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**

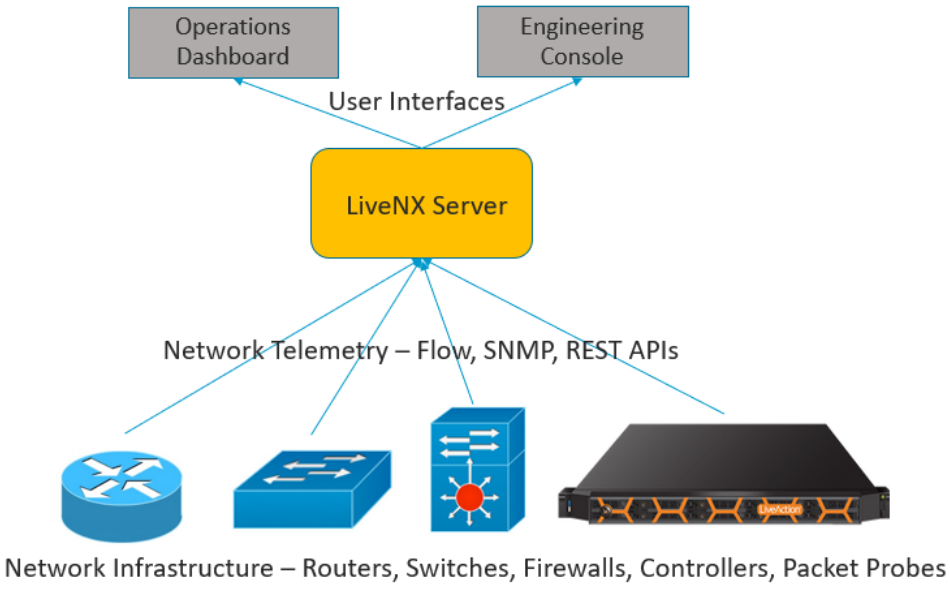
  In Section 1, we will select the appropriate server resources and ensure relevant network configuration is implemented. Additionally, we will also download the LiveNX Server virtual appliance and LiveNX Engineering Console Client.

- **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.

A Simple LiveNX Deployment

The simplest deployment of LiveNX consists of the LiveNX Server ingesting network telemetry such as SNMP and Flow (IPFIX, NetFlow, sFlow) from network infrastructure elements such as Routers, Switches and Firewall to provide network and application visibility. LiveNX can also ingest Flow from LiveAction LiveWire appliances that analyze packets on the wire and generate rich metadata using Live-Flow technology.



Users can leverage the web-based Operations Dashboard as a primary interface for day-to-day operations visibility or the Engineering Console thick-client for configuration and deeper troubleshooting visibility.

For small deployments, proof-of-concepts, or evaluation trials, use a single server deployment as shown above. For larger multi-site deployments, a more distributed LiveNX deployment can be architected with multiple collectors called LiveNX Nodes that aggregate to the Server.

LiveNX comes as a complete appliance with hardened operating system, system libraries, applications, and utilities, and can be deployed as a physical appliance, a virtual appliance or in the cloud, based on your requirements.

LiveNX Component	Physical Appliance	Virtual Appliance	Cloud Images
Server	Pre-installed on LiveAction Hardware. See Datasheet for technical specs.	Supported for VMWare ESXi Microsoft Hyper-V and Linux KVM.	Supported for Amazon AWS, Microsoft Azure and Google GCP.
Node	Pre-installed on LiveAction Hardware. See Datasheet for technical specs.	Supported for VMWare ESXi Microsoft Hyper-V and Linux KVM.	Supported for Amazon AWS, Microsoft Azure and Google GCP.

System requirements

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

Documentation

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

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

Server sizing requirements for LiveNX

LiveAction provides flexible deployment options to cater to your diverse hosting requirements, whether they are on-premises or in the cloud. The simplest method to deploy LiveNX is using the virtual appliance method. As mentioned earlier in this document, all LiveNX appliances are self-contained and do not require installation of any additional software for it to operate. Choose the LiveNX virtual appliance format that suits your underlying hypervisor (ESXi, Hyper-V or KVM).

