LiveAction®

LiveNX

Quick Start Guide

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LiveNX Quick Start Guide

Introduction

This LiveNX Quick Start Guide will provide you with the necessary instructions to set up the LiveNX software, as well as the network configuration needed to ensure LiveNX can collect relevant data from the network and deliver end-to-end network visibility.

This guide is divided into two sections:

- **Section 1: Deployment planning**

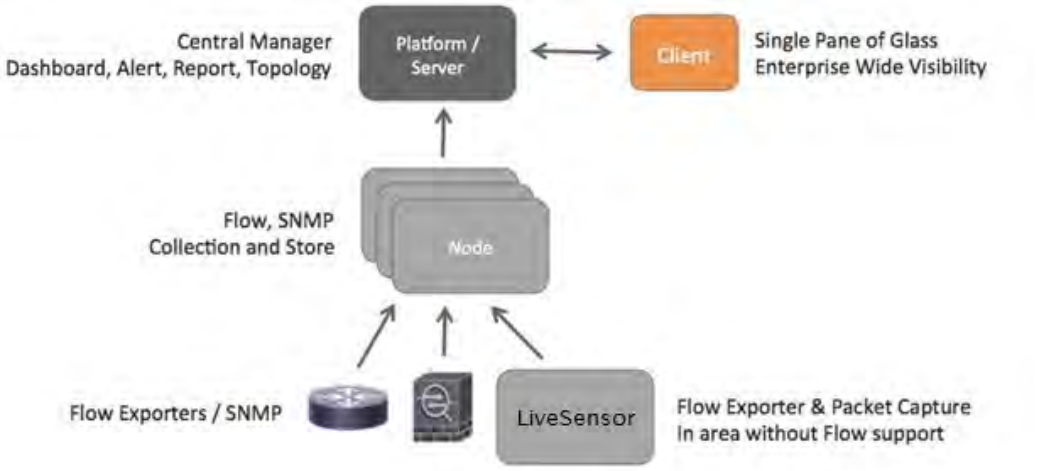
  In Section 1, we will select the appropriate server resources and ensure relevant network configuration is implemented. Additionally, we will also download the LiveNX client, LiveNX server, and platform OVA for deployment.

- **Section 2: LiveNX deployment**

  In Section 2, we will take the administrator through deployment, configuration, and quick references. Additionally, we will also visualize the network data once it's populated in LiveNX.

Solution components for LiveNX

The following figures shows the solution components for LiveNX. LiveNX is a 3-tiered architecture, which includes the server/platform, client, and remote nodes.



For small deployment or the free trial, use a single server deployment where the server component functions as its own node. However, to scale to larger deployments, multiple remote nodes can be deployed.

Deployment Options

Component	Virtual Appliance (.ova)	Virtual Appliance (Hyper-V)	Amazon Web Services (AMI)
Monitor of Monitors	x		
LiveNX Server	x	x	x
LiveNX Node	x	x	x
LiveNX Analytics Node	x	x	
LiveAgent	x		
LiveSensor	x		

System requirements

The LiveNX specifications can be found at *https://www.liveaction.com/support/specifications/*.

Documentation

For full documentation, please visit: *https://community.liveaction.com/*.

Section 1: Deployment planning

Follow these steps to prepare for the deployment of LiveNX and management of network devices:

1. Determine server sizing requirements. See *Server sizing requirements for LiveNX* on page 4.
2. Download LiveNX server and platform OVA. See *Download the LiveNX files from LiveAction* on page 5.
3. Review SNMP community/credentials for network devices. See *Review SNMP community/credentials* on page 5.
4. Review SSH/Telnet requirements (optional if monitoring only). See *Review SSH/Telnet requirements* on page 5.
5. Open ports for remote connections through a firewall. See *Open ports for remote connections through a firewall* on page 6.
6. Obtain an IP address for LiveNX server. See *Obtain an IP Address for LiveNX* on page 7.

