

The purpose of this guide is to provide an overview of ICE ClusterWare™ commands that system administrators may use on a daily basis. For more information, commands, and examples, [see the ClusterWare documentation](#).

In general, commands make use of common CLI options like **-h**, **-v**, **-q**, **ls**, etc. "list" is a heavily used option for many **scyld-\*** commands. The first example of **scyld-nodectl** below combines list with **-l** (or **-L**) for expanded node information.

## Node and Attribute Control

<b>scyld-nodectl</b>	<b>scyld-nodectl list [-l   -L]</b> <b>list</b> Show a list of compute nodes. <b>-l, --long</b> Show a subset of all optional information for each node, e.g. basic hardware info, MAC, IP address. <b>-L, --long-long</b> Show all optional information for each node, e.g. all hardware info, MAC, IP address. <b>scyld-nodectl status [-L]</b> Shows the current status of a node. <b>-L</b> adds all optional information for each node, e.g. uptime, load average, free RAM. <b>scyld-nodectl create mac=00:25:90:0C:D9:3C</b> Add a new node beyond the end of the current list.
<b>scyld-attribctl</b>	<b>scyld-attribctl create name=iScsiGroup</b> Add a new attribute group. <b>scyld-attribctl -i iScsiGroup set _boot_config=RebelBoot boot_style=iscsi</b> Configure attributes to boot nodes using <b>RebelBoot</b> with iSCSI for root file system access.

## Boot Customization

<b>scyld-add-boot-config</b>	<b>scyld-add-boot-config --iso CentOS-7-x86_64-DVD-1908.iso --image \</b> <b>CentOS-7.7-Image --boot-config CentOS-7.7-boot --batch</b> Use the named ISO file in hands-off batch mode to build a repo and distro, both named <b>CentOS-7-x86_64-1908</b> , a boot image named <b>CentOS-7.7-Image</b> , and boot config named <b>CentOS-7.7-boot</b> . <b>scyld-add-boot-config --make-defaults ...</b> If there are no attribute groups on this system, then automatically build an attribute group referencing a new boot configuration referencing a new image.
<b>scyld-bootctl</b>	<b>scyld-bootctl create name=Fed29Boot kernel=@/boot/vmlinuz-4.20.6-200.fc29.x86_64 \</b> <b>initramfs=@cw-ramfs-4.20.6-200.fc29.x86_64</b> Create a boot configuration with a premade kernel and <b>initramfs</b> . @ sign references a local file.

## Image Customization

<a href="#"><b>scyld-imgctl</b></a> Create, query and modify images for compute nodes.	<b>scyld-imgctl -i DefaultImage clone name=NewImage</b> Clone the <b>DefaultImage</b> to a new <b>NewImage</b> .
<a href="#"><b>scyld-modimg</b></a> Tool for manipulating image contents.	<b>scyld-modimg -i NewImage --chroot ...</b> Downloads <b>NewImage</b> , and opens a root environment where changes can be tested on the new image. <b>scyld-modimg --capture n8 --set-name CapturedN8image --upload</b> Capture the image executing on node <b>n8</b> , give it the name " <b>CapturedN8image</b> ," and upload it.

## Backup Cluster Info

<a href="#"><b>scyld-cluster-conf</b></a> Load or save the cluster configuration file.	<b>scyld-cluster-conf save /root/cluster-conf-bak</b> Save a copy (backup) of the current network configuration and node list. <b>scyld-cluster-conf load /root/cluster-conf-new</b> Replace the existing node definitions with ones loaded from <b>/root/cluster-conf-new</b> .
<a href="#"><b>scyld-sysinfo</b></a> Capture the system state information. Often used for debugging.	<b>scyld-sysinfo</b> Capture the state of the current node into a gzip'ed tarball, executed as user root.

## Utilities

<a href="#"><b>scyld-adminctl</b></a> Create, query and modify administrators for the cluster.	<b>scyld-adminctl -i hsolo clone name=cbaca</b> Copy the administrator properties for " <b>hsolo</b> " to a new administrator " <b>cbaca</b> "
<a href="#"><b>scyld-clusterctl</b></a> Tool for manipulating global cluster settings. Many additional tools exist within scyld-clusterctl for power users.	<b>scyld-clusterctl pools create name=infiniband_nodes pattern=ib{} first_index=0</b> <b>scyld-nodectl -i n[64-127] update naming_pool=infiniband_nodes</b> Create a node name group " <b>infiniband_nodes</b> " for nodes named " <b>ibX</b> ", beginning with " <b>ib0</b> ", and associate those names with nodes <b>n64</b> to <b>n127</b> .
<a href="#"><b>scyld-reports</b></a> Manage and generate cluster reports.	<b>scyld-reports unknown</b> Display the full list of unknown nodes that have attempted to boot. Options exist to restrict query.