LiveNX is available in four flavors for scaling purposes – Custom (POC), Small, Medium, and Large. All flavors can be scaled by adding additional compute, memory, and storage to get to the next level. Thus, a POC deployment can be converted to a production deployment without having to recreate a new LiveNX instance. To start things off, we will be deploying the LiveNX Server - Custom flavor, which

provides the ability to monitor 25 network devices. The Custom flavor is also provided as part of the 14-day trial experience of LiveNX.

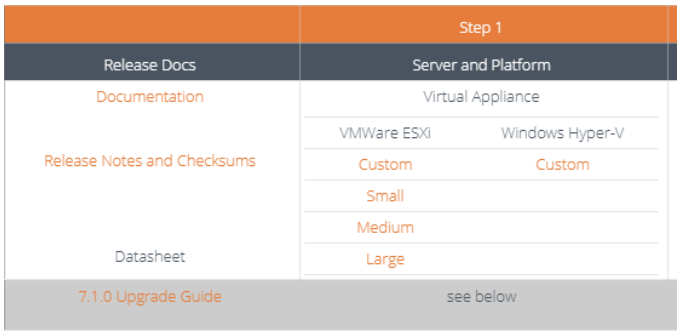
For additional details related to sizing and installation, please reference the LiveNX Administration Guide. In case of a larger deployment, please contact your LiveAction Representative at *sales@liveaction.com* or LiveAction Support at 408-217-6501 for further assistance.

A Custom (POC) virtual appliance would require the following server sizing specifications.

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

Download LiveNX files from LiveAction

If you haven't already, go to *https://www.liveaction.com/download* to download LiveNX Server virtual appliance – Custom flavor.



Review SNMP community and credentials

LiveNX utilizes SNMP protocol to discover 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 administrators can get immediate value from LiveNX.

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

Review SSH and 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 arenot required.

Open ports for remote connections through a firewall

If LiveNX is hosted behind a firewall, the below INBOUND ports must be opened to ensure reachability and functionality of LiveNX. For a detailed list of ports, please refer to *https://docs.liveaction.com/LiveNX*.

- TCP 443 – HTTPS/ LiveNX Web UI
- TCP 7000 – Engineering Console communications

- UDP 2055 – NetFlow
- UDP 2055 - IPFIX
- UDP 6343 – sFlow
- TCP 8093 – LiveNX API
- TCP 8443 – LiveAdmin Web UI
- Port 22 – SSH for cli

Obtain an IP Address for LiveNX

Configuring LiveNX with an IP address since that would allow communication to all network devices. LiveNX connects directly to the network devices to gather data or for configuration changes. LiveNX Users connect to this IP address via the two clients.

Section 2: LiveNX deployment

Once you have completed the steps outlined in *Section 1: Deployment planning* on page 2, follow these steps to deploy LiveNX:

1. Deploy LiveNX Server virtual appliance. See *Deploy LiveNX Server virtual appliance* on page 4.
2. Access LiveNX Operations Dashboard interface. See *Access LiveNX Operations Dashboard* on page 5.
3. Activate LiveNX license. See *Activate LiveNX license* on page 5.
4. Onboard network elements. See *Onboarding devices to LiveNX* on page 9.

