n <net mask> "VMkernel NIC 37"
```

Set the VMkernel NIC to use DHCP:

```
vicfg-vmknic <conn_options>  --ip DHCP "VMkernel NIC 37"
```

Enable IPv6 for the VMkernel NIC for the next boot:

```
vicfg-vmknic VMkernel  --enable-ipv6 true
```

Enable VMotion for the VMkernel NIC on a specified portgroup:

```
vicfg-vmknic <conn_options> --enable-vmotion "portgroup 42"
```

Disable VMotion for the VMkernel NIC on a specified portgroup:

```
vicfg-vmknic <conn_options> --disable-vmotion "portgroup 42"
```

vicfg-volume - Managing LVM snapshot or replica volumes.

SYNOPSIS

```
vicfg-volume [<connection_options>]
   [--help |
    --list |
    --persistent-mount <VMFS-UUID|label> |
    --resignature <VMFS-UUID|label> |
    --umount <VMFS-UUID|label> |
    --vihost <esx_host>]
```

DESCRIPTION

The vicfg-volume command supports resignaturing a snapshot volume and mounting and unmounting the volume. You can also make the mounted volume persistent across reboots and query a list of snapshot volumes and original volumes.

The *ESX Configuration Guide* and the *ESXi Configuration Guide* discuss volume resignaturing in detail.

OPTIONS

connection_options

Specifies the target server and authentication information if required. Run `vicfg-volume --help` for a list of all connection options.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--list | -l

Lists all volumes that have been detected as snapshots or replicas.

--persistent-mount | -M [<VMFS-UUID>|<label>]

Mounts a snapshot/replica volume persistently if its original copy is not online.

--resignature | -r [<VMFS-UUID>|<label>]

Resignatures a snapshot/replica volume.

--umount | -u [<VMFS-UUID>|<label>]

Unmounts a snapshot/replica volume.

--vihost | -h

When you run a vCLI command with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-volume --help` for a list of common options including connection options.

List all volumes that have been detected as snapshots/replicas:

```
vicfg-volume <conn_options> -l
```

Mount a snapshot or replica volume persistently:

```
vicfg-volume <conn_options> -M my_sample_vol
```

Resignature a snapshot or replica volume:

```
vicfg-volume <conn_options -r my_sample_vol
```

Unmount a snapshot or replica volume:

```
vicfg-volume conn_options -u 48c826a3-12815d67-0ac6-0030485cd343
```

vicfg-vswitch - create and configure virtual switches and port groups

---

SYNOPSIS

