



*Plexxi Release Notes
Plexxi Switch and Control Release 3.2.0*

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Introduction

This document contains information about the Plexxi 3.2.0 release, which delivers software updates for Plexxi Switch and Plexxi Control.

Software Versions Included

The following versions of software updates are included:

- Plexxi Switch 3.2.0
- Plexxi Control 3.2.0

Supported Hardware

Plexxi release 3.2.0 is supported on the following Plexxi switches:

- Switch 1x (PX-S1X)
- Switch 2 (PX-S2)
- Switch 2s (PX-S2S)
- Switch 2p (PX-S2P)
- Switch 2sp (PX-S2SP)
- Switch 2e (PX-S2E)
- Switch 3eq (PX-S3EQ)

New in this Release

New features:

- Plexxi Control OVA VM deployment/installation.
- Plexxi Control ISO Installation Single ISO file
- Plexxi switch setup utility: px-setup
- New SNMP MIB to support Nutanix
- Log support bundle improvements
- New Log Support Bundle Command: px-log-bundle
- Experimental: Support for LLDP Transmit



Related Documentation

The following additional documentation supports this release.

- *Plexxi Compatibility Matrix, Version 7 or greater.* The *Plexxi Compatibility Matrix* contains version-specific software and hardware support information as well as cable and transceiver support information.
- *Plexxi Control Installation, Upgrade and Administration Guide, Release 3.2.0*
- *Plexxi Switch Administrator Guide using Linux and Plexxi CLI, Release 3.2.0*
- *Plexxi Control Online Help* is available while logged into the Plexxi Control UI

Except for the online help, this documentation is available on the Resources > Technical Publications page of <http://www.plexxi.com>.

Contacting Plexxi Support

Plexxi Technical Support services are available to answer your questions and to make sure that your software and hardware continue to operate properly.

You can contact Plexxi Support at:

support@plexxi.com

1.888.415.9809 (US/Canada toll-free)

+1 603-782-0702 (US/International)

www.plexxi.com/support

Plexxi Control: OVA VM Deployment/Installation

In addition to installing Plexxi Control using an ISO installer, you can now deploy a VM and install Plexxi Control using OVA in VMware.

The following document is updated to include the new OVA deployment/Installation:

- *Plexxi Control Installation, Upgrade and Administration Guide, Release 3.2.0*

Plexxi Control: Single ISO Installation File

With release 3.2.0, Linux and Plexxi Control can now be installed on a new VM using a single ISO installation file that contains both the Linux CentOS operating system and Plexxi Control software.

The following document is updated to include the new ISO Installation:

- *Plexxi Control Installation, Upgrade and Administration Guide, Release 3.2.0*

Plexxi Switch Setup Utility: px-setup

`px-setup` is a Plexxi utility that simplifies Plexxi switch setup by eliminating the need to edit configuration files and restart services on the Plexxi Switch. The utility queries administrators for information, then configures the IP or hostname of the Plexxi Control software, time zone, network address, default gateway, SNMP management, and several network services, including NTP and DNS.

`px-setup` is used to perform initial switch setup, including:

- setting up all switches and all network characteristics for a new install
- setting up a new Plexxi switch added to an existing Plexxi fabric
- configuring a specific parameter in an existing Plexxi fabric

The utility is run on the Plexxi switch from a console.

The following document is updated to include `px-setup` and revises the Initial Setup procedure to use `px-setup`:

- *Plexxi Switch Administrator Guide using Linux and Plexxi CLI, Release 3.2.0*

New SNMP MIB to Support Nutanix

This release adds support for the following tables from the Q-Bridge MIB (RFC 4363):

- `dot1qVlanStaticTable`
- `dot1qTpFdbTable`

This support is specifically added to allow Nutanix Prism to retrieve Plexxi Switch information to be displayed in the Nutanix Prism graphical user interface.

To support this functionality, Plexxi Connect Nutanix in Plexxi Connect 2.3 has been enhanced to allow for basic configuration of the SNMP interface on the Plexxi Fabric.

Log Support Bundle Improvements

Log improvements are implemented with the Plexxi 3.2.0 release to enable customers and network engineers to quickly pull all relevant logs.



New Log Support Bundle Command: px-log-bundle

The px-log-bundle command, issued from the Control server, allows the user to retrieve a log bundle from a specified switch.

px-log-bundle

Generate log bundle

The px-log-bundle command allows the user to retrieve a log bundle from a specified switch. The output file has the format `HOSTNAME-YYYYMMDD-HHMM-sw-log-bundle.tar.gz` and contains log files for a switch that are newer than the specified or default (24 hours) time.

```
px-log-bundle -h
```

Syntax

```
px-log-bundle [-h] [-v] [-d days | -H hours | -f [YYYY][MM][DD]hhmm]
```

where:

-h --help	Prints this help text.
-d --days=(days)	Include files newer than number of days before now.
-H --hours=(hours)	Include files newer than number of hours before now.
-v --verbose	Print verbose messages.

Example

```
plexxi@localhost ~ $ px-log-bundle -d 1
```

This script will collect a log bundle from the specified switch.

If you make a mistake answering any of the following questions simply type CTRL-C and re-run this command.

If no arguments are given, logs from the last 24 hours will be collected.

