



# LiveNX 8.0

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## QUICK START GUIDE (QSG)

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## Introduction

This LiveNX 8.0 Quick Start Guide will provide you with the necessary steps 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.

To secure a successful deployment, the document is divided into two separate sections:

### Section 1 – Deployment Planning

In Section 1, we will select the appropriate server resources and ensure relevant network configuration is implemented. In addition, we will also download the LiveNX Client and LiveNX Server and Platform OVA for deployment.

### Section 2 – LiveNX Deployment

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

## Section 1: Deployment Planning

The following checklist should help you prepare for the setup of LiveNX and properly manage the network devices.

- Server Sizing Requirements for LiveNX
- Download LiveNX Server and Platform OVA
- SNMP Community/Credentials for Network Devices
- SSH/Telnet (Optional)
- IP Address of LiveNX Server
- Port Usage of Solution Components

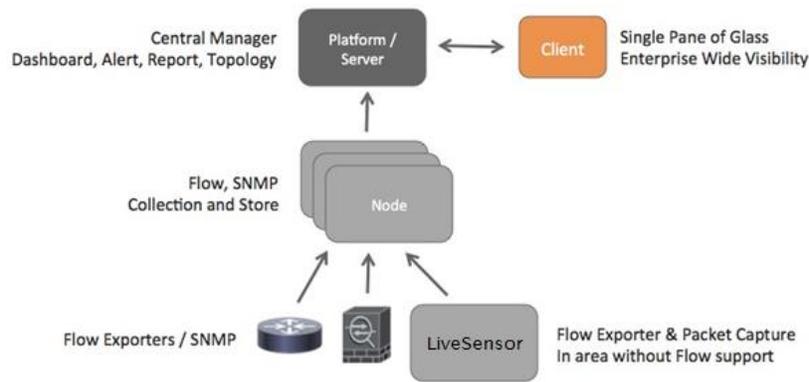


Figure 1

Figure 1 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		

### 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 7 Administration Guide. In case of a larger deployment, please contact your LiveAction Representative at [sales@liveaction.com](mailto: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

### System Requirements

The LiveNX 7 specifications can be found at this location.

<https://www.liveaction.com/support/specifications/>

### Downloading the LiveNX Files from LiveAction

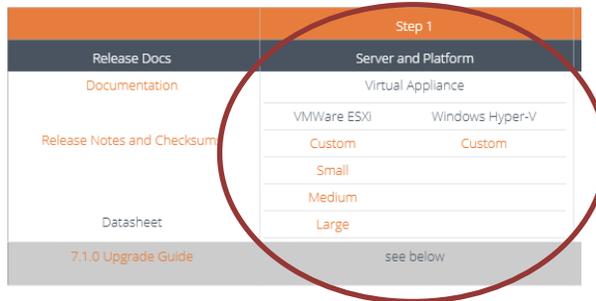


Figure 2

If you haven't already, go to [www.liveaction.com/download](http://www.liveaction.com/download) to download OVA for the Server and Platform AIO.