```
vicfg-vswitch [<connection_options>]
   [ --add <switch_name> |
     --check <vswitch_name> |
     --delete <vswitch_name> |
     --get-cdp <vswitch_name> |
     --help |
     --link <physical_nic> <vswitch_name> |
     --list |
     --mtu <vswitch_name> |
     --set-cdp <vswitch_name> |
     --unlink <physical_nic> <vswitch_name> |
     --vihost <esx_host ]
vicfg-vswitch [<connection_options>]
   [--add_pg <portgroup> <vswitch_name> |
    --check-pg <port_group> <vswitch_name> |
    --del-pg <port_group> <vswitch_name> |
    --help |
    --list |
    --vihost <esx_host |
    --vlan --pg <port_group> ]
vicfg-vswitch [<connection_options>]
   [--add-dvp-uplink <adapter_name> --dvp <DVPort_id> <dvswitch_name> |
    --del-dvp-uplink <adapter_name> --dvp <DVPort_id> <dvswitch_name> |
    --help |
    --vihost <esx_host ]
vicfg-vswitch [<connection_options>]
   [--add-pg-uplink <adapter_name> --pg <port_group> <vswitch_name> |
    --del-pg-uplink <adapter_name> --pg <port_group> <vswitch_name> |
    --help |
    --vihost <esx_host ]
```

DESCRIPTION

The vicfg-vswitch command adds or removes virtual switches or modifies virtual switch settings. A virtual switch is an abstracted network device. It can route traffic internally between virtual machines and link to external networks. The

ESX Configuration Guide and the *ESXi Configuration Guide* discuss virtual switches, vNetwork Distributed Switches (vDS), port groups, and vDS port groups. The vSphere CLI manual presents some sample scenarios.

By default,each ESX/ESXi host has a single virtual switch called vSwitch0.

OPTIONS

--add | -a <switch_name>

Adds a new virtual switch.

--add-pg | -A <portgroup> <vswitch_name>

Adds a port group to the specified virtual switch.

--add-dvp-uplink | -P

Adds an uplink adapter to a distributed virtual port (DVP).

--add-pg-uplink | -M

Adds an uplink adapter to a port group (valid for vSphere 4.0 and later). This command fails silently if the uplink adapter does not exist.

--check | -c <vswitch_name>

Checks whether a virtual switch exists. Prints 1 if the switch exists and prints 0 otherwise. Use the virtual switch name, e.g. vSwitch0 or vSwitch1, to specify the virtual switch.

--check-pg | -C <port_group> <vswitch_name>

Checks whether the specified port group exists or not.

connection_options

Specifies the target server and authentication information if required. Run `vicfg-vswitch --help` for a list of all connection options.

--delete | -d <vswitch_name>

Deletes a virtual switch. Running the command with this option fails if any ports on the virtual switch are in use by VMkernel networks, vswifs, or virtual machines.

--del-pg | -D <port_group> <vswitch_name>

Deletes a port group from the virtual switch. Running the command with this option fails if the port group is in use, for example, by a virtual machine or a VMkernel network.

--del-dvp-uplink | -Q <adapter_name > --dvp <DVPort_id> <dvswitch_name> >

Deletes an uplink adapter from a port on a DVS (distributed virtual switch), also called vNetwork Distributed Switch (vDS). Valid for vSphere 4.0 and later.

--del-pg-uplink | -N <adapter_name > <port_group> <dvswitch_name>

Deletes an uplink adapter from a port group. Valid for vSphere 4.0 and later.

--dvp | -V

Name of a distributed virtual port. Used in conjunction with other options. Valid for vSphere 4.0 and later.

--get-cdp | -b <vswitch_name>

Prints the current CDP (Cisco Discovery Protocol) setting for this virtual switch (valid for vSphere 4.0 and later).

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with `--help` has the same effect.

--link | -L <physical_nic> <vswitch_name>

Adds an uplink adapter (physical NIC) to a virtual switch. Running the command with this option attaches a new unused physical network adapter to a virtual switch.

--list | -l

Lists all virtual switches and their port groups.

--mtu | -m <vswitch_name>

Sets the MTU (maximum transmission unit) of the virtual switch. This option affects all physical NICs assigned to the virtual switch.

--pg | -p <port_group>

Provides the name of the port group for the --vlan option. Specify ALL to set VLAN IDs on all port groups of a virtual switch.

--set-cdp | -B <vswitch_name> [down | listen | advertise | both]

Sets the CDP status for a given virtual switch (valid for vSphere 4.0 and later). To set, specify `down`, `listen`, `advertise`, or `both`.

--unlink | -U <physical_nic> <vswitch_name>

Removes an uplink adapter from a virtual switch. An uplink adapter corresponds to a physical Ethernet adapter to which the virtual switch is connected. If you remove the last uplink adapter, you lose physical network connectivity for that switch.

--vihost | -h <esx_host>

When you run a vSphere CLI command with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

--vlan | -v --pg <port_group>

Sets the VLAN ID for a specific port group of a virtual switch. Setting the option to 0 disables the VLAN for this port group. If you specify this option, you must also specify the `--pg` option.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vicfg-vswitch --help` for a list of common options including connection options.

Add a new virtual switch:

```
vicfg-vswitch <conn_options> -a <vswitch name>
```

Delete the virtual switch. This will fail if any ports on the virtual switch are still in use by VMkernel networks, vswifs, or virtual machines:

```
vicfg-vswitch <conn_options> -d <vswitch name>
```

List all virtual switches and their portgroups:

```
vicfg-vswitch <conn_options -l
```

Add an uplink adapter to a virtual switch:

```
vicfg-vswitch <conn_options> -L <physical adapter name> <vswitch name>
```

Remove an uplink adapter from a virtual switch:

```
vicfg-vswitch <conn_options> -U <physical adapter name> <vswitch name>
```

Check whether a virtual switch exists:

```
vicfg-vswitch <conn_options> --check <vswitch name>
```

Add a new portgroup to the virtual switch:

```
vicfg-vswitch <conn_options> -A <port group name> <vswitch name>
```

Delete a portgroup from the virtual switch:

```
vicfg-vswitch <conn_options> -D <port group name> <vswitch name>
```

Check whether a port group exists:

```
vicfg-vswitch <conn_options> -C <valid portgroup name> <vswitch name>
```

Add an uplink adapter to a port group:

```
vicfg-vswitch <conn_options> -M <physical adapter name> -p <port group name> <vswitch name>
```

Remove an uplink adapter from a port group:

```
vicfg-vswitch <conn_options> -N <physical adapter name> -p <port group name> <vswitch name>
```

Print the current CDP setting for the virtual switch:

```
vicfg-vswitch <conn_options> --get-cdp <vswitch name>
```

vifs - perform file system operations on remote hosts

SYNOPSIS

