# Versa Workflows and Templates

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.

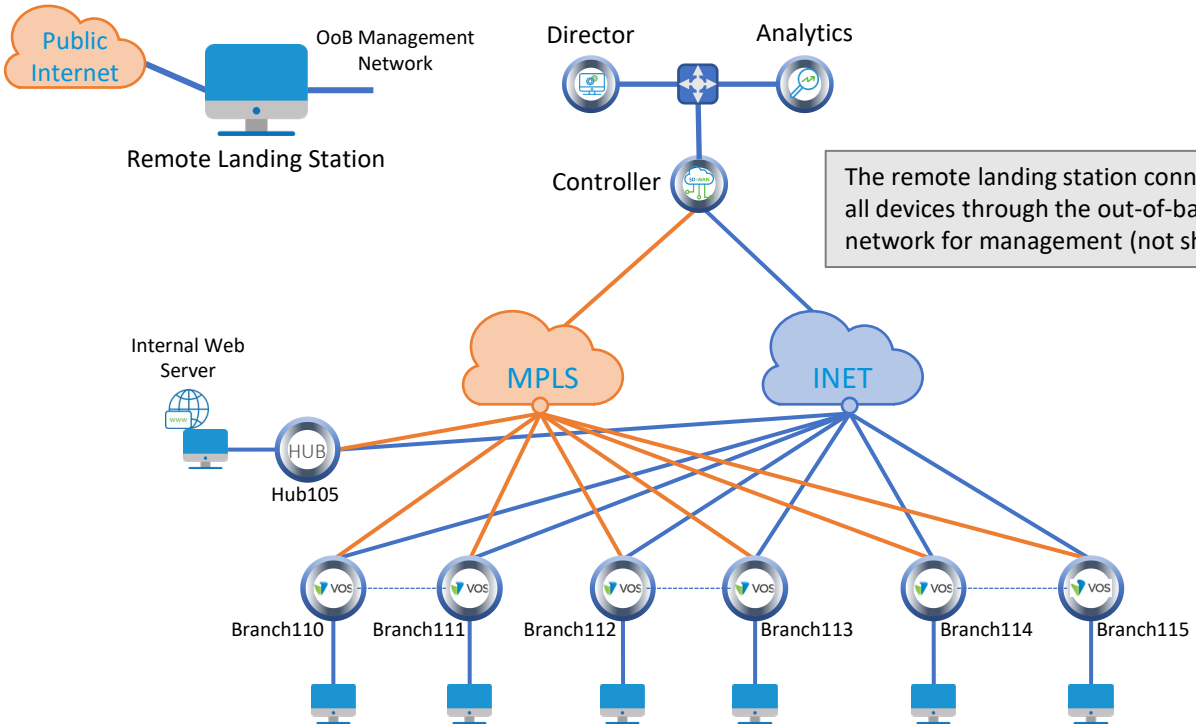
Look for these hints to help you in the labs

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.

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





Each branch device connects to the MPLS transport and to the INET Transport

- MPLS: vni-0/0
- INET: vni-0/1

Each branch connects to a local LAN

- vni-0/2

Each branch pair has a cross-connect (used in HA labs only)

- vni-0/3

Remember this! You will use it a lot!

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`**

# 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:

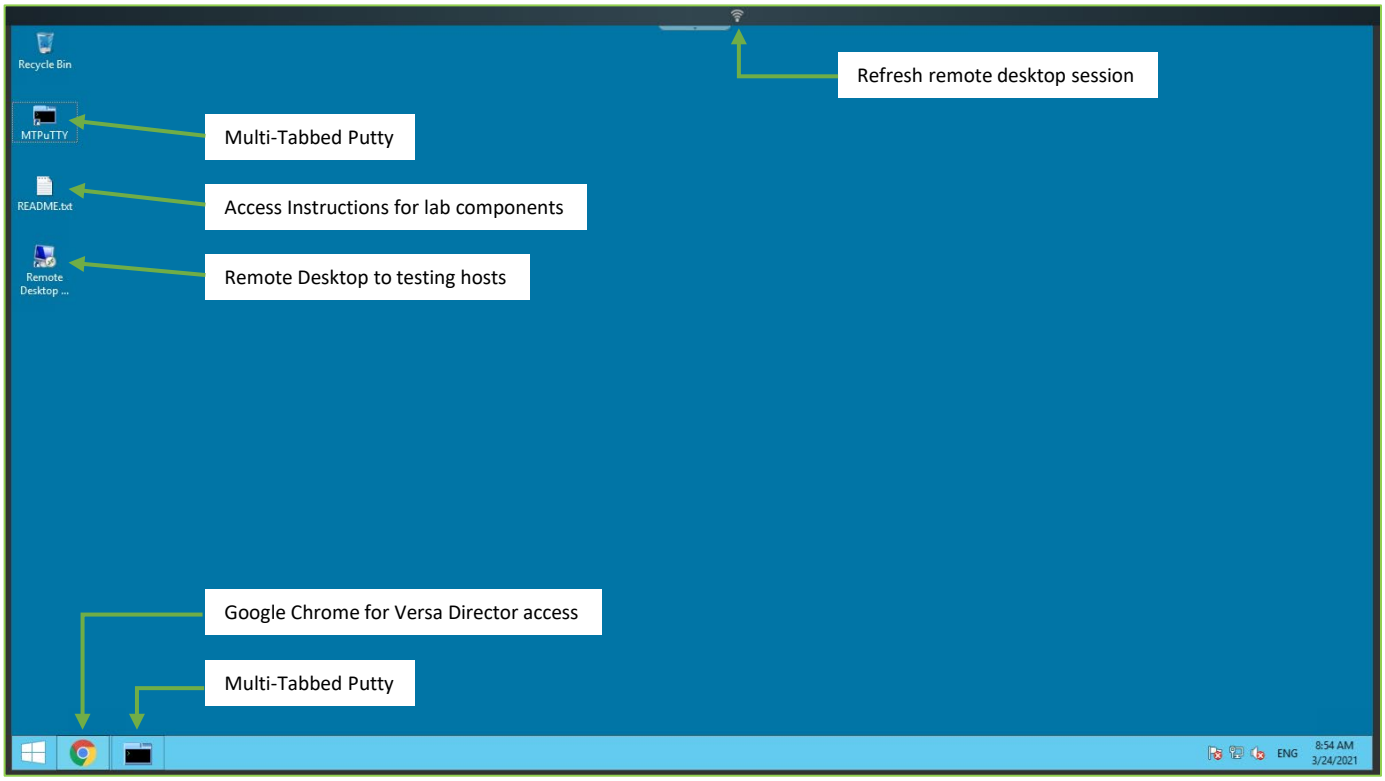
- Branch/Node/CPE Assignment
- Remote Lab Access

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:

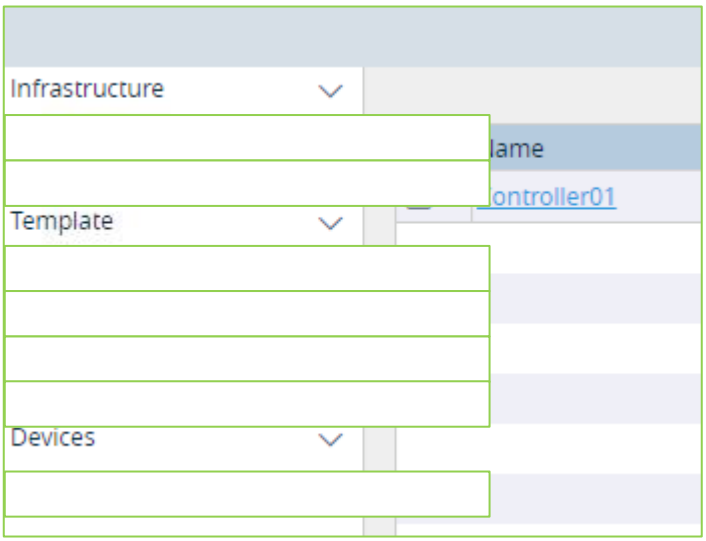
| CPE | Username | Password |
|---|---|---|
| Branch110 | labuser110 | Versa@123 |
| Branch111 | labuser111 | Versa@123 |
| Branch112 | labuser112 | Versa@123 |
| Branch113 | labuser113 | Versa@123 |
| Branch114 | labuser114 | Versa@123 |
| Branch115 | labuser115 | Versa@123 |

# Exercise 2: Examine the Workflow Environment

In the following lab exercises, you will:

- Identify the types of workflows available in Versa Director
- Examine the structure of a Controller workflow
- Examine the structure of an Organization workflow

Open the Workflows dashboard. On the left-side menu there are 3 main categories of workflows. Expand all 3 categories so that the sub-components are visible. Fill in the sub-components in the diagram below.




Each of these categories of objects or components is related to a type of object within Versa Director:

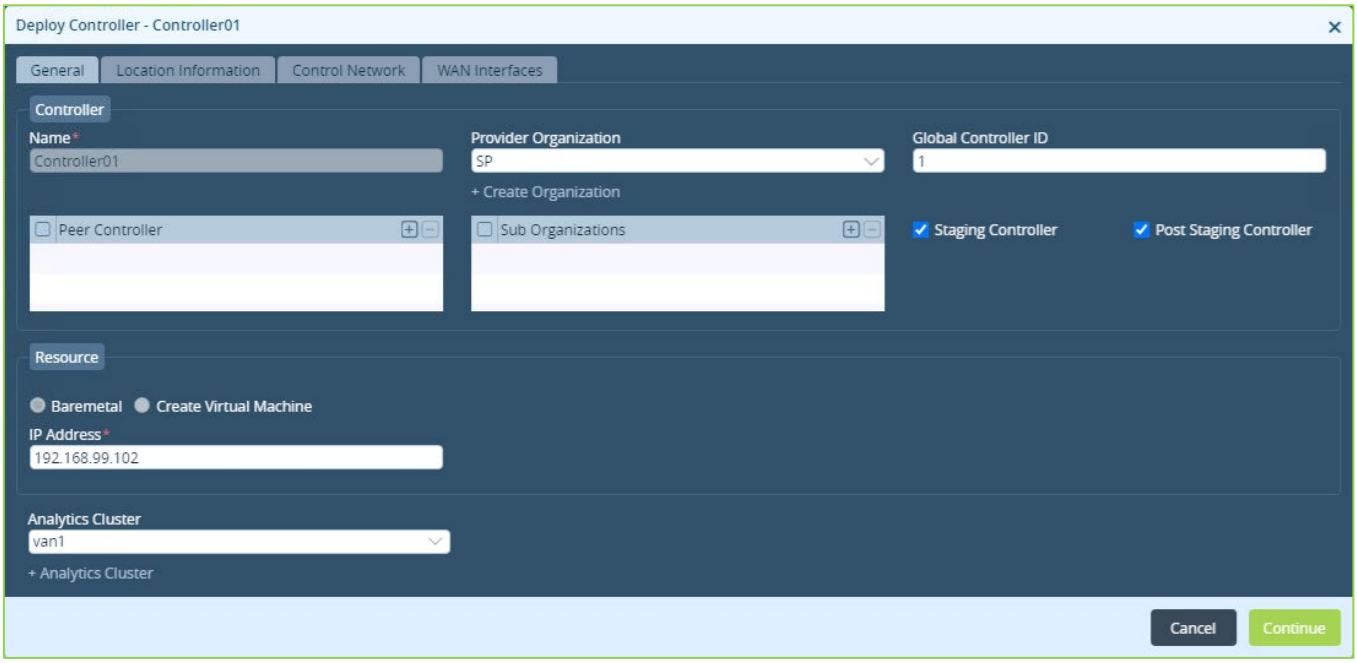
- Infrastructure Workflows are used to help create controllers and organizations.
- Template Workflows are used to create different template-based components.
- Device Workflows are used to create branch device (CPE) components.

