



Plexxi Connect Getting Started Guide

*Release 2.0.2
September 9, 2016*



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Welcome

This document is written for network installers and administrators who manage Plexxi fabrics connected to virtual environments running VMware vSphere.

Plexxi Connect 2.0.x with the VMware vSphere integration pack integrates Plexxi into the VMware vSphere environment and communicates directly with VMware vSphere APIs to automate network resource creation on the Plexxi fabric.

Plexxi Connect software automatically mirrors vSphere server's configuration of virtualization hosts and virtual machines in Plexxi Control.

Plexxi Connect also monitors events sent by the VMware vSphere server, taking necessary actions to mirror changes on the Plexxi fabric as they happen.

Related Documentation

The following documentation supports this release:

- *Plexxi Software Compatibility Matrix*, which identifies compatibility between the versions of Plexxi software and identifies software upgrade paths/compatibility.
- *Plexxi Connect User Guide for Release 2.0.2*
- *Plexxi Connect Getting Started Guide for Release 2.0.2*
- *Plexxi Connect Release Notes for Release 2.0.2*

This documentation is available on the Resources > Technical Publications page of <http://www.plexxi.com>.

Installing Plexxi Connect in a VMware vSphere™ Environment

Prerequisites

- vSphere 5.5/6.0
- Plexxi Control 2.4.x software installed.

IMPORTANT: For software version compatibility, refer to the Plexxi *Software Compatibility Matrix* document available on the Resources > Technical Publications page of <http://www.plexxi.com>.

Required Plexxi Connect Software

- Plexxi Connect 2.0.x installation file (ISO format).

IMPORTANT: For software version compatibility, refer to the Plexxi *Software Compatibility Matrix* document available on the Resources > Technical Publications page of <http://www.plexxi.com>.

VM Requirements

The minimum VM requirements are:

- 2 CPUs
- 8 GB RAM
- 50 GB disk

Required Linux Information

- A secure Linux Administrator password.

Required Plexxi Control Information

- The fully-qualified host name or IP address of Plexxi Control
- Valid Plexxi Control credentials (Administrator or Operator username, and password)
- Determine if SSL/TLS certificates should be validated when connecting to Plexxi Control.
- Determine if the configuration should be immediately enabled upon creation.
- Determine which range of VLANs Plexxi Connect can automatically provision based on the vSphere integration. The VLAN range specifies the VLANs which Plexxi Connect will act on. The default range is all user configurable VLANs (1-4000). Plexxi reserves VLANs 4001-4094 for internal use.

Required vSphere Information

You will need the following information for each vSphere configuration to be added:

- The fully-qualified host name or IP address of VMware vSphere.
- Valid VMware vSphere credentials (username / password).

- Determine if SSL/TLS certificates are required when connecting to VMware vSphere.
- Determine if the configuration should be immediately enabled upon creation.
- Determine if LLDP/Advertise should be automatically enabled on any distributed vSwitches added since enabling the configuration.

Installing Plexxi Connect

Plexxi Connect is distributed as an ISO file designed for rapid deployment on virtual hosts.

In this section, you will be asked to provision a new VMware VM to host the Plexxi Connect software.

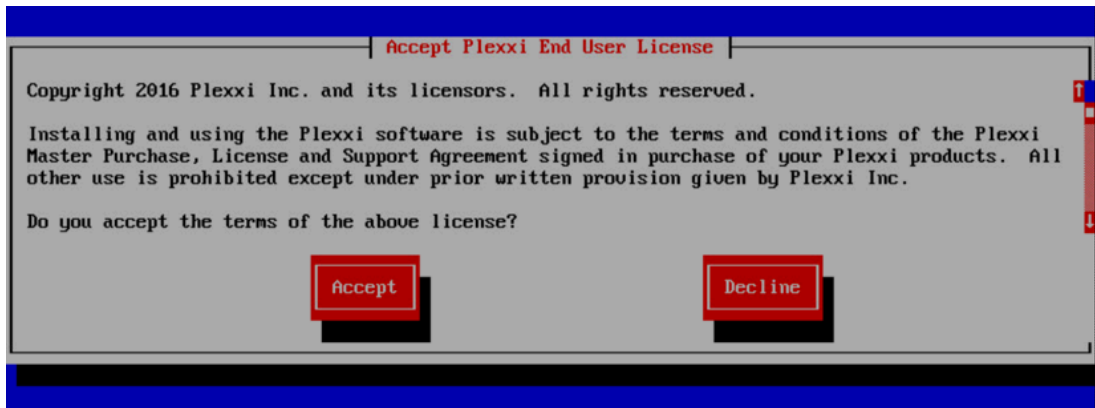
Install Plexxi Connect as follows:

