

HPE Performance Cluster Manager Command Reference

HPE Performance Cluster Manager Release 1.8

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The cm command lines perform functions that are similar to, but not always identical to, legacy commands from SGI Management Suite and the HPE Insight Cluster Management Utility. The legacy commands are obsolete and can produce unexpected results on systems that run the HPE Performance Cluster Manager.

HPE Performance Cluster Manager cm command	Description	SGI Management Suite	HPE Insight Cluster Management Utility
cm aiops cooldev [disable enable restart start status stop]	Control AI monitoring of cooling devices (preview feature). Requires the cluster manager AIOps product to be installed.	NONE	NONE
cm aiops timescale [disable enable]	Control use of TimescaleDB in AIOps Grafana displays	NONE	NONE
cm aiops trainer [disable enable]	Control AI training model for cooling device monitoring.	NONE	NONE
cm chassis cmc firmware {show update}	Show or update firmware of a CMC	NONE	NONE
cm controller {add delete set show}	Add/show controllers, set controllers, delete controllers and associated nodes	NONE	NONE
cm cooldev {arcs cdu rdhx} {add delete show}	Add/delete/show CDU, ARCS cooling devices, or rear door heat exchanger	NONE	NONE
cm elk {gather passwd}	Gather data from kafka to elasticsearch, change elk password	NONE	NONE
cm inventory	Display hardware inventory, including FRU and dimm data	NONE	NONE
cm group archived del NAME...	Delete one or more archived groups	NONE	cmu_del_archived_custom_groups
cm group archived rename NAME NEW_NAME	Rename an archived group	NONE	cmu_rename_archived_custom_group
cm group archived show	Show archived groups	NONE	cmu_show_archived_custom_groups
cm group custom add [--pdsh-group] [--create] GROUP	Add a custom group and/or nodes to a custom group	NONE	cmu_add_custom_group cmu_change_custom_group
cm group custom del [--rename NEW_NAME] [--archive] [--minduration TIME] GROUP... [NODES]	Delete or archive custom groups, or delete nodes from a custom group	NONE	cmu_del_custom_group cmu_del_from_custom_group
cm group custom set --pdsh-groups	Set custom group settings	NONE	NONE
cm group custom show [--settings NAME]	Show all custom groups, settings, or nodes of a specific group	NONE	cmu_show_custom_groups
cm group custom unset --pdsh-groups	Unset custom group settings	NONE	NONE
cm group image	Manage image groups	NONE	NONE
cm group network add [--pdsh-group] [--create] GROUP	Add a network group and/or nodes to a network group	NONE	cmu_add_network_group cmu_change_network_group
cm group network del GROUP... [NODES]	Delete network groups or nodes from a network group	NONE	cmu_del_network_group cmu_del_from_network_group
cm group network set --pdsh-groups	Set network group settings	NONE	NONE
cm group network show [--settings NAME]	Show all network groups, settings, or nodes of a specific group	NONE	cmu_show_network_groups
cm group network unset --pdsh-groups	Unset network group settings	NONE	NONE
cm group system show [NAMES]	Show all system groups or nodes of specific groups	cnodes [--compute --ice-compute] --leader --ib-switch --mgmt-switch --switch-blade --cmc pdu}	NONE
cm health	Run functional and performance tests on nodes, manage alerts	NONE	NONE
cm image capture	Capture an image from a node	cinstallman --create-image --from-node	cmu_add_image_group --device {<device_name> diskless} cmu_capture_image
cm image copy	Make a copy of an image.	cinstallman --create-image --clone	create a new image with cmu_add_image_group and manually copy the old image to the new image group.
cm image create	Create a new image that can be deployed	cinstallman --create-image	cmu_add_image_group --device autoinstall

