

Introduction to Versa Director

The Versa Networks lab environment consists of a fixed, pre-configured topology that will allow you to explore, configure, and manage Versa Networks CPEs by using Versa Director, the central management and orchestration platform for a Versa Secure SD-WAN solution. After completing this lab, you will be able to:

- Identify the functions of the main Versa Director tabs
- Navigate through the Versa Director environment to accomplish some basic tasks

In this lab, you will be assigned a single CPE device (Branch device) for configuration and monitoring.

The lab environment is accessed through a remote desktop connection. The remote desktop connection opens a remote workstation, where you will use various tools to navigate and configure the lab environment. The main tool you will use in this lab is Versa Director. Versa Director can be accessed by opening the Google Chrome browser on the Remote Desktop. There is a bookmark to the Versa Director device in the Google Chrome bookmark bar.

This lab environment is a shared environment. There may be up to 5 other students in the environment. Each student has their own remote desktop, but the Versa Director is shared. Because of the shared environment, you may see configuration templates, device groups, workflows, and devices that other students have created, or that have been pre-provisioned within Versa Director. It is important that you only modify the configuration components that are assigned to you by your instructor.

During certain lab parts, the lab guide will present sample output from the GUI or the CLI. The sample outputs are SAMPLES and represent the information as it appeared during the lab guide creation. Your output may vary in some ways (some devices may or may not be present, some routes may or may not be the same, etc.) Do not be alarmed if your results vary slightly from the results shown in the lab guide. The important thing is that the lab functions in the desired manner.

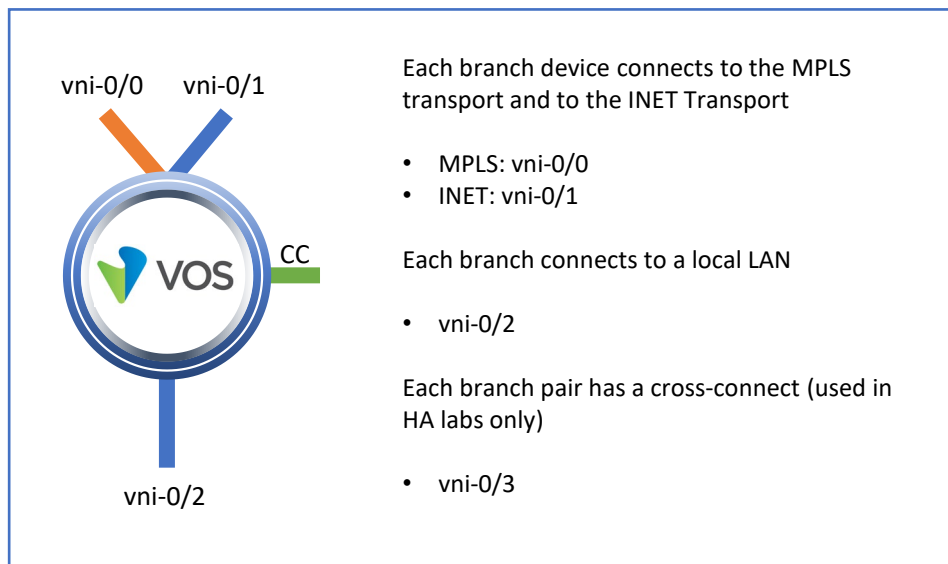
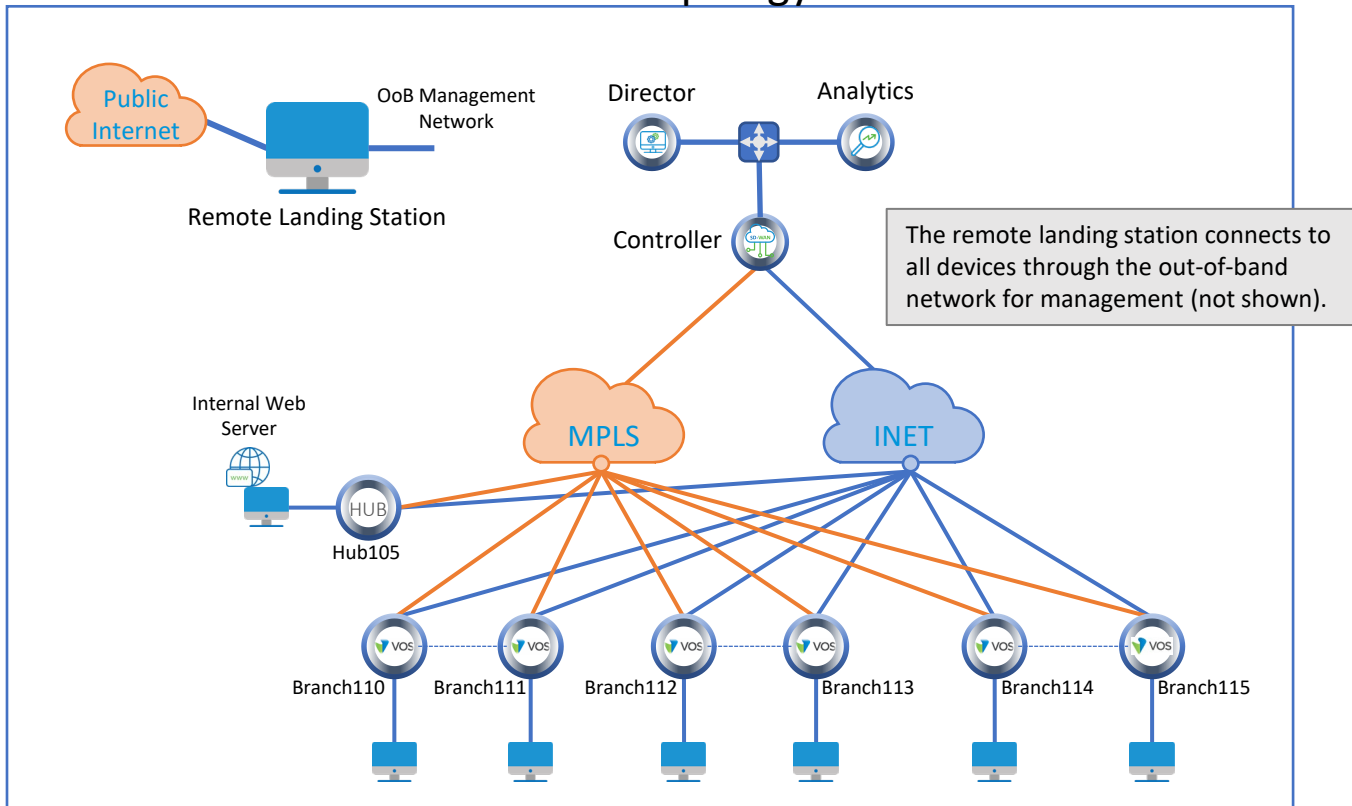
This lab guide will step you through some common tasks that are performed on Versa Director. After an introductory set of exercises, you will be asked to perform some basic tasks that will allow you to become more familiar with the environment. At the end of the lab guide you can find additional help on to how to complete the tasks, so if you have trouble with a task, please refer to the help section. If you still cannot accomplish the task, ask your instructor for assistance. In addition, you will see **hints** placed throughout the lab guide to help you along.