Server sizing requirements for LiveNX

LiveAction provides different deployment packages to cater to the various server and OS related requirements. However, in this document we recommend the Custom Server starter platform, also known as Platform All-in-One (AIO) package, which is available as OVA for virtualized environments. The AIO includes the operating system in the package and requires only a hypervisor for the OVA package. AIO includes the server and node components. We will be deploying the Custom Server AIO OVA, which provides the ability to scale to 100 network devices. The Custom Server AIO OVA is the OVA package provided for the 14-day Trial of LiveNX.

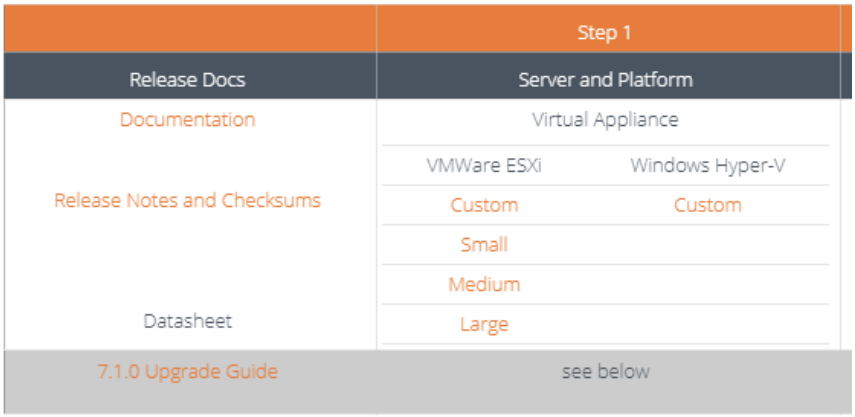
LiveNX is available in four server configurations for scaling purposes. The custom server can easily be upgraded as the number of monitored devices. For additional details related to sizing and installation, please reference the LiveNX 8 Administration Guide. In case of a larger deployment, please contact your LiveAction Representative at *sales@liveaction.com* or 888-881-1116 for further assistance.

A Custom AIO deployment would require the following server sizing specifications.

Hypervisor	vCPU	Memory	Disk Space
ESXi or Hyper-V	8	16GB	500GB

Download the LiveNX files from LiveAction

If you haven't already, go to *https://www.liveaction.com/download* to download OVA for the Server and Platform AIO.



Review SNMP community/credentials

LiveNX utilizes SNMP protocol to discover the network devices. Once the devices are discovered, LiveNX uses SNMP to monitor and poll statistical information from network devices. LiveNX requires SNMP read-only strings. Utilizing SNMP, LiveNX can capture the Hostname, CPU, Memory, Number of Interfaces, etc. of a device. LiveNX recommends that a network device should be configured with a SNMP community string or SNMPv3 credentials for collection of SNMP data sets. Configure SNMP settings prior to managing in LiveNX to ensure that the devices are managed, and admins can get immediate value from LiveNX.

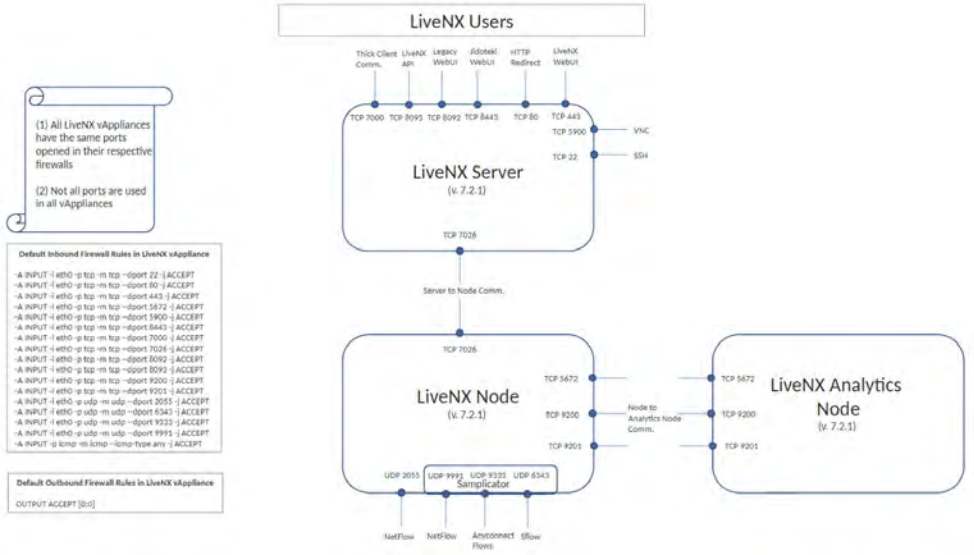
Note Please refer to Vendor Documentation for configuring SNMP settings on your network device(s).

