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BroadView 2.0.4.3 Release Notes

Version 1.0

30 Sept, 2015

Contents

1 Overview

This document is the Release Notes for BroadView™ Instrumentation Reference Agent for maintenance release version 2.0.4.3. The BroadView™ Instrumentation Agent provides means to access the underlying networking silicon's instrumentation features via REST API.

This release contains Buffer Statistics Tracking and Packet Trace features in BroadView software version 2.0.4.3.

2 Deliverables

2.1 Date of Delivery

BroadView 2.0.4.3 is released on Sept 30, 2015.

2.2 Distribution Method

BroadView 2.0.4.3 is distributed via Broadcom's GitHub forum.

2.3 Items included in delivery

Following are the items included in this delivery:

- Packet Trace: Inject a packet and identify its egress through a specific link in a LAG or ECMP group
- Ganglia based Reference Application for Buffer Statistics Tracking feature
- OpenNSL Version upgraded to 6.4.6.6

The binaries included in the release package are the executables and shared libraries for the different platforms the source archive has been tested against and qualified. These binaries are located at `<broadview-base>/bin/<package>` directory. The details of each set of these binaries within the tar ball are mentioned below.

Binary	Description
BroadViewAgent (Executable)	BroadView™ Instrumentation Reference Agent. The **BroadViewAgent** uses the underlying OpenNSL for the Switch silicon.
BroadViewBstApp (Executable)	The reference application communicates with **BroadViewAgent** using REST API which is a Web (HTTP) like mechanism for communication.
BroadViewPacketTraceApp (Executable)	The reference application communicates with **BroadViewAgent** using REST API which is a Web (HTTP) like mechanism for communication.
ExampleCfgApp (Executable)	The example application communicates with **BroadViewAgent** using internal socket.

libsbopennsl.so.1 (Shared Library)	South Bound plugin shared library. The **BroadViewAgent** dynamically links this library.
libvendorinit.so.1 (Shared Library)	Shared library to initialize OpenNSL. The **BroadViewAgent** dynamically links this library.

2.4 Significant changes from Release Version 1.0.0.3

- Enhanced REST APIs for Buffer Statistics Tracking feature
  - Added capability to automatically re-enable BST feature upon a threshold breach
  - Added rate limiting for Trigger reports
  - Added configurable facility to send complete data in Async reports
  - Added version number in agent response messages
  - Added API to get switch properties such as ASIC information
  - Added support to report counter related information on threshold breaches
  - Added a configuration option to report buffer statistics in percentage

2.5 Significant changes from Release Version 2.0.4.1

- Enhanced REST APIs for Buffer Statistics Tracking feature
  - Added option to configure the agent reporting statistics in percentage
- Defects Fixed
  - Fixed issue in sending full async reports
  - Fixed incorrect `dst-lag-member` value reporting in Packet Trace
  - Fixed a segmentation fault while executing `get-bst-thresholds` method

3 Platform Support

The source archive contains the entire source tree for the features being released. It has been tested and qualified against the following build combinations (the binaries of which are available in the `<broadview-base>/bin` directory)

Platform	CPU	OpenNSL	OS	Kernel
TD2_SVK	GTO	6.4.6.6	brl_2.0	2.6.34.6
TH_SVK	GTO	6.4.6.6	brl_2.0	2.6.34.6
IM_N2948_6XLM	X86	6.4.6.6	ubuntu_12	Ubuntu 3.5.0-54

4 Known Issues

- **FP-215996:** In Tomahawk, statistics reporting based on device level threshold triggers does not work.
- **FP-217202:** Operations on `mc-share-queue-entries-threshold` parameter are currently not supported. Get operations always return zero for this parameter.
- **FP-217230:** Operations on `mc-share-threshold` parameter in `configure-bst-thresholds` method for `egress-port-service-pool` realm are currently not supported. Get operations always return zero for this parameter.
- **FP-217465:** Threshold setting for `um-headroom-threshold` parameter in `ingress-port-priority-group` realm for a single port is automatically applied to all the ports.
- **FP-217596:** Only 8 Egress CPU queues are currently used out of the available 48 queues in the silicon.
- **FP-221472:** When unicast packet with unresolved DA is injected for tracing the egress LAG port, the packet does not get hashed correctly in the LAG.
- **FP-221473:** Frames sizes greater than 1588 are not supported in the Packet Tracing feature.
- **FP-229425:** BroadView with OpenNSL does not clear statistics on 'clear statistics' command.
- **FP-229431:** BroadView with OpenNSL does not populate egress port service pool statistics.
- **FP-228488:** When trigger reporting is in progress and traffic is stopped & restarted multiple times while a client attempts to get BST reports occasional crashes are observed.
- **FP-229379:** On Trident-2 platform, ingress service pool statistics is not cleared on clear statistics command.
- **FP-229710:** Statistics are not cleared in get-bst-report in Tomahawk when traffic is running at high rate and then stopped.

5 Previous Releases

Date	Release Number	Feature Set
02 Feb 2015	BroadView 1.0.0.3	Support for Buffer Statistics Tracking
22 Sep 2015	BroadView 2.0.4.1	Support for Packet Tracing & Ganglia Presentation tool