Look for these
hints to help you
in the labs

The goal of this and all lab exercises is to help you gain additional skills and knowledge. Because of this, the lab guide contains additional instruction to supplement the student guides.

Now that we've discussed what is expected, let's get started!

Lab Topology



Versa Director Login: **labuserXYZ** (e.g. **labuser110**, **labuser111**, etc.)
 Versa Director Password: **Versa@123**

Branch OoB Login: **versa**
 Branch OoB Password: **versa123**

Testing Host Login: **labuserXYZ** (e.g. **labuser110**, **labuser111**, etc.)
 Testing Host Password: **versa123**

Remember this! You will use it a lot!

Interface Addresses

CPE	vni-0/0	vni-0/1	vni-0/2
Branch110	192.168.19.110/24	192.168.20.110/24	172.16.110.1/24
Branch111	192.168.19.111/24	192.168.20.111/24	172.16.111.1/24
Branch112	192.168.19.112/24	192.168.20.112/24	172.16.112.1/24
Branch113	192.168.19.113/24	192.168.20.113/24	172.16.113.1/24
Branch114	192.168.19.114/24	192.168.20.114/24	172.16.114.1/24
Branch115	192.168.19.115/24	192.168.20.115/24	172.16.115.1/24
MPLS Gateway	192.168.19.3		
INET Gateway		192.168.20.3	

Controller Addresses

MPLS	MPLS Gateway	INET	INET Gateway
192.168.17.3/24	192.168.17.1	192.168.18.3/24	192.168.18.1

Exercise 1: Connect to the remote lab environment

The first lab exercise is to become familiar with how to connect to the remote lab environment. Your instructor should have reviewed the following information with you prior to starting:

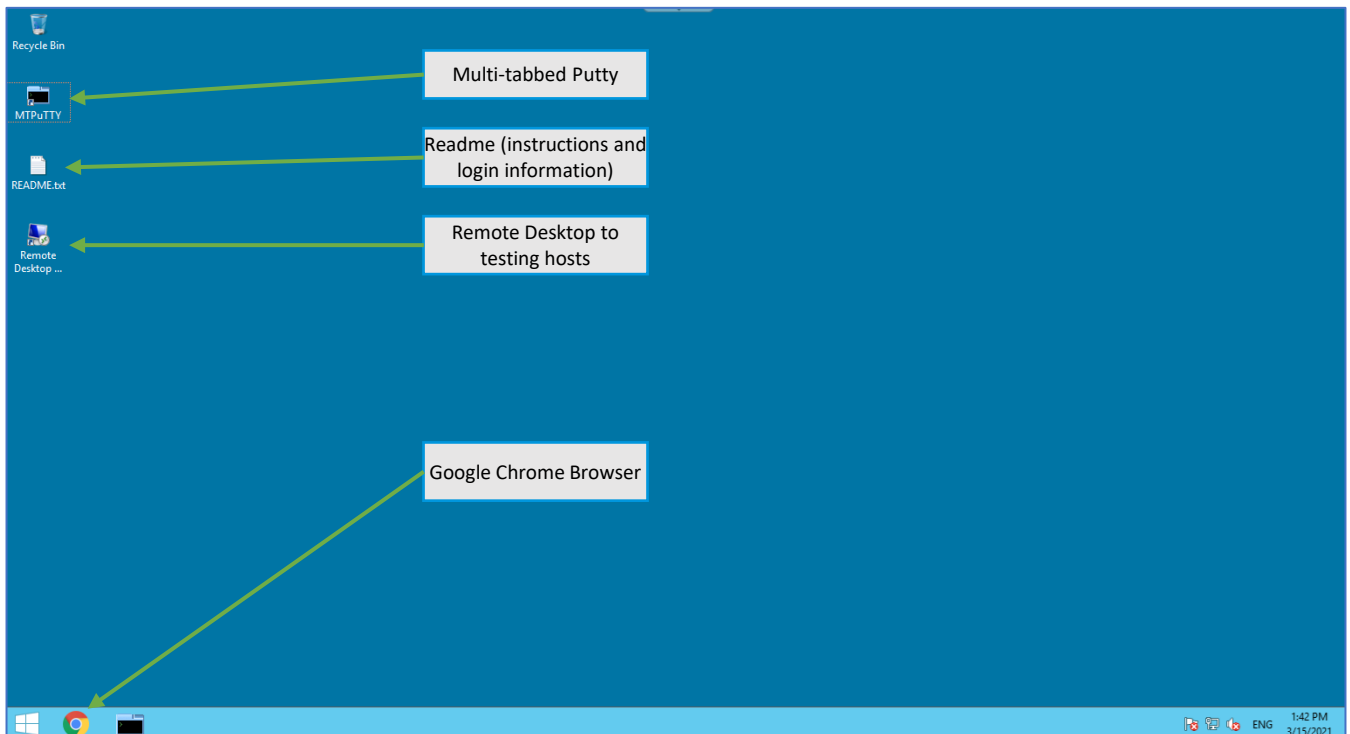
- Branch/Node/CPE Assignment
- Remote Lab Access

If you have not yet been assigned a branch device, please contact the instructor as this is a shared environment, and each student will configure and monitor a specific branch node.

Question: What node is assigned to you in the lab topology? _____

Follow the instructions provided by your instructor to connect to the remote lab environment.

Once you have started your remote desktop session, you will be presented with the remote desktop:

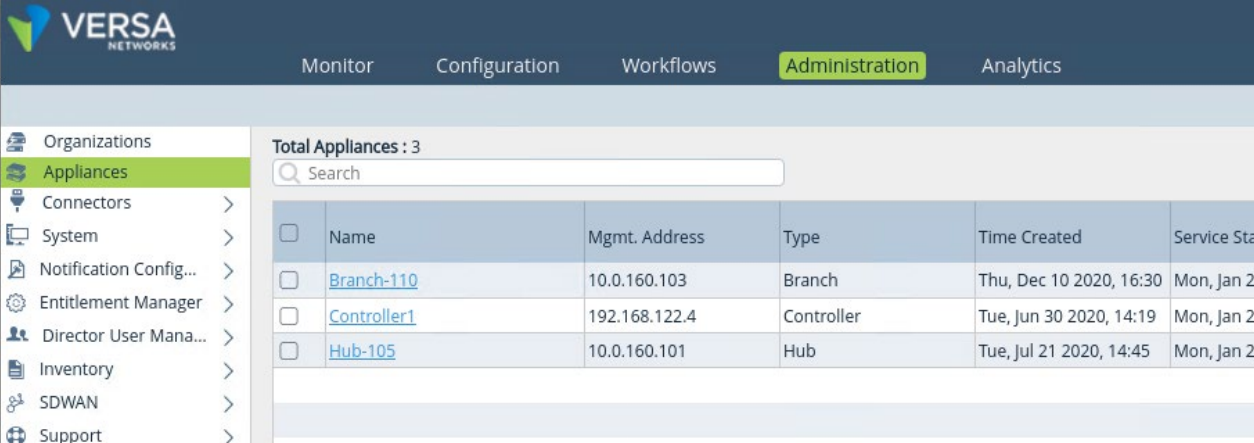


On the remote desktop, open the Google Chrome browser window. The Google Chrome browser window contains a bookmark to the Versa Director. Log into the Versa Director with the username associated with your assigned branch device:

CPE	Username	Password
Branch110	labuser110	Versa@123
Branch111	labuser111	Versa@123
Branch112	labuser112	Versa@123
Branch113	labuser113	Versa@123
Branch114	labuser114	Versa@123
Branch115	labuser115	Versa@123

Exercise 2: Identify the main components of Versa Director

You should be placed into the *Administration > Appliances* dashboard of Versa Director. There are 5 tabs at the top of the Versa Director user interface. Each of the tabs represents a set of dashboards to perform certain tasks, such as monitoring devices, managing configuration components on Versa Director, and creating and managing different components. The currently selected tab is highlighted automatically:



	Name	Mgmt. Address	Type	Time Created	Service Sta
<input type="checkbox"/>	Branch-110	10.0.160.103	Branch	Thu, Dec 10 2020, 16:30	Mon, Jan 2
<input type="checkbox"/>	Controller1	192.168.122.4	Controller	Tue, Jun 30 2020, 14:19	Mon, Jan 2
<input type="checkbox"/>	Hub-105	10.0.160.101	Hub	Tue, Jul 21 2020, 14:45	Mon, Jan 2

Many times there are multiple ways to navigate between windows and dashboards.

