



# Chelsio Unified Wire for Linux

## Release Notes



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## Document History

Version	Revision Date
<b>1.0.0</b>	<b>11/22/2024</b>

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## I. Chelsio Unified Wire

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## 1. Introduction

This document provides details on Chelsio Unified Wire for Linux Release v3.19.0.3.

## 2. New Features

There is no new feature in this release. For the fixed issues, refer to the [Fixed Issues](#) section.

## 3. Fixed Issues

This section lists the resolved issues in this release of Chelsio Unified Wire for Linux.

### Network (NIC/TOE)

Fixed the performance issue observed with Windows VM using virtio adapter running on a Linux hypervisor.

### Offload Bonding

Fixed the compilation issues on latest 6.6.X kernel and ubuntu 20.04.X distributions.

### iWARP RDMA Offload

Fixed the issues observed with IOMMU enabled.

## 4. Known Issues

This section lists the resolved issues in this release of Chelsio Unified Wire for Linux.

### 4.1. Network (NIC/TOE)

Issue ID	Description/Workaround
11454	<b>Description:</b> Traffic keeps running even after the VLAN interface is brought down.
21788	<b>Description:</b> Some incoming connections get tunneled even when an offload server is set up.
23705	<b>Description:</b> Need a way to read the PHY firmware version of the T5 BT cards.
24197	<b>Description:</b> T580-CR LEDs are OFF in Spider and QSA mode.
24481	<b>Description:</b> Link bounce observed when T580 adapters are connected to Quanta Switch. <b>Note:</b> This is a Quanta Switch issue. Only one link bounce is seen initially, and thereafter the link remains good with no bounces or errors.
27853	<b>Description:</b> DUT (in TOE mode) sends out the MSS value of 536, when Peer sends a SYN packet without MSS specified.
31775	<b>Description:</b> The deadman_watchdog timer is not accurate for mode=pauseoff.
32515	<b>Description:</b> [PTP] Unable to start HW time stamping master clock with the Network transport option.
32825	<b>Description:</b> T5 40G twinax link fails to come up when connected to the few switches.
32844	<b>Description:</b> The devlog is flooded with link related messages when 1G link is not UP.
33531	<b>Description:</b> LED blinks rapidly on 100G adapters when we run ethtool -p ethX and connect the Twinax cable.
33643	<b>Description:</b> [VXLAN]: No support for computing outer UDP checksum.
34068	<b>Description:</b> RS FEC is not supported on 50G link.
34179	<b>Description:</b> Setting 1G speed for T6 optics is not supported.
34592	<b>Description:</b> The link goes down on plug/unplug with AN off QSFP28/SFP28 Fibre/Copper.
35243	<b>Description:</b> TCP Fin and Ack packets are seen in tcpdump while running large number of TOE connections.
35353	<b>Description:</b> Rx packets are getting dropped when double VLAN is configured.
35372	<b>Description:</b> The ethtool does not report correct values on swapping the fibre with twinax cables.

Issue ID	Description/Workaround
37930	<b>Description:</b> Need support for ethtool -l.
38844/36020	<b>Description:</b> 100G link fails to come up with few switches with FEC OFF and AN ON. <b>Workaround:</b> Disable AN for the link to come up.
40000	<b>Description:</b> [TOE]: Need support for asynchronous socket mechanism.
40425	<b>Description:</b> Kernel panic with a continuous flood of syn packets to the offloaded server.
40948	<b>Description:</b> SEND-Q values under <b>ss -tin</b> show negative values for TOE connections.
41150	<b>Description:</b> 40G link fails to come up on one port with repeated unload and load of driver when both the ports have 40G cables.
41528	<b>Description:</b> Mismatch in <b>Port Capabilities</b> seen in dmesg, during unplugging 1g modules and plugging 10g modules.
42430	<b>Description:</b> [RHEL8.6]: netlink error observed while trying to read the eeprom of 100g ports.
42666	<b>Description:</b> The ethtool 'rx-vlan-offload off' is not taking effect.
43132	<b>Description:</b> The <b>cxgbtool fec auto</b> is not using cable/transceiver recommended FEC in a few cases.
43831	<b>Description:</b> [RHEL 9.3]: Ping fails on running TOE netperf TCP_RR connections. <b>Note:</b> Memory barrier functionality in RHEL 9.3 was broken due to a missing upstream Linux commit 2505a51ac6f249956735e0a369e2404f96eebef0. This fix is essential for Chelsio drivers. The fix is included in RHEL 9.4.

