



7450 ETHERNET SERVICE SWITCH
7750 SERVICE ROUTER
7950 EXTENSIBLE ROUTING SYSTEM
VIRTUALIZED SERVICE ROUTER

MD-CLI QUICK REFERENCE GUIDE

3HE 15218 0007 TQZZA 01

Issue 01

October 2022

© 2022 Nokia.

Use subject to Terms available at: www.nokia.com/terms/.

Nokia is committed to diversity and inclusion. We are continuously reviewing our customer documentation and consulting with standards bodies to ensure that terminology is inclusive and aligned with the industry. Our future customer documentation will be updated accordingly.

This document includes Nokia proprietary and confidential information, which may not be distributed or disclosed to any third parties without the prior written consent of Nokia.

This document is intended for use by Nokia's customers ("You"/"Your") in connection with a product purchased or licensed from any company within Nokia Group of Companies. Use this document as agreed. You agree to notify Nokia of any errors you may find in this document; however, should you elect to use this document for any purpose(s) for which it is not intended, You understand and warrant that any determinations You may make or actions You may take will be based upon Your independent judgment and analysis of the content of this document.

Nokia reserves the right to make changes to this document without notice. At all times, the controlling version is the one available on Nokia's site.

No part of this document may be modified.

NO WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY WARRANTY OF AVAILABILITY, ACCURACY, RELIABILITY, TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS MADE IN RELATION TO THE CONTENT OF THIS DOCUMENT. IN NO EVENT WILL NOKIA BE LIABLE FOR ANY DAMAGES, INCLUDING BUT NOT LIMITED TO SPECIAL, DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL OR ANY LOSSES, SUCH AS BUT NOT LIMITED TO LOSS OF PROFIT, REVENUE, BUSINESS INTERRUPTION, BUSINESS OPPORTUNITY OR DATA THAT MAY ARISE FROM THE USE OF THIS DOCUMENT OR THE INFORMATION IN IT, EVEN IN THE CASE OF ERRORS IN OR OMISSIONS FROM THIS DOCUMENT OR ITS CONTENT.

Copyright and trademark: Nokia is a registered trademark of Nokia Corporation. Other product names mentioned in this document may be trademarks of their respective owners.

© 2022 Nokia.

Table of contents

1	Getting started.....	4
1.1	Conventions.....	4
1.1.1	Precautionary and information messages.....	4
1.1.2	Options or substeps in procedures and sequential workflows.....	5
2	Navigational and operational commands.....	6
3	Entering and leaving the configuration workflow.....	7
4	Configuration workflow commands.....	8
4.1	Commit confirmed commands.....	9
4.2	Configuration management commands.....	10
5	Output modifiers.....	11

1 Getting started

This guide provides a comparison of the Nokia SR OS Model-Driven Command Line Interface (MD-CLI) to those used by Junos OS and IOS XR.

For more information about the MD-CLI, see the following resources:

- *SR OS Release Notes* for your current release
- *7450 ESS, 7750 SR, 7950 XRS, and VSR MD-CLI User Guide*
- *7450 ESS, 7750 SR, 7950 XRS, and VSR MD-CLI Command Reference Guide*
- MD-CLI introductory videos: <https://www.youtube.com/playlist?list=PLgKNvI454BxcgfUQGMAEGE4yiV8c-ZDLu>

Table 1: Command syntax symbols

Symbol	Description
	A vertical bar represents an "or" condition, indicating that only one of the parameters in the brackets or parentheses can be selected.
()	Parentheses indicate that one of the parameters must be selected.
[]	Brackets indicate optional parameters.
Bold	Commands in bold indicate commands and keywords.
<i>Italic</i>	Commands in <i>italics</i> indicate that you must enter text based on the parameter.

In the following examples, **location** and **graceful-shutdown** are command names. For the **location** command, *keyword* must be one of the keywords **cf1**, **cf2**, or **cf3**. For the **graceful-shutdown** command, *boolean* must be one of the keywords **true** or **false**, although explicitly using the keyword **true** is optional.

location *keyword*

keyword - (**cf1** | **cf2** | **cf3**)

graceful-shutdown *boolean*

boolean - ([**true**] | **false**)

1.1 Conventions

This section describes the general conventions used in this guide.