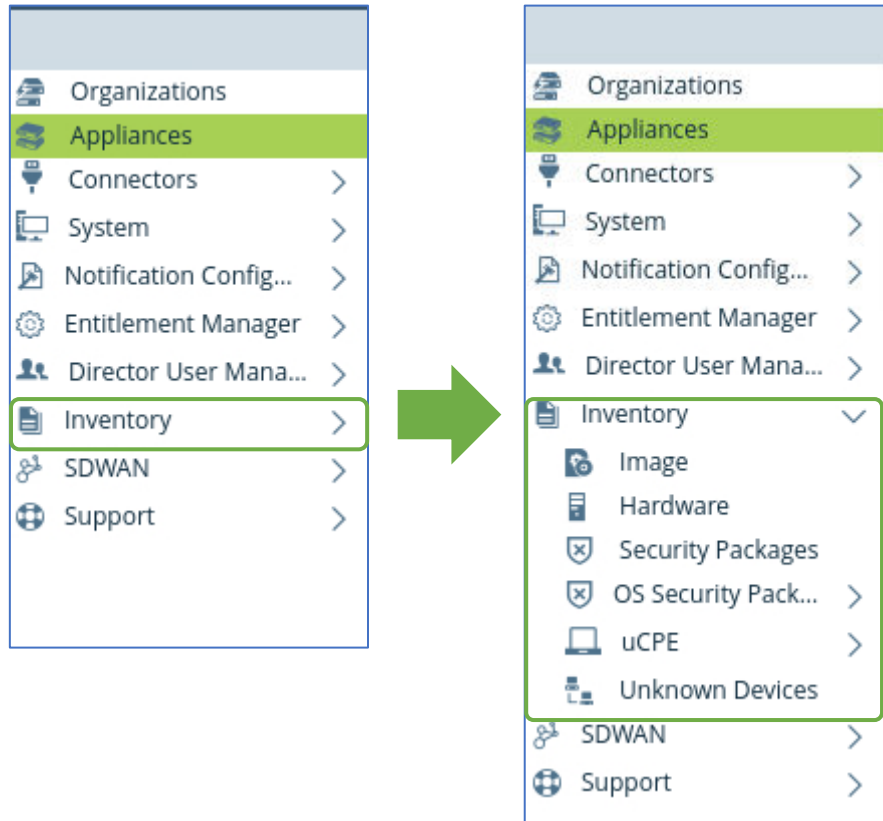
The Appliances table of the Administration dashboard lists all of the deployed appliances in the SD-WAN environment. You can click on a device in the list to navigate directly to that device's configuration and monitoring dashboard. You can also navigate to the individual device configuration and management dashboard by clicking the Monitor tab.

The main tabs are:

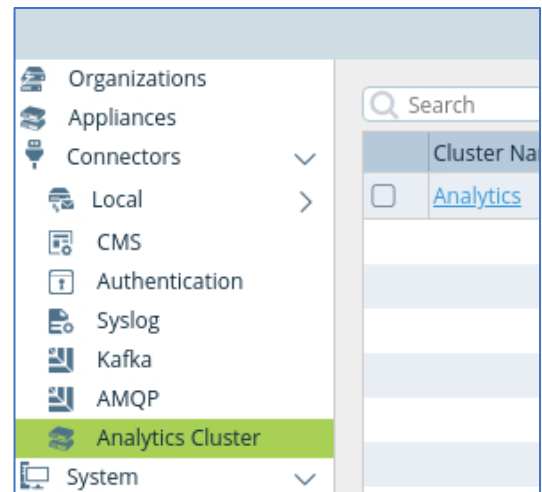
- **Monitor:** Provides access to device specific statistics, status, and configurations
- **Configuration:** Provides access to configuration components stored on Versa Director, including Device Groups, Bind Data, and Device and Service Templates
- **Workflows:** Provides access to create new workflows and to view and update existing workflows
- **Administration:** Provides access to SD-WAN environment configuration, including device inventory, deployment information, overlay configuration, external connectors, organization definition and configuration, user management, and licensing. It also provides access to the software management features, such as downloaded OS packages, Security Packages (Spacks), etc.
- **Analytics:** Opens the Versa Analytics GUI within Versa Director

Because you're already here, let's explore the *Administration* tab.