There are already a few workflows saved in Versa Director that were used to create components in the lab environment. These include:

- A Controller workflow
- A Template workflow for each of the preconfigured templates
- A Spoke Group workflow for each of the preconfigured spoke groups that are used in the hub-and-spoke labs
- A Device workflow for each of the preconfigured devices in the lab environment.

Again, it is important to remember that these are saved processes, not the templates, controllers, or devices that the processes create. We will examine this concept as you complete the lab.

In the Infrastructure menu, click on Controllers. All of the controller workflows are listed in the table. Click on Controller1 (which is the only saved workflow) to open the workflow.




Note that the dialog title is "Deploy Controller – Controller01". This is because the end result of completing the workflow is the creation and deployment of a controller.

Question: What organization owns and manages this controller? _____

Question: What is the IP Address of the controller? _____

Question: To what analytics cluster will this controller forward log and statistics information?

_____

Question: What are the 2 roles that this controller will perform in the SD-WAN?

_____

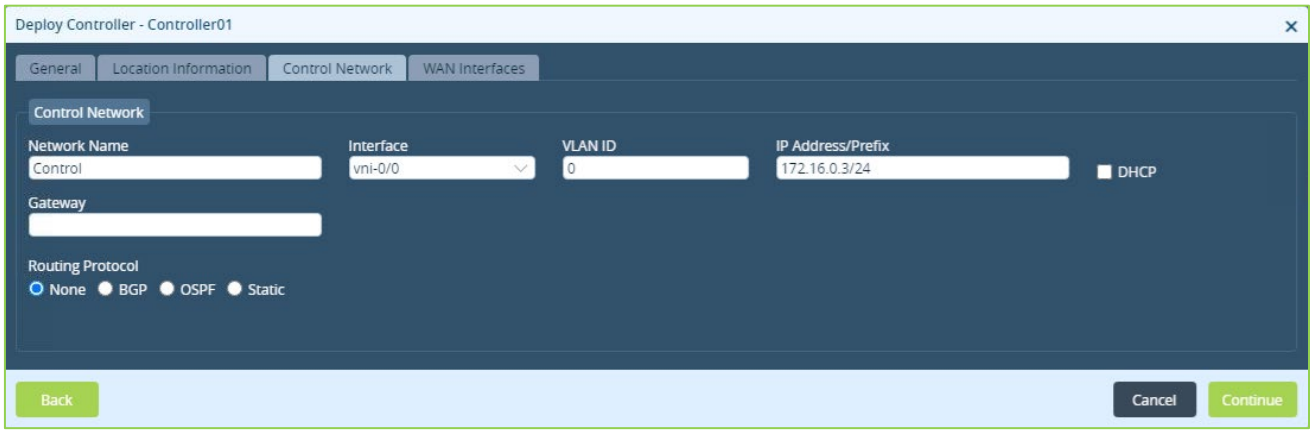
This controller is managed by the SP organization. We'll see later in the lab that sub-organizations that fall under the SP organization can use this controller. When multiple sub-organizations use a parent controller, the controller acts as a multi-tenant controller and maintains separate control plane functionality for each tenant.

The IP address listed is the out-of-band management interface that is used for initial communication between the Versa Director and the Versa Controller. It is only used for the creation and onboarding process. Once the controller is provisioned, a separate interface associates with the Control Network is used for further communication between the head-end components.

This controller will be configured as a Staging controller and as a Post Staging controller. The Staging Controller function allows devices to be onboarded through this controller. The Post Staging Controller function allows this controller to act as a BGP route reflector, and SD-WAN CPEs will be able to establish BGP sessions with the controller for control plane information.

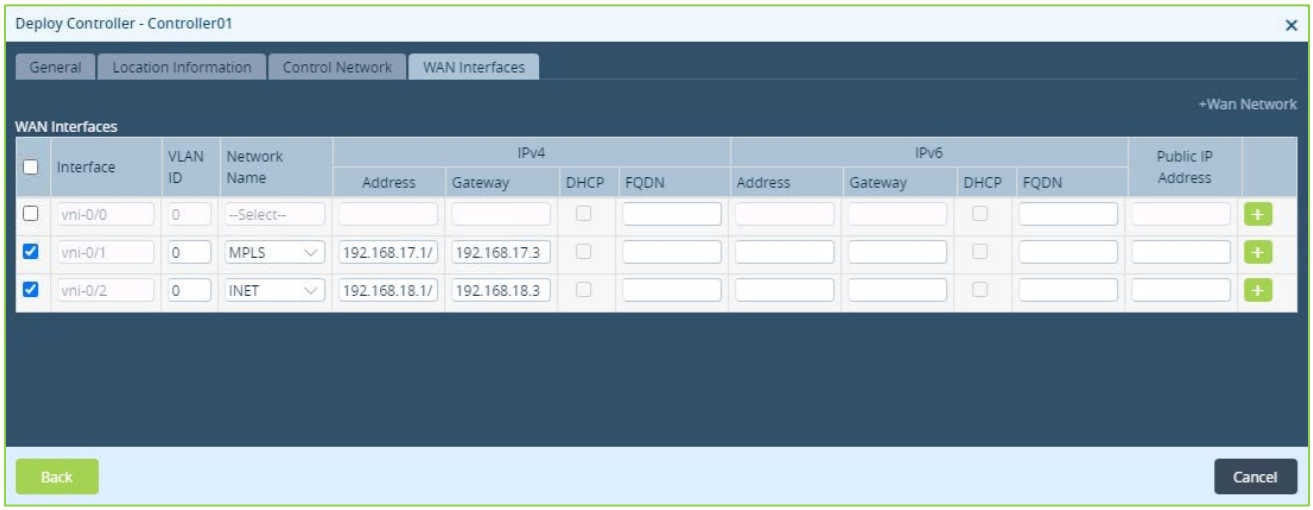
Continue to the Location Information tab. The Location Information tab can be used to indicate where the controller is physically located.

Continue to the Control Network tab.




The Control Network tab is where you define the North-Bound interface that is normally used to communicate with Versa Director and Versa Analytics. If the Versa Controller or Versa Analytics nodes are not on the same broadcast domain as the north-bound interface, routing can be configured on the north-bound interface to enable reachability.

Continue to the WAN Interfaces tab.



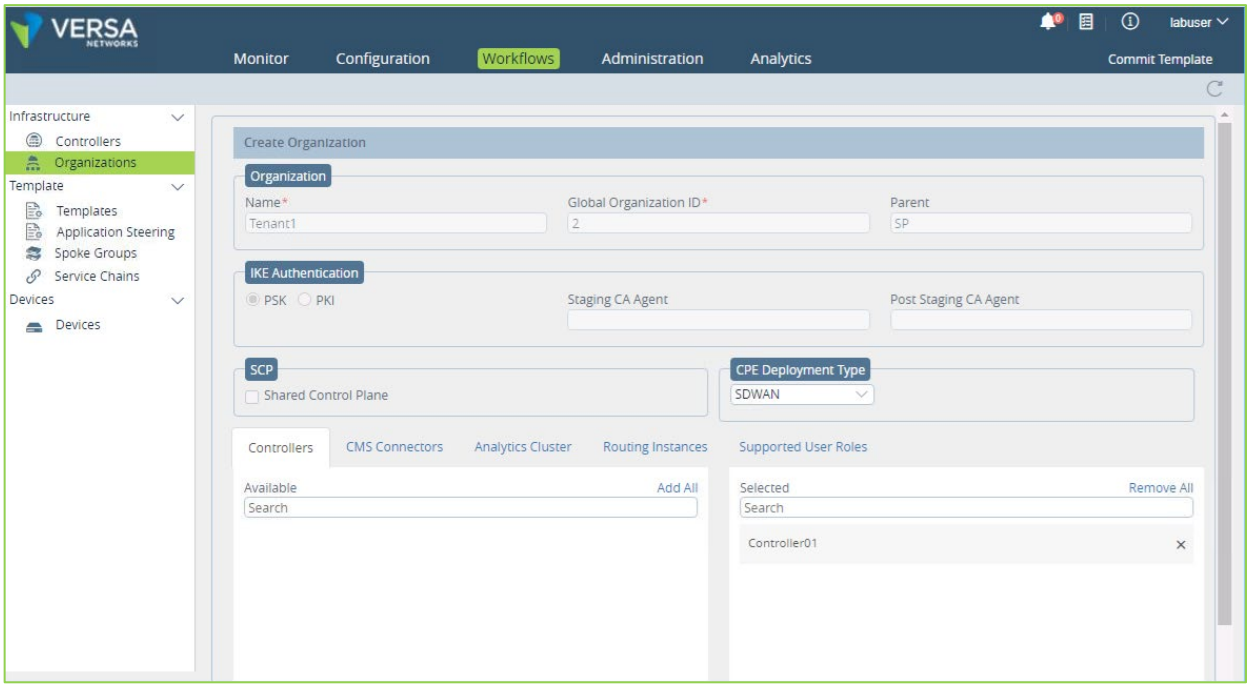

The WAN interfaces are the south-bound interfaces that connect to the SD-WAN environment. It is over these interfaces that CPEs will communicate with the controller.

If you were creating a new controller, a Deploy button would be present in this dialog box, which would begin the process of building the controller, including all of the Virtual Routers, VRF tables, routing protocols, encryption profiles, and all other configuration components required to build a fully functional controller. Because the controller is created before most other SD-WAN components, and other SD-WAN components rely on configuration parameters of the controller when they are created, a provisioned controller cannot be modified using the workflow as changes to the controller would impact all other devices connected to the controller.

Click *Cancel* to exit the workflow dialog.

In the Infrastructure menu, select *Organizations*. The primary organization (SP in this example) is created during the initial Versa Director configuration process. Subsequent organizations (sub-organizations) are created using the Organizations workflow.

Open the Tenant1 organization workflow.




Controllers and Organizations are usually only created at the initial SD-WAN deployment phase

The Organization workflow allows you to define a sub-organization and its associated parameters. Note that the controller Controller1 is listed in the Controllers tab. This configuration allows the Tenant1 sub-organization to use the Controller1. If another sub-organization under the SP domain is created, it could also be allowed to use the Controller1 controller. Other tenant-specific configuration parameters can be configured as well, including tenant-specific Analytics connectors, the default routing instances that will be created for devices within the sub-organization, and the supported user roles available to users within the sub-organization, which allows the parent organization to manage and control what type of access users within the sub-organization are allowed to be assigned.

**IMPORTANT! Do not change any of the organization parameters!**

Take a few minutes to explore the configuration parameters included in the organization workflow, then click Cancel to exit out of the workflow.