Review SSH/Telnet requirements

LiveNX also utilizes SSH or Telnet protocols for configuring QoS management policies and NetFlow on network devices. For Cisco routers, it is recommended to use LiveNX's NetFlow configuration tools. If LiveNX is being used for monitoring only, SSH/Telnet credentials are not required.

Open ports for remote connections through a firewall

LiveNX utilizes client server communication for showcasing all the data collected by LiveNX. Remote connections through a firewall will require the following ports to be open to allow connectivity.



- TCP 7000 – Client Communications
- UDP 2055 – NetFlow
- UDP 2055 - IPFIX
- UDP 6343 – sFlow
- TCP 8093 – LiveNX API
- TCP 8092 – Legacy Web UI
- TCP 8443 – Jidoteki Web UI
- TCP 7026 – Server to Node Communication. Only necessary when remote nodes are deployed.
- TCP 7026 – Node to Server Communication. Only necessary when remote nodes are deployed.
- TCP 443 – HTTPS/ LiveNX Web UI
- Port 22 – SSH for cli

- Port 23 – Telnet for cli

Obtain an IP Address for LiveNX

We recommend configuring LiveNX with a management IP address since that would allow communication to all network devices. LiveNX nodes connect directly to the network devices to gather data or for configuration changes. A client will always connect to LiveNX server.

Note AIO servers have a built-in node.

Section 2: LiveNX deployment

Once you have completed the steps outlined in *Section 1: Deployment planning*, follow these steps to deploy LiveNX:

1. Deploy the LiveNX Server/Platform/Node All-in-One OVA. See *Deploy the LiveNX Server/Platform/Node All-in-One OVA* on page 7.
2. Install the LiveNX client. See *Install the LiveNX client* on page 8.
3. Activate LiveNX license. See *Activate the LiveNX license* on page 9.
4. Access the Web user interface. See *Access the Web user interface* on page 12.
5. Onboard network elements. See *Onboarding LiveNX devices* on page 13.

Deploy the LiveNX Server/Platform/Node All-in-One OVA

The LiveNX All-In-One guide provides step-by-step instructions for deploying the OVA. You can access the guide from the LiveAction website at *https://community.liveaction.com/livenx-5-x-all-in-one-installation/.*

Using the management console, you are able to provision the LiveNX server with the required network settings to access the LiveNX server via the Web interface. The network settings screen is similar to the screen below. After deploying the OVA, you will need to set the ssh password.

From release 6.2.0 onwards, the management console is required only for the initial networking related configuration. Once the initial network settings are configured, you use the LiveNX Web user interface to provision the rest of the properties.

Install the LiveNX client

LiveNX provides the two options below for using the LiveNX client. The client can be run from a Windows or Mac laptop.

- Engineering LiveNX console or Java client

  The quickest way to start accessing LiveNX is to download the thin client from the Web UI since the Java client is already configured with the IP of the LiveNX server. A Web Start Java client is always connected to the IP address of the LiveNX server that it is downloaded from.

- Full LiveNX client

  The full LiveNX client can be configured to reach different LiveNX servers. It is important that the version of the client matches the server version. The LiveNX client can be downloaded from *https://www.liveaction.com/downloads*.

The Engineering Console can also be downloaded from the Web User Interface from the following location.

For detailed information on the client, please reference the *LiveNX Administration Guide* or the *LiveNX User Guide*.