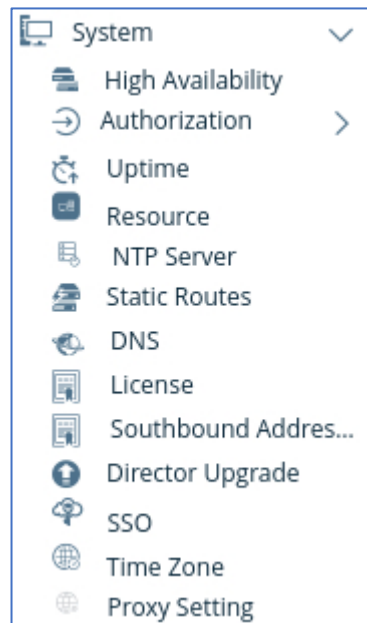
The menu on the left displays the main categories of administration information. Wherever you see a > symbol, this means that the category can be expanded:



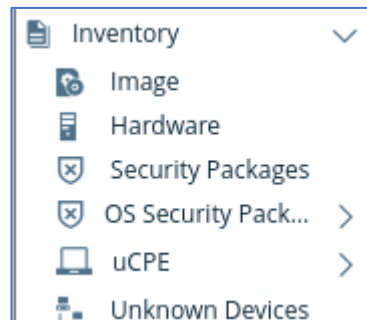
Expand the *Connectors* menu. The Connectors menu lists the different types of connections that are available to other systems, such as Analytics clusters, authentication servers, syslog servers, and so forth. If you click on the Analytics Cluster menu item, you'll see a table that lists all of the Analytics connectors on the system (which is currently one). The Analytics connector provides the information needed for Versa Director to communicate with the Versa Analytics node or cluster.



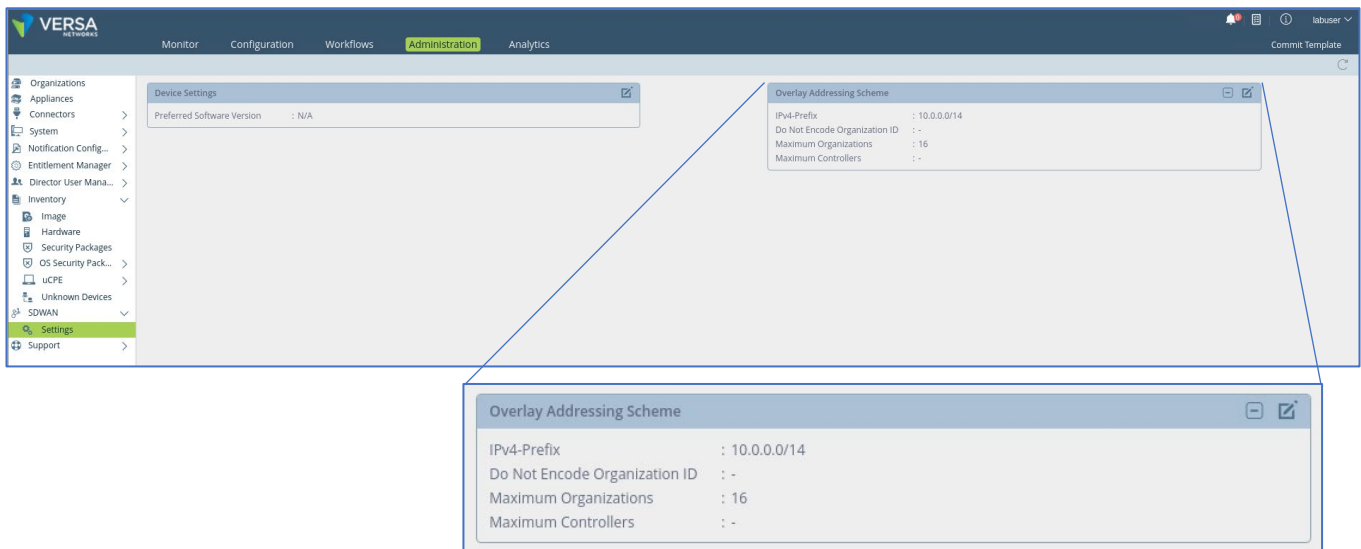
Next expand the *System* menu. The System menu is where Versa Director system information is configured, including Versa Director High Availability, NTP servers, the Versa Director license, DNS settings, Time Zone settings, and so forth. It's important to remember that the Versa Director is a computer system that may need to perform functions for the local processes, including DNS lookups and local routing. These settings are NOT for the SD-WAN systems. These settings are for the local Versa Director system.



Expand the *Inventory* menu. Here you will see dashboards to manage the software images stored on Versa Director, the current device inventory, which includes devices that have been created in the Versa Director database (Hardware), Security Package management, OS Security package management, and uCPE images. The Unknown Devices dashboard lists appliances that have been onboarded but that have a serial number that does not match a device serial number in the Hardware table.



The *SDWAN Settings* dashboard is where the SD-WAN overlay address scheme is defined.



Exercise 3: Explore Versa Director

In this lab exercise, you will explore various dashboards of the Versa Director platform and answer questions related to the areas that you explore.

