



ESXCLI Commands

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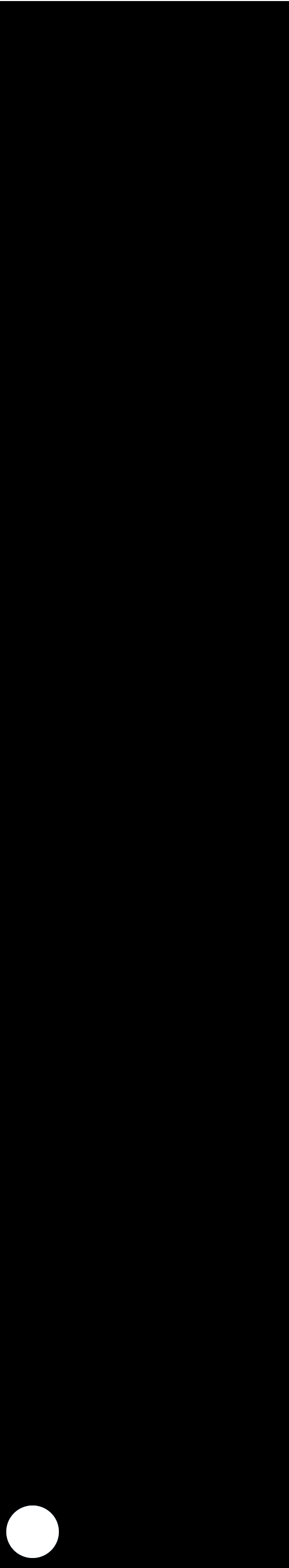
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esxcli storage Commands

Command	Description	Options Help
storage core adapter list	List all the SCSI Host Bus Adapters on the system.	--help 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. --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 This option is deprecated as no filesystem scan is performed by default --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. --help Show the help message.
storage core adapter capabilities list	List the capabilities of the SCSI HBAs in the system.	--adapter -a Limit the capabilities output to one adapter --help Show the help message.
storage core adapter device list	List the devices associated with HBAs.	--adapter -A Limit the output to one or more adapter(s). --help Show the help message.
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 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]. NVMe devices will not be claimed by Filter/VAAI plugins. --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. (required) --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. --help Show the help message.
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. (required) --help 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	--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.

	<p>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.</p>	<p>--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.</p> <p>--claimrule-class -c Indicate the claim rule class to use in this operation [MP, Filter]. NVMe devices will not be claimed by Filter/VAAI plugins.</p> <p>--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.</p> <p>--driver -D If the --type parameter is 'driver' attempt to unclaim all paths provided by a specific HBA driver.</p> <p>--lun -L If the --type parameter 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. If passed, this value must not be higher than the value of the advanced config option /Disk/MaxLUN</p> <p>--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.</p> <p>--path -p If the --type parameter is 'path' attempt to unclaim a specific path given its path UID or runtime name.</p> <p>--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.</p> <p>--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.</p> <p>--type -t Indicate the type of unclaim you wish to perform. Valid values for this paramter are [location, path, driver, device, plugin, vendor] (required)</p> <p>--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.</p> <p>--help Show the help message.</p>
storage core claimrule add	<p>Add a claimrule to the set of claimrules on the system.</p>	<p>--adapter -A Indicate the adapter of the paths to use in this operation.</p> <p>--autoassign -u The system will auto assign a rule id.</p> <p>--channel -C Indicate the channel of the paths to use in this operation.</p> <p>--claimrule-class -c Indicate the claim rule class to use in this operation [MP, Filter, VAAI]. NVMe devices will not be claimed by Filter/VAAI plugins.</p> <p>--config-string -g Input parameter string for multi path plugins that can include one or more comma separated key-value pairs without spaces in between. e.g. key1=value1,key2=value2. If plugin is HPP, the path selection scheme can be configured with same options available through 'esxcli storage hpp device set' without '--' prefix. Device can be marked local, remote, SSD using options 'mark-device-local=true', 'mark-device-remote=true', 'mark-device-ssd=true'.</p> <p>--device -d Indicate the Device Uid to use for this operation.</p> <p>--driver -D Indicate the driver of the paths to use in this operation.</p> <p>--force -f Force claim rules to ignore validity checks and install the rule anyway.</p> <p>--force-reserved Override protection of reserved rule id ranges.</p> <p>--if-unset Execute this command if this advanced user variable is not set to 1</p> <p>--iqn -i Indicate the iSCSI Qualified Name for the target to use in this operation.</p> <p>--lun -L</p>