## 4.2. Virtual Function Network (vNIC)

Issue ID	Description/Workaround
28471	<b>Description:</b> The <b>write_coal_fail counters</b> increments after loading vf driver.
28561	<b>Description:</b> mps_tcam entry is not getting created intermittently whenever subscribing VF to the multicast group.
29916	<b>Description:</b> <b>tp_tnl_cong_drops</b> are incrementing while VM receives traffic.
31759	<b>Description:</b> The soft lockup observed in dmesg while running heavy UDP traffic.



Issue ID	Description/Workaround
35343	<b>Description:</b> Communication fails over VF interface when both VST and VGT modes are configured.
36062	<b>Description:</b> Need transparent VLAN encapsulation/de-encapsulation in Hypervisor for SR-IOV Virtual Functions.
36902	<b>Description:</b> [DCBX] ETS is not supported on vNIC interface.
41046	<b>Description:</b> Ping fails after VF PCI-e reset.
43102	<b>Description:</b> [248VF] IPv6 ping failure observed over VFs on pinging multiple times.
43115	<b>Description:</b> [248VF]: ping failure observed on 62nd VF of PF1 after setting VLAN acl using "ip link" command.

### 4.3. iWARP RDMA Offload

Issue ID	Description/Workaround
4659	<b>Description:</b> OSU benchmark test osu_bibw fails to complete in Platform MPI. <b>Note:</b> Running osu_bibw benchmark using Platform MPI is known to report issues and is not an iWARP driver bug.
5173	<b>Description:</b> Intermittent connection setup failure with NP192 IMB jobs. For OpenMPI/RDMA clusters with node counts greater than or equal to 8 nodes, and process counts greater than or equal to 64, you may experience the following RDMA address resolution error when running MPI jobs with the default OpenMPI settings:  The RDMA CM returned an event error while attempting to make a connection. This type of error usually indicates a network configuration error.  Local host: core96n3.asicdesigners.com Local device: Unknown Error name: RDMA_CM_EVENT_ADDR_ERROR Peer: core96n8 <b>Workaround:</b> Increase the OpenMPI rdma route resolution timeout. The default is 1000, or 1000ms. Increase it to 30000 with this parameter: <code>--mca btl_openib_connect_rdmacm_resolve_timeout 30000</code>
19043	<b>Description:</b> [T5]"osu_latency_mt" test failed. <b>Fix:</b> To fix this issue, build MPI with multi-threading support (--enable-threads=multiple).
35105	<b>Description:</b> Need iWARP support for SR-IOV VF.
35540	<b>Description:</b> [RHEL7.6 ARM]: NFS server panics while opening a file in mounted folder from the client. <b>Note:</b> This is a kernel issue. Issue not seen with RHEL7.9 kernel installed on the server.