### SNMP

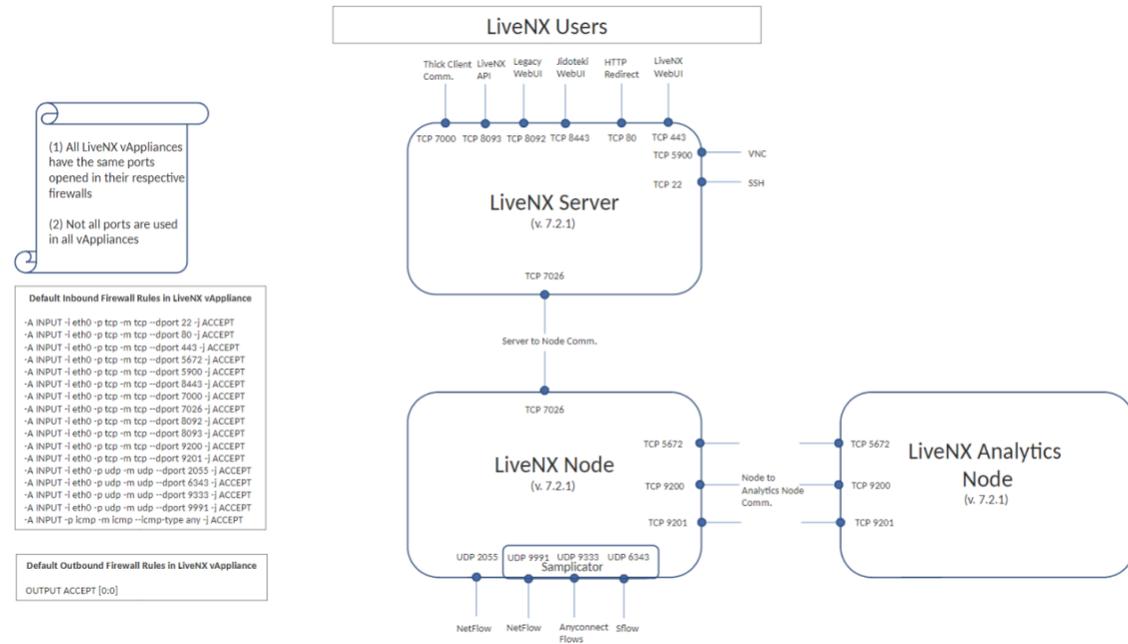
LiveNX utilizes SNMP protocol to discover the network devices. Once the devices are discovered, LiveNX uses SNMP to monitor and poll statistical information from network devices. LiveNX requires SNMP read-only strings. Utilizing SNMP, LiveNX can capture the Hostname, CPU, Memory, Number of Interfaces, 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).**

### SSH/Telnet (Optional If Monitoring Only)

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.

## LiveNX Port Usage

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 WebUI
- TCP 8443 – Jidoteki WebUI
- 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 WebUI
- Port 22 – SSH for cli
- Port 23 – Telnet for cli

## Obtaining 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

This section takes the user through the deployment of LiveNX, licensing, onboarding devices, as well as SNMP and NetFlow configuration for LiveNX.

### Check List

Prior to getting started with deploying LiveNX, please ensure that you have completed all the steps in the checklist below.

- Download the LiveNX Server and Platform All-in-One (AIO) OVA
- Download the LiveNX Client
- Configure SNMP on Network Devices
- Configure SSH on Network Devices
- Configure Firewall to Allow LiveNX Client-server Connectivity
- Obtain an IP Address for LiveNX Server
- IP Address Range of Network Devices to Manage

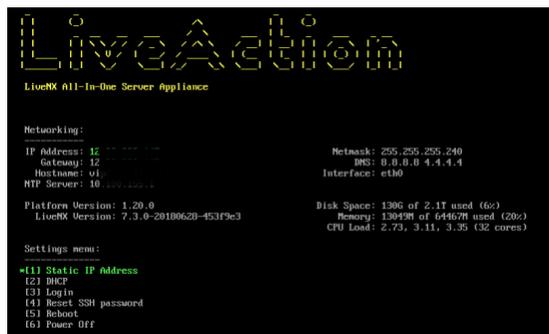
### LiveNX Deployment Steps

- Step 1: Deploy the LiveNX Server/Platform/Node All-in-One OVA
- Step 2: Installing LiveNX Client
- Step 3: Accessing the Web User Interface
- Step 4: Activate LiveNX License
- Step 5: Onboard network elements

### Step 1: Deploying the LiveNX Server/Platform/Node All-in-One OVA

- AIO OVA Deployment <https://community.liveaction.com/livenx-5-x-all-in-one-installation/>  
The above provided installation guide document takes the user in a step-by-step manner on deploying the OVA. The OVA deployment instructions are valid for LiveNX 5.x, 6.x and 7.

Using the management console user would be able to provision the LiveNX server with the required network settings to access the LiveNX Server via the Web Interface. The network settings screen would look like the figure below. User needs to set the ssh password after deploy the ova.



```
LiveAction
LiveNX All-in-One Server Appliance

Networking:
IP Address: 10.10.10.10          Netmask: 255.255.255.240
Gateway: 12                    DNS: 8.8.8.8 4.4.4.4
Hostname: v1                   Interface: eth0
NTP Server: 10.10.10.10

Platform Version: 1.20.0       Disk Space: 1306 of 2.1T used (6%)
LiveNX Version: 7.3.0-20180620-453f9c3  Memory: 13049M of 64467M used (20%)
                                          CPU Load: 2.73, 3.11, 3.35 (32 cores)

Settings menu:
(1) Static IP Address
(2) DHCP
(3) Login
(4) Reset SSH password
(5) Reboot
(6) Power Off
```

From release 6.2.0 onwards, the management console is required only for the initial Networking related configuration. User would be able to provision the rest of the properties via the Web User Interface.