# Exercise 3: Examine Template Workflows

It's common for the Controllers and Organizations workflows to be used only once or twice in an entire deployment, as those components are normally defined and deployed in the initial stages of the SD-WAN deployment. The workflows that are used frequently are the Template and Devices workflows.

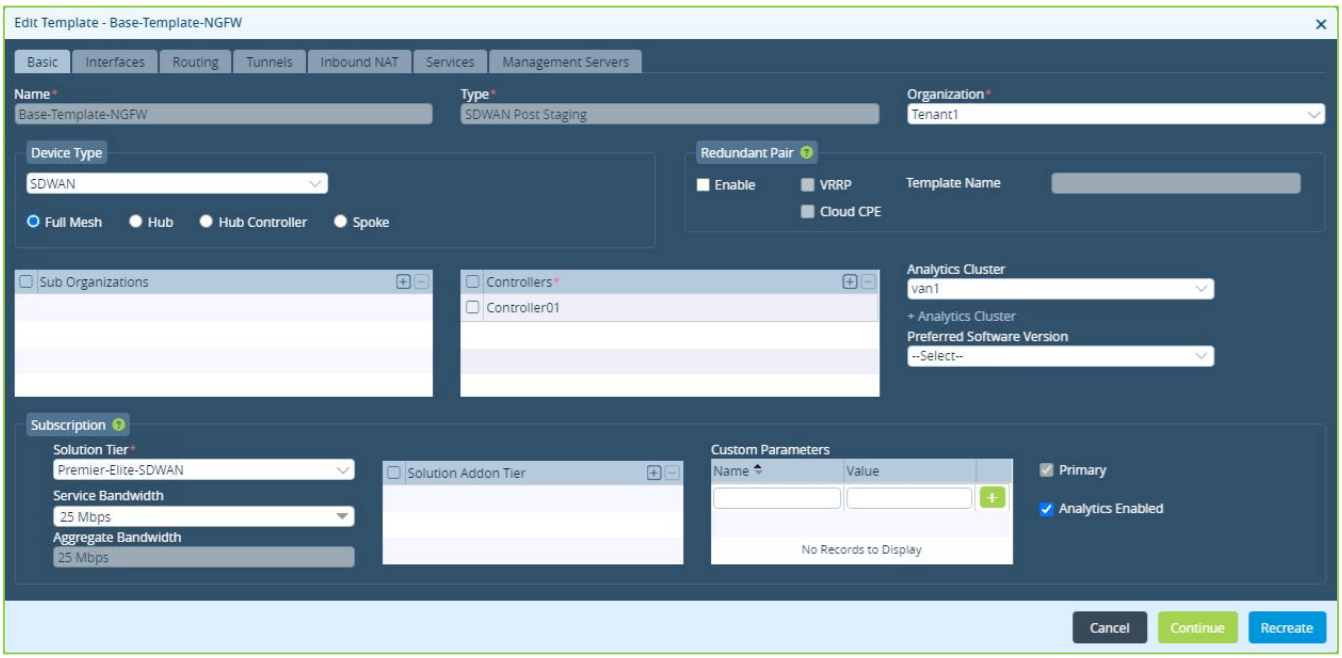
In the following exercises you will:

- Examine the structure of a Device Template workflow

In the Template workflow menu, select Templates. This opens the Device Template workflow table. Device Template workflows are used to build the base configuration template that a group of devices will inherit when a device is created in a later step. There are multiple workflows saved that were created during the initial lab setup. Device Templates that are created using the Device Template workflow are placed in the *Configuration > Templates > Device Templates* table in Versa Director, and are stored in the local Versa Director database.

Click on the *Base-Template-NGFW* workflow to open the workflow.

The template that is created by a workflow inherits the name of the workflow. Continue to the next page in the lab guide to answer some questions and fill in some details related to this example workflow.



Fill in the following information based on the workflow in your lab, or the image above:

What organization will have access to this workflow and the template that this workflow creates? _____

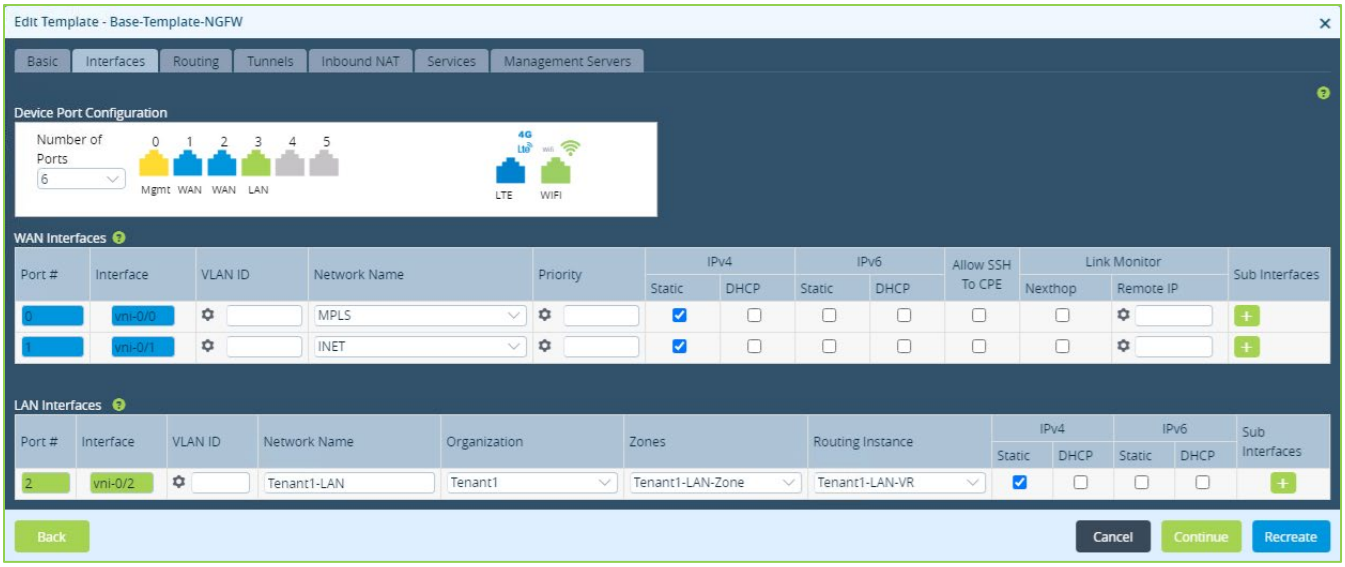
To what controller(s) will devices that use this template connect? _____

This is the inherited subscription profile, which can be over-ridden by a more specific subscription profile on a device if desired.

What subscription information will be inherited by devices that use the template created by this workflow? _____

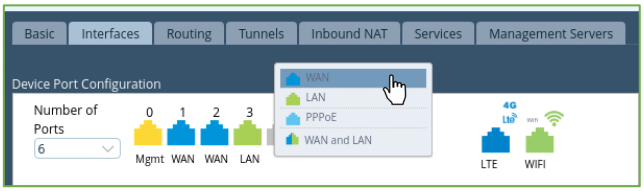
Open the Interfaces tab of the workflow.

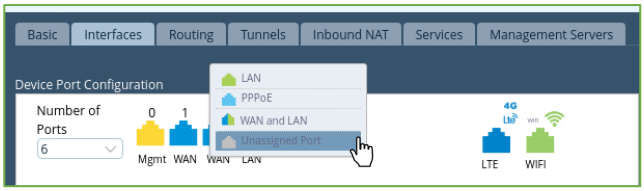
The Interfaces tab allows you to define the common interface layout of the devices that will share the template configuration created by the workflow. Note that the device *Port Configuration* diagram is a logical diagram and does not represent the actual physical device – it is only used for port mapping purposes and basic port parameters.



The LAN interfaces are the customer site facing interfaces at the local site. The *Network Name* is a user-defined name, the *Organization* determines which sub-organization owns the port, the *Zones* allows the user to define a specific security zone associated with the interface, and the Routing Instance is auto-populated based on the routing instance name configured for the organization. The method that devices will acquire address is specified in the template. However, the actual addressing is configured during the device creation process, as addressing is device specific.

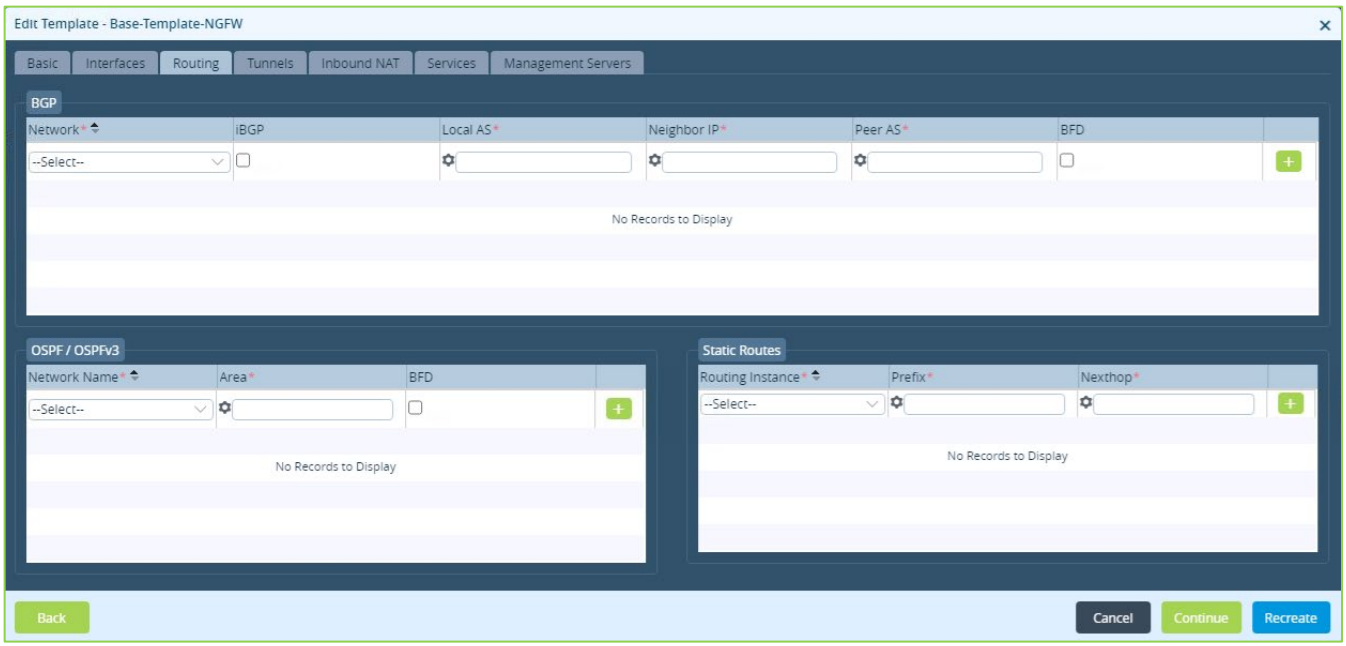
To assign a port to a role, click on the port and select the role from the popup window. You can also change the assignment of a port by clicking on a port that already has an assignment.