Deploy LiveNX Server virtual appliance

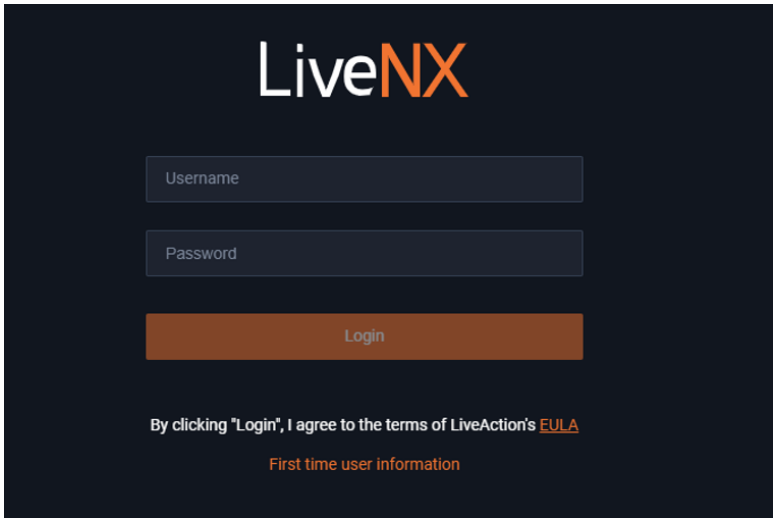
Deploy LiveNX Server virtual appliance OVA on the hypervisor of choice and power-on the virtual appliance. Using the console as shown below, you can provision LiveNX Server with the required network settings to access via the Web interface (Operations Dashboard). The network settings screen is like the screen below. After deploying the OVA, you will need to set the SSH password.

The console is required only for the initial networking related configuration. Once the initial network settings are configured, use the LiveNXWeb interface to provision the rest of the properties.

Access LiveNX Operations Dashboard

Use a web browser to browse to the IP address of the LiveNX Server.

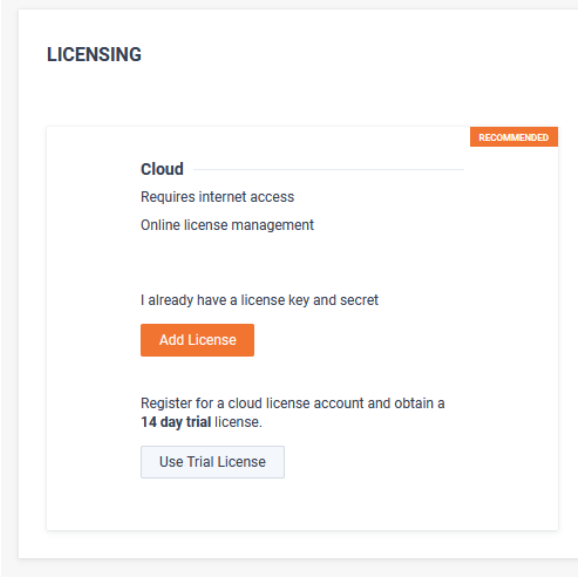
1. In the *IP Address or Hostname* field, enter the IP address or *Hostname* of the LiveNX Server.



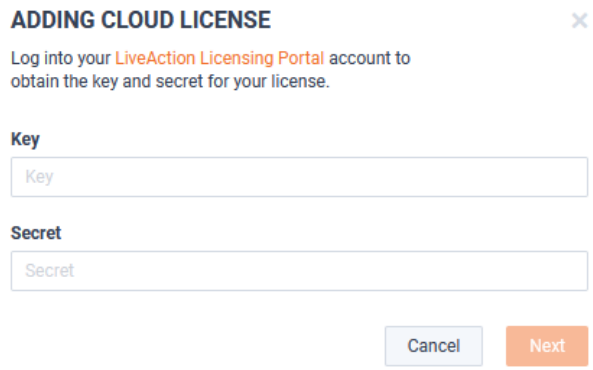
2. Click *First time user information* and login with the following credentials: Username: admin/ Password: admin.
3. You will be prompted to enter a new password. Enter your new password and click *Update Password*.

