



# *Plexxi Connect Release Notes*

*Release 2.3.0  
June 27, 2017*



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Published Date, June 27, 2017  
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## About Plexxi Connect 2.3.0

This document contains release-specific information about the Plexxi Connect 2.3.0 release.

The Plexxi Connect 2.3.0 software contains the following:

- VMware vSphere Pack
- Nutanix Prism Pack
- Plexxi Control Pack
- Plexxi Connect UI
- Plexxi Connect vSphere Web Client plugin

## Release Content

The focus of this release is to deliver a Nutanix Acropolis solution that is similar to the existing VMware feature set in Connect and integrates with the new Prism Network View in AHV:

- Nutanix Acropolis Hypervisor Support
- Automatic VLAN Provisioning in the Nutanix AHV Environment
- Nutanix Prism Network Visualization for AHV
- Support for Multiple Instances of Nutanix Prism
- VLAN USAT Based Topologies for NDFS and Dynamic VLAN Affinity
- Automatic LAG Provisioning for VMware vSphere

## Related Documentation

The following documentation supports this release:

- *Plexxi Connect Release Notes for Release 2.3.0*
- *Plexxi Software Compatibility Matrix*, version 7 or greater, which identifies compatibility between the versions of Plexxi software and identifies software upgrade paths/compatibility.
- *Plexxi Connect Installation, Upgrade and Administration Guide for Release 2.3.0*
- *Plexxi Connect UI Online Help*, available in the Plexxi Connect UI
- *Plexxi Connect vSphere Plugin User Guide for Release 2.3.0* (this guide)

This documentation (except Connect UI Help) 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](mailto:support@plexxi.com)

1.888.415.9809 (US/Canada toll-free)

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

[www.plexxi.com/support](http://www.plexxi.com/support)

## Nutanix Acropolis Hypervisor Support

In addition to supporting Nutanix running ESX, the Plexxi Connect 2.3.0 release supports Nutanix running the Acropolis Hypervisor (AHV), providing the following:

- VLAN provisioning for user VM's. CVM VLANs cannot be provisioned by Plexxi Connect because the CVM needs to join the cluster before it is visible in the API.
- Creation of VHost/VMs in Plexxi Control for visualization in Plexxi Control's Network view.
- Automatic configuration of Plexxi switches in Prism and automatic configuration of LLDP and SNMP on Plexxi Switches to integrate Plexxi into Prism's Network view.

## Automatic VLAN Provisioning in the Nutanix AHV Environment

In addition to automatic VLAN provisioning for VMware vSphere environments, the 2.3.0 release of Plexxi Connect automatically provisions VLAN's for Nutanix Prism environments.

When a VM is created, the Nutanix pack detects this event. By processing the event, the Nutanix pack learns the VM name, the associated AHV hypervisor, the assigned VNICs, associated bridge and the VLAN/networks to be used by the new VM. With this information, the Nutanix pack can follow the chain of objects and determine the AHV hypervisor PNICs that the VM will eventually use for network communication.

The final step is to determine which Plexxi Switches and ports these PNICs are attached to. Once known, the Plexxi Control pack uses the Plexxi Control API to assign the VLAN to the switch port.

### LLDP and SNMP Messages

Plexxi Switches implement a transmitter for LLDP on each access port of the switch and responds to SNMP requests for further port data. When VLAN Provisioning for AHV in the Nutanix Prism configuration is enabled, LLDP advertises the switch and interface name for the Plexxi Switch. Nutanix Prism now builds a hypervisor PNIC to Switch interface mapping of which Plexxi can interrogate and learn the location of each hypervisor port, and further deduce VLAN settings per port.

### Enabling Nutanix Prism Network Visualization for AHV

Automatic PNIC to Plexxi switch port mapping requires LLDP and SNMP which must be enabled. In either the Plexxi Control UI or the VMware vSphere Plug-in, when adding or editing a Nutanix Prism pack configuration, checking the box, **Nutanix Prism Network Visualization for AHV**, enables Plexxi Connect to automatically provision VLAN Groups in Plexxi Control based on the VLAN's used by Virtual Machines running on AHV. This needs to be checked (enabled) for automation of this function to occur. This field is disabled by default. Also note that enabling **VLAN Provisioning for AHV** automatically enables **Nutanix Prism Network Visualization for AHV**.