Issue ID	Description/Workaround
36454	<b>Description:</b> Need DCB (ETS) support for iWARP traffic.
37363	<b>Description:</b> RDMA user-mode fails on RHEL7.6-ALT.
38382	<b>Description:</b> [RHEL7.7/8.1]: "iwpm_mapping_error_cb" seen while running iwarp traffic. <b>Note:</b> This is an issue with RHEL 7.7/8.1 distributions and is not seen from RHEL 7.8/8.2. As a workaround, disable iwpm while running traffic.
40469	<b>Description:</b> [Ubuntu-18.04.5]: Cannot run iwarp tools with iwpm enabled. <b>Workaround:</b> Install rdma-core v28.0 or higher and the issue will not be seen.
40471	<b>Description:</b> LE Hash error observed while running iwarp traffic.
40649	<b>Description:</b> [RHEL7.9]: <b>iwpm_mapping_error_cb</b> seen while running iwarp traffic with iwpm enabled.
40664	<b>Description:</b> <b>Failed to disconnect RDMA CM connection</b> seen on client while running perftest tools on RHEL8.2 and Ubuntu 20.04.2.
43619	<b>Description:</b> [6.6.X]: rping/iSER/NVME-oF(RDMA) fails over VLAN interface.
43775/43785	<b>Description:</b> [RHEL 9.3]: Device not responding and system crash seen on starting Open MPI test. <b>Workaround:</b> This issue is because of a missing commit in RHEL9.3 kernel. Apply upstream kernel commit 2505a51ac6f249956735e0a369e2404f96eebef0 on RHEL9.3 base kernel, and install the kernel to fix the issue.

## 4.4. iSER

Issue ID	Description/Workaround
30607	<b>Description:</b> Trace is seen while clearing target configuration during I/O.
32280	<b>Description:</b> Login timeout and IO errors are seen when sg_reset is issued on the LUN from Initiator.
37110	<b>Description:</b> Call trace seen within 30 min on iser target machine while running iozone traffic. <b>Note:</b> This is an issue with kernel iSER Target module. It is fixed in kernel 5.4 and above.
34813	<b>Description:</b> Session terminates when running traffic with block size >= 1M.
38405	<b>Description:</b> <b>Unknown VPD Code: 0xc9</b> seen on target during iser login. <b>Workaround:</b> Disable multipathd service on initiator.
40616	<b>Description:</b> [5.10]: Login fails for more than 9 connections.

Issue ID	Description/Workaround
	<b>Note:</b> This is a kernel issue and fixed in kernels > 5.10.17.
41130	<b>Description:</b> Issues seen while toggling the interface on multipath enabled lun.
42166	<b>Description:</b> Errors observed during iSER discovery. <b>Note:</b> Login to the target works successfully.
43619	<b>Description:</b> [6.6.X]: rping/iSER/NVME-oF(RDMA) fails over VLAN interface.

## 4.5. WD-UDP

Issue ID	Description/Workaround
32790	<b>Description:</b> UDP offload fails on receiving end with netserver. <b>Workaround:</b> Start netserver with -f option.
34201	<b>Description:</b> [T6]: Unable to run more than 512 connections with WD high capacity config file.
35482	<b>Description:</b> Applications doing fork are not supported with WD-UDP.
39142	<b>Description:</b> wload needs to handle two cards correctly.
40727	<b>Description:</b> Unable to create 63 connections with iperf3.
41134	<b>Description:</b> Large number of <code>tp_tnl_cong_drops</code> observed.
43233	<b>Description:</b> WD-UDP fails with <code>intel_iommu=on</code> .

## 4.6. NVMe-oF iWARP

Issue ID	Description/Workaround
39048	<b>Description:</b> [5.4]: I/O error seen when we format the LUN's. <b>Note:</b> This is a kernel issue and is fixed in later Kernel.org kernels.
41016	<b>Description:</b> Frequent reconnection issue observed on initiator on running iozone.
43619	<b>Description:</b> [6.6.X]: rping/iSER/NVME-oF(RDMA) fails over VLAN interface.