Run " px-log-bundle -h " for usage.

```
Switch hostname or ip: 172.18.3.31
Switch username: admin
Switch password:
SSH session login successful
Collecting log bundle, this may take several minutes.
Executing sudo /usr/bin/px-log-bundle -d 1
sudo /usr/bin/px-log-bundle -d 1
[sudo] password for admin:
Gathering files newer than Sun Jun 25 15:01:28 2017
This may take a few minutes ...
Program exiting, running cleanup...
```

```
Retrieving log file myswitch-20170626-1501-sw-log-bundle.tar.gz
```

```
Log bundle file name is /home/plexxi/myswitch-20170626-1501-sw-log-bundle.tar.gz
```

Experimental: Support for LLDP Transmit

IMPORTANT: LLDP Transmit is an experimental feature in the 3.2.0 release.

To support Plexxi integration with Nutanix, LLDP frames can now be transmitted out access ports. LLDP is enabled in Plexxi Connect when you configure add or edit a Nutanix Prism pack configuration or a VMware vSphere pack configuration. With LLDP enabled, the Plexxi Switch will send LLDP frames with the following information out access ports:

- **chassis ID** - the system MAC address of this Plexxi Switch
- **System Name** - the fully qualified domain name of this Plexxi Switch
- **System Description** - the Plexxi Fabric name and UUID this Switch is part of
- System Capability Information:
 - **Capabilities:** bridge, router, cvlan, svlan
 - **Enabled Capabilities:** bridge, router, cvlan, svlan
- Management IP Information:
 - **IP Address** - the IP address of this switches Management Interface
 - **Interface Index** - the IfIndex of the port this LLDP frame was sent out of

This information can be used by receiving systems to determine which switch and port they are connected to.

Issues Fixed in this Release

Issue ID	Description
PXCTL-3124	Removed the 'VLAN ID' field from the 'Customization Template' screen during OVA install of the Plexxi Control software.
PXCTL-2962	Fixed an issue where network links were not drawn on the core MLAG after an upgrade.
PXCTL-2959	Fixed an issue where multiple clients may lose access to Plexxi Control and one client is unable to recover.
PXCTL-2817	Fixed an issue where changing a QSFP port configuration resulted in a resource processing issue.
PXCTL-2623	<p>Fixed the following issue:</p> <p>If the network link bridging a VHost to a Plexxi Switch in Plexxi Control's Networks view is built based on the MAC attachment being vMotioned (i.e the vMotion VM's MAC attachment is learned before the VMkernel's MAC attachment), then after a vMotion, the vMotioned VM's VHost appears connected to the source and destination switches for the duration of the MAC age-out.</p>
PXPF-1374	The default time zone was changed from Eastern to UTC.
PXSW-2718	Removed benign logging to reduce log messages.
PXSW-2534	Fixed an issue where rebooting a switch connected to a Nutanix node loses connectivity to the VMs in the node or to the entire node.
PXSW-2533	Fixed an issue where periodic failures occurred when adding ports to a VLAN group.
PXSW-2442	<p>Fixed the following issue:</p> <p>The following MC traffic issue exists when decreasing the confluent ring size:</p> <p>After dropping the confluent ring size from 4 to 2, the previously included ports that are now not part of the LAG, are not removed from the MC group. As a result, line rate MC traffic is seen.</p>
PXSW-2697	The ability to configure a separate password for 'enable' (PRIV-EXEC) mode in the px-shell CLI is removed in this release. To arrange separate levels of access and authorization, you can utilize the various Plexxi user roles as outlined in the Plexxi Switch Admin Guide.
PXUI-2959	Fixed an issue where real-time port statics were not available to be viewed from the Plexxi Control UI.

Known Issues in this Release

Issue ID	Description
	Multicast traffic over an MLAG is not supported.
PXSW-2946	Fabric Link Encapsulation (FLE) is not supported in release 3.2.0.
PXSW-2501	<p>The following issue exists:</p> <p>When a switch that is on the In-Band Management LAG is rebooted, the LACP configuration is not restored on the In-Band Management LAG.</p>
PXSW-2443	<p>The following MC traffic issue exists:</p> <p>When an MC receiver host moves, MC traffic still gets delivered to the port it was attached to previously until the IGMP JOIN on that port times out.</p>
PXSW-2440	<p>The following MC traffic issue exists when increasing the confluent ring size:</p> <p>An access port that was part of an MC group prior to increasing the confluent ring size is removed from the group after the confluent ring size is increased.</p>
PXSW-2165	<p>An issue exists where:</p> <p>If the following User Defined Path conditions exist:</p> <ul style="list-style-type: none"> • the path uses confluent ring ports • the last switch in the path (egress switch) is the Ubervisor switch <p>And if a Flow Entry has the following characteristics:</p> <ul style="list-style-type: none"> • Path action is selected • The user defined path stated above is selected • The egress ports on the Ubervisor egress switch (last switch in path) are not selected <p>Broadcast, unknown unicast, and unknown multicast traffic will not be forwarded. Known unicast and known multicast traffic is forwarded as expected.</p> <p>To solve this issue, if the Ubervisor switch is egress switch for a User Defined Path that uses the confluent ring, in Plexxi Control when configuring the Flow Entry, explicitly select the egress ports on the egress (Ubervisor) switch.</p> <p>If the last switch in the path is not an Ubervisor switch, traffic flows as expected.</p>
PXSW-2162	In a Flow Entry created in Plexxi Control that uses the Path action, the Flow Entry might match a flow that does not originate on the source switch defined in the user-defined path.

Issue ID	Description
PXS-1216	Before increasing the size of the confluent ring using the Plexxi Switch CLI, you must remove any configuration from the ports to be added to the confluent ring LAG. This configuration includes L1 Replication, Fabric Link Encapsulation and User Defined Paths.