3.1

If you are assigned Branch 110, the template created for your device probably has a name related to Branch 110

Task: Navigate to the *Configuration* tab. Use the GUI to find the values needed to fill in the three options found under the *Templates* dropdown in the diagram below.

The screenshot shows the Versa Director Configuration tab. The 'Templates' dropdown menu is open, displaying three input fields for selection, numbered 1, 2, and 3. The background interface includes tabs for Monitor, Configuration, Workflows, Administration, and Analytics. Below the tabs, there are dropdowns for Templates, Devices, and Objects. The 'Organizations' section is partially visible in the background.

3.2

Task: Use the GUI to fill in the options in the *Devices* drop-down

The screenshot shows the Versa Director Configuration tab with the 'Devices' dropdown menu open. It displays a search bar and three input fields for selection, numbered 1, 2, and 3. The background interface is consistent with the previous screenshot, showing the Configuration tab and various dropdowns.

3.3

Task: Use the GUI to fill in the options in the *Objects* drop-down

The screenshot shows the Versa Director GUI with the 'Configuration' tab selected. Below the main navigation bar, there are three dropdown menus: 'Templates', 'Devices', and 'Objects'. The 'Objects' dropdown is open, showing a search bar and a list of five empty input fields, numbered 1 through 5. The background shows a table with columns 'Name' and 'ons'.

3.4

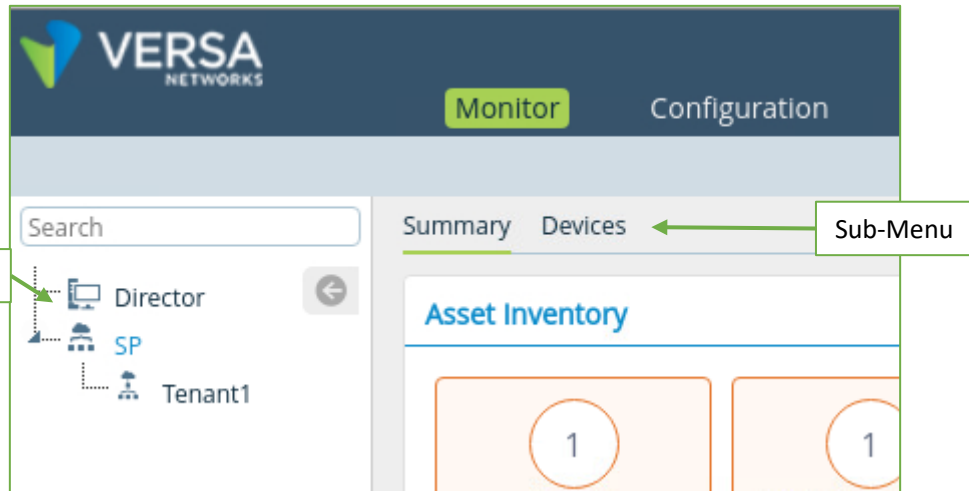
Task: A workflow is a step-by-step process to perform a task. In Versa Director, a workflow is a step-by-step process to create something, similar to a configuration wizard. The process or settings used are saved so that the process can be repeated, or so that settings in the original process can be changed and re-used to update or modify the object that the workflow created.

Navigate to the *Workflows* tab. In the *Workflows* tab, fill in the left-side menu that displays the types of things you can create by using a workflow.

The screenshot shows the Versa Director GUI with the 'Workflows' tab selected. On the left side, there is a menu with four sections: 'Infrastructure', 'Template', 'Devices', and 'Controller1'. Each section has a dropdown arrow. The 'Infrastructure' section is expanded, showing a list of seven empty input fields, numbered 1 through 7. The 'Template' section is also expanded, showing a list of six empty input fields, numbered 3 through 8. The 'Devices' section is expanded, showing a list of one empty input field, numbered 7. The 'Controller1' section is expanded, showing a list of one empty input field, numbered 1. The background shows a table with columns 'Name' and 'Controller1'.

3.5

Task: Open the *Monitor* tab. In the *Monitor* tab there is a left-side menu and a sub-menu at the top of the table displayed on the page.



With the *SP* organization selected, click on the *Devices* tab to display devices that are managed by the *SP* organization.

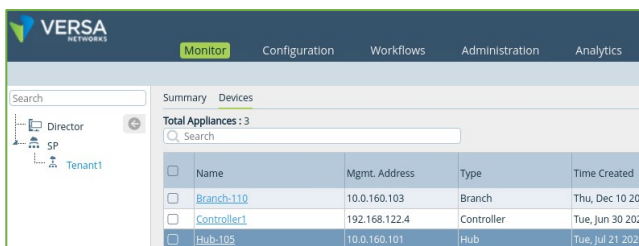
Click on the *Tenant1* organization. With the *Tenant1* organization selected, click on the *Devices* tab to display devices that are managed by the *Tenant1* organization.

Question: What differences do you see between the *SP* organization view and the *Tenant1* organization view within the corresponding *Devices* tables?