1. Open the VMware vSphere Web Client.
2. Upload the Plexxi Connect ISO file to a datastore accessible from the ESXi server where Plexxi Connect will be deployed.

- PlexxiConnect-2.0.x-xxx.iso

IMPORTANT: For software version compatibility, refer to the Plexxi *Software Compatibility Matrix* document available on the Resources > Technical Publications page of <http://www.plexxi.com>.

3. Create a new VM for Plexxi Connect. You will need to configure the following Plexxi-specific parameters:
 - Select Guest OS Family = **Linux**.
 - Select Guest OS Version = **CentOS 4/5/6/7 (64-bit)**.
 - In Customer Hardware, select CPU = minimum 2 CPUs.
 - Set Memory = minimum 8 GB.
 - Set New Hard Disk = minimum 50 GB.
 - Select New CD/DVD Drive = **Datastore ISO File**.
 - In Select File, select the Plexxi Connect iso file in the datastore where it was uploaded.
 - Select (check) the **Connect At Power On** checkbox.
 - Finish creating the VM.
4. Open the Summary tab for the new VM.
5. Turn the new VM power ON.
6. Immediately open a console.
7. When prompted, after reading the license agreement, tab to the Accept button and press Enter to accept the license agreement:



The installation begins.

8. When the installation completes, as prompted, login using the following default credentials:

```
user: admin
password: plexxi
```

9. Obtain the IP address of the Plexxi Connect VM. There are several ways you can obtain the IP address assigned to the Plexxi Connect VM. Two methods are outlined here:

- At the Linux prompt, enter either the `ifconfig` or the `ip addr` command:

```
CentOS Linux 7 (Core)
Kernel 3.10.0-327.13.1.el7.x86_64 on an x86_64

localhost login: admin
Password:
[admin@localhost ~]$ ip addr
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP qlen 1000
    link/ether 00:50:56:87:28:b1 brd ff:ff:ff:ff:ff:ff
    inet 172.24.220.173/15 brd 172.25.255.255 scope global dynamic eth0
        valid_lft 43105sec preferred_lft 43105sec
    inet6 fe80::250:56ff:fe87:28b1/64 scope link
        valid_lft forever preferred_lft forever
[admin@localhost ~]$
```

- In vSphere, on the Summary tab for the new VM.

Note: By default, the IP address is a dynamic DHCP address. To avoid potential loss of access to Plexxi Connect, either reserve the IP address on the DHCP server, or create a static IP address for Plexxi Connect.

10. Optionally, type `<ctrl>-d` to logout from the Linux session.

Changing the Linux admin password

For security purposes, change the Linux admin password:

1. SSH to Plexxi Connect (by domain name or IP address) and login as user: **admin** and password: **plexxi**.
2. At the Linux prompt, change the password using the `passwd` command.

Opening the Plexxi Connect UI

Open the Plexxi Connect UI as follows. You will use it as described in the next few sections to establish connections to Plexxi Control and VMware vSphere, change the Plexxi Connect password, and register the Plexxi Plugin with VMware vSphere.

1. In a web browser, enter the Plexxi Connect IP address that you obtained through either the Linux command (ip addr or ifconfig) or from the vSphere window as described above.
2. Login to Plexxi Connect with the following default credentials:

```
user: admin  
password: plexxi
```



Login

Username

Password

Remember Me

Login

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Changing the Plexxi Connect admin User Password

When Plexxi Connect is installed, a default administrator account is created with full Plexxi Connect UI access. For security, change the *admin* account password to a secure private password.

