RAD ETX 203, 205, 220 debug and information commands

Author: Yuri Slobodyanyuk, https://www.linkedin.com/in/yurislobodyanyuk/

Carrier Ethernet Devices by RAD (ETX-203AX, ETX-203AM, ETX-203AX-T, ETX-205A, ETX-220A) are quite popular with telco companies around the world for connecting end clients to the backbone at layer 2. And while reference documentation is available, I couldn't find the debug/information commands digest on the Internet at all. This post, I hope, comes to fill the gap.

The commands below are meant to be run on the device CLI itself, not on provisioning system like RADview. You can see how output looks like when run on the real ETX on my blog post https://yurisk.info/2020/03/21/rad-etx-203-203-220-debug-and-information-commands-examples/.

Command	Description
show configure port summary	Show port summary: state (up/down), speed
show config port *name* status	Show port status: administrative and operational states, speed/duplex, connector type, MAC address, and most important (for fiber) - RX/TX signal power (dBm)
show config port *name* statistics	Statistics of the port: total bits/frames passed, maximum/minimum bits/sec seen, and most interesting - CRC errors, error frames, oversize frames, discards, CV/ES/SES/FC stats for E1 lines.
config port ethernet *number* **clear-statistics**	Clear all statistics/counters for this port.
config flow **flow *flow-name*** **show statistics running**	Show detailed counters for the given flow, will include bps, max/min bps seen after reboot, drops if any.
config port *name* **rate-measure interval *seconds*** **show rate**	Show port utilization in bits/sec in real-time

Command	Description
Responder: **config flow** **service-ping-response local-ip 13.13.13.2/30 next-hop 13.13.13.1 egress-port ethernet 4/2 vlan** 777 *Ping sender:* **config flow** service-ping local-ip 13.13.13.1/30 dst-ip 13.13.13.2 next-hop 13.13.13.2 egress-port ethernet 4/1 vlan 777 number-of-packets 10 payload-size 1450	Send ping over the client vlan in Service Provider network (here 777) from ETX to ETX to measure latency and packet loss. You configure one ETX as a responder and another one as a sender.
show configure flows summary brief	List all flows configured on this ETX briefly
show configure flows summary details	List all flows configured on this ETX with details
config flow *name* **mac-learning** **show mac-table** **no mac-learning**	Enable MAC address learning inside a flow and show the MAC table. The *flow* should be the one where those MAC addresses are supposed to be learned, and in the appropriate direction. E.g. if the equipment of the end client is connected to ETX port `ethernet 0/10`, then you should run this command under the flow that has `ingress port 0/10`, to see if the ETX can see client's equipment. WARNING: after showing the results, make sure to disable the MAC learning, as it may interfere with the client's traffic.
show config system system-date	Show system time of the appliance, important for logs/alarms correlation.
show config reporting brief-alarm-log	Show alarms log, their severity/state/last raised time
exit all	Exit all sub-configuration modes to the top level.
show file startup	Show startup configuration.
save	Save the configuration.
clear-statistics	Clear all statistics (at the highest config level) - errors on interfaces, bytes sent/received, etc.
admin **reboot**	Reboot the device.