Activate LiveNX license

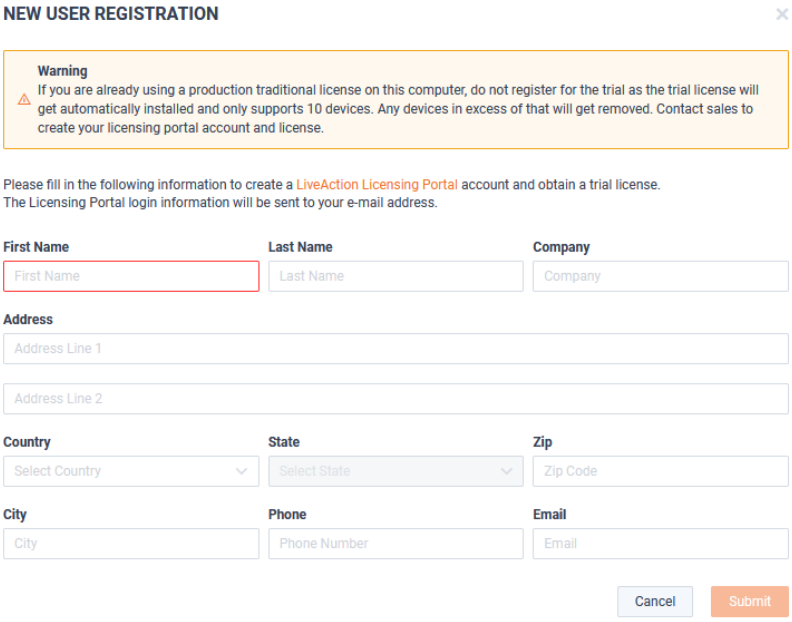
This section guides you on how to sign up for and activate a Cloud License in LiveNX.



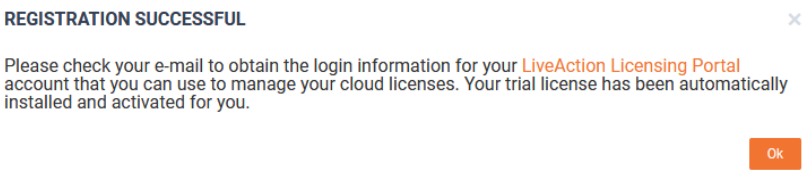
1. If you already have a license, click on **Add License**. You can grab the Key and Secret from your *LiveAction Customer portal*.



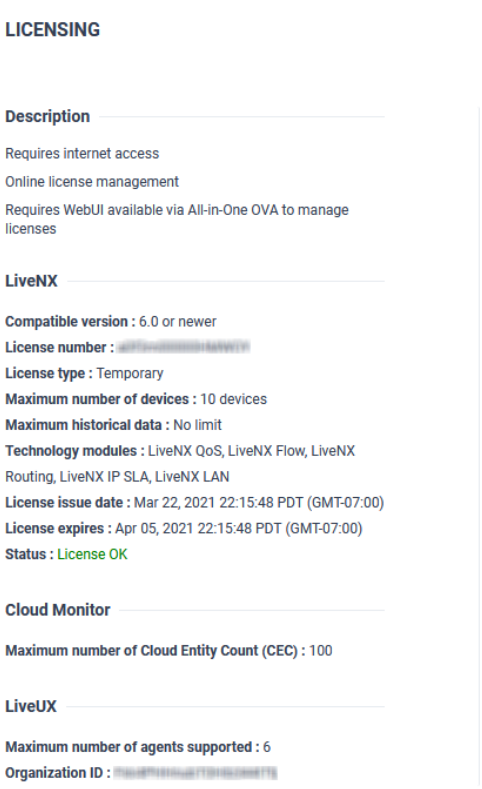
2. If you do not have a license, you can register for a Trial license by clicking on **Use Trial License**. Fill up the **New User Registration** form.



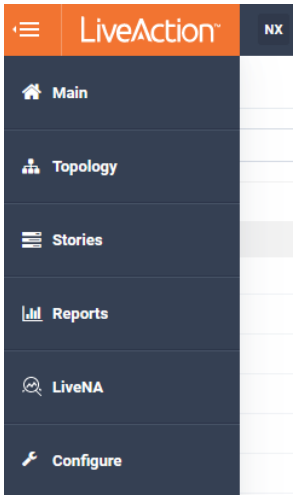
3. Upon clicking **Submit**, a *Registration Successful* popup will appear with instructions on how to access the *LiveAction Customer Portal*.