```
vifs [<connection_options>]
  [--copy <source> <target> |
   --dir <remote_dir> |
   --help |
   --force |
   --get <remote_path> <local_path> |
   --listdc |
   --listds [--dc <datacenter>] |
   --mkdir <remote_dir> |
   --move <source> <target> |
   --put <local_path> <remote_path> |
   --rm <remote_path> |
   --rmdir <remote_dir> ]
```

DESCRIPTION

The vifs command performs common operations such as copy, remove, get, and put on files and directories. The command is supported against ESX/ESXi hosts but not against vCenter Server systems.

Note: While there are some similarities between vifs and DOS or Unix file system management utilities, there are also many differences. For example, vifs does not support wildcard characters or current directories and, as a result, relative path names. Use vifs only as documented.

OPTIONS

connection_options

Specifies the target server and authentication information if required. Run `vifs --help` for a list of all connection options

--copy | -c <source> <target>

Copies a file in a datastore to another location in a datastore. The <source> must be a remote source path, the <target> a remote target path or directory. Use the `--force` option to replace existing destination files.

--dir | -D <remote_dir>

Lists the contents of a datastore or host directory.

--help

Prints a help message for each command-specific and each connection option. Calling the command with no arguments or with `--help` has the same effect.

--force | -f

Overwrites the destination file. Use with `--copy` and `--move`.

--get | -g <remote_path> <local_path>

Downloads a file from the ESX/ESXi host to the machine on which you run the vCLI commands. This operation uses HTTP GET.

--listdc | -c

Lists the datacenter paths available on an ESX/ESXi system.

--listds | -S

Lists the datastore names on the ESX/ESXi system. When multiple datacenters are available, you can use the `--dc|-Z <datacenter>` argument to specify the name of the datacenter from which you want to list the datastore.

--mkdir | -M <remote_dir>

Creates a directory in a datastore. This operation fails if the parent directory of remote_dir does not exist.

--move | -m <source> <target>

Moves a file in a datastore to another location in a datastore. The <source> must be a remote source path, the <target> a remote target path or directory. The `--force` option replaces existing destination files.

--put | -p <local_path> <remote_path>

Uploads a file from the machine on which you run the vCLI commands to the ESX/ESXi host. This operation uses HTTP PUT. This command can replace existing host files but cannot create new files.

--rm | -r <remote_path>

Deletes a file or a directory.

--rmdir | -r <remote_dir>

Deletes a datastore directory. This operation fails if the directory is not empty.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run vifs --help for a list of common options including connection options.

Copy a file to another location:

```
vifs <connection_options> -c "[StorageName] VM/VM.vmx" "[StorageName] VM_backup/VM.vmx"
```

List all the datastores:

```
vifs <connection_options> -S
```

List all the directories:

```
vifs --server <connection_options> -D "[StorageName] vm"
```

Upload a file to the remote datastore:

```
vifs <connection_options> -p "tmp/backup/VM.pl"
   "[StorageName] VM/VM.txt" -Z "ha-datacenter"
```

Delete a file:

```
vifs <connection_options> -r "[StorageName] VM/VM.txt" -Z "ha-datacenter"
vifs <connection_options> -rmdir "[StorageName] VM/VM.txt" -Z "ha-datacenter"
```

List the paths to all datacenters available in the server:

```
vifs <connection_options> -C
```

Download a file on the host to a local path:

```
vifs <connection_options> -g  "[StorageName] VM/VM.txt"
```

```
   -Z "ha-datacenter" "tmp/backup/VM.txt"
```

Move a file to another location:

```
vifs <connection_options> -m  "[StorageName] VM/VM.vmx"
   "[StorageName] vm/vm_backup.vmx" -Z "ha-datacenter"
```

Remove an existing directory:

```
vifs <connection_options> -R "[StorageName] VM/VM" -Z "ha-datacenter"
vifs <connection_options> --rm "[StorageName] VM/VM" -Z "ha-datacenter"
```

vihostupdate35 - manage software installation packages on a VMware Infrastructure 3.5 host using vSphere CLI 4.0 and later.

SYNOPSIS

```
vihostupdate35 [<connection_options>]
 [ --help |
   --install [--bundle <zip_location>|--metadata <zip_location>] |
   --query |
   --remove <bulletin> |
   --scan [--bundle <location>|--metadata <zip_location>]]
```

DESCRIPTION

vihostupdate35 provides an interface to list installed packages on a host, scan for packages that apply to a host, install packages in a specified directory, unpack a downloaded update, and install an update package.

Run this command only against ESX/ESXi version 3.5 hosts. Run vihostupdate agains ESX/ESXi 4.0 and later hosts.

OPTIONS

--bundle | -b

Location of the offline bundle. Use either -b or -m but not both.

connection_options

Specifies the target server and authentication information if required. Run `vihostupdate35 --help` for a list of all connection options.

--force | -f

Always reboot the host after a successful host update.

--help

Prints a help message for each command-specific and each connection option. Calling the command with no arguments or with `--help` has the same effect.

--install | -i

Installs an update package from a given directory.

--metadata | -m

Specifies the location of the depot metadata.xml ZIP file that contains information about the update bundle. Use either -b or -m, not both.

--query | -q

Lists installed packages on the host.

EXAMPLES

Query host for installed packages:

```
vihostupdate35 <connection_options> -q
```

Unpack and install the update:

```
vihostupdate35 <connection_options> -i -b <bundle zip file>
```

Unpack a zip bundle containing the update but do not install the update:

```
vihostupdate35 <connection_options> -b <bundle zip file>
```

Install the update using a metadata file:

```
vihostupdate35 <connection_options> -i -m <bundle zip file>/metadata.xml
```

vihostupdate - manage software installation packages on an ESX/ESXi host.

SYNOPSIS

```
vihostupdate [<connection_options>]
 [ --help |
   --install [--bundle <zip_location>|--metadata <zip_location>] |
   --list [--bundle <zip_location>|--metadata <zip_location>] |
   --query |
   --remove <bulletin> |
   --scan [--bundle <location>|--metadata <zip_location>]]
```

DESCRIPTION

The vihostupdate command applies software updates to ESX/ESXi images and installs and updates ESX/ESXi extensions such as VMkernel modules, drivers, and CIM providers.

The vihostupdate command works with bulletins. Each bulletin consists of one or more vSphere bundles and addresses one or more issues. A bulletin is considered to be included in another bulletin if every vSphere bundle in the first bulletin meets one of these criteria:

- The vSphere bundle is included in the second bulletin.
- The vSphere bundle is obsoleted by another bundle in the second bulletin.

Towards the end of a release cycle, bulletins include a large number of other bulletins. Bulletins are available in bundles and in depots with associated metadata.zip files.

- If you use offline bundles, all patches and corresponding metadata are available as one ZIP file.
- If you use metadata, the metadata.zip file points to metadata. The metadata describes the location of the files.

The command supports querying software installed on a host, listing software in a patch, scanning for bulletins that apply to a host, and installing all or selective bulletins in the patch. You can specify a patch by using a bundle ZIP file or the metadata ZIP file of a depot. The depot can be on the remote server, or you can download a bundle ZIP file and use a local depot.

vihostupdate supports https://, http://, and ftp:// downloads. You can specify the protocols in the download URL for the bundle or metadata file.

See the *ESXi Upgrade Guide* for some additional information. For more information about installing, removing, and updating 3rd-Party extensions in vSphere 4.0, see the *Setup Guide*. An example is in the EXAMPLES section below.

Important: Do not specify -b or -m more than once. If you do, the command only processes the last file that is specified. You can specify a comma-separated list of bundles with --install but not with other options. That might be necessary if you want to install a VMware bundle and a third-party bundle.

OPTIONS

--bulletin | -B <bulletin_list>

Bulletins to install. Use this option together with `--bundle` or `--metadata`.

Use a comma-separated list, for example, `bulletin1,bulletin2`. If this option is not specified, vihostupdate installs all bulletins.

--bundle | -b <location>

Location of the offline bundle. Use either -b or -m but not both. You can specify a list of bundles separated by commas but not spaces. That might be necessary if you want to install a VMware bundle and a third-party bundle. The bundles can be local (e.g. C:\bundle1.zip, C:\bundle2.zip) or remote (e.g. http://<server>/bundle1.zip, http://<server>/bundle2.zip).

connection_options

Specifies the target server and authentication information if required. Run `vihostupdate --help` for a list of all connection options.

--help

Prints a help message for each command-specific and each connection option. Calling the command with no arguments or with `--help` has the same effect.

--install | -i [--bundle <location> | --metadata <zip_location>]

Installs the host with selective bulletins from the bundle or the depot. Requires either -b or -m, but not both. You can specify this parameter only once.

--list | -l [--bundle <location> | --metadata <zip_location>]

Lists the bulletins in the specified bundle or depot. Requires either -b or -m but not both.

--metadata | -m <zip_location>

Specifies the location of the depot metadata.xml ZIP file that contains information about the update bundle. Use either -b or -m, not both.

--query | -q

Displays all bulletins that are already installed on the host.

--remove | -r <bulletin>

Removes the specified bulletin from the host.

Use this option for removing bulletins that are third-party or VMware extensions. Do NOT remove bulletins that are VMware patches or updates.

--scan | -s [--bundle <location> | --metadata <zip_location>]

Scans the host for the bundle or the depot for applicable bulletins. Requires either -b or -m but not both.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vihostupdate --help` for a list of common options including connection options.

You can update an ESX/ESXi host using bundles by running the following commands in sequence:

1. Find out which bulletins are installed on your ESX/ESXi host
   `vihostupdate.pl <conn_options --query`
2. Find out which bulletins are available in the bundle
   `vihostupdate.pl <conn_options> --list --bundle http>//<webserver>/rollup.zip`
3. Find out which bulletins in the bundle are applicable to your ESX/ESXi host.
   `vihostupdate.pl <conn_options> --scan --bundle http://<webserver>/rollup.zip`

4. Install all or some bulletins from the bundle on the ESX/ESXi host. The ESX/ESXi host is updated to the specified patch level.
   `vihostupdate.pl <conn_options> --install --bundle http://<webserver>/rollup.zip`
5. If necessary, you can remove individual bulletins. Use this option only for removing bulletins that are third-party or VMware extensions. Do not remove bulletins that are VMware patches or updates.
   `vihostupdate.pl <conn_options> --remove --bulletin bulletin1`

You can update your ESX/ESXi host using depots by running the following commands in sequence:

1. List all bulletins in the depot given the metadata.zip file location.
   `vihostupdate.pl --list --metadata http>//<webserver>/depot/metadata.zip`
2. Scan the depot for bulletins that are applicable to the host.
   `vihostupdate.pl --scan --metadate http://<webserver>/depot/metadata.zip`
3. Install bulletins in the depot on the hos.