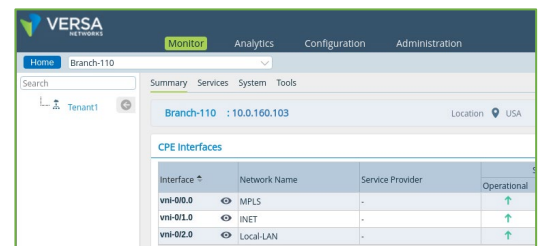
3.6

Task: Click on your branch device in the *Tenant1* *Devices* table.

Question: How did the main menu bar change when you opened your branch device?



Before



After

Key Differences: Device Context Mode (also called Appliance Context Mode)

Return to global menus (Exit Device Context)

Current Device

Parameters and properties that can be monitored on the device

Interface	Network Name	Service Provider	Operational
vni-0/0.0	MPLS		↑
vni-0/1.0	INET		↑
vni-0/2.0	Local-LAN		↑

3.7

Task: Explore the *Services* options in Device/Appliance Context mode.

Open the *Services* tab for your device. There are 2 main categories of services that can be viewed: Services and Networking. Take a few minutes to explore the type of information available in some of the Services and Networking dashboards.

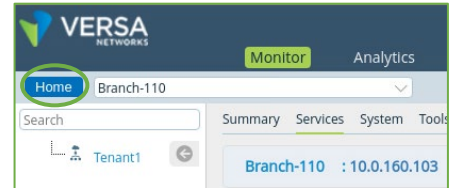
What type of information is available in the Services section?

What type of information is available in the Networking section?

Is the information listed above for an organization, or for a specific device?

3.8

Task: Click the *Home* button next to your device name. What happens to the display and top menu bar?



Clicking the *Home* button takes you back to the main Versa Director system and dashboards, and exits the device/appliance context mode.

3.9

Task: Explore the *Director User Management* menus.

Navigate to the global *Administration* tab in Versa Director (make sure you are no longer in the Device/Appliance Context mode). In the *Administration* tab, locate the *Director User Management* menu on the left side and expand the menu. Select the *Provider Users* from the menu.

Question: What uses are visible in the table?

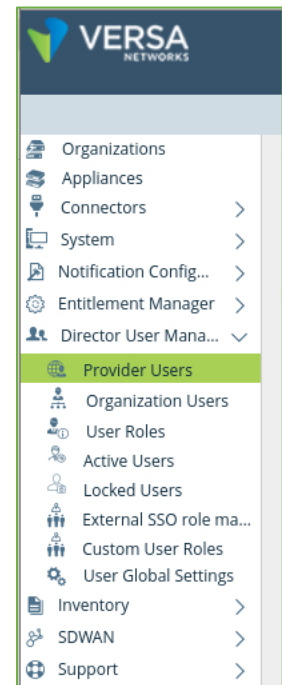
Question: What role is assigned to your username?

Click your username to open the *Edit Provider User* dialog.

Question: What is the Landing Page configured for your user?

Click *Cancel* to close the dialog – do not change any settings.

Do you remember what dashboard you were presented with when you first logged on?





Note that there is no connectivity status on the Hardware table, but the Appliance table has a connectivity status.

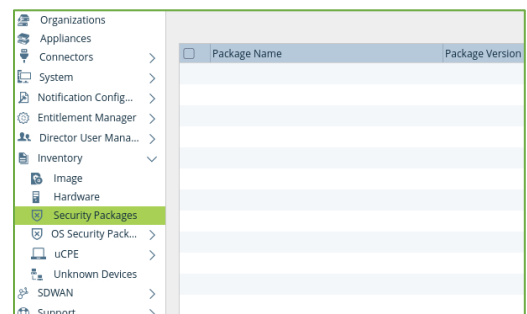
Select the *Hardware* menu. This is where devices that have been created in Versa Director are stored. It's important to remember that when you create a device in Versa Director, it is stored as an object in the Versa Director database. The Hardware table lists devices that have been created in Versa Director. The Appliances menu table lists devices that have been deployed and are active in the network. When a device in the Hardware table is onboarded or deployed in the network, a corresponding Appliance is created in the Appliance table – but only AFTER the device is successfully onboarded and is live.

Organization: --Select--

- Organizations
- Appliances
- Connectors >
- System >
- Notification Config... >
- Entitlement Manager >
- Director User Mana... >
- Inventory >
- Image >
- Hardware**
- Security Packages
- OS Security Pack... >
- uCPES >
- Unknown Devices >
- SDWAN >
- Support >