Activate the LiveNX license

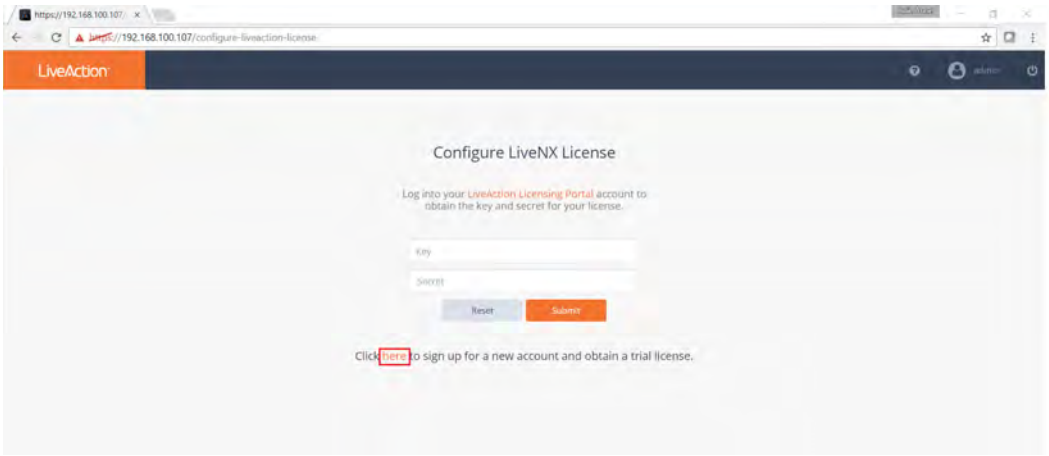
This section guides you on how to sign up for and activate a Cloud License in LiveNX.

1. The Cloud License process (recommended) requires:
   a. LiveAction Trial customers who use the All-In-One OVA for the Platform Web UI.
   b. Existing LiveAction customers who are using the All-In-One OVA should migrate from the traditional licensing to cloud licensing.
   c. Existing LiveAction customers who use the All-In-One OVA for the Platform Web UI.
   d. Internet Access
2. The Traditional License Key process requires:
   a. Customers who do not have Internet access, but require an offline activation key
   b. Customers who do not use the All-In-One OVA for the Platform Web UI.

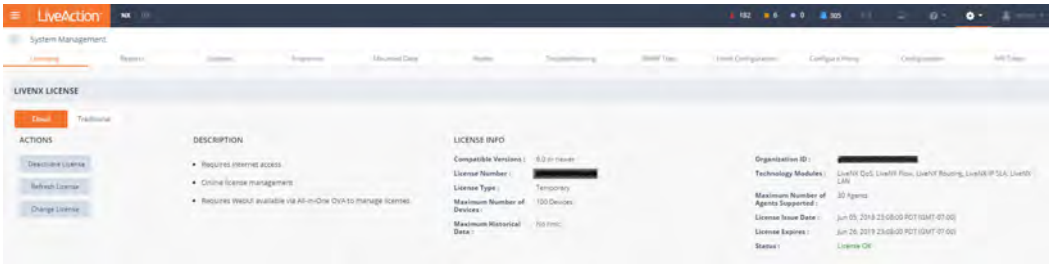
If you have any questions about this guide or need any assistance in general please contact LiveAction support: *support@liveaction.com*.