1.1.1 Precautionary and information messages

The following are information symbols used in the documentation.



DANGER: Danger warns that the described activity or situation may result in serious personal injury or death. An electric shock hazard could exist. Before you begin work on this equipment, be aware of hazards involving electrical circuitry, be familiar with networking environments, and implement accident prevention procedures.



WARNING: Warning indicates that the described activity or situation may, or will, cause equipment damage, serious performance problems, or loss of data.



Caution: Caution indicates that the described activity or situation may reduce your component or system performance.



Note: Note provides additional operational information.



Tip: Tip provides suggestions for use or best practices.

1.1.2 Options or substeps in procedures and sequential workflows

Options in a procedure or a sequential workflow are indicated by a bulleted list. In the following example, at step 1, the user must perform the described action. At step 2, the user must perform one of the listed options to complete the step.

Example: Options in a procedure

1. User must perform this step.
2. This step offers three options. User must perform one option to complete this step.
 - This is one option.
 - This is another option.
 - This is yet another option.

Substeps in a procedure or a sequential workflow are indicated by letters. In the following example, at step 1, the user must perform the described action. At step 2, the user must perform two substeps (a. and b.) to complete the step.

Example: Substeps in a procedure

1. User must perform this step.
2. User must perform all substeps to complete this action.
 - a. This is one substep.
 - b. This is another substep.

2 Navigational and operational commands

[Table 2: Navigational and operational commands](#) compares the basic navigational and operational commands of the Nokia SR OS MD-CLI to those used by Junos OS and IOS XR.

The `//` command can be used to switch CLI engines to access classic CLI commands that are not yet available in the MD-CLI. Enter `//command` to run a single command in the other CLI engine. Command completion and `? help` are not available when using `//command`.

Switching CLI engines is described in the *7450 ESS, 7750 SR, 7950 XRS, and VSR MD-CLI User Guide*.

Table 2: Navigational and operational commands

	SR OS	Junos OS	IOS XR
Move back one or more levels	<code>back [number]</code>	<code>up [number]</code>	—
Return to the previous working context or to the operational root	<code>exit [all]</code>	<code>exit</code> <code>quit</code>	<code>end</code> <code>exit</code>
Move to the top level of the context	<code>top</code>	<code>top</code>	<code>root</code>
Access the per-session environment	<code>environment</code>	<code>set cli</code>	<code>terminal</code>
Switch CLI engines	<code>//</code>	—	—
Run a command in the other CLI engine	<code>//command</code>	—	—
Show the command tree under the present working context	<code>tree [flat]</code> <code>[detail]</code>	—	—
Exit the CLI session	<code>logout</code>	<code>exit</code> <code>quit</code>	<code>exit</code> <code>quit</code>

3 Entering and leaving the configuration workflow

[Table 3: Entering and leaving the configuration workflow](#) compares the commands for entering and leaving the configuration workflow of the Nokia SR OS MD-CLI to those used by Junos OS and IOS XR.

For more information about the implicit and explicit configuration workflows and the candidate configuration mode, see the *7450 ESS*, *7750 SR*, *7950 XRS*, and *VSR MD-CLI User Guide*.

Table 3: Entering and leaving the configuration workflow

	SR OS	Junos OS	IOS XR
Candidate configuration modes	global exclusive private read-only	global (not a keyword) exclusive private	private (not a keyword) exclusive
Enter the implicit configuration workflow	configure <i>mode</i>	configure [<i>mode</i>] Default: global	configure [<i>mode</i>] Default: private
Leave the implicit configuration workflow	^Z exit [all]	exit quit	^C ^Z exit
Enter the explicit configuration workflow	edit-config <i>mode</i>	—	—
Leave the explicit configuration workflow	quit-config (at operational root)	—	—

4 Configuration workflow commands

Table 4: Configuration workflow commands compares the configuration workflow commands of the Nokia SR OS MD-CLI to those used by Junos OS and IOS XR.