### Step2: Installing LiveNX Client

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

### 1. 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 it's downloaded from.

### 2. 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. LiveNX client can be downloaded from: [www.liveaction.com/downloads](http://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 7 Administration Guide](#) or the [LiveNX 7 User Guide](#).

## Step 3: Activate LiveNX License

This section will guide users on how to sign up for and activate a Cloud License in LiveNX 7.

### 1. The Cloud License process (recommended) requires:

- LiveAction Trial customers who use the All-In-One OVA for the Platform Web UI.
- Existing LiveAction customers who are using the All-In-One OVA should migrate from the traditional licensing to cloud licensing.
- Existing LiveAction customers who use the All-In-One OVA for the Platform Web UI.
- Internet Access

### 2. The Traditional License Key process requires:

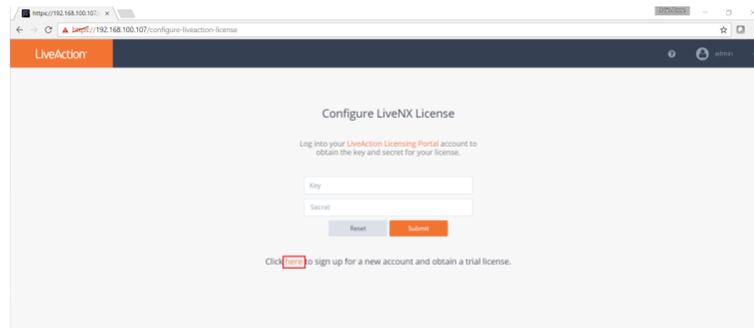
- Customers who do not have Internet access, but require an offline activation key
- Customers who do not use the All-In-One OVA for the Platform Web UI.

If you have any questions about this guide or need any assistance in general please contact LiveAction support: [support@liveaction.com](mailto:support@liveaction.com).

## Sign Up for a New Account and Obtain a Trial License

### 1) Step 1

Once logged in with your new LiveNX Server password, click on the “[here](#)” link to sign up for a new account to obtain a trial license or login to the users LiveAction Licensing Portal.

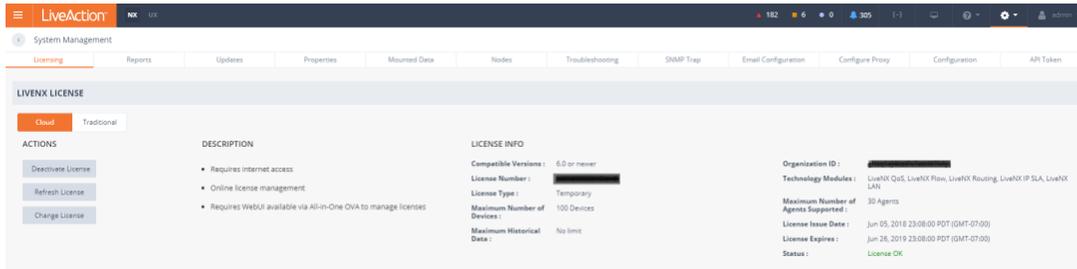


## 2) Step 2

Fill out all fields on the New User Registration page and click **Submit**

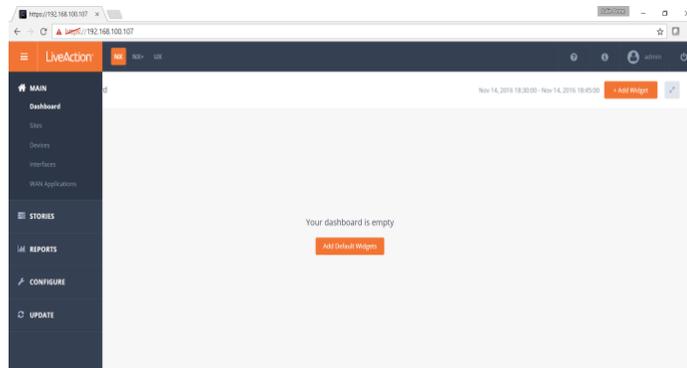
## 3) Step 3

After you click Submit, you will be redirected to the **About** page in the Web UI. Here, you will find your license information:



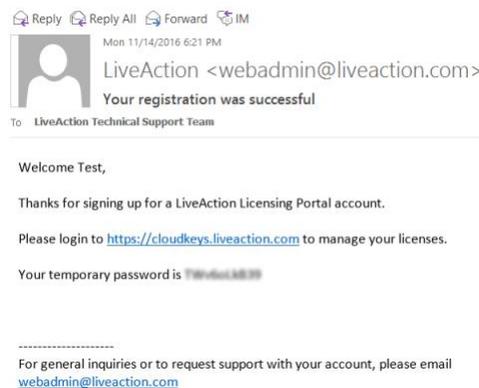
## 1) Step 4

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

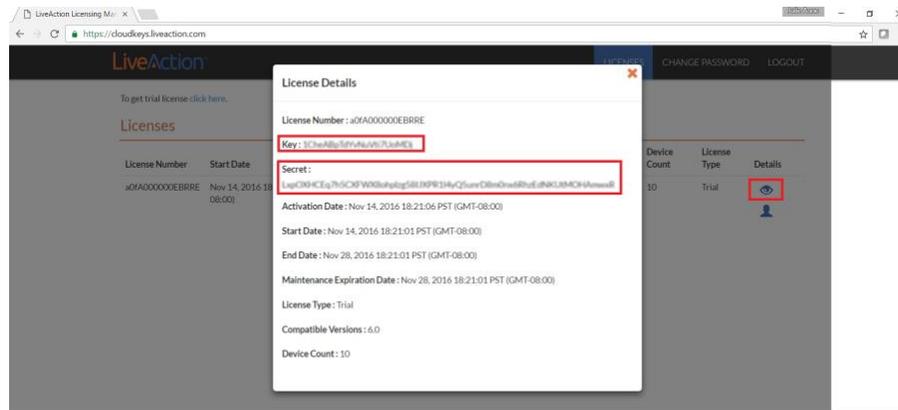


## Cloud License Portal

The cloud license portal allows a user to manage their 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:



- 1) **Step 1:** Open a browser and go to <https://cloudkeys.liveaction.com>. Login with your credentials.
- 2) **Step 2:** You will be prompted to change your password. Enter a new password and Save Changes.
- 3) **Step 3:** Click on License at the top to view your current License(s)
- 4) **Step 4:** If you would like to view your License Details, click on the “eye” icon and you can view your Key and Secret here:



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.

#### Step 4: Accessing 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 on **Save Settings**



3. Click on **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 on Update Password.

#### Step5:

##### Step 5a: Onboarding Devices in LiveNX 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:

### 1. Adding a Single Device

- On your Java client, click on **File > Add Device** and enter the IP address and community string as shown in Figure 5.

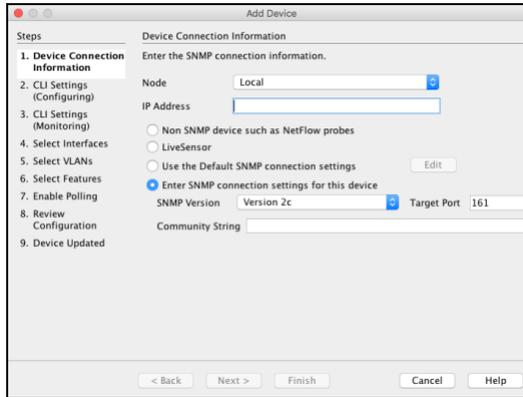


Figure 5

### 2. Adding Multiple Devices

- On your Java client, click on **File > Discover Devices** as shown in Figure 6. Provide the IP address range and community string as indicated.

