Add a Network Device

⚠️ Not planning to do this module? You can skip to the .

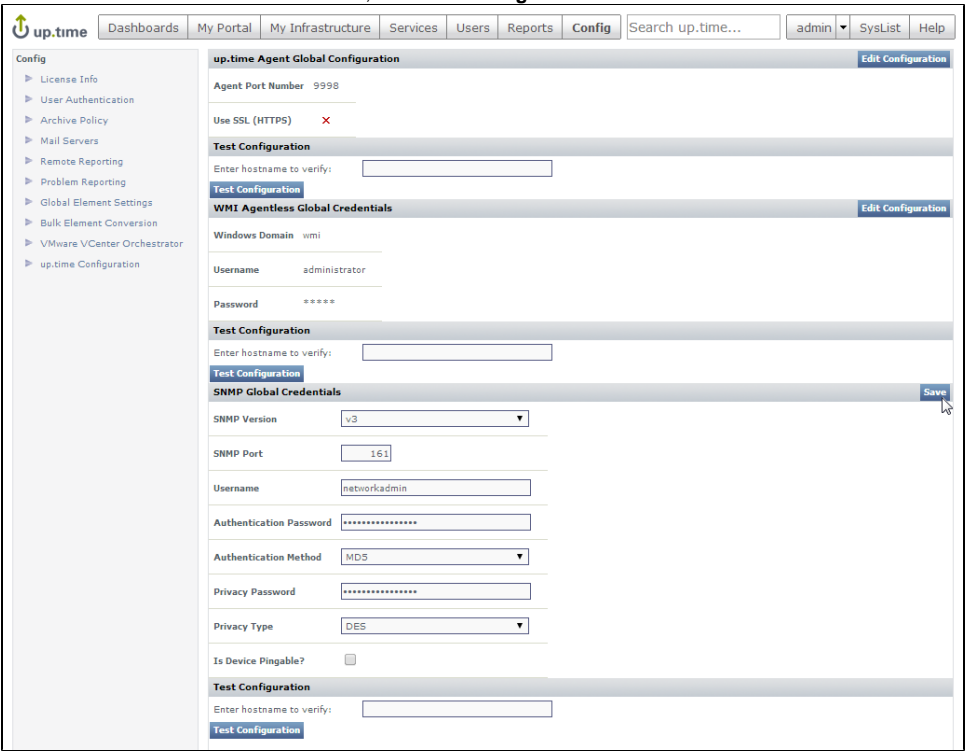This module consists of the following exercises:

Module	Description	Time required
Configure Global SNMP Settings	Configure up.time to use standard SNMP settings to add network devices with Auto Discovery.	½ slice
Add and Auto Discover Network Devices	Use Auto Discovery to detect SNMP devices on the network.	1 slice
Review Your Current Inventory and View a Quick Snapshot for a Network Device	View metrics available on a summary page for a network device.	½ slice

Configure Global SNMP Settings

Prerequisite: You will need to know the SNMP settings for the device you want to add.

1. In the up.time Web interface, begin by clicking **Config**, then clicking **Global Element Settings** in the left pane. As you did with agent- and WMI-based servers in the previous track, you can create a common definition that many or all of your SNMP devices use, allowing you to auto discover large groups that share the same properties.
2. In the **SNMP Global Credentials** section, click **Edit Configuration**:

3. Select the **SNMP Version** for this common SNMP definition.
4. Configure the settings similar to those shown above:
    - **SNMP Port:** The port on which the network device is listening.
    - **Username:** (v3) The name that is required to connect to the network device.
    - **Authentication Password:** (v3) The password that is required to connect to the network device.
    - **Authentication Method:** (v3, optional) From the list, select an option that will determine how encrypted information traveling between the network device and up.time will be authenticated.
    - **Privacy Password:** (v3) The password that will be used to encrypt information traveling between the network device and up.time.
    - **Privacy Type:** (v3, optional) From the list, select an option that will determine how information traveling between the network device and up.time will be encrypted.
    - **Read Community:** (v2) A string that acts like a user ID or password, giving you access to the network device instance.
5. Click **Save**.

Validation Step: Test the global setting by entering a SNMP device in the **Test Configuration** section.

Now you are ready to go find an SNMP device or two!

Add a Network Device Using Auto Discovery

1. Click **My Infrastructure**, then click **Auto Discovery** in the left pane.
2. In the **Auto Discovery** pop-up, confirm that you want to **Discover Servers and Network Devices on Your Network**, and click **Next**.
3. In the next step, select **Network Devices with SNMP**, and ensure the **Use Global SNMP Connection Configuration** check box you defined in the previous exercise is selected.

Auto Discovery Step 2 of 4	
#1 - What Types Of Elements Would You Like To Discover?	
☐ Servers with up.time Agent	
☐ Servers with Windows Management Instrumentation (WMI)	
☐ Servers with Net-SNMP v2 or v3	
☑ **Network Devices with SNMP**	
Please Provide Connection Information for SNMP	
☑ Use Global SNMP Connection Configuration	
#2 - What Subnet Would You Like To Search In?	
Subnet (format 255.255.x)	10.1.54.1-100
#3 - What Group Would You Like Elements Placed In?	
Element Group	My Infrastructure ▼
	Cancel Back Next

4. Enter the subnet or an IP address range, similar to above.

> ⓘ **Pro Tip**
>
> Although we are keeping things simple, and using a single subnet or IP address range as shown above, there are other ways to point up.time at subnets and subnet ranges to expedite the Auto-Discovery process. See Using Auto Discovery for more information.