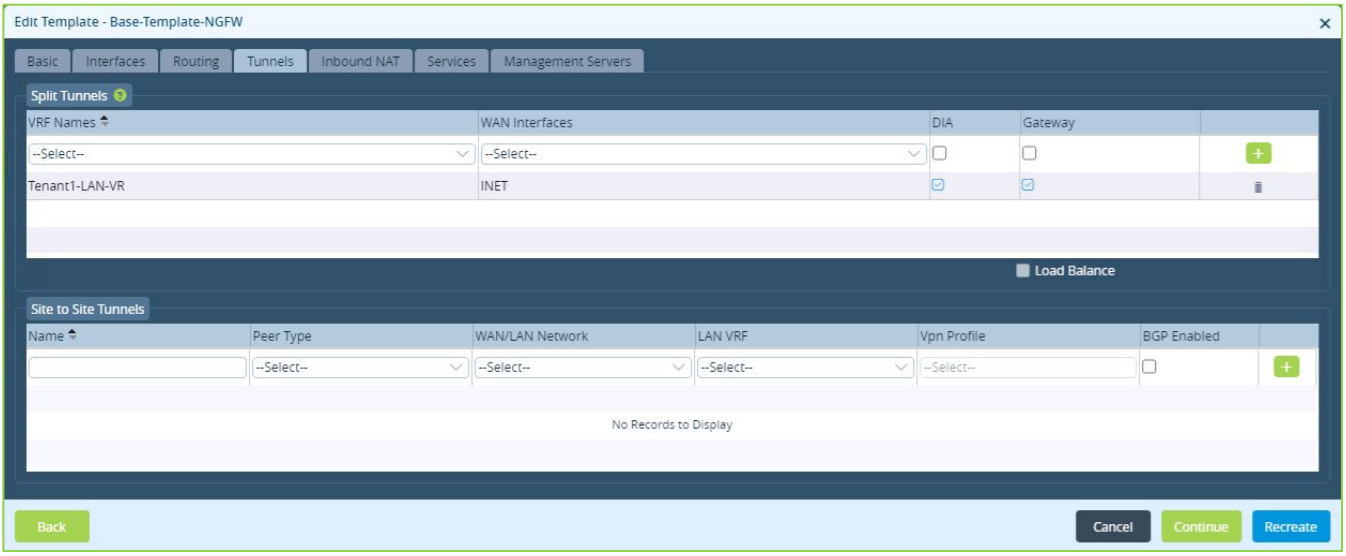

Open the Routing tab of the workflow.

The Routing template allows you to define base routing protocol parameters if desired. When routing protocol information is configured in the workflow, the workflow process automatically creates the route redistribution policies required to advertise the local routing information – and routes learned through the workflow-created routing processes – to remote sites in the SD-WAN.



Open the Tunnels tab of the workflow.

The Tunnels tab allows you to specify direct internet access or SD-WAN gateway functions on devices that use the template created by the workflow. You can also configure site-to-site tunnels for non-SD-WAN tunnels between devices.

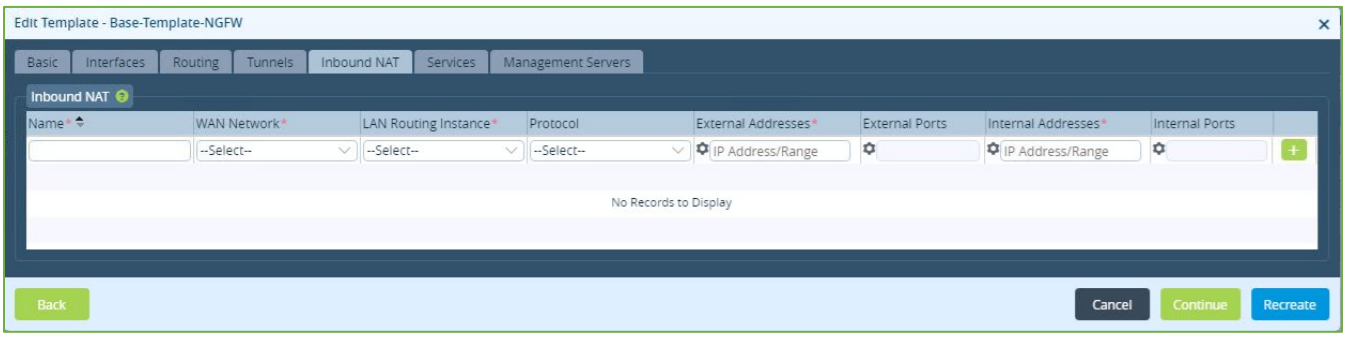



Question: According to the preconfigured tunneling configuration, which local VRF will be able to use the INET transport to reach non-SD-WAN destinations (split tunneling and DIA)?

_____

Open the Inbound NAT tab.

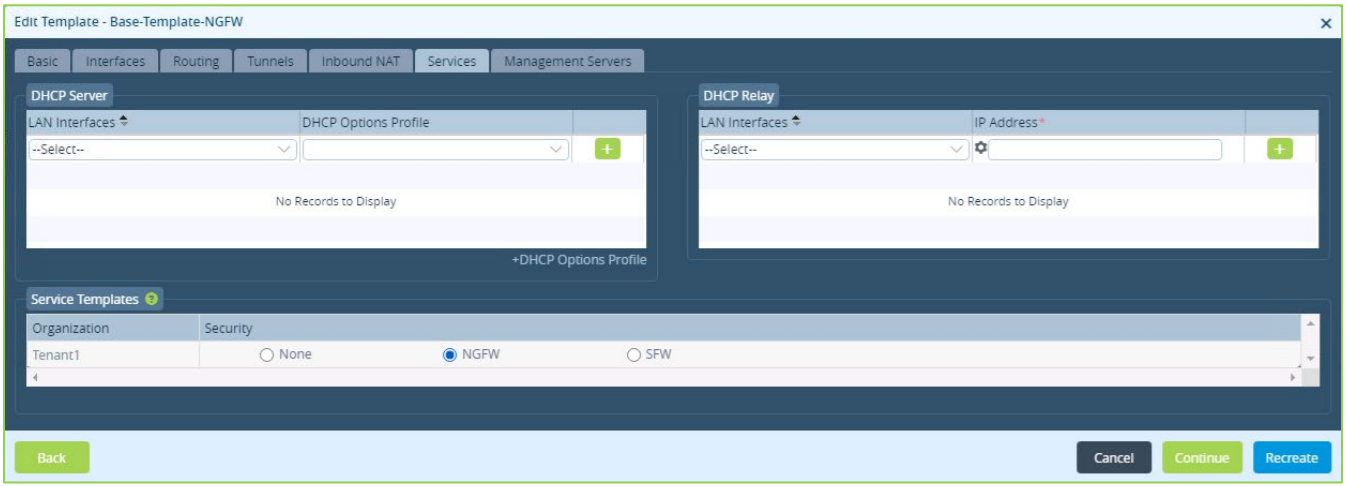
The Inbound NAT tab allows you to create static destination-NAT to allow outside resources to reach internal NATed devices.



Open the Services tab.

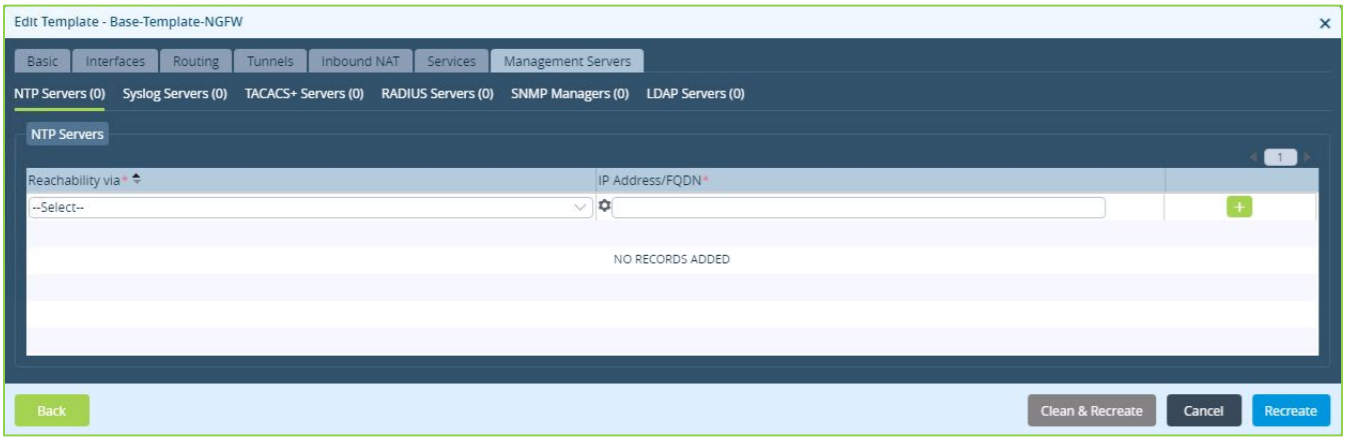
Enabling the services in the template workflow allows you to configure the services in the resulting template.

The Services tab allows you to define what services will be active on the device. The services themselves are not created in the Workflow. The services are activated in the workflow, which instructs the workflow to create the configuration hierarchy necessary to add the services later by defining the services within the template that will be created. If you do not enable the services in the workflow, the corresponding configuration hierarchy will not be created in the template.




Open the Management Servers tab.

The Management Servers tab allows you to define parameters such as NTP servers, Syslog Servers, and other management server connectivity that will be common among all devices that use the resulting template.




**Important! Do not change this workflow!**

This workflow is used to reset the Base-Template device template throughout the lab! You will have the opportunity to create your own template workflow next!

Click ***Cancel*** to close the workflow dialog, then select *Yes* from the popup.

# Exercise 4: Examine Device Workflows

After completing this lab exercise, you will be able to:

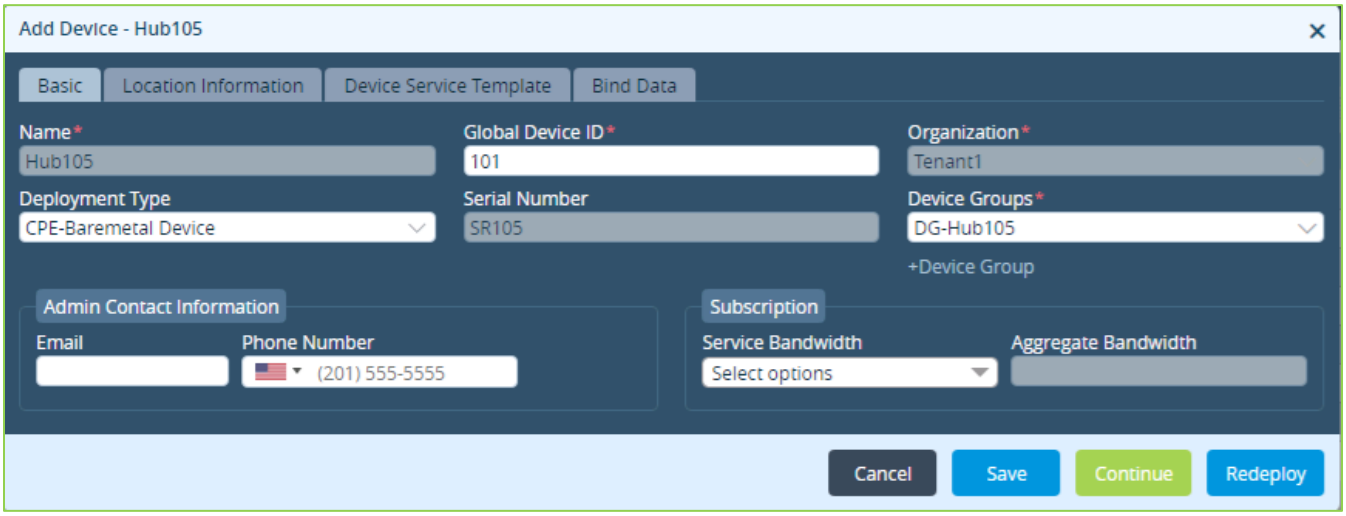
- Identify the components of a Device workflow

Next you will explore the Devices device template. The Device workflow is used to create the individual devices in the network. Devices created by the Device workflows are added to the *Administration > Inventory > Hardware* table in Versa Director.

