MRV Optiswitch OS904 OS906 OS912 debug and diagnostic commands

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MRV Communications (acquired in 2017 by ADVA Optical Networking) is an Israeli company known for their optical network equipment, most notably their Optiswitch Carrier Ethernet Switch series. The switches (OS904, OS906G, OS912) are not available for purchase from them anymore, but if you work for a telco company, you surely still have these boxes around doing their work.

Unfortunately, with the merger and the end of sale, all the documentation disappeared as well. To help you a bit I bring below some debug and diagnostic commands to be run on the CLI. You can still find the datasheet here https://www.cornet-solutions.co.jp/pdf/mrv_os_900_sdb_a4_hi.pdf

Command	Description
no cli-paging/cli-paging	Enable/disable paging the output.
show <smth> | <include/begin/end/exclude> <search term>	Pipe output of some `show` command, e.g. find specific MAC address: `show lt | include B1:12` (search terms are case sensitive). Also can pipe to few Linux commands, e.g. count number of learned/dynamic MACs: `show lt | grep -c "DYNAMIC"`
show run	Show the running configuration
show port	Show port summary: state (on/off), speed, media (copper/sfp), duplex state
show interface	List of logical/vlan interfaces, MAC addresses, IP address (if any)
show port detail *n*	Show details of the port number *n*: media type, speed/duplex configured and actual, state, shaping applied.
show port statistics *n*	Show real-time statistics: packets/bytes received/sent, CRC and other error count
show l2cntrl-protocol-counters	Show counters of received/transmitted Layer 2 control protocols - LACP, MSTP, RSTP, OAM.
show run ports	Show running configuration for all ports
show port tag	Show tagging/vlans configured on each port
show port sfp-diag *n*	Show real-time diagnostic data for the interface: TX/RX power in dBm, voltage, temperature
show port sfp-params	Physical parameters of the SFP interface
show port rate *portnumber* time *seconds*	Show the rate of the traffic passing the interface real-time

Command	Description
monitor port statistics *portnumber*	Show the same data as `show port statistics` but refresh every other second
(config)# port state disable/enable <n>	Disable/enable MRV port number `n` (shut/no shut in Cisco terminology). Make sure you don't disable th eport you are connected through.
(config)# port media-select <sfp/sfp100/copper/auto/sgmii>	Set manually type of physical interface installed in MRV.
(config)# port speed <10/100/1000/auto> <n/all>	Force specific speed settting for a port.
show lt [port <port number> all]	Show MAC address table - static and learned dynamic. Output also gives timestamp when MAC address displayed was last changed. Optionally, specify port to show only MACs on this port.
(config)# clear lt	Delete all learned MAC addresses from Learning Table.
show syslog <all/debug/info/warning/error/fatal> [start-date] [end-date]	Show logs per their severity. Optional start/end dates are in format `mm-dd-ff:mm:ss` . If remote syslog is configured in the MRV, there will be NO local logs, to verify - look in configuration `show run	i rsyslog`.
clear syslog	Delete all local log entries.
show ver	Show the device model, hardware, fan status, OS installed, MAC address, serial number and uptime.
show time	Show system time. Important for checking alarms and logs
show cpu	CPU properties

Additionally see https://github.com/yuriskinfo/cheat-sheets/blob/master/RAD-ETX-203-205-220-debug-and-information-commands-cheat-sheet.adoc