OpenNSL 3.0.0.2 Release Notes

Version 0.3

12-Dec-2015

Contents

1 Overview

This document provides a general description of the OpenNSL release. It also describes the supported platforms, API additions or changes, resolved issues and any relevant open issues.

OpenNSL 3.0.0.2 release adds the following new features:

- SDK upgrade to 6.4.8
- Support for Accton AS5712 Switch
- Support for Broadcom reference platform with Tomahawk B0 switching silicon
- Support for sFlow
- Added API's to support for L3 statistics and resilient ECMP
- Pruning reserved fields from structures and enumerations

For product documentation, please refer to the 'doc/html/index.html' file in the OpenNSL package.

2   Deliverables

2.1 Date of Delivery

OpenNSL version 3.0.0.2 is released on 4th December 2015.

2.2 Distribution Method

OpenNSL is distributed via Broadcom's DOCSAFE and Broadcom's GitHub forums.

2.3 Items included in this release

Following are the items included in this release:

- OpenNSL library for supported platforms
- OpenNSL header files
- OpenNSL documentation
- OpenNSL example applications and supporting software.

2.4 Items Not Included in this release

The following items are specifically not included in this delivery and will be considered for future releases:

- None

3 Platform Support

This release contains support for the following platforms:

Platform	Broadcom Switching Silicon
Interface Masters Niagara 2948-6XL switch	Trident2 (BCM56850_A1)
Broadcom reference platform (SVK)	Trident+ (BCM56842_A1) Trident2 (BCM56850_A1) Tomahawk (BCM56960_A0, BCM56960_B0)
Wedge Switch	Trident2 (BCM56850_A1)
Celestica Redstone-XP	Trident2 (BCM56850_A1)
Accton AS5712	Trident2 (BCM56854_A2)

4 Testing

The following table lists the high level testing done on OpenNSL API's using the sample applications.

Sample Application	Test description
L2 firewall	Verified L2 entry addition and deletion by checking the traffic from/to a destination. This application is also tested by booting it in warm boot mode.
Routing	Created host and default routes and verified that traffic is routed as per the routes added. This application is also tested by booting it in warm boot mode.
Trunk	Added few ports to a trunk and verified that the traffic is distributed across the trunk members. This application is also tested by booting it in warm boot mode.
KNET	Created a Linux interface that maps to a front panel port with a specified IP and net mask and verified the configured parameters from the Linux shell.
BST	Verified display and clearing of basic BST counters.
sFlow	Verified configuration, display of sFlow sampling rate along with the sampling of packets to CPU at configured rate.

Only minimal testing has been done on the following.

Features:
- Warmboot

5 Issues resolved

ID	Description
FP-232760	GPL modules does not compile unless LINUX_UAPI_SPLIT variable is exported
FP-231776	Console hangs on Broadcom reference platform during system boot up if DHCP server is not reachable
FP-233561	Upgraded CFE image
FP-233730	Xml files are included in the ODP package

6 Known Issues

ID	Description
FP-230782	QSFP ports on Accton AS5712 platform are not supported
FP-233309	Warmboot feature is not supported on Accton AS5712 platform

7 Previous Releases

Date	Release Number	Feature Set	Codebase
5th Oct 2015	2.0.0.8	- SDK upgrade to 6.4.6 - Support for the following modules - Trunk - KNET - Sample application to demonstrate L3 routing and STP modules - Support for Warmboot feature - Support for Netserve application that is used to connect to OpenNSL application through telnet - Support for Celestica Redstone XP platform - Enhanced L2 firewall application to dump the L2 table - Removed linux-uk-proxy kernel module	6.4 branch