Router

Library version: RENAT 0.1.7
Library scope: test suite
Named arguments: supported

Introduction

A class provides keywords for router controll. Usual command could be executed via VChannel. This class provides the vendor independent commands

Device's type is defined in master device.yaml. The system will load appropriate modules for each device.

Details about keywords provided by modules could be found in document of each module likes:

- Juniper module
- Cisco module
- GR module

Keywords provides by above module could be executed through <u>Xrun</u> keyword or directly called from Router. Examples:



Shortcuts

 $\textbf{C} \texttt{md} \cdot \textbf{E} \texttt{xec} \ \texttt{File} \cdot \textbf{Follow} \ \texttt{Milb} \cdot \textbf{Follow} \ \texttt{Syslog} \cdot \textbf{Get} \ \texttt{lp} \cdot \textbf{R} \\ \texttt{ead} \cdot \textbf{S} \\ \texttt{nap} \cdot \textbf{S} \\ \texttt{nap} \ \texttt{Diff} \cdot \textbf{S} \\ \texttt{top} \ \texttt{Screen} \ \texttt{Mode} \cdot \textbf{S} \\ \texttt{witch} \cdot \textbf{W} \\ \texttt{rite} \cdot \textbf{X} \\ \texttt{run} \\ \texttt{run} \quad \texttt{N} \\ \texttt{run} \\ \texttt{N} \\ \texttt{vich} \cdot \textbf{S} \\ \texttt{vich} \cdot \textbf{S}$

Keywords

Keyword	Arguments	Documentation
Cmd	str_cmd=, str_prompt=	Runs the command str_cmd and waits until the prompt defined for this router. This keyword is identical to VChannel.Cmd
		Examples:
		Router. <u>Cmd</u> set system login user testtest authentication plain- text-password # wait for password:
		Router. Cmd Renat2017 password: # wait for password:
		Router. Cmd Renat2017 # wait for default prompt
		The above sample creates an output likes this:
		user@vmx11# set system login user testtest authentication plain-text-password New password:Renat2017 Retype new password:Renat2017
Exec File	file_name, vars=, comment=#, step=False, str_error=syntax,rror	[edit] Executes commands listed in file_name Lines started with comment character is considered as comments
		file_name is a file located inside the config folder of the test case.
		This command file could be written in Jinja2 format. Default usable variables are LOCAL and GLOBAL which are identical to Common.LOCAL and Common.GLOBAL. More variables could be supplied to the template by vars.
		vars has the format: var1=value1,var2=value2
		If step is True, after very command the output is check agains an error list. And if a match is found, execution will be stopped. Error list is define by str_err, that contains multi regular expression separated by a comma. Default value of str_err is error
		A sample for command list with Jinja2 template:
		show interface {{ LOCAL['extra']['line1'] }} show interface {{ LOCAL['extra']['line2'] }}
		{% for i in range(2) %} show interface et-0/0/{{ i }} {% endfor %}
		Examples:
		Router. <u>Exec File</u> cmd.lst Router. <u>Exec File</u> step=\${TRUE} str_error=syntax,error
		Note: Comment in the middle of the line is not supported For example if comment is "# "
		# this is comment line < this line will be ignored

		## this is not an comment line, and will be enterd to the router cli, but the router might ignore this
Follow Mib	node_list, wait_time=10s, interval_time=5s, len=12, percentile=80, threshold=75, max_len=300, factor=1	Waits until all the nodes defined in node_list become stable. Stableness is checked by SNMP polling result. The MIB list is define by mib in node section Parameter: wait_time(1): the time before the evaluation starting interval_time(2): interval between SNMP polling time threshold: below this value is evaluated as stable len(3): the size of the evaluation window (number of values that are used in each valuation) percentile: real useful percentage of data (ignore top 100-percentile percent) max_len(4): maximum waiting lend for this checking time sequence: -(1) -(2)- (3)
Follow Syslog	pattern	Watches syslog of this device on Apollo server and block the excuation until the pattern is matched
Get Ip		Returns the IP address of current node Examples: \$\{\text{router_ip}=} \text{Router.} \frac{\text{Get IP}}{\text{P}}
Read		Executes command read for the current vchannel coressponded to this router
Snap	name, *cmd_list	Remembers the result of a list of command defined by cmd_list Use this keyword with <u>Snap Diff</u> to get the difference between the command's result. The a new snapshot will overrride the previous result. Each snap is identified by its name
Snap Diff	name	Executes the comman that have been executed before by name snapshot and return the difference. Difference is in context diff format
Stop Screen Mode		Stop the screen mode
Switch	name	Changes the current channel of this router to name Rerturns old node name Note: This is identical to VChannel.Switch Examples: Router. Switch vmx11 Router. Cmd show version
Write	cmd_str, wait_str=1s, start_screen_mode=False	Executes command write for the current vchannel coressponded to this router
Xrun	cmd, *args, **kwargs	Runs the vendor independent keywords. Parametes: cmd: a keyword args: other argumemts Examples: Router. Xrun Flap Interface ge-0/0/0 This keyword will then actually calling the correspond keyword for the device type.

Altogether 12 keywords. Generated by <u>Libdoc</u> on 2018-03-20 02:58:09.