Sign up for a new account and obtain a trial license

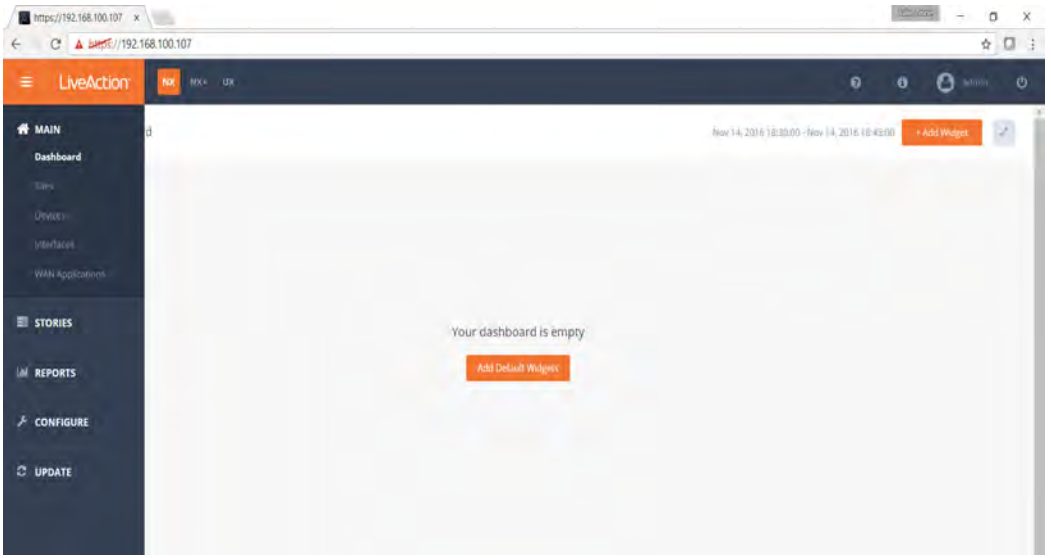
1. Once logged in with your new LiveNX server password, click the '**here**' link to sign up for a new account to obtain a trial license or to log in to the users LiveAction licensing portal.



2. Complete the New User Registration page and click **Submit**.
3. After you click **Submit**, you are redirected to the *About* page in the Web UI. Here, you will find your license information.



4. To go to the dashboard, click the ☰ icon on the top left next to the LiveAction logo, and select **Main** > **Dashboard**. Once completed, your cloud license has been successfully activated.



Cloud license portal

The cloud license portal allows you to manage your LiveNX license(s). When you initially signed up for a trial cloud license, you should have received an email with your credentials to login into the Cloud license portal. See example below.

Reply Reply All Forward IM

Mon 11/14/2016 6:21 PM

LiveAction <webadmin@liveaction.com>

Your registration was successful

To **LiveAction Technical Support Team**

Welcome Test,

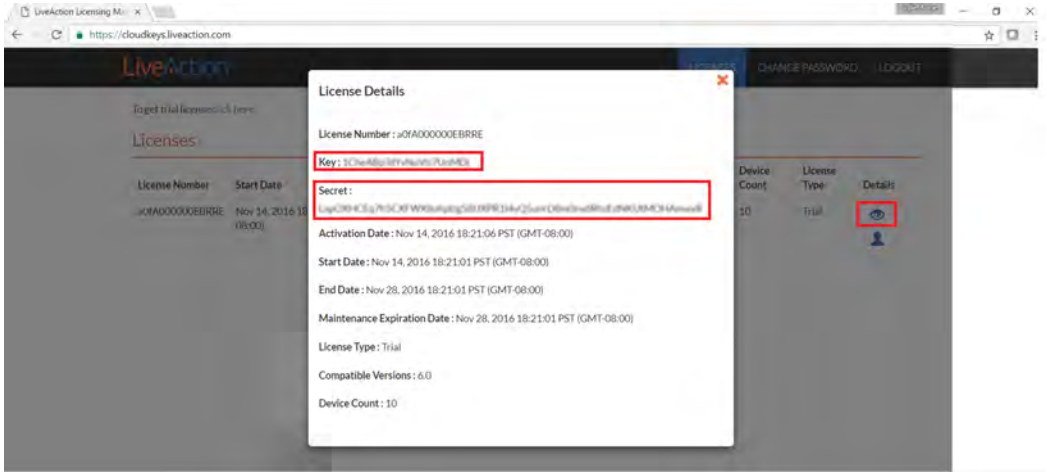
Thanks for signing up for a LiveAction Licensing Portal account.

Please login to https://cloudkeys.liveaction.com to manage your licenses.

Your temporary password is [redacted]

For general inquiries or to request support with your account, please email webadmin@liveaction.com

1. Open a browser and go to *https://cloudkeys.liveaction.com*. Login with your credentials.
2. You will be prompted to change your password. Enter a new password and save changes.
3. Click *License* at the top to view your current License(s)
4. If you would like to view your license details, click the 'eye' icon to view your Key and Secret.