Note: This procedure assumes that you are logged in as admin.

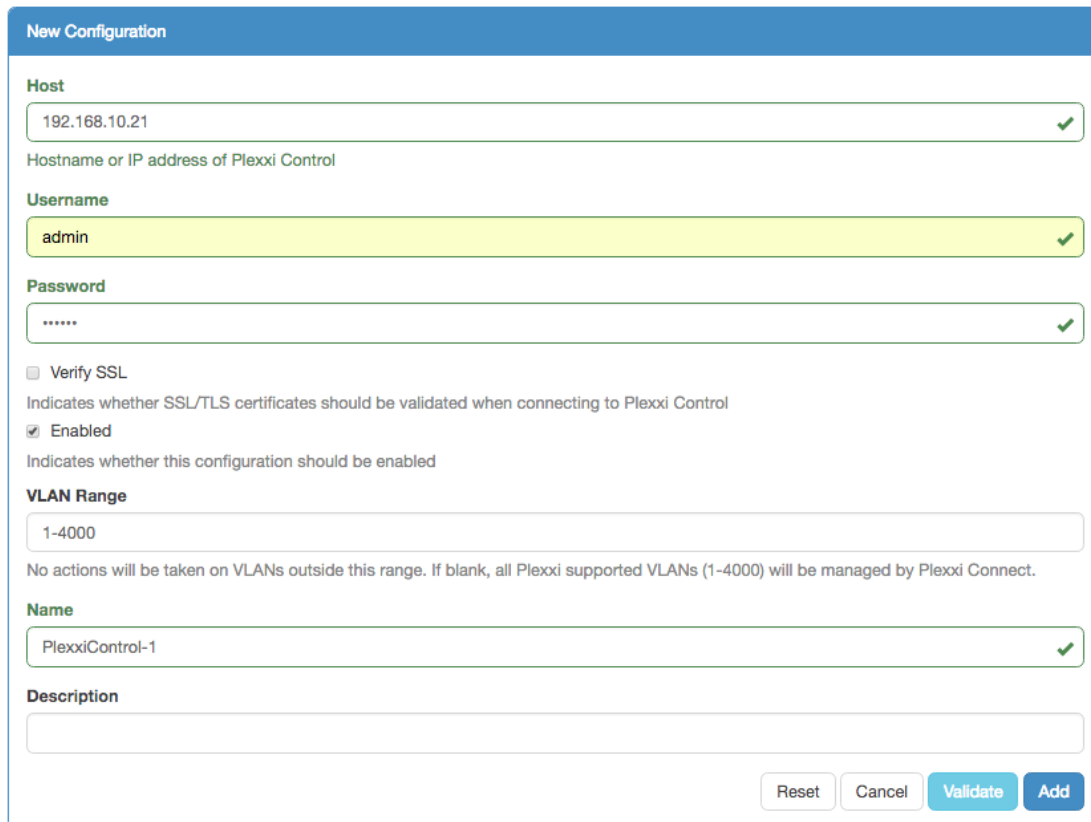
1. In the Plexxi Connect header, select **admin** > **Change Password**.
2. In the Change Password popup, enter the current password, then enter a new password, twice to confirm.
3. Click **Confirm** to accept the new password.

The password is immediately changed.

Adding the Plexxi Control Pack Configuration

Configure Plexxi Connect access to Plexxi Control by adding a Plexxi Control configuration as follows:

1. In Plexxi Connect, select **Packs** > **Plexxi Control** > **Add Configuration**.



New Configuration

Host
 ✓
Hostname or IP address of Plexxi Control

Username
 ✓

Password
 ✓

Verify SSL
Indicates whether SSL/TLS certificates should be validated when connecting to Plexxi Control

Enabled
Indicates whether this configuration should be enabled

VLAN Range

No actions will be taken on VLANs outside this range. If blank, all Plexxi supported VLANs (1-4000) will be managed by Plexxi Connect.