		<p>Indicate the LUN of the paths to use in this operation. It must not be higher than the value of the advanced config option /Disk/MaxLUN</p> <p>--model -M Indicate the model of the paths to use in this operation.</p> <p>--nvme-controller-model NVMe controller model for the device. This option is specific to NVMe devices. Value can be partial string as prefix ending with wildcard '*' e.g. abcd*. If this option is specified then --vendor/--model and --pci-vendor-id/--pci-sub-vendor-id should not be specified. This option is applicable for claimrule class 'MP'.</p> <p>--pci-sub-vendor-id PCI sub vendor identifier for the device. The value should be hexadecimal number. For example, if PCI sub vendor ID is '0x8086' then '8086' should be provided as input. This option should be specified in combination with --pci-vendor-id and applicable in case of claimrule class 'MP'.</p> <p>--pci-vendor-id PCI vendor identifier for the device. The value should be hexadecimal number. For example, if PCI vendor ID is '0x8086' then '8086' should be provided as input. --pci-sub-vendor-id can be specified along with this option. --vendor, --model or --nvme-controller-model options should not be specified with this option. This option is applicable for claimrule class 'MP'.</p> <p>--plugin -P Indicate which PSA plugin to use for this operation. (required)</p> <p>--rule -r Indicate the rule ID to use for this operation.</p> <p>--target -T Indicate the target of the paths to use in this operation.</p> <p>--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, fcoe, pcie, rdma, unknown]</p> <p>--type -t Indicate which type of matching used for claim/unclaim or claimrule. Valid values are: [vendor, location, driver, transport, device, target] (required)</p> <p>--vendor -V Indicate the vendor of the paths to use in this operation. If this option is specified then --nvme-controller-model and --pci-vendor-id/--pci-sub-vendor-id should not be specified.</p> <p>--wwnn Indicate the World-Wide Node Number for the target to use in this operation.</p> <p>--wwpn Indicate the World-Wide Port Number for the target to use in this operation.</p> <p>--xcopy-max-transfer-size -m Maximum transfer size in MB to use for XCOPY commands if admin wants to use a transfer size different than array reported. This option only takes effect when --xcopy-use-array-values is specified. This option is deprecated. Use --xcopy-max-transfer-size-kib instead</p> <p>--xcopy-max-transfer-size-kib -k Maximum transfer size in KiB to use for XCOPY commands if admin wants to use a transfer size different than array reported. This option only takes effect when --xcopy-use-array-values is specified. This option takes precedence over --xcopy-max-transfer-size option</p> <p>--xcopy-use-array-values -a Use array reported values for XCOPY commands.</p> <p>--xcopy-use-multi-segs -s Use multiple segments for XCOPY commandsThis option only takes effect when --xcopy-use-array-values is specified.</p> <p>--help Show the help message.</p>
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 carefully, then if the suggested LUN mask claim rules are correct use the --commit parameter to write the list to the config file.	<p>--commit -C Force LUN mask config changes to be saved. If this parameter is omitted, config file changes will not be saved.</p> <p>--help Show the help message.</p>
storage core claimrule list	List all the claimrules on the system.	<p>--claimrule-class -c Indicate the claim rule class to use in this operation [MP, Filter, VAAI, all]. NVMe devices will not be claimed by Filter/VAAI plugins.</p> <p>--help Show the help message.</p>
storage core claimrule load	Load path claiming rules from config file into the VMkernel.	<p>--claimrule-class -c Indicate the claim rule class to use in this operation [MP, Filter, VAAI, all]. NVMe devices will not be claimed by Filter/VAAI</p>

		<p>plugins.</p> <p>--help Show the help message.</p>
storage core claimrule move	Move a claimrule from one rule id to another	<p>--claimrule-class -c Indicate the claim rule class to use in this operation [MP, Filter, VAAI]. NVMe devices will not be claimed by Filter/VAAI plugins.</p> <p>--force-reserved Override protection of reserved rule id ranges.</p> <p>--new-rule -n Indicate the new rule id you wish to apply to the rule given by the --rule parameter. (required)</p> <p>--rule -r Indicate the rule ID to use for this operation. (required)</p> <p>--help Show the help message.</p>
storage core claimrule remove	Delete a claimrule to the set of claimrules on the system.	<p>--claimrule-class -c Indicate the claim rule class to use in this operation [MP, Filter, VAAI]. NVMe devices will not be claimed by Filter/VAAI plugins.</p> <p>--plugin -P Indicate the plugin to use for this operation.</p> <p>--rule -r Indicate the rule ID to use for this operation.</p> <p>--help Show the help message.</p>
storage core claimrule run	Execute path claiming rules.	<p>--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.</p> <p>--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.</p> <p>--claimrule-class -c Indicate the claim rule class to use in this operation [MP, Filter]. NVMe devices will not be claimed by Filter/VAAI plugins.</p> <p>--device -d Indicate the Device Uid to use for this operation.</p> <p>--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.</p> <p>--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.</p> <p>--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.</p> <p>--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]</p> <p>--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.</p> <p>--help Show the help message.</p>
storage core device list	List the devices currently registered with the PSA.	<p>--device -d Filter the output of this command to only show a single device.</p> <p>--exclude-offline -o If set this flag will exclude the offline devices</p> <p>--pe-only -p If set this flag will list the mount points of pe type.</p> <p>--skip-slow-fields Do not show the value of some fields that need more time to fetch. The output will show the value <i>skipped</i> for such fields.</p> <p>--help Show the help message.</p>
storage core device purge	Removes storage devices which have not been seen in some time interval.	<p>--force -f Purge the LUNs that are not in active state.</p> <p>--interval -i Timeout interval (in days) for storage device removal. If a storage device has not been seen for the specified number of</p>

