Command quick reference

The following table provides a command quick reference. For details on command options, refer to NN10600-050 *Nortel Networks Multiservice Switch 7400/15000/20000 Command Reference.* Each description below also specifies what mode, (P) for provisioning or (O) for operational, you can be in to use the command. Many of the commands listed in this table have options associated with them.

Command	Abbreviation	Description
add <component>	a	Adds a new component to the edit view. (P)
delete <component>		Removes a component (and its subcomponents) from the edit view. (P)
list <component>	l	Lists subcomponents of a component or all instances of a type of component. See the other side of this card for command options. (P, O)
display <component>	d	Displays all the attributes of a particular component in a particular view. (P, O)
find <component>	f	Finds all the available components that can be linked to a given component or component class. (P, O)
set <component> <attr> <value>	s	Changes the value of an attribute for a particular component. (P, O)
help <component>	h	Provides information about commands, components and attributes. See the other side of this card for command options. (P, O)
lock <component>		Prevents additional use of a component, such that eventually the component will not be in use operationally. (P, O)
unlock <component>		Changes the operational use of a component. It is normally used after the lock command. After unlock has been issued, the component is ready to provide service. (P, O)
start prov	st prov	Starts provisioning mode. Only one provisioning session is allowed at a time. (O)
end prov		Exits provisioning mode. (P)
clear prov		Deletes all non-permanent components from the edit view. (P)
copy prov		Copies components from a specified view (current view or edit view) into the edit view.(P)
check prov		Invokes semantic checking of components in the edit view. (P)
activate prov		Copies the edit view into current view, thus making this the actual configuration of the node. This involves modifying the running configuration and/or software on the node. (P)
confirm prov		Ensures that connectivity to the operator is maintained after activation. If the operator cannot confirm, then the node will roll back to the committed view after 20 minutes. (P)
commit prov		Sets the current view of the provisioning data as the committed view. (P)
load prov		Loads provisioning data stored on disk into the edit view. (P)
tidy prov		Deletes provisioning data from the disk. **Note:** Do not use file system commands to delete provisioning files. (P, O)
save prov		Saves the provisioning data from a particular view on the disk. (P)
stop prov		Stops a running check, apply, load, or save command as soon as possible. (P)
apply prov		Applies a previously stored set of changes (on the disk) to the edit view. (P)
logout, quit	logoff, exit	Ends your operator session. (P, O)
switchover lp		Allows you to manually switch control between the active and standby processor cards of an LP. **Note:** Do not perform a CP switchover more than once every 10 minutes.(P, O)

NORTEL NETWORKS

Nortel Networks Multiservice Switch

7400/15000/20000

Commands Job Aid

Summary Card

NN10600-053

Using this summary card

This card is a quick summary to assist you in using Nortel Networks Multiservice Switch common operator commands. It provides definitions of operating modes and gives a brief description of common commands.

For additional information on commands, see NN10600-050 *Nortel Networks Multiservice Switch 7400/15000/20000 Command Reference*.

Operating modes and common commands

When and how you use Nortel Networks Multiservice Switch system commands depends on your current operating mode. At any given time, you will either be in operational mode or provisioning mode. The following are the four types of commands:

- **Common commands used in operational mode** — used outside of provisioning mode. These commands may be applied to almost all Multiservice Switch components. This group of commands includes display, list, set, help, lock, and unlock.
- **Common commands used in provisioning mode** — common to all components. These commands may be applied to almost all Multiservice Switch components. This group of commands includes add, delete, display, list, set, and help.
- **Provisioning system commands** — specific to the ProvisioningSystem component. These include start prov, end prov, clear prov, copy prov, check prov, activate prov, confirm prov, commit prov, load prov, tidy prov, save prov, stop prov, and apply prov.
- **Component-specific commands** — unique to individual Multiservice Switch subsystems. Most component-specific commands are operational commands. Refer to NN10600-060 *Nortel Networks Multiservice Switch 7400/15000/20000 Component Reference*, for component-specific commands.