HPE Performance Cluster Manager cm command	Description	SGI Management Suite	HPE Insight Cluster Management Utility
cm image delete	Delete an image	installman --del-image [--del-nodes]	cmu_del_image_group
cm image dnf -i NAME [--repos REPOLIST --repo-group REPOGROUP] [--duk] ...	Perform dnf operations on an image	installman --dnf-image --image image [--repos REPOLIST --repo-group REPOGROUP] [--duk] ...	NONE
cm image recreate	Delete an image or associated miniroot and recreates it.	installman --recreate [--update-miniroot] --create-image}	NONE
cm image refresh	Refresh an image	installman [--refresh-image] --refresh-bt}	NONE
cm image rpmlist	Create a new RPM list from an image or from a running node.	NONE	NONE
cm image revision commit	Commit an image into the version control system	installman --comit --image [--msg]	NONE
cm image revision delete	Delete all stored revisions of an image, leaving just the working copy	installman --del-revisions --image	NONE
cm image revision diff-contents	Show file content differences of an image and one of its revisions	installman --idiff --image [--rev] [--diff-tool] [--file]	NONE
cm image revision diff-versions	Show which files differ between an image and one of its revisions	installman --changed --image [--rev][--cmp-tool]	NONE
cm image revision diff	Show which files differ between two images or an image and the installed image on a node	installman --diff --image [--node] --source][--file]	NONE
cm image revision history	Show revision history for an image	installman --history --image [--rev]	NONE
cm image revision revert	Revert the working copy of image to a specific revision.	installman --revert --image [--rev] [--duk]	NONE
cm image set	Set image properties	cadmin --image IMAGE --set* installman --image IMAGE --set*	NONE
cm image show	Show image properties	installman --show-images [--image IMAGE] installman --show-nodes	cmu_show_image_groups
cm image unset	Un-set image properties	cadmin --image IMAGE --unset* installman --image IMAGE --unset*	NONE
cm image update	Update an image or its related elements	installman --image [--update-kernels] --commit-msg --update-miniroot --update-image] [--repos REPOS --repo-group REPO GROUP] [--duk]	NONE
cm image yum -i NAME [--repos REPOLIST --repo-group REPOGROUP] [--duk] ...	Perform yum operations on an image	installman --yum-image --image image [--repos REPOLIST --repo-group REPOGROUP] [--duk] ...	NONE
cm image zypper -i NAME [--repos REPOLIST --repo-group REPOGROUP] [--duk] ...	Perform zypper operations on an image	installman --zypper-image --image NAME [--repos REPOLIST] [--repo-group REPOGROUP] [--duk] ...	NONE
cm monitoring alerta {disable enable restart start status stop}	Alerta disable, enable, restart, start, status, stop	NONE	NONE
cm monitoring connect {disable enable pause restart resume rewind status}	Perform Confluent Kafka connector actions	NONE	NONE
cm monitoring config port {set show}	Set/show the port number of monitoring services	NONE	NONE
cm monitoring dashboard grafana set	Enable or disable Grafana dashboards	NONE	NONE
cm monitoring elk {disable enable restart start status stop}	Elk disable, enable, restart, start, status, stop	NONE	NONE
cm monitoring ganglia {disable enable restart start status stop}	Ganglia disable, enable, restart, start, status, stop	NONE	NONE
cm monitoring kafka {disable enable restart start status stop}	Kafka disable, enable, restart, start, status, stop	NONE	NONE
cm monitoring nagios {disable enable restart start status stop}	Nagios disable, enable, restart, start, status, stop	NONE	NONE
cm monitoring timescaledb {destroy disable enable node restart start status stop}	Perform TimescaleDB actions	NONE	NONE
cm monitoring ldms {enable disable start stop restart status}	LDMS enable, disable, start, stop, restart, status	NONE	NONE
cm monitoring ldms config autoconfig {disable enable show}	Disable, enable, or display the LDMS autoconfiguration feature	NONE	NONE
cm monitoring ldms config interval {set show}	Set or show the configured LDMS metric polling interval	NONE	NONE
cm monitoring ldms config topic {set show}	Set or show the configured LDMS Kafka topic	NONE	NONE