4. Your LiveNX Server will obtain a "Trial License" with all the details as shown below.



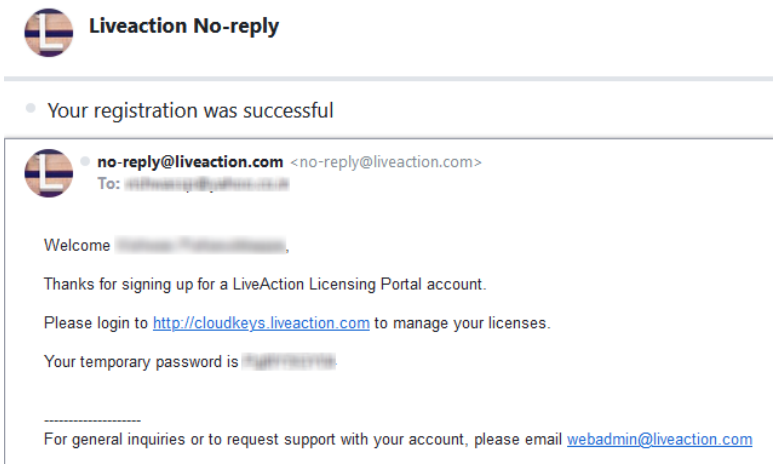
5. Now, you can explore various LiveNX features by clicking on the icon at the top-left of the screen.



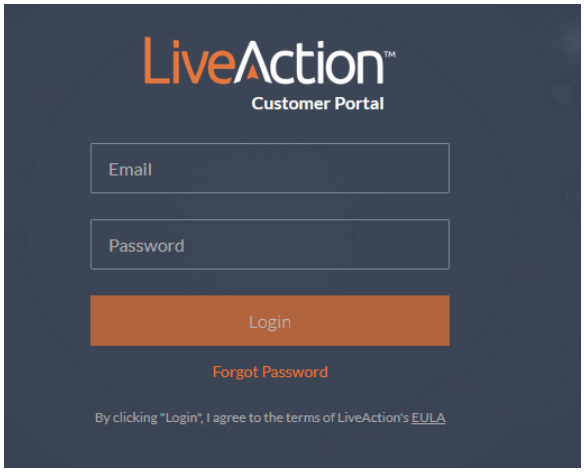
If you have any questions about getting a trial license, please contactLiveAction support: *support@liveaction.com*.

CloudKeys - Cloud license portal

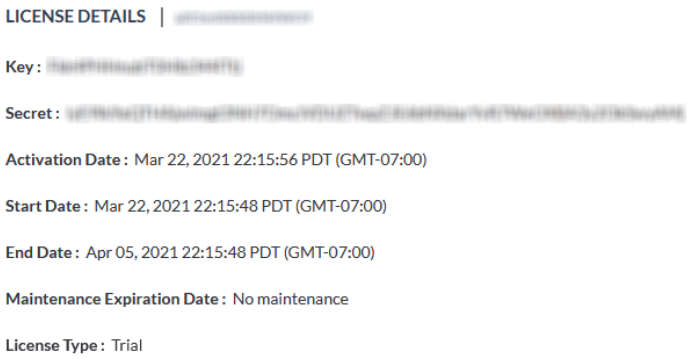
The cloud license portal allows you to manage your LiveNX licenses. When you initially signed up for a trial cloud license, you should have received an email with your credentials to login into the *Cloud license portal*.



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 **LiveNX** at the top to view your current License.
4. If you would like to view your license details, click on the License number to view your Key and Secret.