Refer to the following documents:

- *Plexxi Connect Online Help*
- *vSphere Plugin User Guide, Release 2.3.0*

## Nutanix Prism Network Visualization for AHV

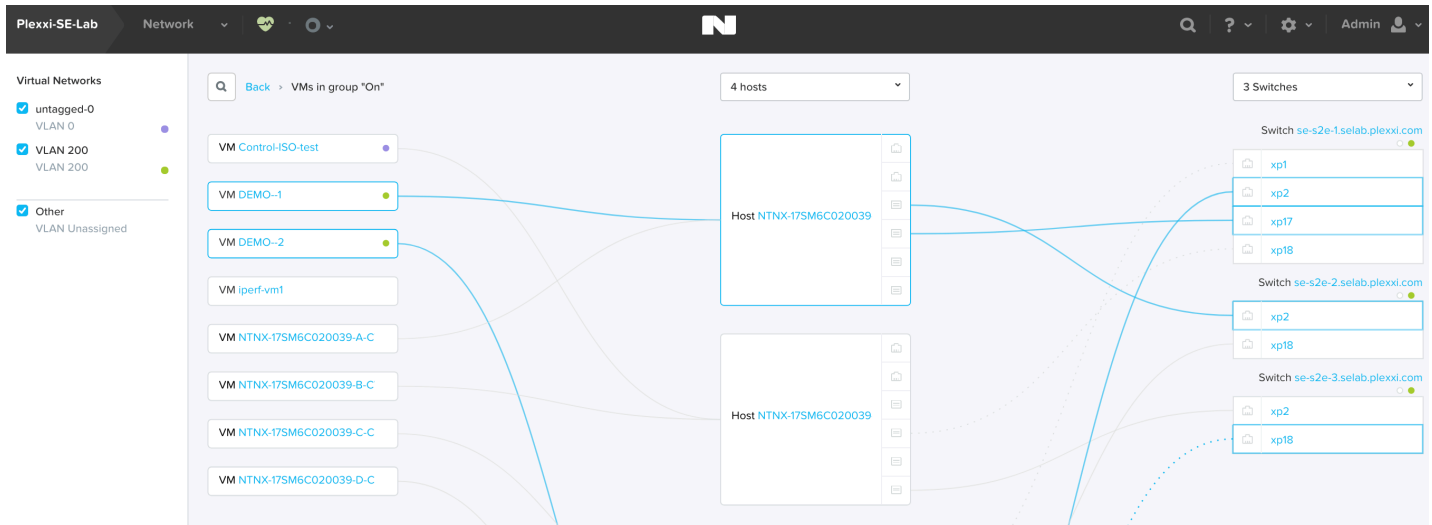
The Prism network visualizer presents an end to end topology representing Virtual Networks (VLANs), VMs and hosts in a Nutanix cluster with associated directly connected Plexxi Switch. This is auto-populated within Prism once Plexxi Connect automatically applies a series of configurations to both Prism and the corresponding Plexxi Switches.

Plexxi Connect automates the configuration, ensuring that the Prism network visualizer always contains up to date connectivity data on Plexxi Switches.

### Enabling Nutanix Prism Network Visualization for AHV

In either the Plexxi Connect UI or the VMware vSphere Plug-in, when adding or editing a Nutanix Prism pack configuration, checking the box, **Nutanix Prism Network Visualization for AHV**, enables visualization of the related Plexxi network from Nutanix Prism when AHV is used. If enabled, Nutanix Prism harvests network information via LLDP and SNMP from Plexxi switches in the fabric. Prism uses this data to populate the Network view, showing the network from VMs/Hosts to Plexxi switches. This needs to be checked (enabled) for automation of this function to occur. This field is disabled by default.

The following sample illustrates Prism visualization:



## Support for Multiple Instances of Nutanix Prism

Plexxi Connect Release 2.3.0, through both the Plexxi Connect UI and the vSphere plug-in, supports the creation (adding) of as many as 10 (ten) Nutanix Prism pack configurations.

Refer to the following documents for detailed information on creating these pack configurations:

- *Plexxi Connect Online Help*
- *vSphere Plugin User Guide, Release 2.3.0*

## VLAN USAT Based Topologies for NDFS and Dynamic VLAN Affinity

In Plexxi Connect 2.3.0, the Nutanix Integration creates an isolated VLAN topology for the VLAN used for Nutanix storage traffic exchanged between CVMs on each Nutanix node.

This replaces the previous point to point isolated topologies created between CVMs and allows for larger Nutanix environments. All traffic on this VLAN is physically isolated from all other traffic on the Plexxi Fabric.

## Automatic LAG Provisioning for VMware vSphere

Plexxi Connect can automatically provision LAGs in Plexxi Control based on the LAGs used by Virtual Machines and VMKernel Adapters running on VMware vSphere ESX vSwitches.