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cm monitoring ldms metrics {config list set show}	Display configured LDMS metric modules, list available LDMS metric modules, set LDMS metric modules, or show latest LDMS metrics collected	NONE	NONE
cm monitoring native alerts show	Display the latest available native monitoring alerts for the specified nodes and groups	NONE	NONE
cm monitoring native disable	Disable native HPCM monitoring either globally or per-node	NONE	cmuserver.conf: CMU_MONITORING=off per-node disable not supported
cm monitoring native enable	Enable native HPCM monitoring either globally or per-node	NONE	cmuserver.conf: CMU_MONITORING=on per-node enable not supported
cm monitoring native metrics add	Add metric groups to HPCM native monitoring: AMS, NVIDIA, Moonshot	NONE	cmu_config_metrics -A cmu_config_nvidia cmu_config_metrics -M
cm monitoring native metrics dump	Dump archived monitoring data	NONE	cmu_monitoring_dump
cm monitoring native metrics remove	Remove metric groups from HPCM native monitoring: AMS, NVIDIA, Moonshot	NONE	cmu_config_metrics -A -r cmu_config_nvidia -r cmu_config_metrics -M -r
cm monitoring native metrics show	Display the latest available native monitoring sensors and alerts for the specified nodes and groups	NONE	cmu_monstat
cm monitoring native restart	Restart native HPCM monitoring	NONE	cmu_restart_monitoring
cm monitoring native start	Start native HPCM monitoring	NONE	cmu_start_monitoring
cm monitoring native stop	Stop native HPCM monitoring	NONE	cmu_stop_monitoring
cm network	Add, delete, set, unset, and show network information	configure-cluster	NONE
cm node add	Add nodes using a cluster definition file	NONE	NONE
cm node bios {reset set show}	Show, Set or Reset BIOS settings	NONE	conrep & GUI "Show BIOS Settings"
cm node console	Connect to the console of a node	console	cmu_console
cm node delete	Delete one or more nodes by name or by cluster definition file	cadmin --db-purge	cmu_del_node
cm node discover {add disable enable mkconfig status subnet}	Use DHCP and PXE to discover the MAC and other information of one or more servers and adds them into HPCM	NONE	NONE
cm node dnf	Perform dnf operations on a node	NONE	NONE
cm node firmware {show status update}	Display firmware versions, BMC log entries, or update firmware components	csumtool	cmu_get_fw_versions & GUI "Update -> Update Firmware Inventory"
cm node nic	Add, delete, set, or show NICs	NONE	NONE
cm node provision	Provision an image to one or more nodes	installman --assign-image installman --next-boot cpower	cmu_clone cmu_autoinstall_node
cm node refresh netboot	Refresh the netboot configuration on one or more nodes	installman --refresh-netboot	NONE
cm node refresh rpms	Ensure all specified rpms are installed on one or more nodes	installman --refresh-node	NONE
cm node refresh secrets	Refresh the existing secrets on one or more nodes	NONE	/opt/cmu/tools/copy_ssh_keys.exp
cm node run, clush	Run a command on one or more nodes. cm node run displays output using cm_pager. clush displays line-by-line output.	NONE	cmu_dsh
cm node set	Set proprieties of one or more nodes, or global node properties	cadmin --node NODES --set* --enable* installman --node NODES --set* --assign-image --kernel	cmu_mod_node
cm node show	Show node properties	cnodes cadmin --node NODES --show*	cmu_show_nodes
cm node slot	Copy one slot to a new slot	clone-slot	NONE