Select *Devices* from the Devices workflow section. You will see several device workflows in the table. These device workflows were used to create the devices in the pre-configured lab environment. In this part of the lab you will examine the properties of one of the pre-configured device workflows.

Select the *Hub105* device workflow in the table. This will open the workflow that was used to create the Hub-105 device.

**IMPORTANT: Do NOT change the parameters in the Hub-105 device workflow!**

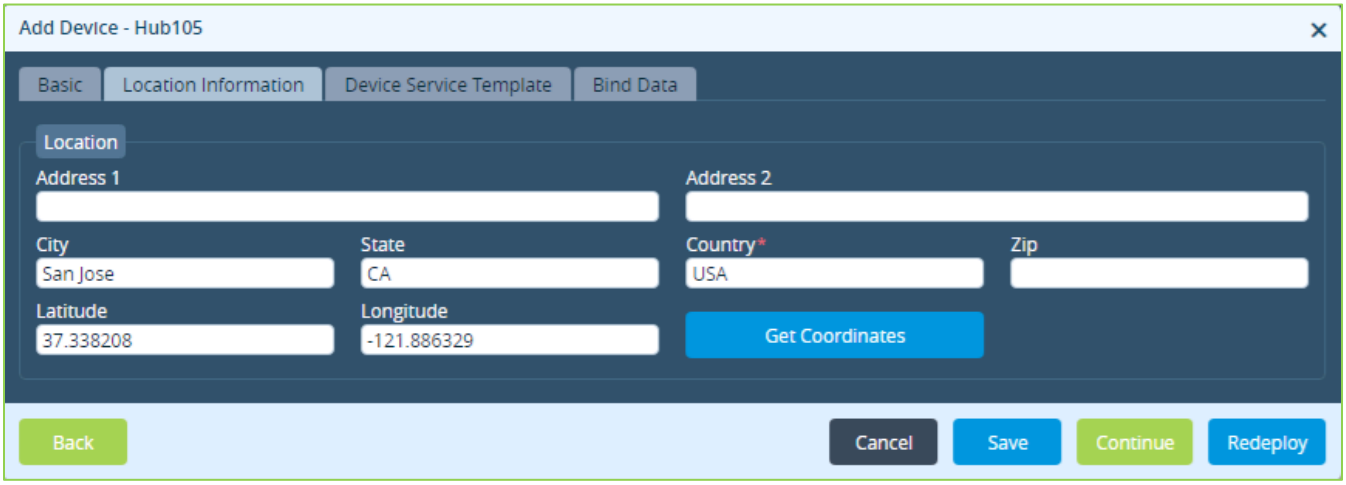



The Basic tab of the device workflows is used for the base parameters. The device that is created in the *Hardware Inventory* will inherit the name of the device workflow.

In most situations, the *Global Device ID* chosen by Versa Director is used to avoid overlapping device IDs within other organizations, as the Global Device ID must be unique on Versa Director. The Serial Number is the software or hardware serial number of the device. The Subscription properties can be left at the default values, in which case the subscription values in the template to which the device is linked will be used. If you wish to assign different subscription values to the individual device, you may do so here.

The *Device Groups* parameter is used to link the device to a template. If a device group needed to link the device to a template does not exist, the *+Device Group* shortcut will open the Device Group creation dialog, where you can create the desired device group without leaving the Device workflow.

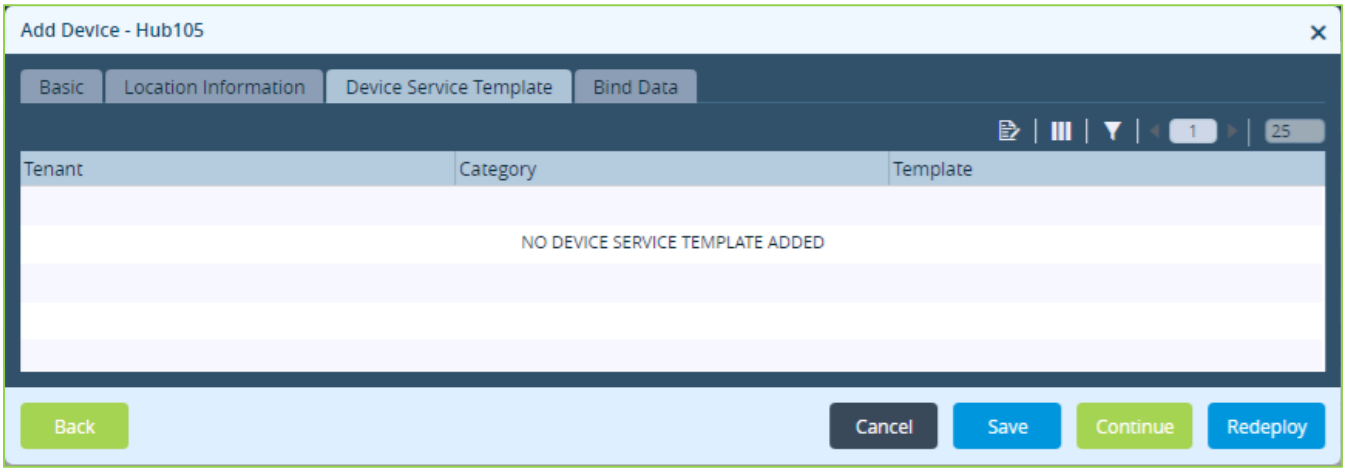
Open the Location Information tab.




You must enter a Country value. Other values are optional, but the more specific you are, the better.

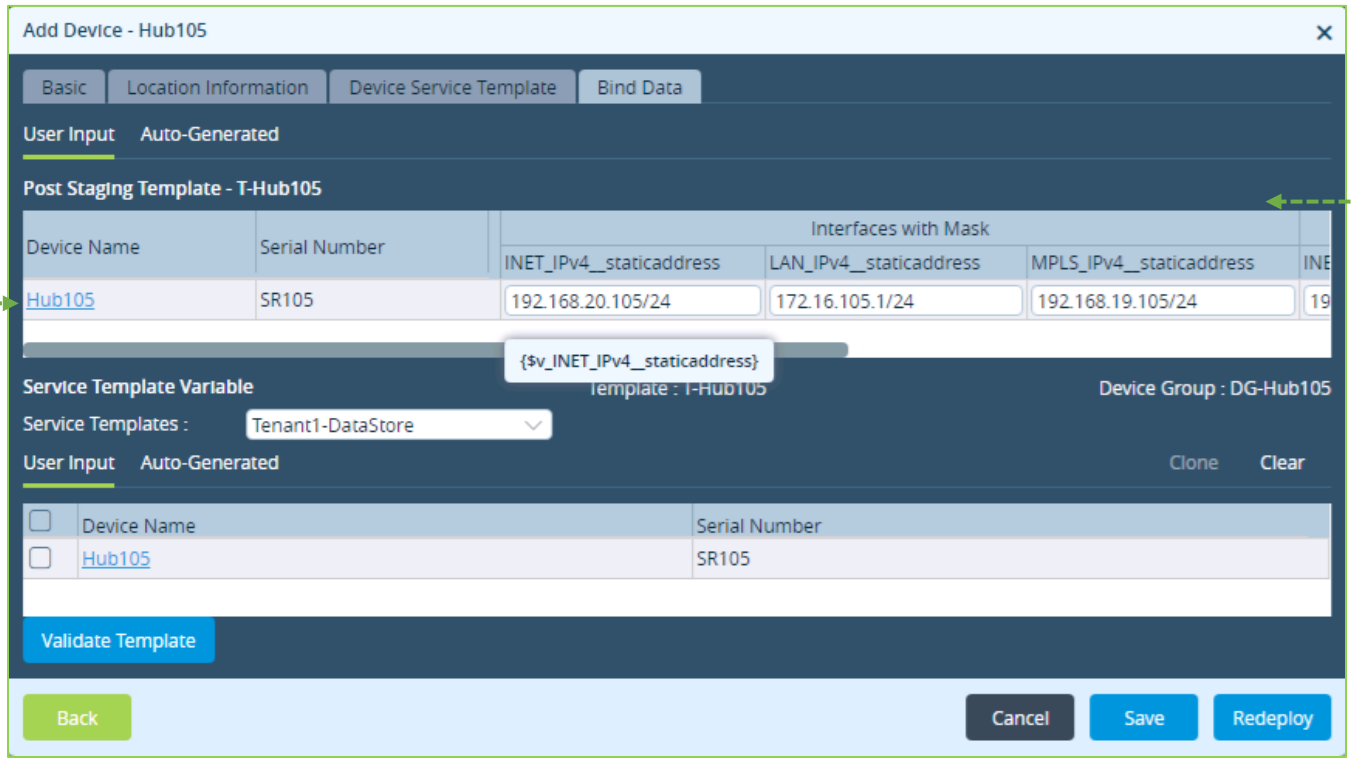
The Location Information tab allows you to enter device location information. The final location is based on Latitude and Longitude values that are calculated from the address information. The more detailed the address information, the more accurate the latitude and longitude values will be. This information is used to display the device on maps in the Monitor and Analytics dashboards.

Open the Device Service Template tab of the Device workflow.




The Device Service Template tab allows you to assign service templates to the device directly. In many instances, the service templates are assigned through the device group. Allowing the administrator to assign a service template directly to a device allows more flexibility for service assignment.

Open the Bind Data tab of the Device workflow.




The Bind Data tab is where you enter device-specific information. When the Bind Data tab is opened, the template associated with the Device Group (in the Basic tab) is scanned for any variables or values that the user needs to enter. If the Bind Data tab is empty when you open it, this is usually because the Device Group configured in the Basic tab is not properly configured, and does not have a corresponding device template configured. When there is a problem with the device group template assignment, the Bind Data tab tries to look for template information, but can't find a related template.

There are 2 ways to enter user-defined information in the Bind Data fields. The first is to enter them directly in the fields listed in the Device Name field. The scroll bar at the bottom of the Post Staging Template window allows you to scroll for additional values.

Another common method of entering the bind data is to click on the device name in the table. This will open a new dialog window that displays all of the required fields.

Click the Hub105 device name in the table to examine the pre-configured bind data for the device.