		<p>days, it will be removed. If not specified, the advanced setting '/Scsi/LunCleanupInterval' will be used (see esxcli system settings advanced list and esxcli system settings advanced set).</p> <p>--help Show the help message.</p>
storage core device set	Provide control to allow a user to modify a SCSI device's state.	<p>--data-integrity-enabled -I Enable / Disable device data integrity 0 -> Protection disabled 1 -> Protection enabled.Please refer to ESX release notes for more Information</p> <p>--default-name -D Set the default display name for the device. If there is an existing user defined name it will be changed.</p> <p>--device -d The device upon which to operate. This can be any of the UIDs that a device reports. (required)</p> <p>--force -f Force the device state to be set.</p> <p>--led-duration -L Set the duration of LED in seconds. If not specified, use maximum duration that hardware can support.</p> <p>--led-state -l Set the disk LED state. Valid values are: error: Turn on error LED. locator: Turn on locator LED. off: Turn off LED.</p> <p>--max-queue-depth -m Set device's max queue depth.</p> <p>--name -n The new name to assign the given device.</p> <p>--no-persist -N Set device state non-persistently; state is lost after reboot.</p> <p>--queue-full-sample-size -s Set device's queue full sample size. IO samples to monitor for detecting non-transient queue full condition. Should be non zero to enable queue depth throttling.</p> <p>--queue-full-threshold -q Set device's queue full threshold. BUSY or QFULL threshold,upon which LUN queue depth will be throttled. Should be <= queue-full-sample-size if throttling is enabled.</p> <p>--sched-num-req-outstanding -O Set number of outstanding IOs with competing worlds.</p> <p>--state Set the SCSI device state for the specific device given. Valid values are : off: Set the device's state to OFF. on: Set the device's state to ON.</p> <p>--write-cache-enabled -w Set device's write cache state.</p> <p>--help Show the help message.</p>
storage core device setconfig	Set device configuration	<p>--detached Mark device as detached.</p> <p>--device -d The device upon which to operate. This can be any of the UIDs that a device reports. (required)</p> <p>--perennially-reserved Mark device as perennially reserved.</p> <p>--shared-clusterwide Mark device as not shared clusterwide.</p> <p>--help Show the help message.</p>
storage core device capacity list	List capacity information for the known storage devices.	<p>--device -d Limit the output to a specific device.</p> <p>--help Show the help message.</p>
storage core device detached list	Lists all devices that were detached manually by changing their state on the system.	<p>--device -d Filter the output of the command to limit the output to a specific device.</p> <p>--help Show the help message.</p>
storage core device detached remove	Provide control to allow a user to remove Detached devices from the persistent detached device list.	<p>--all -a If set, all devices will be removed from the Detached Device List.</p> <p>--device -d Select the detached device to remove from the Detached Device List.</p> <p>--help Show the help message.</p>

storage core device inquirycache list	List inquiry cache information for the known storage devices.	--device -d Limit the output to a specific device. --help Show the help message.
storage core device inquirycache set	Manipulate inquiry cache settings of storage devices.	--apply-all Operate on all existing devices. --device -d NAA ID of the device upon which to operate. --ignore Ignore device inquiry cache. (required) --help Show the help message.
storage core device latencythreshold list	List latency sensitive threshold for the known storage devices.	--device -d Limit the output to a specific device. --help Show the help message.
storage core device latencythreshold set	Set latency sensitive threshold for devices. This option is applicable only for devices claimed by HPP. The device(s) can be selected based on the mutually exclusive parameters device name, vendor/model, NVMe controller model (For NVMe devices), PCIe vendor ID/PCIe sub vendor ID. See the examples for more details.	--device -d Select the device by its device name. --latency-sensitive-threshold -t Set device's latency sensitive threshold (in milliseconds). If IO latency exceeds the threshold, new IOs will use the default IO scheduler. (required) --model -m Select the devices based on model in addition to its vendor. Select by model prefix if the value ends with '*'. Only valid with option --vendor. --nvme-controller-model -c Select the NVMe devices based on NVMe controller model. Select by NVMe controller model prefix if the value ends with '*'. Controller model for a NVMe device can be found in 'Model' field under 'storage core device list' output. --pci-sub-vendor-id -s Select the devices based on PCI sub vendor ID in addition to its PCI vendor ID. This is a hexadecimal number without leading '0x'. --pci-vendor-id -p Select the devices based on PCI vendor ID. This is a hexadecimal number without leading '0x'. --pci-sub-vendor-id can be specified with this option --vendor -v Select the devices based on vendor. Select by vendor prefix if the value ends with '*'. --model can be specified along with this option. --help 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 Show the help message.
storage core device partition showguid	For a given device list the GUID for GPT partitions	--device -d Filter the output to a specific device. --help Show the help message.
storage core device physical get	Get information about a physical storage device.	--device -d Specify a device name. (required) --help Show the help message.
storage core device raid list	List the physical devices that compose a given logical device.	--device -d Specify a device name. (required) --help Show the help message.
storage core device smart get	List Smart device parameters.	--device-name -d The Smart device name (required) --help Show the help message.
storage core device smart daemon start	Enable smartd.	--help Show the help message.
storage core device smart daemon stop	Disable smartd.	--help Show the help message.
storage core device smart daemon status get	Get status of smartd.	--help Show the help message.