For a brief description of common commands, refer to the other side of this card.

The current view and the edit view

In Nortel Networks Multiservice Switch systems you work mainly with two views of data:

- **Current view** — represents the actual running configuration of the node. This view contains both operational and provisioned components and their operational and provisioned data. You may not directly modify the provisioned data contained in this view.
- **Edit view** — represents a potential next configuration of the node. This view contains only provisioned components and their provisioned data. You may edit this view through the use of provisioning system or common provisioning operator commands. When you are in provisioning mode, the edit view is the default view for most commands.

Wildcarding

The list, display, and find commands support wildcarding. Substituting an asterisk (*) wildcard or wildcard pattern for the last component type or an instance will give you multiple components. You can substitute many instances with a wildcard, but you cannot combine type and instance wildcarding.

Using the list command

The list (l) command is used to display the subcomponents of a particular component in a particular view (edit or current). Here are some examples:

l	Lists all the top-level components of the node.
l sw	Lists all software subcomponents.
l lp/*	Lists all existing logical processors.
l lp/* DS1/*	Lists all existing DS1 ports.
l trm	Lists links to all neighboring nodes.

Options:

-c specifies the current view. If this option is not specified, the view selected is the edit view if you are in provisioning mode, or the current view if you are in operational mode.

-p specifies provisioned subcomponents.

-o specifies operational subcomponents.

If neither -o nor -p is specified, the type of components displayed are provisioned subcomponents if you are in provisioning mode, or both provisioned and operational subcomponents if you are in operational mode.

Using the help command

The help (h) command is used to view information about commands, components, and attributes.

h	Displays command usage, the node name, top-level components, and verbs.
h -verb(verb) <component>	Both the impact and the possible options for the verb appear. For example, h -v (sync) fs displays impact and options for the sync command.
h <component>	Provides specific properties of a component. For example, these properties could be a list of attributes for the component, a list of verbs that can be applied, and a list of allowed subcomponents. Other properties may be displayed depending on the specific component.
h <component> <attribute>	For information about a particular attribute.

where <component> can be any component and <attribute> can be any attribute of a particular component.

Options:

-s used to display the full component class hierarchy.

-v displays a verb's full name and abbreviation, its impact, and a list of available options.

Using the display command

To display information about your node, use the display (d) command. Here are some examples of the command in operational mode:

d -p mod	Displays provisioned module information, including the node ID, and node name.
d -p sw	Displays provisioned software, including versions.
d -p lp/<n>	Displays provisioned cards of a logical processor. <n> = 0 - 15.
d -p lp/*	Displays attributes for all provisioned logical processors.
d lp/<n>	Displays a logical processor's status. <n> = 0 - 15.
d lp/* <attribute>	Displays an attribute for all logical processors. <attribute> = a specific attribute name.
d fs	Displays the volume name of the file system, the active disk, synchronization status, capacity and free space available.
d fs disk/<n>	Displays all operational attributes of the disk, including disk volume name, disk capacity and available free space. <n> is the control processor slot number.
d shelf bus/<n>	Displays the status of a bus. <n> = X or Y.
d trm link/<n>	Displays the operational attributes of a link, including throughput and delay. <n> = 1 - 1023.
d rtg dpn	Displays CSRM RIDs available. If the response is empty, routing is not working.
d lp/<n> <port>/<m>	Displays the attributes of a port on a logical processor interface. <n> = 1 - 15; <port> = port type, for example, DS1, E3, V35, or Enet; and <m> = port number (where required).
d trk/<n>	Displays the attributes of a trunk application.

Options:

-c specifies the current view. If this option is not specified, the view selected is the edit view if you are in provisioning mode, or the current view if you are in operational mode.

-p specifies provisioning data.

-o specifies operational data.

If neither -o nor -p is specified, the type of data displayed is provisioned data if you are in provisioning mode, or operational data if you are in operational mode.