**IMPORTANT: Do NOT change the bind data information for the Hub105 device!**

Click ***Cancel*** to close the bind data dialog when you are finished examining the data, then click ***Cancel*** again to close the Device Workflow dialog.

# Exercise 5: Practice

In the next lab exercises you will perform the following tasks:

- Create a Template workflow that is named after your user-id and branch-id (e.g. Template-labuser110-branch110, Template-labuser111-branch111, etc.)
- Create a new device group that links to your newly created template
- Re-assign your existing device to the new device group
- Commit the template in order to re-configure the existing device in the network (using the new template configuration)

Because this course does not cover deployment of devices, you will not deploy the new device that you create. However, you will examine the objects created in Versa Director, and you will re-assign your existing device to the new device group that references the template that you create. You will then commit the template so that you are familiar with the process of creating a template using Workflows and applying the template to a device.

## 5.1

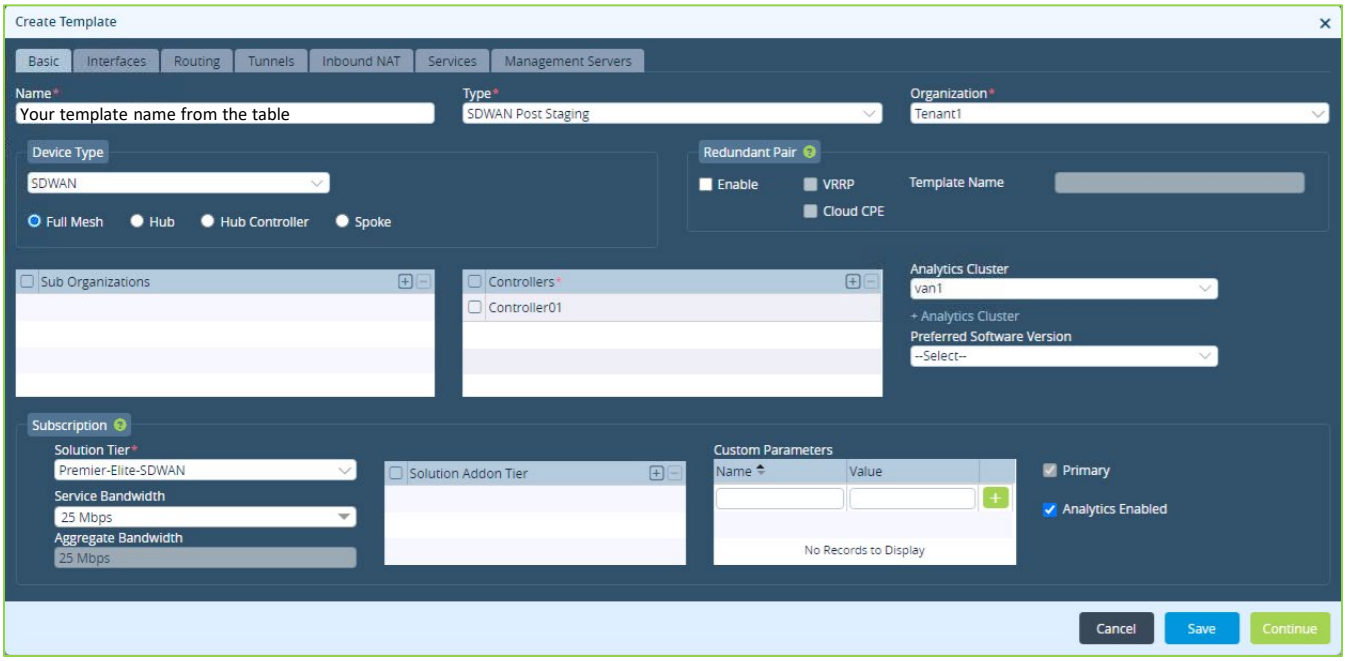
**Create a new Device Template**

In this exercise you will create a new Device Template using a Template workflow. Use a template workflow to create the template with the following parameters:

### Basic Tab:

| | |
|---|---|
| Workflow Name: | Template-[user-id]-[branch-id]-SFW |
| Type: | SDWAN Post Staging |
| Organization: | Tenant1 |
| Device Type: | SDWAN Full Mesh |
| Controllers: | Controller01 |
| Analytics Cluster: | van1 |
| Solution Tier: | Premier-Elite-SDWAN |
| Bandwidth: | 25 Mbps |

Example: Template-labuser110-branch110

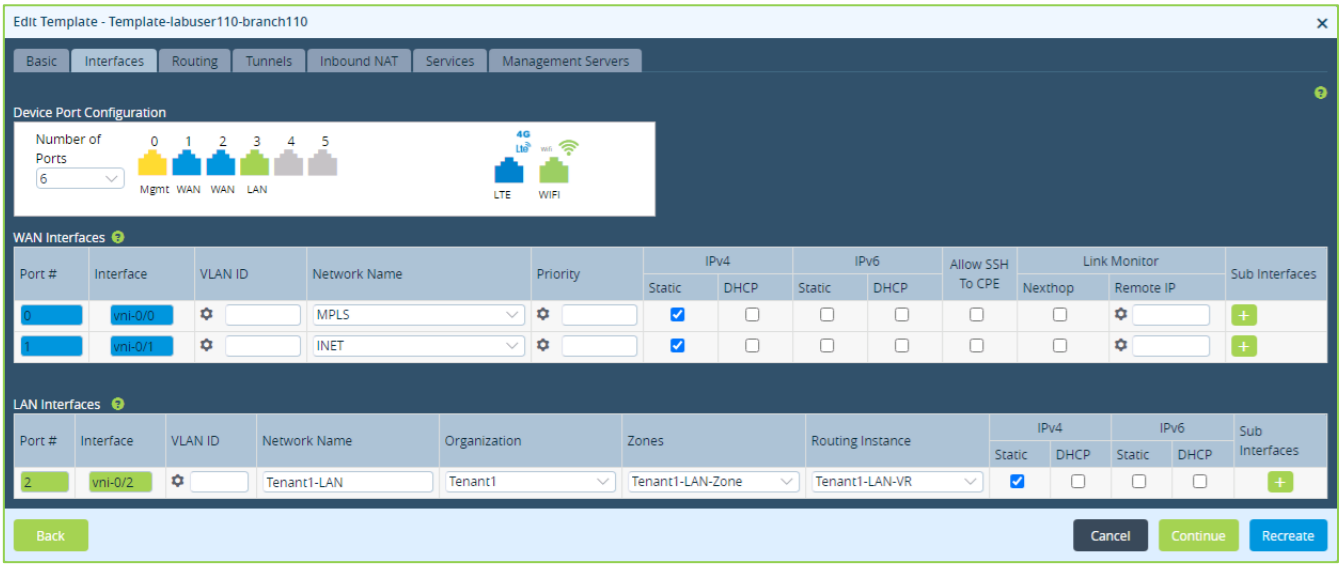



Example Output

## Interfaces Tab

Assign the following interface parameters in the Interfaces tab:

| | |
|---|---|
| Port 1<br>(WAN Interface 0, vni-0/0) | Port Type: WAN<br>Network Name: MPLS<br>IPv4 Address: Static |
| Port 2<br>(WAN Interface 1, vni-0/1) | Port Type: WAN<br>Network Name: INET<br>IPv4 Address: Static |
| Port 3<br>(LAN Interface 2, vni-0/2) | Network Name: Tenant1-LAN<br>Organization: Tenant1<br>Zones: Tenant-1-LAN-Zone<br>Routing Instance: (Auto-populate)<br>IPv4 Address: Static |



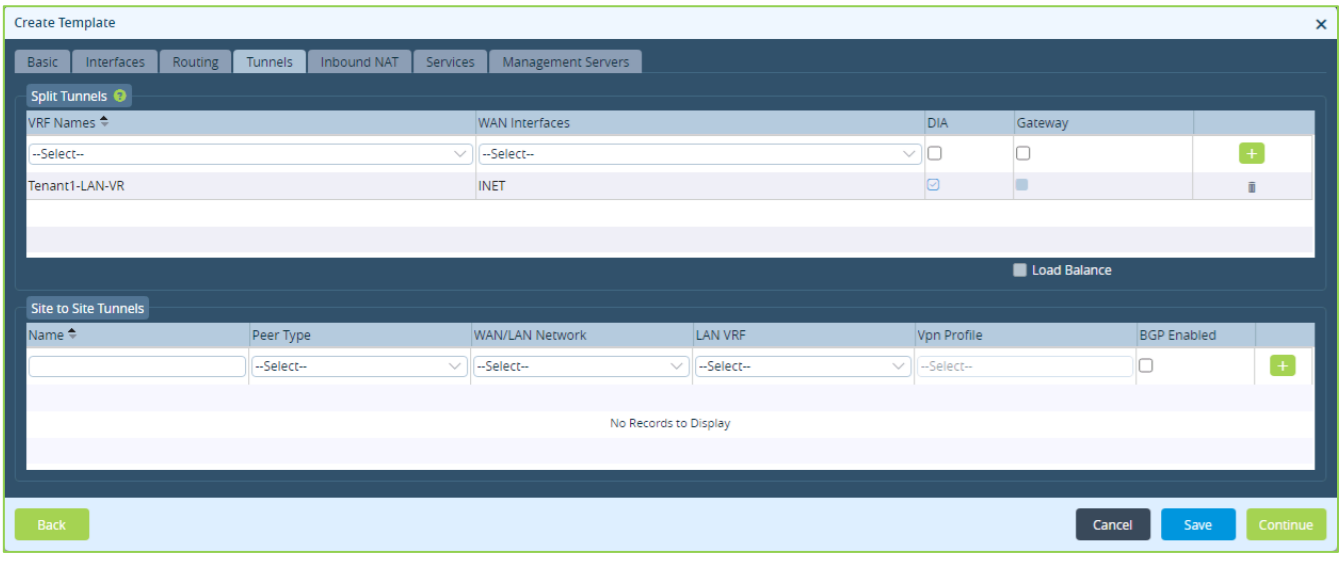

## Routing Tab

Do not configure any Routing parameters.

## Tunnels Tab

Configure Split Tunnels. In the Split Tunnels, link the VRF Tenant1-LAN-VR with the WAN interface INET. Make the Split Tunnels a DIA type, which allows traffic sourced from the Tenant1-LAN-VR and destined to a non-SD-WAN destination to use the INET routing instance to forward traffic (Direct Internet Access).

Be sure to click the + button to add the DIA configuration .

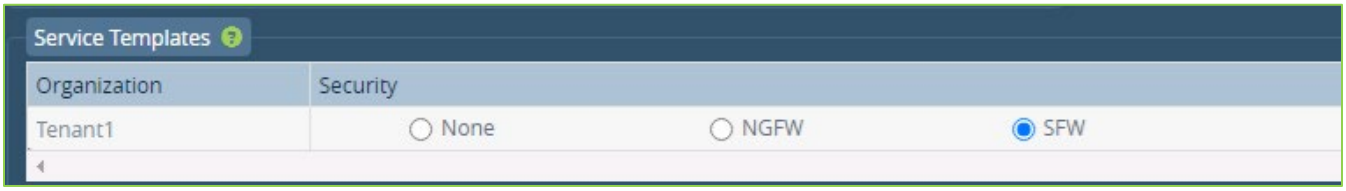


### Inbound NAT Tab

Do not configure any Inbound NAT properties.