storage core device smart status get	Get status of SMART stats on a device.	--device-name -d The SMART device name. (required) --help Show the help message.
storage core device smart status set	Enable or disable SMART stats gathering on a device.	--device-name -d The SMART device name. (required) --enabled -e Enable or disable SMART stats gathering. (required) --help Show the help message.
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 Show the help message.
storage core device uidmap list	Get a mapping between a device's primary UID and the alternative UIDs for that device on the system.	--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 Show the help message.
storage core device vaai ats list	List the ATS VAAI attributes (as per SCSI standard) for the devices.	--device -d Filter the output of this command to only show a single device. --help Show the help message.
storage core device vaai clone list	List the Clone VAAI attributes (as per SCSI standard) for the devices.	--device -d Filter the output of this command to only show a single device. --help Show the help message.
storage core device vaai delete list	List the Delete VAAI attributes (as per SCSI standard) for the devices.	--device -d Filter the output of this command to only show a single device. --help 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 Show the help message.
storage core device vaai status set	Enable/Disable VAAI operations on local SCSI disks. (NOTE: A request to enable an operation will take effect only if the underlying device supports the VAAI operation.)	--ats -A Enable or Disable ATS operation (1/0) --clone -C Enable or Disable CLONE operation (1/0) --delete -D Enable or Disable DELETE operation (1/0) --device -d The device upon which to operate (NAA ID). (required) --zero -Z Enable or Disable ZERO operation (1/0) --help Show the help message.
storage core device vaai zero list	List the Zero VAAI attributes (as per SCSI standard) for the devices.	--device -d Filter the output of this command to only show a single device. --help 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 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. --path -p Limit the output to a specific path. This name can be either the UID or the runtime name of the path. --help Show the help message.
storage core path set	Provide control to allow a user to modify a single path's state. This effectively 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 -p Select the path to set path state on. This can be a Runtime Name or Path UID (required) --state Set the SCSI path state for the specific path given. Valid values are : active: Set the path's state to active. This may be

	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.	immediately changed by the system to another state if the active state is not appropriate. off: Administratively disable this path. (required) --help Show the help message.
storage core path stats get	List the SCSI stats for the SCSI Paths in the system.	--path -p Limit the stats output to one specific path. This path name can be the runtime name or the path UID. --help Show the help message.
storage core plugin list	List loaded PSA plugins on the system.	--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) --help Show the help message.
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 --module-name -m Select the module name to be registered (required) --plugin-class -N Indicate the class of plugin to register. Allowed values are MP, VAAI or MPP defined subplugins like PSP, SATP. (required) --plugin-name -P Select the plugin name to be registered (required) --help Show the help message.
storage core plugin registration list	List modules currently registered with PSA.	--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. --help Show the help message.
storage core plugin registration remove	UnRegister a plugin module with PSA.	--module-name -m Select the module name to be unregistered (required) --help Show the help message.
storage filesystem automount	Request mounting of known datastores not explicitly unmounted.	--help Show the help message.
storage filesystem list	List the volumes available to the host. This includes VMFS, NAS, VFAT and UFS partitions.	--ignore-errors -i Ignore errors encountered (if any) while retrieving information for each file system. --uuid -u Only show information for the filesystem with the specified UUID. --help Show the help message.
storage filesystem mount	Connect to and mount an unmounted volume on the ESX host.	--no-persist -n Mount the volume non-persistently; 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. --help Show the help message.
storage filesystem rescan	Scan storage devices for new mountable filesystems.	--help 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.	--no-persist -n Unmount the volume non-persistently; the volume will be automounted after a restart. --unmount-all-vmfs -a Unmount all vmfs volumes. --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.

		<div><div>--help</div><div>Show the help message.</div></div>
storage hpp device list	List the devices currently controlled by the VMware High Performance Plugin.	<div><div>--device -d</div><div>Filter the output of this command to only show a single device.</div><div>--help</div><div>Show the help message.</div></div>
storage hpp device set	Configure settings for an HPP device.	<div><div>--bytes -B</div><div>Maximum bytes on the path after which the path will be switched.</div><div>--cfg-file</div><div>Update the config file and runtime with the new setting. In case device is claimed by another PSS, ignore any errors when applying to runtime configuration.</div><div>--device -d</div><div>The HPP device upon which to operate. This can be any of the UUIDs that a device reports. (required)</div><div>--iops -I</div><div>Maximum IOPS on the path after which the path will be switched.</div><div>--latency-eval-time -T</div><div>Interval at which the latency of paths is evaluated (in ms).</div><div>--mark-device-ssd -M</div><div>Set whether or not HPP should treat the device as an SSD.</div><div>--path -p</div><div>The path you wish to set as the preferred path for the given device.</div><div>--pss -P</div><div>The path selection scheme you wish to assign to the given device. One of the following options can be specified as input. Default values will be chosen for unspecified options. FIXED: Fixed path is chosen for the I/Os. Preferred path can be specified using --path option. LB-BYTES: Load Balance - Bytes scheme selects optimal path having least outstanding bytes. - -bytes option can be specified as input. LB-IOPS: Load Balance - IOPS scheme selects optimal path having least outstanding I/Os. --iops option can be specified as input. LB-Latency: Load Balance - Latency scheme selects optimal path having least latency. --latency-eval-time and/or --sampling-ios-per-path options can be specified as input. LB-RR: [Default] Load Balance - Round Robin scheme chooses path in round robin manner based on IOPS and bytes count. --iops and/or --bytes options can be specified as input. This is the default path selection scheme for the device. default: Default scheme[LB-RR] for the device.</div><div>--sampling-ios-per-path -S</div><div>Number of I/Os to be issued on each path to calculate the latency on the path</div><div>--help</div><div>Show the help message.</div></div>
storage hpp device usermarkedssd list	List the devices that were marked as SSD by user.	<div><div>--device -d</div><div>Filter the output of the command to limit the output to a specific device.</div><div>--help</div><div>Show the help message.</div></div>
storage hpp path list	List the paths currently claimed by the VMware High Performance Plugin	<div><div>--device -d</div><div>Filter the output of this command to only show info for a single device.</div><div>--path -p</div><div>Filter the output of this command to only show a single path.</div><div>--help</div><div>Show the help message.</div></div>
storage iofilter enable	Enable an iofilter.	<div><div>--filter -f</div><div>Name of the iofilter. (required)</div><div>--help</div><div>Show the help message.</div></div>
storage iofilter list	List the iofilters installed on this host.	<div><div>--filter -f</div><div>Filter the output of this command to only show a single iofilter.</div><div>--help</div><div>Show the help message.</div></div>
storage nfs add	Add a new NAS volume to the ESX Host and mount it with the given volume name.	<div><div>--host -H</div><div>The hostname or IP address of the NAS volume to add and mount on the system. (required)</div><div>--ispe -p</div><div>If set this flag will set the mount point to be PE.</div><div>--readonly -r</div><div>If set this flag will set the mount point to be read-only.</div><div>--share -s</div><div>The share name on the remote system to use for this NAS mount point. (required)</div><div>--volume-name -v</div></div>