Table 4: Configuration workflow commands

	SR OS	Junos OS	IOS XR
Navigate into a context	Enter the context by typing <i>context</i> For example: router bgp	<i>edit context</i> For example: edit protocols bgp	Enter the context by typing <i>context</i> For example: router bgp 65551
Set an element in the candidate datastore	Enter the context with a value by typing <i>context value</i>	<i>set context value</i>	Enter the context with a value by typing <i>context value</i>
Delete an element from the candidate datastore	<i>delete context</i>	<i>delete context</i>	<i>no context</i>
Annotate an element in the candidate datastore with a comment	<i>annotate "string" context</i>	<i>annotate context "string"</i>	Enter ! followed by a string. The comment is associated with the next configuration element entered.
Show the candidate configuration from the present working context	<i>info</i>	<i>show</i>	<i>show configuration merge</i>
Show the candidate configuration with default and unconfigured values	<i>info detail</i>	<i>show display detail</i>	—
Show the candidate configuration with inherited values from configuration groups	<i>info inheritance</i>	<i>show display inheritance</i>	<i>show configuration running inheritance</i>
Show the intended running configuration with configuration groups expanded without groups and apply-groups statements	<i>info intended</i>	—	—

	SR OS	Junos OS	IOS XR
Show the candidate configuration in a flat format	info flat info full-context	show display set relative show display set	show configuration merge formal
Show the candidate configuration in JSON format	info json	show display json	show running-config json
Show the candidate configuration in XML format	info xml	show display xml	show running-config xml
Show the running configuration	admin show configuration	show configuration	show running-config
Show changes between datastores	compare	show compare	show commit changes diff
Discard changes in the candidate datastore	discard	rollback or rollback 0	abort
Update the candidate baseline	update	update	—
Validate changes in the candidate datastore	validate	commit check	—
Commit changes to the running datastore	commit (also runs validate)	commit (also runs commit check)	commit
Commit changes to the running datastore with a comment	commit comment "string"	commit comment "string"	commit comment "string"
Roll back to a previous configuration	rollback <i>commit-id</i> startup	rollback <i>number</i>	rollback configuration to <i>commit-id</i>
Run an operational command	/ <i>command</i>	run <i>command</i>	do <i>command</i>

4.1 Commit confirmed commands

[Table 5: Commit confirmed commands](#) compares the commit commands of the Nokia SR OS MD-CLI to those used by Junos OS and IOS XR.

Table 5: Commit confirmed commands

	SR OS	Junos OS	IOS XR
Start the commit confirmed	commit confirmed [<i>number</i>] Default timeout: 10 minutes	commit confirmed [<i>number</i>] Default timeout: 10 minutes	commit confirmed [<i>number</i>] [<i>minutes</i> <i>number</i>] Note: timeout is in seconds unless specified with minutes parameter
Accept a commit confirmed	commit confirmed accept	commit	commit
Cancel a commit confirmed	commit confirmed cancel	rollback 1 and commit	Exit configuration mode or clear the CLI session

4.2 Configuration management commands

Table 6: Configuration management commands compares the configuration management commands of the Nokia SR OS MD-CLI to those used by Junos OS and IOS XR.

Table 6: Configuration management commands

	SR OS	Junos OS	IOS XR
Paste configuration	Input is accepted in hierarchical, flat, full-context or compare format, opening ({} and closing {}) braces navigate	Input is accepted in display set format or using load merge terminal relative for hierarchical format	Input is accepted in hierarchical or formal format
Load and merge a configuration file	load merge <i>url</i> commit	load merge <i>url</i> commit	load <i>url</i> commit
Load and replace a configuration file	load full-replace <i>url</i> commit	load override <i>url</i> commit	load <i>url</i> commit replace
Save configuration to a file	info > <i>url</i>	save <i>url</i>	copy running-config <i>url</i>
Show the commit history	show system management-interface commit-history	show system commit	show configuration commit list

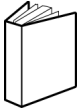
5 Output modifiers

[Table 7: Output modifiers](#) compares the output modifiers of the Nokia SR OS MD-CLI to those used by Junos OS and IOS XR.

Table 7: Output modifiers

	SR OS	Junos OS	IOS XR
Count occurrences	count	count	show utility wc
Match a pattern	match <i>string</i> Note: enclose the pattern in apostrophes for regular expression matches	match <i>regexp</i>	include <i>regexp</i>
Disable output pagination	no-more	no-more	—
Redirect output to a file	>	save	file

Customer document and product support



Customer documentation

[Customer documentation welcome page](#)



Technical support

[Product support portal](#)



Documentation feedback

[Customer documentation feedback](#)