Issue ID	Description/Workaround
43805	<p><b>Description:</b> [RHEL 9.3]: Initiator machine hits panic while running iozone test.</p> <p><b>Workaround:</b> This issue is because of a missing commit in RHEL9.3 kernel. Apply upstream kernel commit 2505a51ac6f249956735e0a369e2404f96eebef0 on RHEL9.3 base kernel, and install the kernel to fix the issue.</p>

## 4.7. SPDK NVMe-oF iWARP

Issue ID	Description/Workaround
40481	<p><b>Description:</b> [SPDK] iozone hang observed while running io against spdk target with interface toggle test.</p> <p><b>Workaround:</b> Configure in_caps_data (-c) less than 8192 on the target.</p>
40505	<p><b>Description:</b> [RHEL 8.2]: initiator hits call trace while formatting spdk luns.</p> <p><b>Note:</b> This issue is seen only with ext3.</p>

## 4.8. NVMe-oF TOE

Issue ID	Description/Workaround
39048	<p><b>Description:</b> I/O error seen when we format the LUN's.</p> <p><b>Note:</b> This is a kernel issue and is fixed in later Kernel.org kernels.</p>
40852	<p><b>Description:</b> NVMe/TCP and NVMe/TOE are not supported in RHEL8.2.</p>
41626	<p><b>Description:</b> [NVMe/TCP]: Frequent reconnects seen on initiator on running iozone.</p>
42327	<p><b>Description:</b> <b>Unmaintained driver is detected: NVMe/TCP Target</b> warning seen in dmesg.</p>

## 4.9. SPDK NVMe-oF TOE

Issue ID	Description/Workaround
39550	<p><b>Description:</b> Compilation fails on Virtual Machines.</p> <p><b>Note:</b> This is not a Chelsio driver issue. It is a generic issue with SPDK. To avoid this, ensure that virtual cpu has sse4_1,sse4_2 attributes. Please refer <a href="https://mails.dpdk.org/archives/users/2016-February/000283.html">https://mails.dpdk.org/archives/users/2016-February/000283.html</a>.</p>
39606	<p><b>Description:</b> nvme_tgt reports errors with lvm on nvme disks.</p> <p><b>Note:</b> This is not a Chelsio driver issue. It is a generic issue with SPDK.</p>
40979	<p><b>Description:</b> Unable to create targets when <b>vfio-pci</b> is used.</p>
43156	<p><b>Description:</b> Starting target errors out with Transport type 'TCP' create failed with both T5 and T6 cards in machine.</p>
43181	<p><b>Description:</b> "failed to connect controller, error 1006 seen when we try to connect to target using connect-all..</p> <p><b>Note:</b> This issue is fixed with with nvme-cli v2.5.</p>
43791	<p><b>Description:</b> [RHEL9.3/8.9, 6.6.X]: Warning seen on starting nvme_tgt.</p>
43879	<p><b>Description:</b> Need support for spdk v24.01 LTS.</p>

## 4.10. SoftiWARP

Issue ID	Description/Workaround
39037	<p><b>Description:</b> I/O errors (WRITE) seen on while running NVMe-oF iotzone traffic.</p> <p><b>Workaround:</b> This is fixed in the latest kernel.org kernels. As a workaround, increase the number of retries for nvme host driver.</p> <pre># modprobe nvme-core max_retries=15</pre>
39156	<p><b>Description:</b> Connection errors seen intermittently while running iser traffic.</p>
39340	<p><b>Description:</b> Trace seen on initiator while running nvme traffic with link toggle.</p>
40653	<p><b>Description:</b> Initiator hits panic during nvme discovery.</p> <p><b>Note:</b> This is a kernel issue and fixed in &gt; 5.10.18.</p>
41004	<p><b>Description:</b> [iSER]: I/O errors seen on initiator while running iotzone traffic.</p>
41240	<p><b>Description:</b> [iSER]: Issues observed on Initiator while running iotzone traffic with repeated link toggle.</p>

## 4.11. LIO iSCSI Target Offload

Issue ID	Description/Workaround
33602	<b>Description:</b> Connection errors due to dataout_timeout seen while running traffic.
41924	<b>Description:</b> Trace seen while running IO to brd device.