5. Click **Next** to start the Auto Discovery process.

Auto Discovery Step 3 of 4				
Please Select Which Elements To Add.				
Discovery Progress				
☐ Hide elements that are already added.				
☐ **All**	Connection	IP	Host Name	Info
Looking for elements... nothing found yet.				
				Cancel Back Add

6. When all network devices on the subnet or subnet range have been detected, you will be able to make selections to add to your up.time inventory. Select an SNMP device, similar to below:

| Auto Discovery Step 3 of 4				
Please Select Which Elements To Add.				
Discovery Progress				
☐ Hide elements that are already added.				
☐ **All**	⇅ Connection	⇵ IP	⇅ Host Name	⇅ Info
☐	Network Device	10.1.54.1	SUX 6000	Ethernet Routing Switch
☐	Network Device	10.1.54.2	SUX 6001	Ethernet Routing Switch
☐	Network Device	10.1.54.3	snswtch3	Ethernet Switch
☐	Network Device	10.1.54.6	ARP24T-1	Neyland 24T
☐	Network Device	10.1.54.7	ARP24T-2	Neyland 24T
☐	Network Device	10.1.54.9	ARP24T-3	Neyland 24T
☑	Network Device	10.1.54.10	PowerConnect9000	PowerConnect 5448
☐	Network Device	10.1.54.16	ciscoball	Cisco IOS Software, C3750E Software (C3750E-IPBASEK9-M), Version 12.2(55)
☐	Network Device	10.1.54.22	hpswtch	PROCURVE J9029A - PA.03.01
☐	Network Device	10.1.54.25	eswtch2	Ethernet Routing Switch
				Cancel Back Add

7. Scroll to the bottom of the Auto Discovery list, and click **Add**. As a final step, you will receive confirmation that the network device is now part of your monitored inventory.
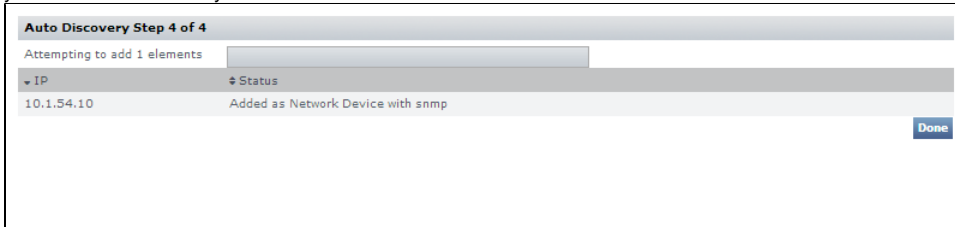

8. Click **Done**.

Review Your Current Inventory

After adding the network device and closing the **Auto Discovery** window in the previous exercise, the main up.time browser window is at the **My Infrastructure** view. Refresh the page (or click **My Infrastructure**) to ensure the latest additions appear immediately:
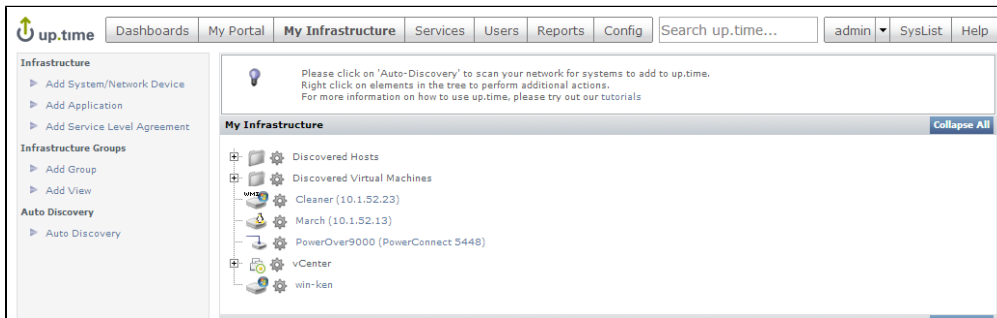
If you followed the exercises that comprised the vCenter Server track and physical server track, your inventory already includes a vCenter Server Element (along with its Infrastructure Groups), as well as an agent-based Linux server, and WMI-based Windows server. In addition, you will now see the network device you added in the previous exercise. Your inventory is now a mix of virtual and physical servers on different platforms, and network devices. Also note the platform-specific icons beside each Element type.

Validation Step: Click a newly added server's gear icon. Then in the pop-up menu, click **Graph Performance** to go to its **Quick Snapshot**.
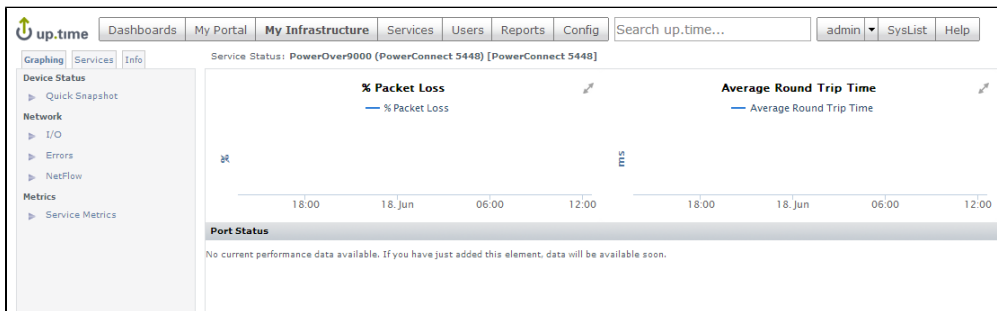
Over the last three tracks of this "Add Elements to up.time" module, you have viewed the Quick Snapshot for different Element types: a vCenter Server, a VM, servers, and now an SNMP-based network device. Similar to a newly-added server in the previous module, there is not yet any performance data for this device to display, but there will be shortly. After moving through more of this Getting Started Guide, we will return to this Quick Snapshot to view some data.