   - To install all bulletins:
     `vihostupdate.pl --install --metadate http://<webserver>/depot/metadata.zip`
   - To install selected bulletins, use a comma-separated list. Spaces after the commas are not supported.
     `vihostupdate.pl --install --metadate http://<webserver>/depot/metadata.zip --bulletin bulletin1,bulletin`

You can deploy a third-party bundle that you have downloaded on your web server, for example:
`vihostupdate.pl <conn_options> --install --bundle https://<3rdParty_webserver>/Cisco_Swordfish.zip`

vmkfstools - vSphere CLI for managing VMFS volumes.

SYNOPSIS

vmkfstools <conn_options> <options> <target>

If <target> is a file system, <options> can be one of the following:

--createfs [blocksize]kK|mM --setfsname <fsname>

--queryfs

--extendfs <span_partition> <head_partition>

If <target is a virtual disk, <options> can be one of the following:

--clonevirtualdisk

--createdrm

--createdrmpassthru

--createvirtualdisk

<size>kK|mM|gG

--adaptertype <type>

--diskformat <format> <location>

--deletevirtualdisk

--diskformat

--extendvirtualdisk

--geometry

--inflatedisk

--querydrm

--rescanvmfs

--renamevirtualdisk <oldName> <newName>

--writezeros

DESCRIPTION

You use the vmkfstools vSphere CLI to create and manipulate virtual disks, file systems, logical volumes, and physical storage devices on an ESX/ESXi host. You can use vmkfstools to create and manage a virtual machine file system (VMFS) on a physical partition of a disk and to manipulate files, such as virtual disks, stored on VMFS-3 and NFS. You can also use vmkfstools to set up and manage raw device mappings (RDMs).

OPTIONS

GENERAL OPTIONS

connection_options

Specifies the target server and authentication information if required. Run `vmkfstools --help` for a list of all connection options.

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with --help has the same effect.

--vihost | -h <esx_host>

When you execute a vCLI with the `--server` option pointing to a vCenter Server system, use `--vihost` to specify the ESX/ESXi host to run the command against.

FILE SYSTEM OPTIONS

--createfs | -C vmfs3 -b | --blocksize -S | --setfsname <fsName> <partition>

Creates a VMFS3 file system on a specified partition, such as naa.<naa_ID>:1. The specified partition becomes the file system's head partition.

--blocksize | -b

Specifies the block size of the VMFS file system to create. When omitted, defaults to using 1MB.

--setfsname | -S

Name of the VMFS file system to create.

--spanfs | -Z <span_partition> <head_partition>

Extends the VMFS file system with the specified head partition by spanning it across the partition specified by <span_partition>.

--rescanvmfs | -V

Rescans the host for new VMFS volumes.

--queryfs | -P <directory>

Lists attributes of a file or directory on a VMFS volume. Displays VMFS version number, the VMFS file system partitions, the capacity and the available space.

VIRTUAL DISK OPTIONS

--createvirtualdisk | -c <size> -a | --adaptertype <srcfile> -d | --diskformat <location>

Creates a virtual disk at the specified location on a VMFS volume. With <size> you can specify specify k|K, m|M, or g|G. Default size is 1MB, default adapter type is 'busLogic', and default disk format is 'zeroedthick'.

--adapterType | -a [buslogic|lsilogic|ide]

Adapter type of a disk to be created. Accepts buslogic, lsilogic or ide.

--diskformat | -d

Specifies the target disk format when used with -c, -i, or -X.

For c, accepts `zeroedthick`, `eagerzeroedthick`, or `thin`.

For i, accepts `zeroedthick`, `eagerzeroedthick`, `thin`, `rdm:dev`, `rdmp:dev`, or `2gbsparse`.

For -X, accepts `eagerzeroedthick`.

--clonevirtualdisk | -i <src_file> <dest_file> --diskformat | -d <format> --adaptertype | -a <type>

Creates a copy of a virtual disk or raw disk. The copy will be in the specified disk format. Takes source disk and destination disk as arguments.

--deletevirtualdisk | -U <disk>

Deletes files associated with the specified virtual disk.

--renamevirtualdisk | -E <old_name> <new_name>

Renames a specified virtual disk.

--extendvirtualdisk | -X [-d eagerzeroedthick]

Extends the specified VMFS virtual disk to the specified length. This command is useful for extending the size of a virtual disk allocated to a virtual machine after the virtual machine has been created. However, this command requires that the guest operating system has some capability for recognizing the new size of the virtual disk and taking advantage of this new size (e.g. by updating the file system on the virtual disk to take advantage of the extra space).

On ESX/ESXi 4.0 and later, you can use `-d | --diskformat` to specify that the disk should grow in eagerzeroedthick format. You can use `-d` only with eagerzeroedthick. By default, any disk, regardless of format, is extended as zeroedthick. Extending disks to eagerzeroedthick makes sense only when these virtual disks are used for fault tolerance or clustering and have to be preallocated and zeroed out up front.

--createrdm | -r <rdm_file>

Creates a raw disk mapping, that is, maps a raw disk to a file on a VMFS file system. Once the mapping is established, the mapping file can be used to access the raw disk like a normal VMFS virtual disk. The 'file length' of the mapping is the same as the size of the raw disk that it points to.

--createrdmpassthru | -z <device> <map_file>

Creates a passthrough raw disk mapping. Once the mapping is established, it can be used to access the raw disk like a normal VMFS virtual disk. The 'file length' of the mapping is the same as the size of the raw disk that it points to.

--querydm | -q

This option is not currently supported.

--geometry | -g

Returns the geometry information (cylinders, heads, sectors) of a virtual disk.

--writezeros | -w

Initializes the virtual disk with zeros. Any existing data on the virtual disk is lost.

--inflatedisk | -j

Converts a 'thin' virtual disk to 'eagerzeroedthick'. Any data on the 'thin' disk is preserved. Any blocks that were not allocated are allocated and zeroed out.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run `vmkfstools --help` for a list of common options including connection options. The examples use single quotes around some names; use double quotes on Windows.

Create the specified file system:

For ESX/ESXi version earlier than 4.0, specify the VMHBA name:

```
vmkfstools <conn_options> -C vmfs3 -b 1m -S Test vmhba0:0:0:3
```

For ESX/ESXi version 4.0 or later, specify the device name, for example naa.xxx:

```
vmkfstools <conn_options> -C vmfs3 -b 1m -S Test naa.600601604d521c002732ff0dc122dd11:3
```

Create a virtual disk:

```
vmkfstools <conn_options> -c 2048m '[storage1] rh6.2.vmdk'
```

Rename files associated with a specified virtual disk to the specified name:

```
vmkfstools <conn_options> -E '[storage1] rh6.2.vmdk' '[storage1] testing2.vmdk'
```

Get the geometry information (cylinders, heads, and sectors) of a virtual disk:

```
vmkfstools <conn_options> -g '[storage1] testing2.vmdk'
```

Delete an existing virtual disk:

```
vmkfstools <conn_options> -U '[storage1] testing2.vmdk'
```

Shrink the size of the virtual disk:

```
vmkfstools <conn_options> -s '[storage1] rh6.2.vmdk'
```

Extend the virtual disk to specified size, the extended region of the disk grows in eagerzeroedthick format:

```
vmkfstools <conn_options> -X 1g -d eagerzeroedthick '[storage1] rh6.2.vmdk'
```

Initialize the virtual disk with zeros:

```
vmkfstools <conn_options> -w '[storage1] rh6.2.vmdk'
```

vmware-cmd - perform virtual machine operations

SYNOPSIS

General Options

```
vmware-cmd [--help | -q | -v]
```

Server Operations

```
vmware-cmd -s <conn_option>
  [-l |
   -s register <config_file_path> [<datacenter>] [<resource_pool>] |
   -s unregister <config_file_path> ]
```

Virtual Machine Operations