		<p>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. (required)</p> <p>--help Show the help message.</p>
storage nfs list	List the NAS volumes currently known to the ESX host.	<p>--pe-only -p Filter the output to only show VVol PE volumes</p> <p>--help Show the help message.</p>
storage nfs remove	Remove an existing NAS volume from the ESX host.	<p>--volume-name -v The volume name of the NAS volume to remove from the ESX host. (required)</p> <p>--help Show the help message.</p>
storage nfs param get	Get the volume parameters of the NAS volumes.	<p>--volume-name -v NAS volume name("all" to list all). (required)</p> <p>--help Show the help message.</p>
storage nfs param set	Set the volume parameters of the NAS volumes.	<p>--maxqueuedepth -q The maximum queue depth for the NAS volume.</p> <p>--volume-name -v The NAS volume name. (required)</p> <p>--help Show the help message.</p>
storage nfs41 add	Add a new NFS v4.1 volume to the ESX Host and mount it with the given volume name.	<p>--hosts -H The hostname(s) or IP address(es) (comma-separated) of the server for the NFS v4.1 volume to add and mount on the system. (required)</p> <p>--ispe -p If set, this flag will set the mount point to be PE.</p> <p>--readonly -r If set, this flag will make the mount point be read-only.</p> <p>--sec -a Security flavors. Acceptable values are: [AUTH_SYS, SEC_KRB5, SEC_KRB5I].</p> <p>--share -s The share name on the remote system to use for this NFS v4.1 mount point. (required)</p> <p>--volume-name -v The volume name to use for the NFS v4.1 mount. This must be a unique volume name and cannot conflict with existing NAS, NFS v4.1, VMFS, or other volume names. (required)</p> <p>--help Show the help message.</p>
storage nfs41 list	List the NFS v4.1 volumes currently known to the ESX host.	<p>--pe-only -p Filter the output to only show VVol PE Volumes</p> <p>--help Show the help message.</p>
storage nfs41 remove	Remove an existing NFS v4.1 volume from the ESX host.	<p>--volume-name -v The volume name of the NFS v4.1 volume to remove from the ESX host. (required)</p> <p>--help Show the help message.</p>
storage nfs41 param get	Get the volume parameters of the NFS v4.1 volumes.	<p>--volume-name -v NFS v4.1 volume name("all" to list all). (required)</p> <p>--help Show the help message.</p>
storage nfs41 param set	Set the volume parameters of the NFS v4.1 volumes.	<p>--maxqueuedepth -q The maximum queue depth for the NFS v4.1 volume.</p> <p>--volume-name -v The NFS v4.1 volume name. (required)</p> <p>--help Show the help message.</p>
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.	<p>--device -d Filter the output of this command to only show a single device.</p> <p>--help Show the help message.</p>
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.	<p>--default -E The Path selection policy is set back to the default for the assigned SATP for this device.</p> <p>--device -d The device you wish to set the Path Selection Policy for. (required)</p> <p>--psp -P</p>