## 4.12. iSCSI PDU Offload Initiator

Issue ID	Description/Workaround
32813	<b>Description:</b> Observing few connection errors while running traffic.
38376	<b>Description:</b> Connection errors are seen during logout of the LUN.
41241/42691	<b>Description:</b> Target stop and start with IO running on luns is not supported. <b>Note:</b> The issue is fixed in upstream and is available in Kernels 5.15.35 and above.
41977	<b>Description:</b> Few node/session commands fail, when logged in over iface.
42291	<b>Description:</b> [RHEL 9.0]: Persistent login fails after reboot.
42330	<b>Description:</b> [RHEL 8.6/9.0]: Connection failure and stuck TID seen during discovery. <b>Note:</b> The issue is fixed in upstream and is available from RHEL8.7/9.1.
42714	<b>Description:</b> [Debian 11.5]: Kernel panic seen in 1 hour of starting 2 port traffic.
42980	<b>Description:</b> Kernel panic observed while running 'iscsiadm -m node -s' command, when Target is not reachable.

## 4.13. Crypto Offload

Issue ID	Description/Workaround
32884	<b>Description:</b> Machine hits kernel panic when running IPSEC with AES-CTR with larger payload sizes. <b>Note:</b> This is a kernel issue, and it is fixed with <a href="http://www.mail-archive.com/linux-crypto@vger.kernel.org/msg25422.html">http://www.mail-archive.com/linux-crypto@vger.kernel.org/msg25422.html</a> patch. Fix is available in kernels >=4.9.37.

Issue ID	Description/Workaround
32889	<p><b>Description:</b> Running HMAC tests by specifying <b>-engine af_alg</b> fails.</p> <p><b>Workaround:</b> Do not specify <b>-engine af_alg</b> since it gets offloaded on to the adapter even without this parameter.</p>
35686	<p><b>Description:</b> Inline TLS is not supported on memory free adapters.</p>
37442	<p><b>Description:</b> [Co-processor]: Issues with IPsec tunnelling.</p> <p><b>Workaround:</b> This is a kernel issue and not seen in 5.3 and above kernels. Disable IOMMU and the issue will not be seen.</p>
38677	<p><b>Description:</b> [Co-processor]: VSFTP is not supported.</p>
38690	<p><b>Description:</b> [Co-processor]: Need openssh support.</p>
39584	<p><b>Description:</b> Apache is not supported.</p> <p><b>Note:</b> This is not a Chelsio driver issue. The Application does not have kTLS support.</p>
39666	<p><b>Description:</b> [Co-processor]: Connections in IPsec tunnel fail to establish if t4_tom is loaded.</p>
39748	<p><b>Description:</b> OpenVPN is not supported.</p> <p><b>Note:</b> This is not a Chelsio driver issue. The Application does not have kTLS support.</p>
39969	<p><b>Description:</b> [Co-processor]: Issues observed while running on dual socket machines.</p>
41074	<p><b>Description:</b> [TLS TOE]: Only AES128-GCM-SHA256 cipher is supported.</p>
41209	<p><b>Description:</b> [TLS TOE]: Client doesn't transfer data when lower MTU is configured on router.</p>
41299	<p><b>Description:</b> [TLS TOE]: Abrupt killing of openssl server with heavy traffic is not supported.</p>
41332	<p><b>Description:</b> [Co-processor]: Crypto counters do not increment on nginx server with upload test from PEER.</p>
43758	<p><b>Description:</b> [RHEL 9.3]: Ping failure observed on TLS TOE nginx server upon starting ab download connections from clients.</p> <p><b>Note:</b> Memory barrier functionality in RHEL 9.3 is broken due to a missing upstream Linux commit 2505a51ac6f249956735e0a369e2404f96eebef0. This fix is essential for Chelsio drivers. The fix is included in RHEL 9.4.</p>

## 4.14. Data Center Bridging (DCB)

Issue ID	Description/Workaround
30002	<b>Description:</b> "Failed DCB Set Application Priority" seen in dmesg if DCBX configuration is updated on Switch. <b>Note:</b> This is not a Chelsio driver issue. It is a generic issue with SPDK.
34552	<b>Description:</b> PFC pause frames with priority > 3 are not honoured by T6 adapter. <b>Workaround:</b> Configure priority 0-3 for PFC.
37518	<b>Description:</b> Need to show local, remote and operational DCBX parameters in devlog/dcb_info.
37609	<b>Description:</b> Intermittent PFC failures are seen.
38705	<b>Description:</b> Only few connections are reset, when iSCSI DCB priority is updated in switch.
39742	<b>Description:</b> dcb_info does not show local App TLVs, when DCBX is disabled on PEER.