```
vmware-cmd <conn_option> <config_file_path>
   [answer |
    connectdevice <device_name> |
    createsnapshot <name> <description> quiesce [0|1] memory [0|1] |
    disconnectdevice <device_name> |
    getconfigfile |
    getguestinfo <variable> |
    getproductinfo [product|platform|build|majorversion|minorversion] |
    getstate |
    gettoolslastactive |
    getuptime |
    hassnapshot |
    reset [soft|hard] |
    removesnapshots
    revertsnapshot |
    setguestinfo <variable> <value> |
    start |
    suspend [soft|hard] ]
```

DESCRIPTION

vmware-cmd provides an interface to perform operations on a virtual machine. You can retrieve information such as the power state, register and unregister the virtual machine, set configuration variables, and manage snapshots.

OPTIONS

CONNECTION OPTIONS

The vmware_cmd vSphere CLI command connection options differ from those of most other vSphere CLI commands.

-H <host>

Specifies an ESX/ESXi host or a vCenter Server system.

-h | --vihost <esx_host>

Specifies a target host if the host specified by -H <host> is a vCenter Server system.

-O <port>

Specifies an alternative port. Default is 443

-U <user_name>

Name of the user who connects to the target. This user must have privileges to perform the operation.

-P <password>

Password of the user specified by <username>. Required if a user is specified.

--config <connection_config_file>

Location of a configuration file that specifies connection information.

--credstore <cred_store>

Name of a credential store file.

--sessionfile <session_file>

Name of a session file that was saved earlier using the vSphere SDK for Perl session/save_session.pl script.

--passthroughauth <passthroughauth>

If you specify this option, the system attempts to connect using Microsoft Windows Security Support Provider Interface (SSPI).

GENERAL OPTIONS

--help

Prints a help message for each command-specific and each connection option. Calling the script with no arguments or with --help has the same effect.

-q

Turns on quiet mode with minimal output.

-v

Turns on verbose mode.

OPERATIONS

The following operations require that you specify the path to the virtual machine configuration file. Choose one of the following formats:

Datastore prefix style: `[ds_name] <relative_path>`

For example:

'[myStorage1] testvms/VM1/VM1.vmx' (Linux)

"[myStorage1] testvms\VM1\VM1.vmx" (Windows)

UUID-based path: `folder/subfolder/file`

For example:

'/vmfs/volumes/mystorage/testvms/VM1/VM1.vmx' (Linux)

"/vmfs/volumes/mystorage/testvms/VM1/VM1.vmx" (Windows)

SERVER OPERATIONS

-l

Lists all registered virtual machines.

-s register <config_file_path[<datacenter>] [<resource_pool>]

Registers a virtual machine.

If -H specifies a vCenter Server system, you must specify the datacenter and the resource pool to register the virtual machine in. The default datacenter is ha-datacenter and the default resource pool is Resources.

If -H specifies an ESX/ESXi system, you usually do not specify the resource pool and datacenter. However, if two virtual machines with the same name exist in two resource pools, you must specify the resource pool.

-s unregister

Unregisters a virtual machine.

VIRTUAL MACHINE OPERATIONS

<config_file_path> answer

Prompts the user to answer a question for a virtual machine waiting for user input.

connectdevice <config_file_path> <device_name>

Connects a virtual device to a virtual machine.

<config_file_path> createsnapshot <name> <description> quiesce 0|1 memory 0|1

Creates a snapshot of the specified virtual machine, providing a name and description for the snapshot.

If the <quiesce> flag is 1 and the virtual machine is powered on when the snapshot is taken, VMware Tools is used to quiesce the file system in the virtual machine. Quiescing a file system is a process of bringing the on-disk data of a physical or virtual computer into a state suitable for backups. This process might include such operations as flushing dirty buffers from the operating system's in-memory cache to disk, or other higher-level application-specific tasks.

If the <memory> flag is 1, a dump of the internal state of the virtual machine is included in the snapshot. Memory snapshots take longer to create.

<config_file_path> disconnectdevice

Disconnects the specified virtual device from the virtual machine.

<config_file_path> getconfigfile

Returns a string containing the name of the virtual machine configuration file. This command fails if the virtual machine is not connected.

<config_file_path> getguestinfo

Retrieves the value for a GuestInfo variable. The variable contains the attributes of the guest operating system of a virtual machine. For example, you can run the following command to retrieve the IP address of a virtual machine: vmware-cmd <config_file-path> getguestinfo ip You usually use this command when VMware Technical Support or a VMware Knowledge Base article instruct you to do so.

<config_file_path> getproductinfo

Returns information about the product, where <prodinfo> is product, platform, build, majorversion (product major version number), or minorversion (product minor version number). If product is specified, the return value is one of the following:

```
esx -- VMware ESX
embeddedESX -- VMware ESXi
unknown (unknown product type)
```

If platform is specified, the return value is one of the following:

```
win32-x86 -- x86-based Windows system
linux-x86 -- x86-based Linux system
```