HPE Performance Cluster Manager cm command	Description	SGI Management Suite	HPE Insight Cluster Management Utility
cm node template {delete help show submit test update}	Preallocate node attributes for automatically discovered nodes on HPE Cray EX clusters	NONE	NONE
cm node unset	Un-set properties of one or more nodes, or global node properties	cadmin --node NODES [--unset* --disable*]	cmu_mod_node
cm node update config	Update node configuration settings	update-configs	NONE
cm node update rpms	Update the existing rpms on one or more nodes	installman --update-node	NONE
cm node yum	Perform yum operations on a node	installman --yum-node	NONE
cm node zypper	Perfrom zypper operations on a node	installman --zypper-node	NONE
cm power	Issue power requests to nodes. Identify nodes. Requests include: on/off/status/halt/shutdown/reboot/hard_reboot/reset/press/uid_on/uid_off	cpower	cmu_power
cm repo add [--custom REPO_NAME] PATH	Add a repository	crepo --add PATH [--custom REPO_NAME]	NONE
cm repo del NAME	Delete a repository	crepo --del NAME	NONE
cm repo group add NAME [--repos ...]	Add repositories to a group or create a repository group	crepo --add-group NAME [REPO_NAME...]	NONE
cm repo group del NAME [--repos ...]	Remove repositories from a group or delete a repository group	crepo --del-group NAME [REPO_NAME...]	NONE
cm repo group show ...	Show all repository groups or details on a specific group	crepo --show-group [REPO_NAME...]	NONE
cm repo reexport	Re-export all repositories with yume.	crepo --reexport	NONE
cm repo refresh NAME	Refresh repository metadata	crepo --refresh NAME	NONE
cm repo select NAME	Mark a repository as selected	crepo --select NAME	NONE
cm repo show [--distros --source]	Show available repositories	crepo [--show-distro --show-updateurls --show]	NONE
cm repo unselect NAME	Mark a repository as not selected	crepo --unselect NAME	NONE
cm sim	Manage service infrastructure monitoring	NONE	NONE
discover --show-configfile	Display path to the cluster definition file	discover --show-configfile	NONE
discover --show-configfile --images --kernel --bmc-info --ips \ --kernel-parameters --skip-examples --expand-templates	Display the cluster definition file and include image, kernel, and baseboard management controller (BMC) information	discover --show-configfile --images --kernel \ --bmc-info --ips --kernel-parameters --skip-examples \ --expand-templates	NONE
cp /etc/myfile /opt/clmgr/image/images/image_name/etc	Copy files into an image		
cat /proc/cmdline	From a compute node, display the image that was used on boot		
clush -g compute cat /proc/cmdline	From admin node, display the image used to boot all compute nodes		
cm node provision -n hostname -i image_name -s	Assign an image to a node for provisioning the next time the node boots		
cm node provision -n hostname -i image_name	Assign an image to a node, reboot, and provision with an operating system		
ipmiwrapper hostname chassis bootdev pxe	Specify that a node boot from its Ethernet device the next time it boots		
cm image create -i new_image \ -l /opt/clmgr/image/rpmlists/my-rhel8.X.rpmlist	Create an image from selected repositories and an RPM list		
cm image copy -o existing_image -i new_image	Create a new image from an existing image		
cm image capture --image image_name --node number	Capture an image from a running compute node		
cm image capture --image image_name --node hostname --exclude /var/spool/BBS/*_logs/* \ --exclude /var/spool/PBS/server_priv/accounting/*	Capture an image from a running compute node and exclude some structures		
cm image rpmlist -W output_file -i source	Create a new RPM list from an image or from a running node		

HPE Performance Cluster Manager cm command	Description	SGI Management Suite	HPE Insight Cluster Management Utility
RHEL 9, 8: cm image dnf --duk -i image_name install RPM RPM ... RHEL 7: cm image yum --duk -i image_name install RPM RPM ... SLES: cm image zypper --duk -i image_name install RPM RPM ...	Installing RPMs into an image		
RHEL 9, 8: cm image dnf --duk -i image_name remove RPM RPM ... RHEL 7: cm image yum --duk -i image_name remove RPM RPM ... SLES: cm image zypper --duk -i image_name remove RPM RPM ...	Removing RPMs from an image		
RHEL 9, 8: cm node dnf -n hostname install RPM RPM ... RHEL 7: cm node yum -n hostname install RPM RPM ... SLES: cm node zypper -n hostname install RPM RPM ...	Installing RPMs into an image on a running compute node		
RHEL 9, 8: cm image dnf --duk -n hostname remove RPM RPM ... RHEL 7: cm image yum --duk -n hostname remove RPM RPM ... SLES: cm image zypper --duk -n hostname remove RPM RPM ...	Removing RPMs from an image on a running compute node		
cimage --push-rack image_name rack_number	Pushing ICE compute node images to a rack		
cimage --show-images	Display ICE compute node images and kernels		
	Display image, kernel, and file system mode of ICE compute nodes		
cimage --show-nodes rack_number			
	Change the image, kernel, or file system mode of ICE compute nodes		
cimage --set [option] image_name kernel node			
cm node update rpms -n hostname	Update existing RPMs on a node		
cm image update -i image_name	Update existing RPMs in an image in the admin node repository		
cm image revision commit -i image_name -m 'checking in'	Check in an image with changes or updates into version control		
cm image revision history -i image_name	Review version control history for an image		
cm image revision revert -i image_name --rev version_number	Revert to a previous image version		
ls /opt/clmgr/image/scripts/post-install	Review post-installation scripts		
/opt/clmgr/image/images/image_name/etc/opt/sgi/conf.d	Configuration scripts directory		
* From the admin node, use the following ilorest command: ilorest bootorder --onetimeboot=pxe --url=iLO_IP -u ADMIN \ -p iLO_password --commit * Use ssh to log into a node, and then run one of the following commands: hpbootcfg -P -b Or efibootmgr options ... * On the node console, press F12 or Esc+@ (serial). You can download ilorest and hpbootcfg from the HPE support website.	Configure a one-time PXE boot on nodes with iLO node controllers		