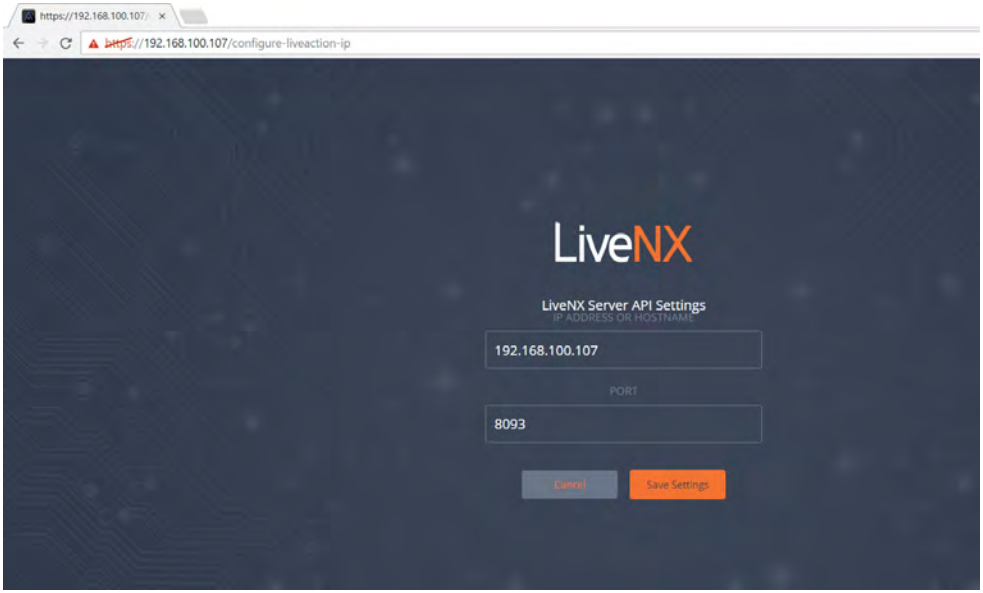


Once you have completed deploying the All-In-One OVA and configured all the network settings, the next step is to log into the Web UI.

Access the Web user interface

Use a web browser to browse to the IP address of the All-In-One OVA.

1. In the *IP Address* or *Hostname* field, enter the IP address or *Hostname* of the LiveNX server.
2. Enter the default port **8093**, then click **Save Settings**.



3. Click *First time user information* and login with the following credentials:

   Username: admin

   Password: admin

4. You will be prompted to enter a new password. Enter your new password and click **Update Password**.

Onboarding LiveNX devices

Onboarding devices via the Java client

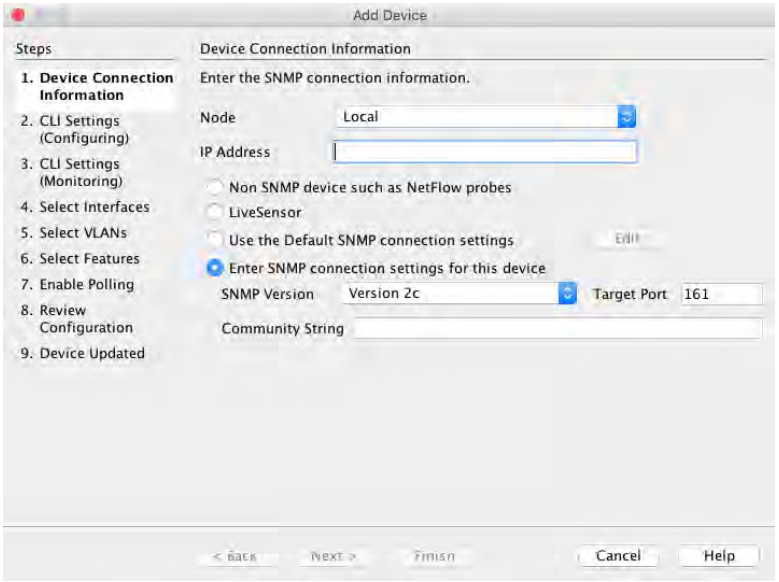
Once the LiveNX server is deployed and the client is downloaded. Log into LiveNX by launching the Java client and using the default credentials. You will be prompted to change the password on the first login.