		<p>The Path selection policy you wish to assign to the given device.</p> <p>--help Show the help message.</p>
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.	<p>--device -d Filter the output of this command to only show paths to a single device.</p> <p>--path -p Filter the output of this command to only show a single path.</p> <p>--help Show the help message.</p>
storage nmp psp list	List the Path Selection Plugins (PSP) that are currently loaded into the NMP system and display information about those PSPs	<p>--help Show the help message.</p>
storage nmp psp fixed deviceconfig get	Allow retrieving of Fixed Path Selection Policy settings for a given device.	<p>--device -d The device you wish to get the Preferred path for. (required)</p> <p>--help Show the help message.</p>
storage nmp psp fixed deviceconfig set	Allow setting of the perferred path on a given device controlled by the Fixed Path Selection Policy.	<p>--cfgfile -g Update the config file and runtime with the new setting. In case device is claimed by another PSP, ignore any errors when applying to runtime configuration.</p> <p>--default -E Clear the preferred path selection for the given device.</p> <p>--device -d The device you wish to set the preferred path for. This device must be controlled by the Fixed Path Selection Policy(except when -g is specified) (required)</p> <p>--path -p The path you wish to set as the preferred path for the given device.</p> <p>--help Show the help message.</p>
storage nmp psp generic deviceconfig get	Allow retrieving of per device PSP configuration parameters.	<p>--device -d The device you wish to get PSP configuration for. (required)</p> <p>--help Show the help message.</p>
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.	<p>--cfgfile -g Update the config file and runtime with the new setting. In case device is claimed by another PSP, ignore any errors when applying to runtime configuration.</p> <p>--config -c The configuration string you wish to set. (required)</p> <p>--device -d The device you wish to set PSP configuration for. (required)</p> <p>--help Show the help message.</p>
storage nmp psp generic pathconfig get	Allow retrieving of per path PSP configuration parameters.	<p>--path -p The path you wish to get PSP configuration for. (required)</p> <p>--help Show the help message.</p>
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.	<p>--cfgfile -g Update the config file and runtime with the new setting. In case device is claimed by another PSP, ignore any errors when applying to runtime configuration.</p> <p>--config -c The configuration string you wish to set. (required)</p> <p>--path -p The path you wish to set PSP configuration for. (required)</p> <p>--help Show the help message.</p>
storage nmp psp roundrobin deviceconfig get	Allow retrieving of Round Robin Path Selection Policy settings for a given device.	<p>--device -d The device you wish to get the Round Robin properties for. (required)</p> <p>--help Show the help message.</p>
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.	<p>--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.</p> <p>--cfgfile -g Update the config file and runtime with the new setting. In case device is claimed by another PSP, ignore any errors when applying to runtime configuration.</p> <p>--device -d The device you wish to set the Round Robin settings for. This device must be controlled by the Round Robin Path Selection</p>

		<p>Policy(except when -g is specified) (required)</p> <p>--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.</p> <p>--latency-eval-time -T When the --type option is set to 'latency' this value can control at what interval (in ms) the latency of paths should be evaluated.</p> <p>--num-sampling-cycles -S When the --type option is set to 'latency' this value will control how many sample IOs should be issued on each path to calculate latency of the path.</p> <p>--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. latency: Set the trigger for path switching based on latency and pending IOs on path.</p> <p>--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</p> <p>--help Show the help message.</p>
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	<p>--help Show the help message.</p>
storage nmp satp set	Set the default Path Selection Policy for a given Storage Array Type Plugin (SATP).	<p>--boot -b This is a system default rule added at boot time. Do not modify esx.conf or add to host profile.</p> <p>--default-psp -P The default path selection policy to set for a given --satp (required)</p> <p>--satp -s The SATP name for the Storage Array Type Plugin on which this command will operate. (required)</p> <p>--help Show the help message.</p>
storage nmp satp generic deviceconfig get	Allow retrieving of per device SATP configuration parameters.	<p>--device -d The device you wish to get SATP configuration for. (required)</p> <p>--exclude-tpg-info -e Exclude TPG info from the device's SATP configuration.</p> <p>--help Show the help message.</p>
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 configured with.	<p>--config -c The configuration string you wish to set. (required)</p> <p>--device -d The device you wish to set SATP configuration for.</p> <p>--help Show the help message.</p>
storage nmp satp generic pathconfig get	Allow retrieving of per path SATP configuration parameters.	<p>--path -p The path you wish to get SATP configuration for. (required)</p> <p>--help Show the help message.</p>
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 configured with.	<p>--config -c The configuration string you wish to set. (required)</p> <p>--path -p The path you wish to set SATP configuration for. (required)</p> <p>--help Show the help message.</p>
storage nmp satp rule add	Add a rule to the list of claim rules for the given SATP.	<p>--boot -b This is a system default rule added at boot time. Do not modify esx.conf or add to host profile.</p> <p>--claim-option -c Set the claim option string when adding a SATP claim rule.</p> <p>--description -e Set the claim rule description when adding a SATP claim rule.</p> <p>--device -d Set the device when adding SATP claim rules. Device rules are mutually exclusive with vendor/model and driver rules.</p> <p>--driver -D Set the driver string when adding a SATP claim rule. Driver rules are mutually exclusive with vendor/model rules.</p> <p>--force -f Force claim rules to ignore validity checks and install the rule anyway.</p>