Search

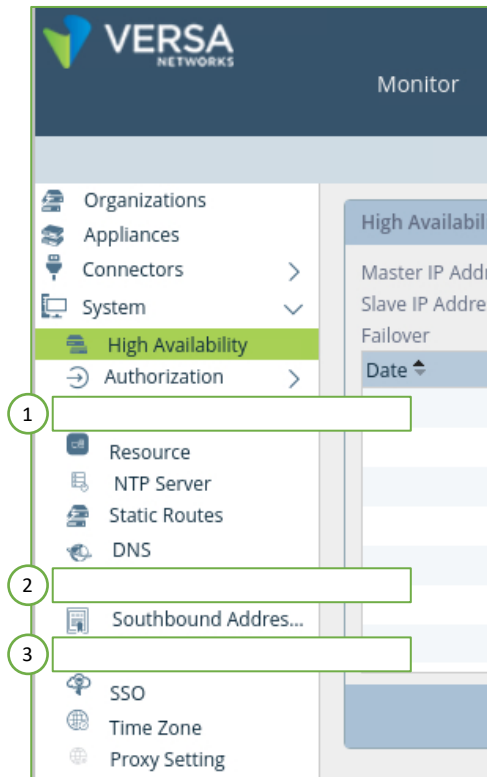
<input type="checkbox"/>	Device Name	Serial Number
<input type="checkbox"/>	Branch-110	SN-Branch-110
<input type="checkbox"/>	Branch-111	SN-Branch-111
<input type="checkbox"/>	Branch-115	SN-12345
<input type="checkbox"/>	Hub-105	SN-Hub-105
<input type="checkbox"/>	New-Branch	SN-New-Branch



3.11

Task: Explore the System menus.

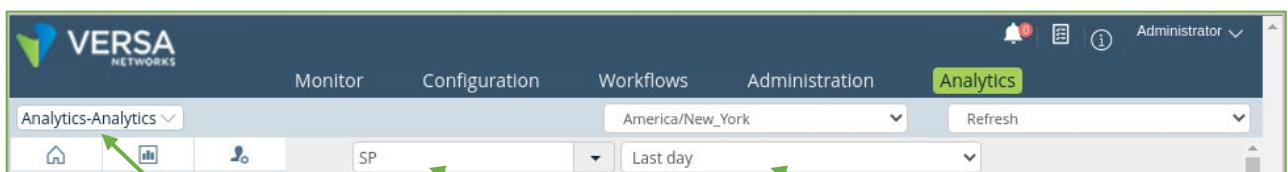
Expand the System menu. In the System menu. Fill in the hidden menu items in the image below.



3.12

Task: Explore the Analytics dashboard.

The Analytics tab opens the Versa Analytics dashboard. Currently there is a single Versa Analytics node deployed in the network. However, when multiple Versa Analytics nodes are configured and linked to Versa Director, you can select which Versa Analytics node is displayed by choosing the node from the dashboard menu.



Currently displayed Analytics Node

Organization level

Time frame of displayed data

3.13

Task: Explore the Versa Analytics Dashboards

The left menu is divided into 2 main sections: Dashboards and Logs. The Dashboards display historical statistic information gathered from devices in the SD-WAN. The Logs section displays the logs that are sent from processes that run on the end devices.

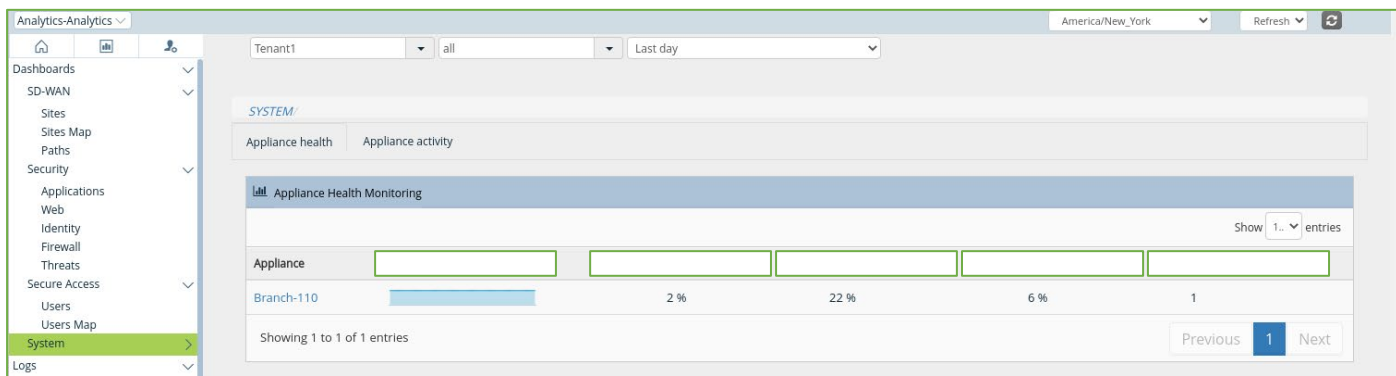
Fill in the main dashboard names in the image below.



In Versa Analytics, you can select the main Dashboard title to display summary information related to that dashboard topic. You can also select the sub-menus for more specific information.

Each dashboard has sub-components that display graphs and charts related to the SD-WAN. Take a few minutes to explore the dashboards and sub-tabs within each dashboard entry. Please note that because this is a lab environment there may be many charts and graphs that don't contain any information because there isn't any production traffic running on the network.

Select the System dashboard. What information is shown on the main System dashboard?



STOP! Notify your instructor that you have completed this lab.