- Username: admin
- Password: <enter the new password created during the web interface login>

We will now onboard the devices that need to be managed by providing the IP address and SNMP community string settings. There are two options available to Onboard devices:

Adding a single device:

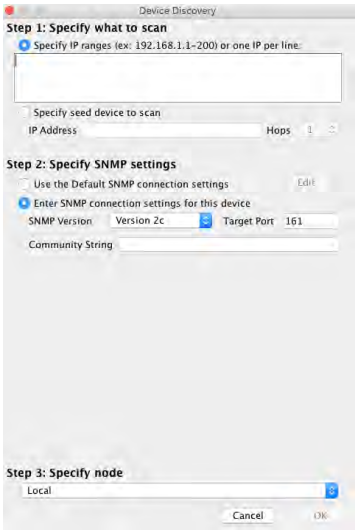
1. On your Java client, click **File** > **Add Device**. The **Add Device** dialog appears.

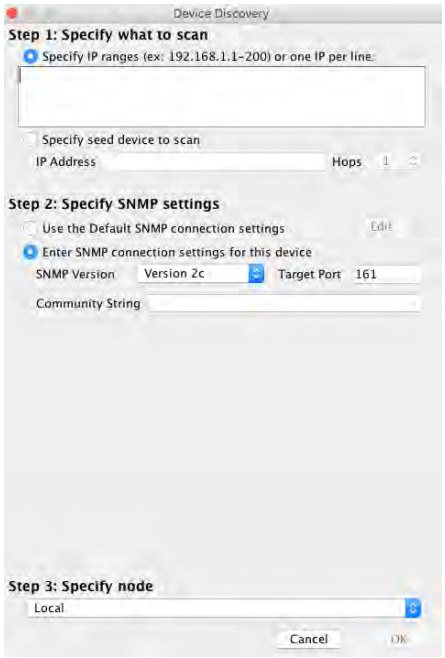


2. Enter the IP address and the SNMP connection settings for the device.

Adding multiple devices:

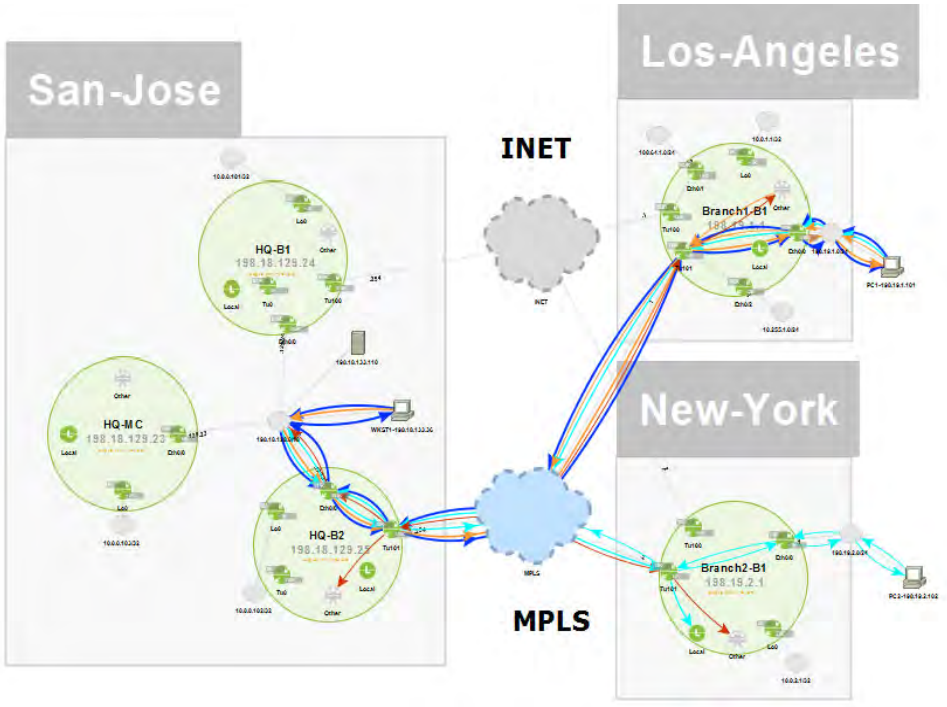
1. On your Java client, click **File** > **Discover Devices**. The **Device Discovery** dialog appears.