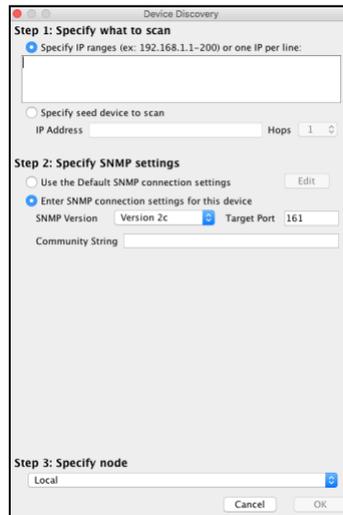


Figure 6

Congrats, 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 in Figure 7.

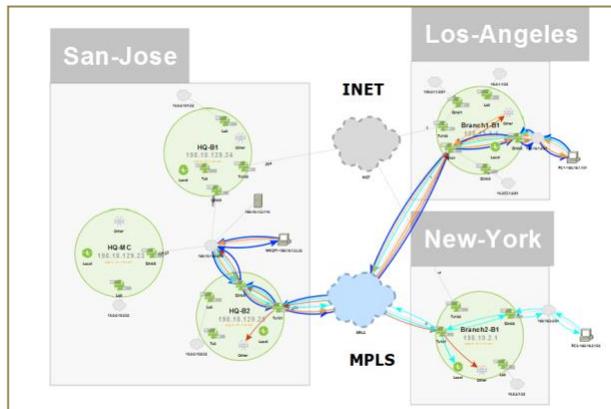
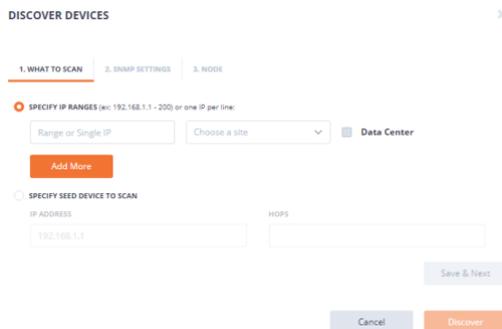
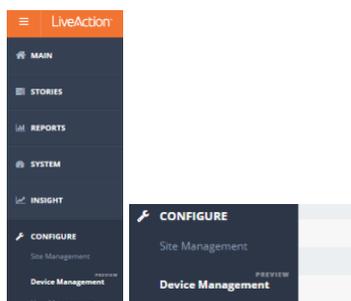


Figure 7

### Step5b: Onboarding Devices in LiveNX via the WebUI

Once the LiveNX Server is deployed and user can access the Application via the WebUI, Device Discovery can be done via the Web also. Select Device Management under LiveAction dropdown menu.



User will 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, user still needs to go to the Java Client.

Discover Devices

MY DEVICES

DEVICE NAME	IP ADDRESS	VENDOR	MODEL	POLL	QOS	FLOW	IP SLA	ROUTING	LAN	INTERVAL
<input type="checkbox"/> Device Name	<input type="text" value="IP Address"/>	<input type="text" value="Vendor"/>	<input type="text" value="Model"/>	All	All	All	All	All	All	All
<input type="checkbox"/> IWAN-BR_INET	10.100.51.32	Cisco	ciscoCSR1000v	✓	✓	✓	✓	✗	✗	10 seconds
<input type="checkbox"/> RTR_SanJose	10.100.51.12	Cisco	ciscoCSR1000v	✓	✓	✓	✓	✗	✗	10 seconds
<input type="checkbox"/> RTR-DC-CORE	10.100.51.3	Cisco	ciscoCSR1000v	✓	✓	✓	✓	✓	✗	10 seconds
<input type="checkbox"/> RTR_Madison	10.100.51.11	Cisco	ciscoCSR1000v	✓	✓	✓	✓	✗	✗	10 seconds
<input type="checkbox"/> DEMO-CORE-3850	10.100.51.1	Cisco	cat3850stack	✓	✓	✓	✓	✗	✗	10 seconds
<input type="checkbox"/> IWAN-BR_MPLS	10.100.51.31	Cisco	ciscoCSR1000v	✓	✓	✓	✓	✗	✗	30 seconds
<input type="checkbox"/> IWAN-BriL_Sydney	10.100.51.35	Cisco	ciscoCSR1000v	✓	✓	✓	✓	✗	✗	10 seconds
<input type="checkbox"/> RTR_LosAngeles	10.100.51.9	Cisco	ciscoCSR1000v	✓	✓	✓	✓	✗	✗	10 seconds

## Additional Information

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