Name
 ✓

Description

2. In the New Configuration window, configure the following:

Host: Enter the fully-qualified host name or IP address of Plexxi Control.

Username: Enter the username to connect to Plexxi Control. The user of a Plexxi Control account must be an Administrator or an Operator.

Password: Enter the password to connect to Plexxi Control.

Verify SSL: Check this box to enable validation of SSL/TLS certificate chains when connecting to Plexxi Control.

Important: Before you enable **Verify SSL**, you need to install certificates as described in the User Guide.

Enabled: Check this checkbox to enable the configuration.

VLAN Range: If needed, enter a VLAN range for the Plexxi Control host.

Name: Enter a name for the configuration.

Description: Enter a description for the configuration.

3. Click **Validate** to validate the configuration and its connections. The following should be returned:



4. If the validation is successful, click **Add** to save the configuration.

Also:

Reset resets all entered values

Cancel exits the New Configuration window without saving.

Adding VMware vSphere Pack Configurations

Configure Plexxi Connect access to VMware vSphere hosts by adding one VMware vSphere configuration for each VMware vSphere host as follows:

1. In Plexxi Connect, select **Packs > VMware vSphere > Add Configuration**.

New Configuration

Host
 ✓
Hostname or IP address of vSphere

Username
 ✓

Password
 ✓

Verify SSL
Indicates whether SSL/TLS certificates should be validated when connecting to vSphere

Enabled
Indicates whether this configuration should be enabled

Name
 ✓

Description

Auto-enable LLDP/Advertise
Indicates whether LLDP/Advertise should be automatically enabled on new Distributed vSwitches

2. In the New Configuration window, configure the following:

Host: Enter the fully-qualified host name or IP address of VMware vSphere.

Username: Enter the username to connect to VMware vSphere. This needs to be a user with appropriate permissions to perform configuration or administrative tasks within VMware.

Password: Enter the password to connect to VMware vSphere.

Verify SSL: Check this box to enable validation of SSL/TLS certificate chains when connecting to VMware vSphere.

Important: Before you enable **Verify SSL**, you need to install certificates as described in the User Guide.

Enabled: Check this checkbox to enable the configuration.

Name: Enter a name for the configuration.

Description: Enter a description for the configuration.

Auto-enable LLDP/Advertise: This automatically enables LLDP on any new distributed vSwitches as they are added. It does not enable LLDP on existing distributed vSwitches or any standard vSwitches.

3. Click **Validate** to validate the configuration and its connections. The following should be returned:



4. If the validation is successful, click **Add** to save the configuration.
5. As needed, repeat the steps above to add other VMware vSphere configurations.

Also:

Reset resets all entered values

Cancel exits the New Configuration window without saving.

Registering the Plexxi Plugin for VMware vSphere

Plexxi Connect contains a VMware vSphere Plugin which must be registered with VMware before it can be used. This product provides the ability to manage packs, support bundles and users without leaving VMware vSphere.

Register the VMware vSphere web client plugin with VMware as follows:

Important: Bidirectional 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 available, the plug-in will be reported as successfully registered when it really failed.

1. In the Plexxi Connect UI, select **Packs > VMware vSphere**.
2. For the vSphere where the Plexxi plugin should be registered, click **Actions > Register vSphere Plugin**.
3. In the popup window, confirm the registration information and then click **Register**. A popup will confirm successful registration.
4. If multiple instances of VMware vSphere are configured, repeat these steps to register the plugin with each VMware vSphere configuration.

Further Configuration and Features

For further configuration and feature information, refer to the appropriate release of the *Plexxi Connect User Guide*.

Contacting Plexxi Care

Plexxi Care technical support services are available to answer your questions and to make sure your software and hardware are operating properly at all times. Contact Plexxi Care using one of the following methods:

- support@plexxi.com
- 1.888.415.9809 (US/Canada toll-free)
- +1 603-782-0702 (US/International)

www.plexxi.com/support