Install LiveNX Engineering Console

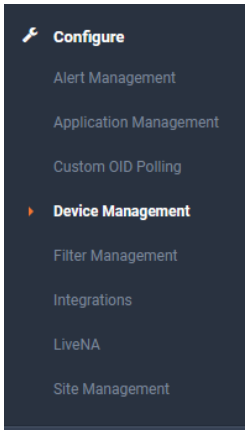
- LiveNX Engineering Console or the thick client can be downloaded from *https://www.liveaction.com/download*. The client can be run from a Windows or Mac laptop. The thick client can be configured to reach multiple LiveNX servers. It is important that the version of the Client matches the version of the Server.

For detailed information on the Client, please reference the *LiveNX Administration Guide* or the *LiveNX User Guide* at *https://docs.liveaction.com/LiveNX*.

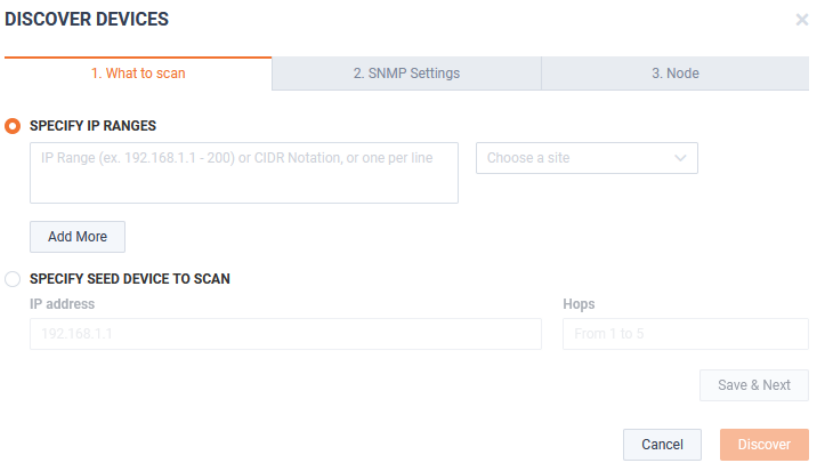
Onboarding devices to LiveNX

Onboarding devices via the Operations Dashboard

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

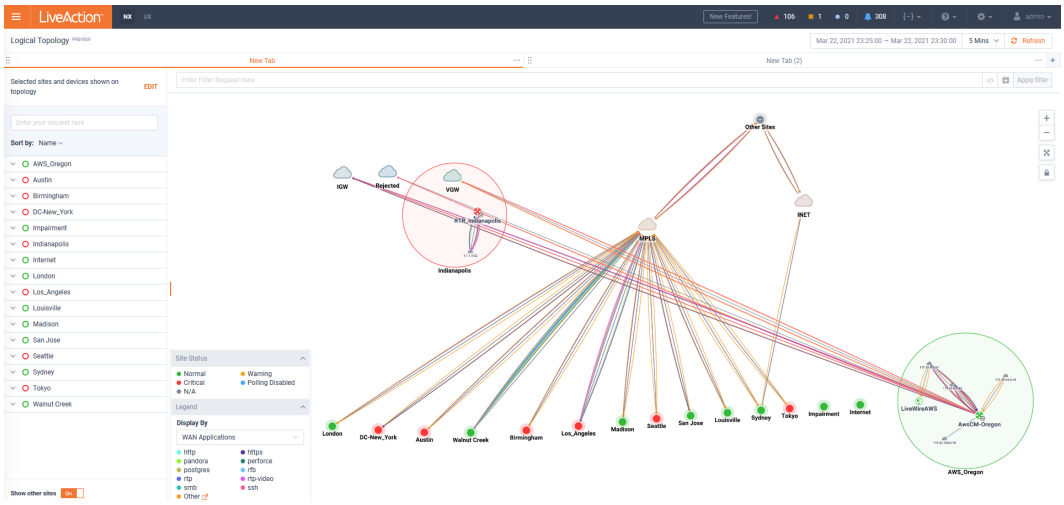


2. Click Discover Devices at the top-right corner of the screen to configure what to discover.
3. Go through the Device Discovery process to add devices to LiveNX.



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

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



For more detailed documentation such as Administrator and User Guides, please refer to *https://docs.liveaction.com/LiveNX*.