```
vmnix-x86 -- x86 ESX/ESXi microkernel
```

<config_file_path> getstate

Retrieves the execution state of a virtual machine. The state can be on, off, suspended, or unknown.

<config_file_path> gettoolslastactive

Returns an integer indicating how much time has passed, in seconds, since the last heartbeat was detected from the VMware Tools service. This value is initialized to zero when the virtual machine powers on. It stays at zero until the first heartbeat is detected. After the first heartbeat, the value is always greater than zero until the virtual machine is power cycled again. The command can return one of the following:

- 0 -- VMware Tools are not installed or not running.
- 1 -- Guest operating system is responding normally.
- 5 -- Intermittent heartbeat. There might be a problem with the guest operating system.
- 100 -- No heartbeat. Guest operating system might have stopped responding

<config_file_path> getuptime

Returns the uptime (in seconds) of the guest operating system on the virtual machine.

<config_file_path> hassnapshot

Returns 1 if the virtual machine already has a snapshot. Returns 0 otherwise.

<config_file_path> removesnapshots

Removes all snapshots belonging to the virtual machine. If no snapshot exists, does nothing.

<config_file_path> reset [soft|hard]

Shuts down, and then reboots a virtual machine. The powerop_mode can be hard or soft. Default is soft.

<config_file_path> revertsnapshot

Reverts the virtual machine to the current snapshot. If no snapshot exists, does nothing and leaves the virtual machine state unchanged.

<config_file_path> setguestinfo<variable> <value>

Writes a GuestInfo variable into memory. This is an advanced command. You usually use this command when VMware Technical Support or a VMware Knowledge Base article instruct you to do so.

<config_file_path> start

Powers on a previously powered-off virtual machine or resumes a suspended virtual machine.

<config_file_path> stop

Shuts down and powers off a virtual machine. The powerop_mode can be hard or soft. Default is soft.

<config_file_path> suspend [soft|hard]

Suspends a virtual machine. The default powerop_mode is soft.

EXAMPLES

The following examples assume you are specifying connection options, either explicitly or, for example, by specifying the server, user name, and password. Run vmware-cmd --help for a list of common options including connection options.

SERVER OPERATIONS

List all the registered virtual machines:

```
vmware-cmd <connection_options> -l
```

Register a virtual machine:

```
vmware-cmd <connection_options>
   -s register /vmfs/volumes/storage1/MyVM/MyVM.vmx
```

Unregister a virtual machine:

```
vmware-cmd <connection_options>
   -s unregister /vmfs/volumes/storage1/MyVM/MyVM.vmx
```

VIRTUAL MACHINE OPERATIONS

Get the execution state of a virtual machine:

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx getstate
```

Power on a virtual machine with 'soft' power mode (requires VMware Tools):

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx start soft
```

Power on a virtual machine with 'hard' power mode:

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx start hard
```

Set a guest info variable for a virtual machine:

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx setguestinfo VarABC 102
```

Retrieve the value for a guest info variable for a virtual machine:

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx getguestinfo VarABC
```

Get the platform information:

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx getproductinfo platform
```

Get the build information:

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx getproductinfo build
```

Connect a virtual CD/DVD drive to a virtual machine:

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx connectdevice "CD/DVD Drive 2"
```

Disconnect a virtual CD/DVD drive from a virtual machine:

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx disconnectdevice "CD/DVD Drive 2"
```

Retrieve the path to the configuration file for a virtual machine:

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx getconfigfile
```

Retrieve the uptime of a virtual machine's guest OS:

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx getuptime
```

Answer a question for a virtual machine requesting input:

```
vmware-cmd <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx answer
```

Retrieve the VMware tools status:

```
vmware-cmd -U <connection_options>
   /vmfs/volumes/storage1/MyVM/MyVM.vmx gettoolslastactive
```

DATACENTER OPERATIONS

You can perform any of the datacenter operations on a vCenter Server system by specifying the vCenterServer system using the `-H` option and the ESX/ESXi host using the `--vihost | -h` option. To register a virtual machine on a vCenter Server system, you have to specify the datacenter and resource pool name. For example:

Register a virtual machine.

```
vmware-cmd -U <myuser> -P <mypassword> -H VCServerABC --vihost ESXHost
   -s register /vmfs/volumes/storage1/MyVM/MyVM.vmx DatacenterA PoolC
```

Get the execution state of a virtual machine.

```
vmware-cmd -U <myuser> -P <mypassword> -H VCServerABC -h ESXHost
   /vmfs/volumes/storage1/MyVM/MyVM.vmx getstate
```

Get the product information.

```
vmware-cmd -U <myuser> -P <mypassword> -H VCServerABC --vihost ESXHost
   /vmfs/volumes/storage1/MyVM/MyVM.vmx getproductinfo product
```

Determine if the virtual machine has snapshot.

```
vmware-cmd -U <myuser> -P <mypassword> -H VCServerABC -h ESXHost
   /vmfs/volumes/storage1/MyVM/MyVM.vmx hassnapshot
```

Create a snapshot.

```
vmware-cmd -U <myuser> -P <mypassword> -H VCServerABC -h ESXHost
   /vmfs/volumes/storage1/MyVM/MyVM.vmx createsnapshot  <name> <description>
      <quiesce> <memory>
```

Revert the virtual machine to the last snapshot.

```
vmware-cmd -U <myuser> -P <mypassword> -H VCServerABC -h ESXHost
   /vmfs/volumes/storage1/MyVM/MyVM.vmx revertsnapshot
```

Remove all the snapshots of virtual machine

```
vmware-cmd -U <myuser> -P <mypassword> -H VCServerABC -h ESXHost
   /vmfs/volumes/storage1/MyVM/MyVM.vmx removesnapshots
```