## 4.15. FCoE full offload Initiator

Issue ID	Description/Workaround
33948	<b>Description:</b> Need scsi-stats under sysfs.
33967	<b>Description:</b> Running FCoE full offload and openfcoe (NIC) initiator traffic simultaneously is not supported.
34116	<b>Description:</b> Panic observed while loading csiosstor after cxgb4 when multiple adapter are present in RHEL7.X platforms. <b>Note:</b> This is a kernel issue.
35737	<b>Description:</b> Repeated shut and no-shut of target switch port with less delay is not supported.
41649	<b>Description:</b> Repeated shut and no-shut of initiator switch port is not supported.
42085	<b>Description:</b> csiosstor reports link down on Port0 when Port1 is shut on switch end.
42097	<b>Description:</b> HMA configuration failure seen during PCI bus reset, when csiosstor is loaded.
43699	<b>Description:</b> Warning observed while compiling csiosstor in Debian 12.X OS.



## 4.16. Offload bonding Driver

Issue ID	Description/Workaround
21419	<b>Description:</b> Offload connections need to be migrated to host stack when last slave is removed from the bond.
29564	<b>Description:</b> All Rx connections are not resuming immediately on failover.
36972	<b>Description:</b> No Load balancing in RHEL7.X platforms with mode=2. <b>Note:</b> This issue is seen only with iperf and not with other applications like netperf.
43789	<b>Description:</b> Connections are not resuming on removing and adding both the slaves to the bond.
43795	<b>Description:</b> [RHEL 9.3, 6.6.X, Debian 12.4]: System hits panic on removing and adding both the slaves to the bond repeatedly using ifenslave with rx traffic.

## 4.17. Offload Multi-Adapter Failover (MAFO)

Issue ID	Description/Workaround
32092	<b>Description:</b> Traffic fails to run on backup interface if two non-identical cards are used. <b>Workaround:</b> Disable tcp_timestamps using, <code>[root@host ~]# sysctl -w net.ipv4.tcp_timestamps=0</code>
41481	<b>Description:</b> Issues with IPv6 failover.
41483	<b>Description:</b> Repeated shut and no-shut of switch port with IPv4 bidirectional.

## 4.18. UDP Segmentation Offload and Pacing

Issue ID	Description/Workaround
13484	<b>Description:</b> Need a way to reset the pacing values to default value.
13872	<b>Description:</b> Application exits immediately when interface goes down.
43942	<b>Description:</b> [RHEL 9.3, 6.6.X][MTU 1500]: All connections are not running simultaneously.

## 4.19. Offload IPv6

Issue ID	Description/Workaround
7263	<b>Description:</b> IPv6 offload does not support "IPv4-mapped IPv6 addresses".

## 4.20. WD Sniffing And Tracing Utility

Issue ID	Description/Workaround
40833	<b>Description:</b> tp_tnl_cong_drops seen on tracer while running wd_tcpdump_trace. <b>Workaround:</b> Disable PAUSE on the Chelsio ports of the tracer machine.
40885	<b>Description:</b> Start/stop of tracer continuously with traffic is not supported.