		<div><div><div>--model -M</div><div>Set the model string when adding SATP a claim rule. Vendor/Model rules are mutually exclusive with driver rules.</div></div><div><div><div>--option -o</div><div>Set the option string when adding a SATP claim rule.</div></div><div><div><div>--psp -P</div><div>Set the default PSP for the SATP claim rule.</div></div><div><div><div>--psp-option -O</div><div>Set the PSP options for the SATP claim rule.</div></div></div><div><div><div>--satp -s</div><div>The SATP for which a new rule will be added. (required)</div></div><div><div><div>--transport -R</div><div>Set the claim transport type string when adding a SATP claim rule.</div></div><div><div><div>--type -t</div><div>Set the claim type when adding a SATP claim rule.</div></div><div><div><div>--vendor -V</div><div>Set the vendor string when adding SATP claim rules. Vendor/Model rules are mutually exclusive with driver rules.</div></div></div><div><div><div>--help</div><div>Show the help message.</div></div></div></div></div></div></div></div></div>
storage nmp satp rule list	List the claiming rules for Storage Array Type Plugins (SATP)	<div><div><div>--satp -s</div><div>Filter the SATP rules to a specific SATP</div></div><div><div><div>--help</div><div>Show the help message.</div></div></div></div>
storage nmp satp rule remove	Delete a rule from the list of claim rules for the given SATP.	<div><div><div>--boot -b</div><div>This is a system default rule added at boot time. Do not modify esx.conf or add to host profile.</div></div><div><div><div>--claim-option -c</div><div>The claim option string for the SATP claim rule to delete.</div></div><div><div><div>--description -e</div><div>The desription string for the SATP claim rule to delete.</div></div><div><div><div>--device -d</div><div>The device for the SATP claim rule to delete</div></div><div><div><div>--driver -D</div><div>The driver string for the SATP claim rule to delete.</div></div><div><div><div>--force -f</div><div>Ignore validity checks and remove the rule anyway.</div></div><div><div><div>--model -M</div><div>The model string for the SATP claim rule to delete.</div></div><div><div><div>--option -o</div><div>The option string for the SATP claim rule to delete.</div></div><div><div><div>--psp -P</div><div>The default PSP for the SATP claim rule to delete.</div></div><div><div><div>--psp-option -O</div><div>The PSP options for the SATP claim rule to delete.</div></div><div><div><div>--satp -s</div><div>The SATP for which a rule will be deleted. (required)</div></div><div><div><div>--transport -R</div><div>The transport type for the SATP claim rule to delete.</div></div><div><div><div>--type -t</div><div>Set the claim type when adding a SATP claim rule.</div></div><div><div><div>--vendor -V</div><div>The vendor string for the SATP claim rule to delete</div></div></div><div><div><div>--help</div><div>Show the help message.</div></div></div></div></div></div></div></div></div></div></div></div></div></div></div></div>
storage san fc list	List attributes of all FC adapters on the system.	<div><div><div>--adapter -A</div><div>FC adapter name (vmhbaX), or none, to list all.</div></div><div><div><div>--help</div><div>Show the help message.</div></div></div></div>
storage san fc reset	Perform LIP (Loop Initiation Primitive) Reset to a given FC adapter on the system.	<div><div><div>--adapter -A</div><div>Issue LIP Reset command to given Fibre Channel HBA. (required)</div></div><div><div><div>--help</div><div>Show the help message.</div></div></div></div>
storage san fc events clear	Clear events for a given FC adapter on the system.	<div><div><div>--adapter -A</div><div>Issue Clear Event command to specified Fibre Channel HBA. (required)</div></div><div><div><div>--help</div><div>Show the help message.</div></div></div></div>
storage san fc events get	Get Events for FC Devices	<div><div><div>--adapter -A</div><div>FC adapter name (vmhbaX), or none, to retrieve all.</div></div><div><div><div>--help</div><div>Show the help message.</div></div></div></div>
storage san fc stats get	Get statistics for a given FC adapter, or all FC adapters on the system.	<div><div><div>--adapter -A</div><div>FC adapter name (vmhbaX), or none, to list all.</div></div></div>

		--help Show the help message.
storage san fcoe list	List attributes of all FCoE adapters on the system.	--adapter -A FCoE adapter name (vmhbaX), or none, to list all. --help Show the help message.
storage san fcoe reset	Perform LIP (Loop Initiation Primitive) Reset to a given FCoE adapter on the system.	--adapter -A Issue LIP Reset command to given hba. (required) --help Show the help message.
storage san fcoe stats get	Get statistics for a given FCoE adapter, or all FCoE adapters on the system.	--adapter -A FCoE adapter name (vmhbaX), or none, to list all. --help Show the help message.
storage san iscsi list	List attributes of all Software iSCSI adapters on the system.	--adapter -A iSCSI adapter name (vmhbaX), or none, to list all. --help Show the help message.
storage san iscsi stats get	Get statistics for Software iSCSI adapter.	--adapter -A iSCSI device name (vmhbaX), or none, to list all. --help Show the help message.
storage san sas list	List all SAS IO Device Management devices.	--adapter -A SAS adapter name (vmhbaX), or none, to list all. --help Show the help message.
storage san sas reset	Perform SAS Reset	--adapter -A Issue Reset command to given hba. (required) --help Show the help message.
storage san sas stats get	List Stats for given device, or all devices.	--adapter -A SAS adapter name (vmhbaX), or none, to list all. --fail-on-error -F Do not ignore errors when fetching stats for all devices. --help Show the help message.
storage vflash device list	List vflash SSD devices.	--eligible -e List the eligible / ineligible SSD devices for vflash. --used -u List the used / unused SSD devices for vflash. --help Show the help message.
storage vflash module get	Get vflash module info.	--module-name -m The vflash module name --help Show the help message.
storage vflash module list	List vflash modules.	--help Show the help message.
storage vflash module stats get	Get vflash module statistics	--module-name -m The vflash module name --help Show the help message.
storage vmfs unmap	Reclaim the space by unmapping free blocks from VMFS Volume	--reclaim-unit -n Number of VMFS blocks that should be unmapped per iteration. --volume-label -l The label of the VMFS volume to unmap the free blocks. --volume-uuid -u The uuid of the VMFS volume to unmap the free blocks. --help Show the help message.
storage vmfs upgrade	Upgrade a VMFS3 volume to VMFS5.	--volume-label -l The label of the VMFS volume to upgrade. --volume-uuid -u The uuid of the VMFS volume to upgrade. --help Show the help message.
storage vmfs extent list	List the VMFS extents available on the host.	--ignore-errors -i Ignore errors encountered (if any) while retrieving information for each file system.