### Services Tab

Enable the SFW services under the Services tab.




### Management Servers Tab

Do not configure any Management Servers properties.

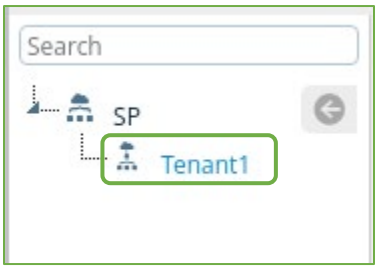
5.2

Click the Create button to create the workflow and the corresponding device template.

Question: Is your template workflow listed in the workflow table? _____

Question: Is the object listed in the table a workflow or a template? _____

Navigate to the *Configuration > Templates > Device Templates hierarchy*. Make sure that the *Tenant1* organization is selected from the organization menu on the left.




Question: Is there a template listed in the table that matches the workflow name you used? _____

Click on the template that you created with your workflow to open the template and use the values in the lab to fill in the information below.

| Interface Name: | Address associated with the interface |
|---|---|
| vni-0/0 | |
| vni-0/1 | |
| vni-0/2 | |

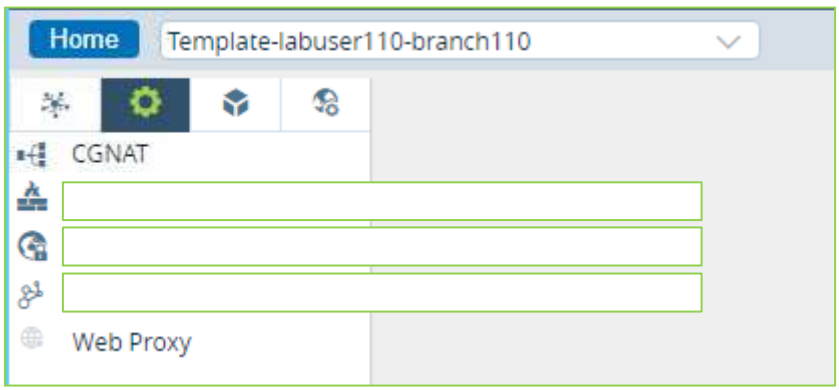
Question: Why do you think that there are variable names in the interface IP Address field of the interfaces instead of actual IP addresses?

_____

| Network Name | Interface associated with the network |
|---|---|
| MPLS | |
| INET | |
| LAN-Network | |

| Virtual Routers | Networks associated with the Virtual Router |
|---|---|
| MPLS-Transport-VR | |
| INET-Transport-VR | |
| Tenant1-Control-VR | |
| Tenatn1-LAN-VR | |

Open the Services tab of the template and fill in the following information:

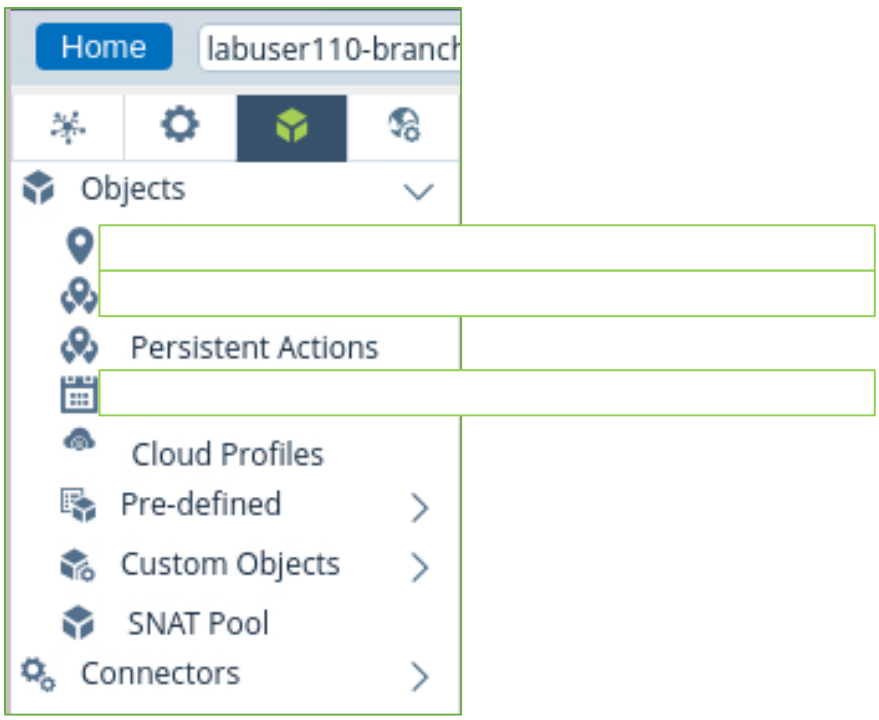


Using the information in the Services tab of the template, fill in the following information:

| Location | Values |
|---|---|
| Stateful Firewall > Security > Policies | What 2 policies are automatically created?<br><br>_____<br><br>_____ |
| Stateful Firewall > IPsec | What 2 VPN profiles are automatically created?<br><br>_____<br><br>_____ |
| SDWAN > Controllers | What controller is listed?<br><br>_____ |

Open the *Objects & Connectors* tab of the template.

Expand the *Objects* menu and fill in the following information:



In the next lab parts you will:

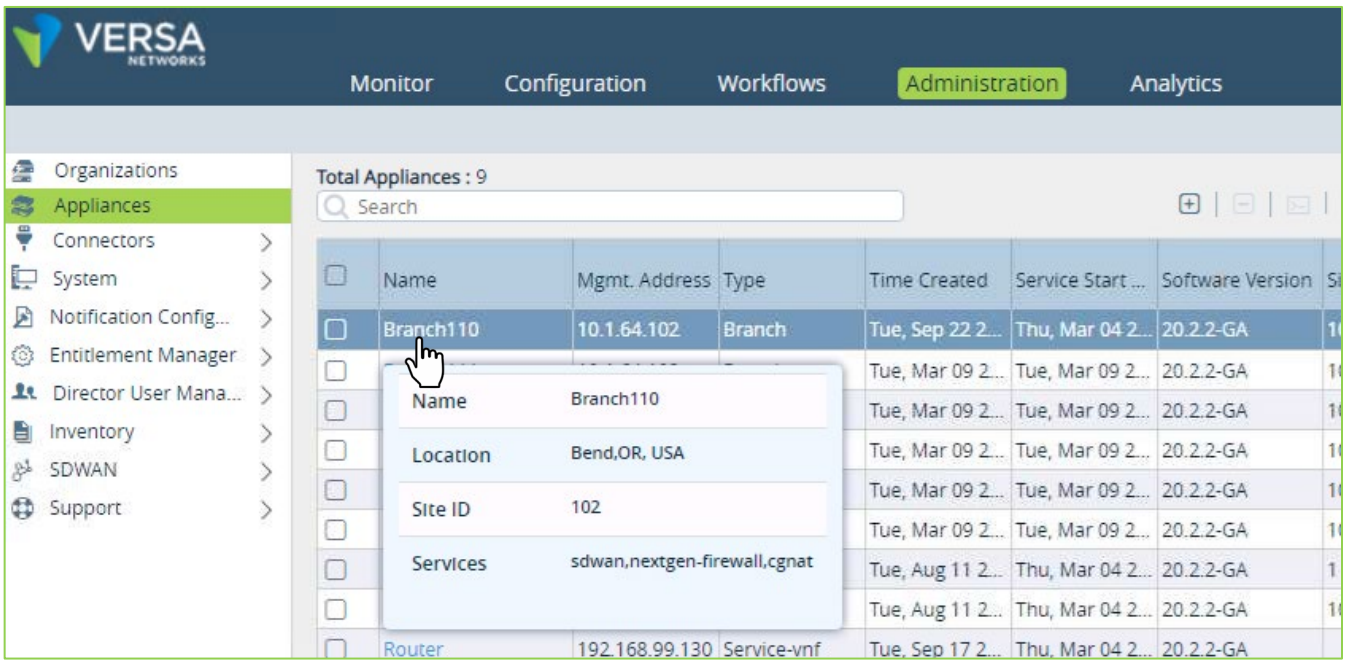
- Compare the newly created Device Template to the running configuration on your device

**Steps:**

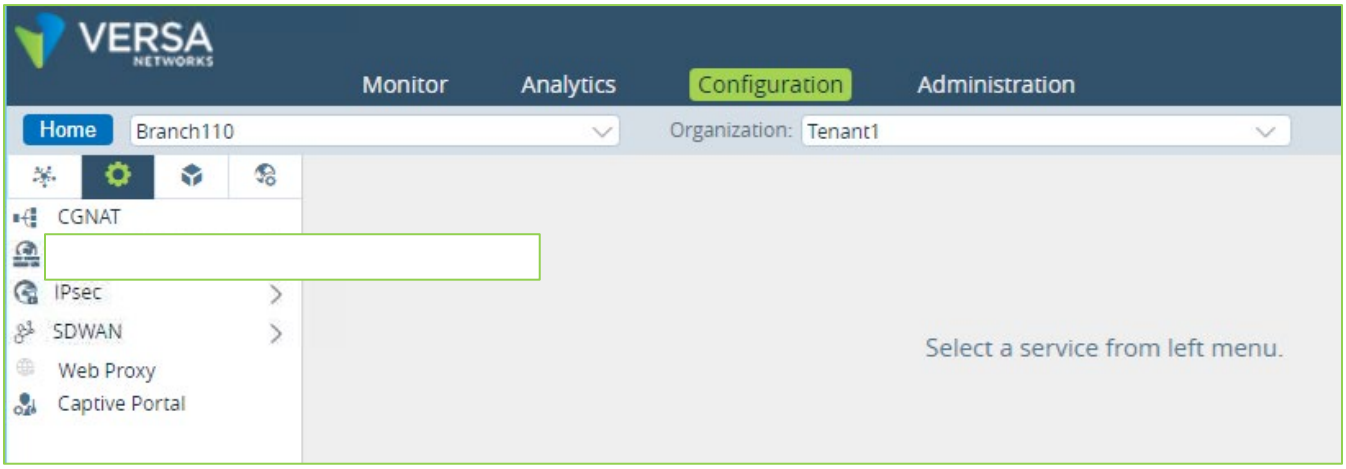
- Open your device in Appliance Context mode (by using the Monitor tab, the Configuration > Devices table, or through the Administration > Appliances table.)
- Identify the security features configured on your device and compare them with the security features configured in the device template you just created.

**Step by Step Guide**

Navigate to the *Administration > Appliances* dashboard. Locate your device in the Appliances table. Click on your device to open the Appliance Context mode of your device.



From Appliance Context mode, navigate to the Configuration > Services dashboard and fill in the configured service below:




Question: What type of security services are currently configured (and configurable) on the device? _____

Question: Are these services the same services that are available under the template that you created? _____

Click the Home button to exit device configuration mode.

In the next lab parts you will:

- Create a device group named DG-[branched] (e.g. DG-branch110, DG-branch111, etc.);
- Assign the template you created to the device group;
- Re-assign your branch device to the new device group; and
- Commit the template you created in order to re-configure your branch device.