## 4.21 Classification and Filtering

Issue ID	Description/Workaround
10219	<b>Description:</b> Rule based on ethertype 0x8906(FCoE) isn't getting honoured.
21118	<b>Description:</b> VLAN insertion/extraction/rewrite is not supported with DDR filters.
30260	<b>Description:</b> Filter rule is not honoured for packet with both outer and inner vlan.
32677	<b>Description:</b> Need proper error message when hash filter entries get exhausted.
33535	<b>Description:</b> Kernel panic seen when enabling tracing to port-1 with hashfilter-config file.
33640	<b>Description:</b> Need support for src-mac match for Filtering.
34040	<b>Description:</b> [VxLAN encap] can not classify packets based on outer header in VxLAN traffic (encap_lookup=0).
34757	<b>Description:</b> Need support for stateful NAT.
35653	<b>Description:</b> Kernel invokes panic when sending traffic to any RspQ ID other than ethernet queue using TCAM filter rule.

Issue ID	Description/Workaround
35952	<b>Description:</b> Filter do not honour when Don't Fragment(DF) and More Fragments(MF) flags are set in a packet.
37333	<b>Description:</b> Filter rule does not get honoured when "frag" is set to "1" along with fport or lport tuples.
37865	<b>Description:</b> Should report error when creating Hash filter rule with not all tuples provided in filterMask.
40102	<b>Description:</b> Unable to create hash filters on SO adapter.

## 4.22. OVS Offload Driver

Issue ID	Description/Workaround
33271	<b>Description:</b> Hitcounts are not incrementing seamlessly when less than 16 flows are configured.
33280	<b>Description:</b> VxLAN VNI rewrite is not supported.
33662	<b>Description:</b> Second VxLAN tunnel with different UDP port won't get offloaded.
33706	<b>Description:</b> Exact match filters (specifying 4 tuples) with VxLAN currently not supported.
37130	<b>Description:</b> LIP should be provided for IPv6 filter to be hit.

## 4.23. Mesh Topology

Issue ID	Description/Workaround
37267	<b>Description:</b> Need a utility to configure network interfaces in mesh topology.
38744	<b>Description:</b> Need a method to configure two network interfaces with IPv6 address on same subnet.
38780	<b>Description:</b> rping fails to run when iwpmc is enabled.

## 4.24. Traffic Management

Issue ID	Description/Workaround
17207	<b>Description:</b> Class rate limiting with mode flow is not supported for NIC traffic.
34124	<b>Description:</b> [TM+TLS]: Higher bandwidth observed for TLS+TOE connections.
35985	<b>Description:</b> No error observed on configuring rate limit more than link speed.
39533	<b>Description:</b> Throughput exceeds the set rate if burst size > 13043.
39706	<b>Description:</b> [Class Rate Limiting][25G]: Throughput drop observed while running multipleconnections on multiple classes.

## 4.25. Unified Boot Software

Issue ID	Description/Workaround
23143	<b>Description:</b> [HII] Behaviour on IBM x3850 Gen 6 needs few modifications.
35708	<b>Description:</b> [Lenovo]: HII is currently not supported on latest uEFI v2.6 machines. <b>Workaround:</b> Use <code>drvcfg -s</code> from uEFI shell to configure the adapter.
36680	<b>Description:</b> Need support for AARCH64 in uEFI driver.
39895	<b>Description:</b> iSCSI boot should allow multiple target and luns to save as boot device.
39995	<b>Description:</b> Option ROM loading with adapters having different versions. <b>Note:</b> With multiple adapters having different types and versions of Option ROMs, the loading of Option ROM depends on factors like System type (Legacy only, uEFI or dual bios), versions, first device initializing etc. So, it is highly recommended to use the same Option ROM (type and version) on all Chelsio adapters in the system.
40158	<b>Description:</b> Machine keeps rebooting in legacy mode with EFI based OS already present on LUN.
44045	<b>Description:</b> Link status is shown as <b>Down</b> for Chelsio interface while iPXE boot.
44046	<b>Description:</b> iSCSI BIOS Initialization fails for T6225-OCP3 Adapter.
44047	<b>Description:</b> FCoE BIOS Initialization fails for T6225-OCP3 Adapter.