		<div><div>--help</div><div>Show the help message.</div></div>
storage vmfs host list	List hosts accessing a particular VMFS Volume.	<div><div>--liveness -v</div><div>The type of liveness check to perform on the VMFS volume. Valid values are [none, quick] (default is none).</div><div>--volume-label -l</div><div>The label of the target VMFS volume.</div><div>--volume-uuid -u</div><div>The uuid of the target VMFS volume.</div><div>--help</div><div>Show the help message.</div></div>
storage vmfs lockmode list	List the on-disk critical section locking mode for VMFS volumes available on this host.	<div><div>--ignore-errors -i</div><div>Ignore errors encountered (if any) while retrieving information for each file system.</div><div>--volume-label -l</div><div>The label of the target VMFS volume.</div><div>--volume-uuid -u</div><div>The uuid of the target VMFS volume.</div><div>--help</div><div>Show the help message.</div></div>
storage vmfs lockmode set	Update the on-disk critical section locking mode for a particular VMFS Volume.	<div><div>--ats -a</div><div>Enable ATS-only locking.</div><div>--scsi -s</div><div>Enable SCSI locking.</div><div>--volume-label -l</div><div>The label of the target VMFS volume.</div><div>--volume-uuid -u</div><div>The uuid of the target VMFS volume.</div><div>--help</div><div>Show the help message.</div></div>
storage vmfs pbcache get	Get VMFS Pointer Block cache statistics.	<div><div>--help</div><div>Show the help message.</div></div>
storage vmfs pbcache reset	Reset the VMFS Pointer Block cache statistics.	<div><div>--help</div><div>Show the help message.</div></div>
storage vmfs reclaim config get	Get space reclamation configuration parameters	<div><div>--volume-label -l</div><div>The label of the target VMFS volume.</div><div>--volume-uuid -u</div><div>The uuid of the target VMFS volume.</div><div>--help</div><div>Show the help message.</div></div>
storage vmfs reclaim config set	Set space reclamation configuration parameters	<div><div>--reclaim-bandwidth -b</div><div>Space reclamation fixed bandwidth (MB/s)</div><div>--reclaim-granularity -g</div><div>Minimum granularity of automatic space reclamation in bytes</div><div>--reclaim-method -m</div><div>Method of automatic space reclamation. Supported options are [priority, fixed].</div><div>--reclaim-priority -p</div><div>Priority of automatic space reclamation. Supported options are [none, low, medium, high].</div><div>--volume-label -l</div><div>The label of the target VMFS volume.</div><div>--volume-uuid -u</div><div>The uuid of the target VMFS volume.</div><div>--help</div><div>Show the help message.</div></div>
storage vmfs snapshot list	List unresolved snapshots/replicas of VMFS volume.	<div><div>--volume-label -l</div><div>The VMFS volume label of the snapshot to list.</div><div>--volume-uuid -u</div><div>The VMFS volume uuid of the snapshot to list.</div><div>--help</div><div>Show the help message.</div></div>
storage vmfs snapshot mount	Mount a snapshot/replica of a VMFS volume.	<div><div>--no-persist -n</div><div>Mount the volume non-persistently; the volume will not be automounted after a restart.</div><div>--volume-label -l</div><div>The VMFS volume label of the snapshot to mount.</div><div>--volume-uuid -u</div><div>The VMFS volume uuid of the snapshot to mount.</div><div>--help</div><div>Show the help message.</div></div>
storage vmfs snapshot resignature	Resignature a snapshot/replica of a VMFS volume.	<div><div>--volume-label -l</div><div>The VMFS volume label of the snapshot to resignature.</div><div>--volume-uuid -u</div></div>

		<div>The VMFS volume uuid of the snapshot to resignature.</div> <div>--help</div> <div>Show the help message.</div>
<div>storage vmfs snapshot extent list</div>	<div>List extents of unresolved snapshots/replicas of VMFS volume.</div>	<div>--volume-label -l</div> <div>The VMFS volume label of the target snapshot to enumerate.</div> <div>--volume-uuid -u</div> <div>The VMFS volume uuid of the target snapshot to enumerate.</div> <div>--help</div> <div>Show the help message.</div>
<div>storage vvol daemon unbindall</div>	<div>Unbind all Virtual Volumes from all VASA Providers known to this host.</div>	<div>--help</div> <div>Show the help message.</div>
<div>storage vvol protocolendpoint list</div>	<div>List the VVol Protocol EndPoints currently known to this host.</div>	<div>--pe -p</div> <div>Show Protocol Endpoint (PE) information associated with the given VASA PE ID.</div> <div>--pe-type -t</div> <div>PE type to display. Acceptable values are: [SCSI, NFS, NFS4x].</div> <div>--help</div> <div>Show the help message.</div>
<div>storage vvol storagecontainer list</div>	<div>List VVol storage containers known to this host.</div>	<div>--help</div> <div>Show the help message.</div>
<div>storage vvol storagecontainer abandonedvvol scan</div>	<div>Scans the specified storage container for abandoned VVols.</div>	<div>--path -p</div> <div>Path to VVol Storage Container to scan. (required)</div> <div>--help</div> <div>Show the help message.</div>
<div>storage vvol vasacontext get</div>	<div>Get the VVol VASA Context (vCenter UUID).</div>	<div>--help</div> <div>Show the help message.</div>
<div>storage vvol vasaprovider list</div>	<div>List the VASA Providers registered on this host.</div>	<div>--help</div> <div>Show the help message.</div>