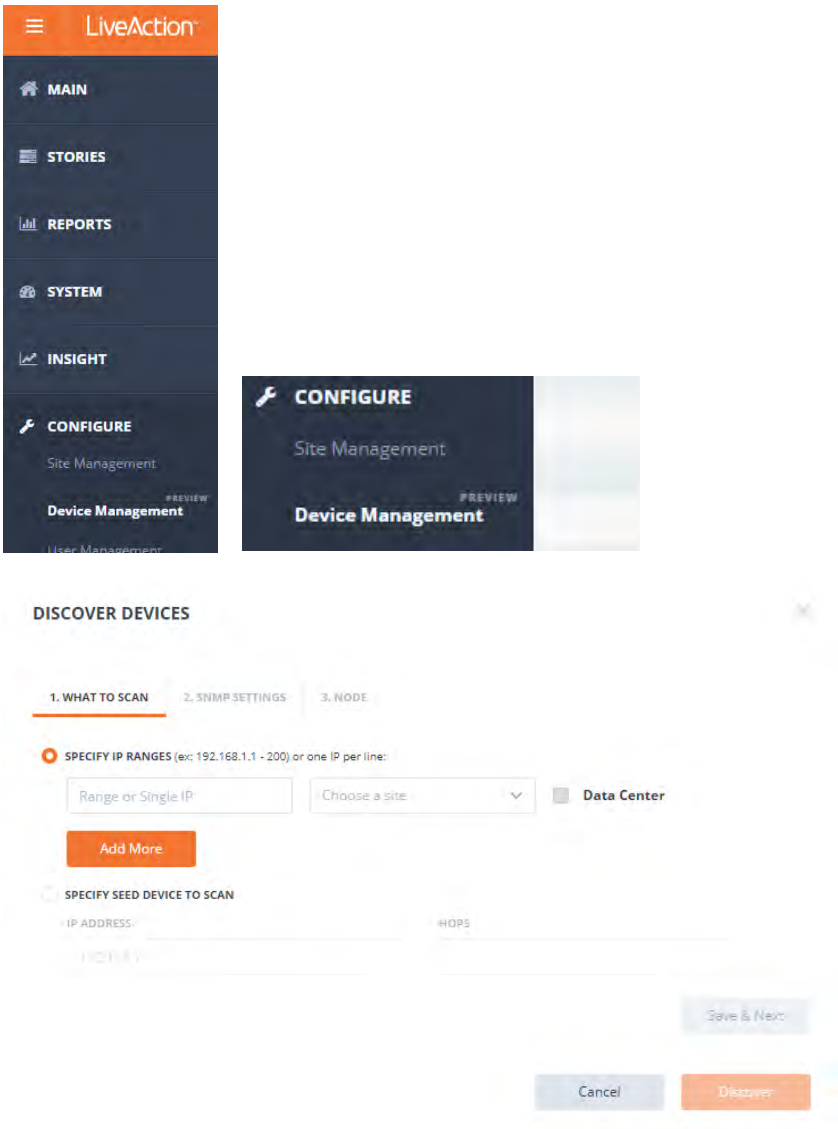
2. Specify the IP address ranges and SNMP settings.

Congratulations! You are done with the device and LiveNX setup. Once NetFlow is configured on the network devices, flows from devices can be visualized on the LiveNX client as shown below.



Onboarding devices via the Web UI

Once the LiveNX server is deployed and you can access the LiveNX via the Web UI, device discovery can be done via the Web UI also. Select *Device Management* from the LiveAction drop-down menu.



You can now onboard the devices that need to be managed by providing the IP address and SNMP community string settings.

The devices discovery can be done via this screen. To view the topology layout, you must go to the Java client.