### Enabling Automatic LAG Provisioning for VMware vSphere

In either the Plexxi Connect UI or the VMware vSphere Plug-in, when adding or editing a VMware vSphere pack configuration, checking the box, **LAG Provisioning**, enables Plexxi Connect to automatically provision LAGs in Plexxi Control based on the LAGs used by Virtual Machines and VMKernel Adapters running on VMware vSphere ESX vSwitches. This needs to be checked (enabled) for automation of this function to occur.

Refer to the following documents:

- *Plexxi Connect Online Help*
- *vSphere Plugin User Guide, Release 2.3.0*





## Issues Fixed in the 2.3.0 Release

Issue ID	Description
PXCTL-2623	Fixed the following issue: 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.
PXPSE-1585	Fixed the following issue: In the VMware vSphere plug-in Fabric section, the status of "Latest Fit" is "Unknown" when there are no Fits run in Plexxi Control.
PXPSE-1014	Under certain scenarios, it is possible that the Plexxi Control Jobs created by Plexxi Connect can fail due to a lack of synchronization between 1 or more Jobs. When this occurs, Plexxi Control will be left in the correct state despite the Job failure.

## Known Issues in the 2.3.0 Release

### Known Plexxi Connect Issues

Issue ID	Description
PXPSE-1603	When an existing VLAN Affinities Fit Style is updated from Off to Incremental or Full a Fit will not be immediately run if this is the only change detected by Connect. If a Fit is necessary one can be run manually via Plexxi Control. The next change detected by Plexxi Connect that impacts the VLAN Affinity will result in a Fit being run.
PXPSE-1602	Under certain scenarios, it is possible that the Plexxi Control Jobs created by Plexxi Connect for managing VLAN Affinities can fail due to a lack of synchronization between 1 or more Jobs. When this occurs, Plexxi Control will be left in the correct state despite the Job failure.
PXPSE-1254	When a Support Bundle is created in Plexxi Connect, there may be a delay before the bundle is visible in the UI for download. This occurs when the support bundle is large and takes longer than expected to create. Once the bundle is created, it will appear in the UI for download.
PXPSE-1044 and 1141	Under certain scenarios, it is possible that the Plexxi Control Jobs created by Plexxi Connect can fail due to a lack of synchronization between 1 or more Jobs. When this occurs, Plexxi Control will be left in the correct state despite the Job failure.
N/A	Plexxi Connect leverages LLDP and CDP advertise on distributed vSwitches to know where ESXi servers are cabled into the Plexxi Fabric. Ensure that DNS is properly

Issue ID	Description
	configured on the ESXi servers so that LLDP sends out accurate information.
PXPSE-812	The vSphere pack in Plexxi Connect should not be configured with multiple configurations referencing the same vCenter server (e.g. one by its fully qualified domain name and one by IP address).
PXPSE-791	Plexxi Connect will not properly configure VLANs for Virtual Machines with Fault Tolerance enabled.
PXPSE-753	Plexxi Connect creates VLAN Groups in Plexxi Control that it manages. They can be identified by names starting with "PSE". Users of Plexxi Control should not modify these VLAN Groups. If a user changes a LAG that a VLAN Group provisioned by Plexxi Connect is associated with, Plexxi Connect will not automatically correct it.
PXPSE-607	Plexxi Connect includes the Open VM Tools package. When Plexxi Connect is deployed in a VMware environment Open VM Tools will be run and it will sync the Plexxi Connect VM's clock with the time on the ESXi server. As a result users of Plexxi Connect should verify that their ESXi servers have the proper time configured (NTP is recommended).

## Known Plexxi Control Issue

Issue ID	Description
PXPM-691	When viewing VHost details in Plexxi Control from the Networks view the count of Virtual Machines displayed is not the strict count of VMs on that ESXi server. The total also includes the number of VMKernel Adapters on that ESXi server.



## Known VMware vSphere Plugin Issues

Issue ID	Description
N/A	When the Plexxi vSphere plugin is registered from Plexxi Connect's Action menu at Packs → VMware vSphere bi-directional communication must be available between Plexxi Connect and VMware vSphere (i.e. Connect must be able to reach vSphere, and vSphere must be able to reach Connect). If this communication is not possible the plugin will be reported as successfully registered when it failed.
PXPSE-826	After configuring Plexxi Connect authentication (Plexxi Connect -> Manage -> Settings -> Authentication) the first time after registering the Plexxi Connect vSphere Web Client Plugin, a browser refresh is required before Pack Configurations can be added.

## Known Nutanix Prism Issues

Issue ID	Description
ENG-86651	Prism reports the Plexxi port speeds incorrectly due the usage of SNMP ifSpeed which doesn't support 10GB or greater port speeds.
ENG-86499	Prism reports Plexxi switches as "Vendor: Unknown" in the UI.