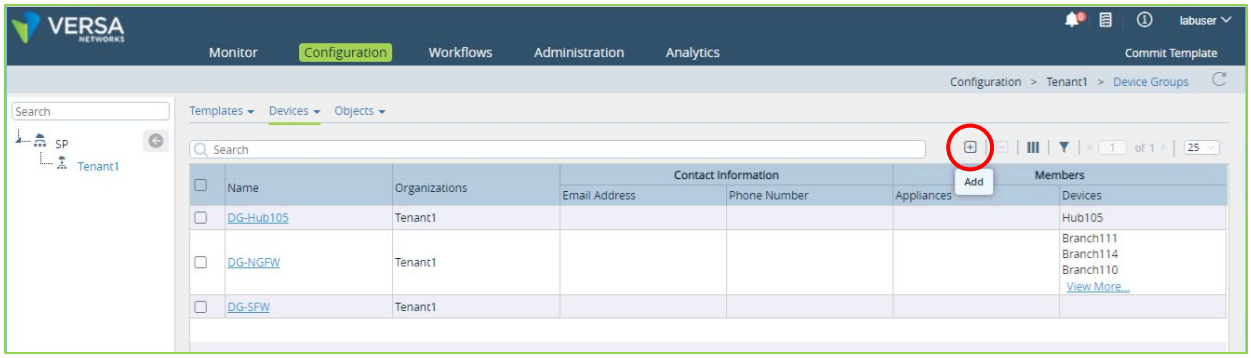
**Steps:**

- Create a new device group with the name DG-[branch-name] (e.g. DG-branch110, DG-branch111, etc.).
- Assign the template that you created to the device group.
- Reassign your device to the new device group (either through the Devices > Device Group dashboard or through the Device Workflow for your device)
- Commit the changes
- Verify that the services changed on your device from Next Gen Firewall to Stateful Firewall services.

**Step by Step Guide**

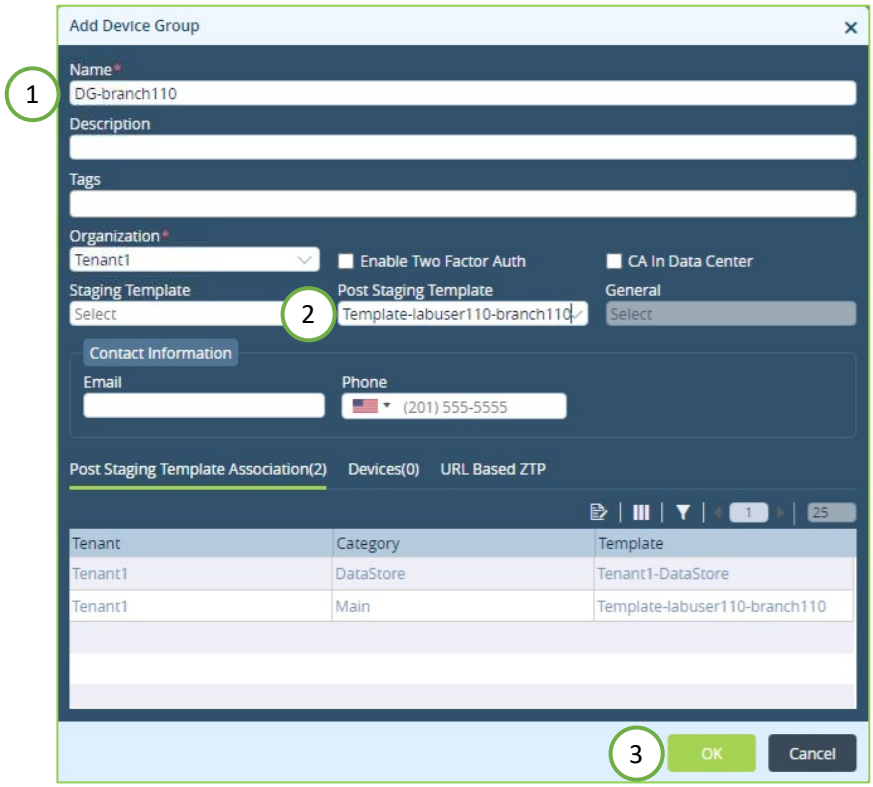
From the main Versa Director dashboard, navigate to *Configuration > Devices > Device Groups*.

In the Device Groups dashboard, click the + button to create a new device group.




Name the device group DG-[branch-id] (e.g. DG-branch110, DG-branch111, etc.)

Assign the template you created earlier to the Post Staging Template field, then click OK to create the device group.



Question: Does your new device group appear in the Device Group table?_____

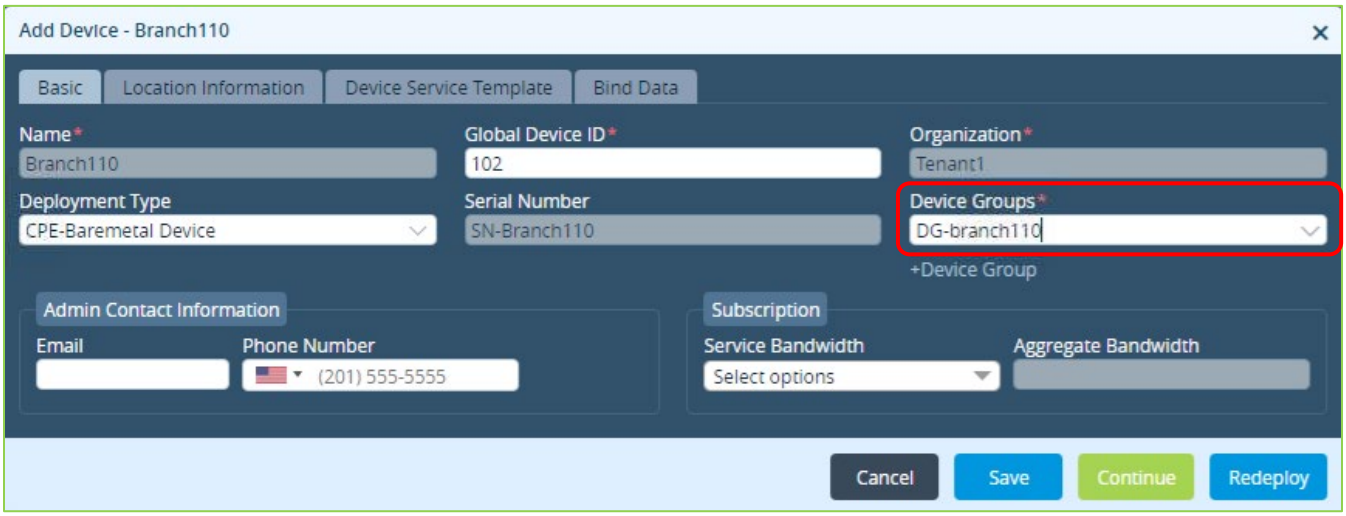
Question: Does your branch device appear in your device group Members list? _____

**Assign Device to a New Device Group**

In the next steps, you will use the Device workflow to assign your branch device to the new device group.

Navigate to the Workflows > Devices > Devices dashboard and locate your device in the Device Workflow list. Click your device to open the workflow.

Locate your new device group in the Device Groups drop-down menu, and assign your new device group to the device.



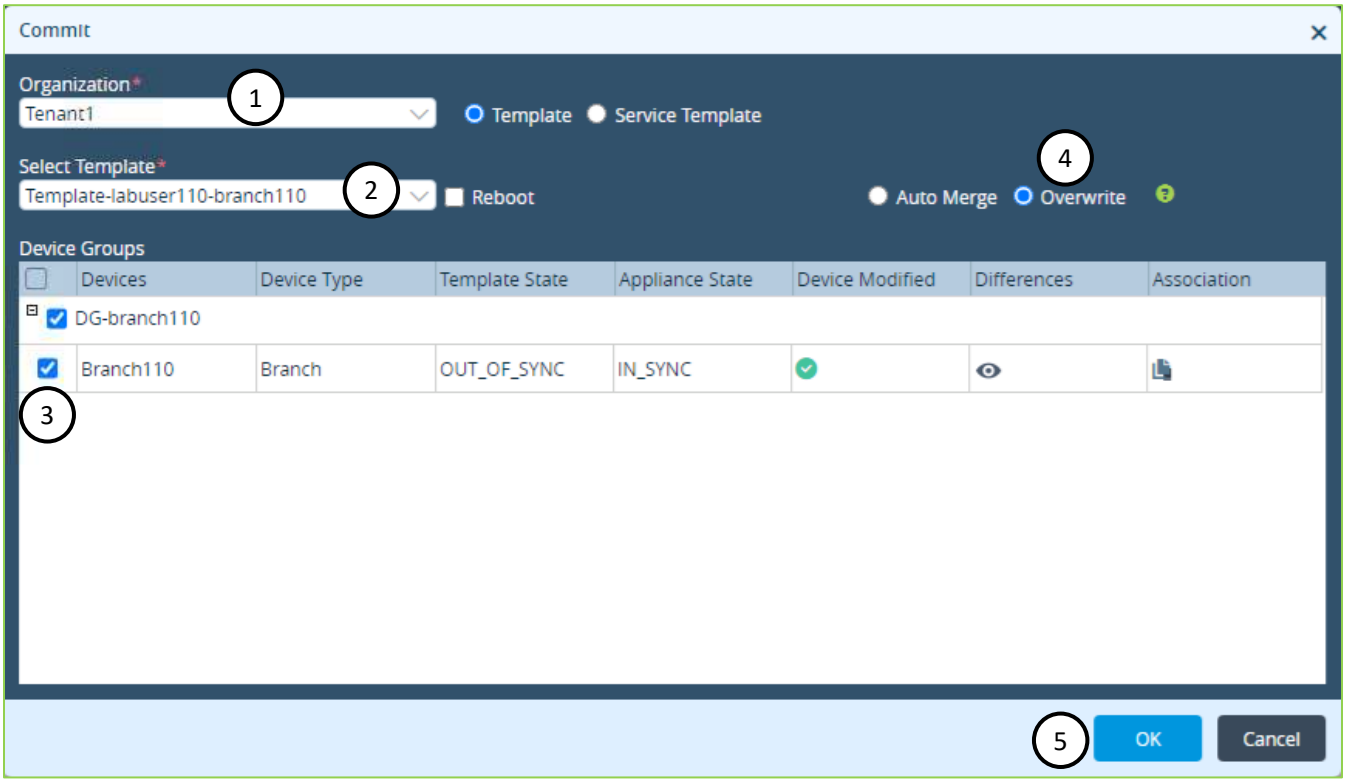
Click the Redeploy button to apply the changes to the Device workflow.

You have successfully update the device information in Versa Director. The next step is to apply the changes made in Versa Director to your appliance by committing the template.

Click the Commit Template link in the top-right corner of Versa Director.

In the Commit dialog:

1. Select the Tenant1 organization
2. Select your newly created template from the Select Template drop-down
3. Locate your device in the Device Groups table and select the box next to your device
4. Ensure that the Overwrite option is selected
5. Click the OK button to apply the changes to the device.



**Verify the Changes on the Device and Revert back to NGFW Services**

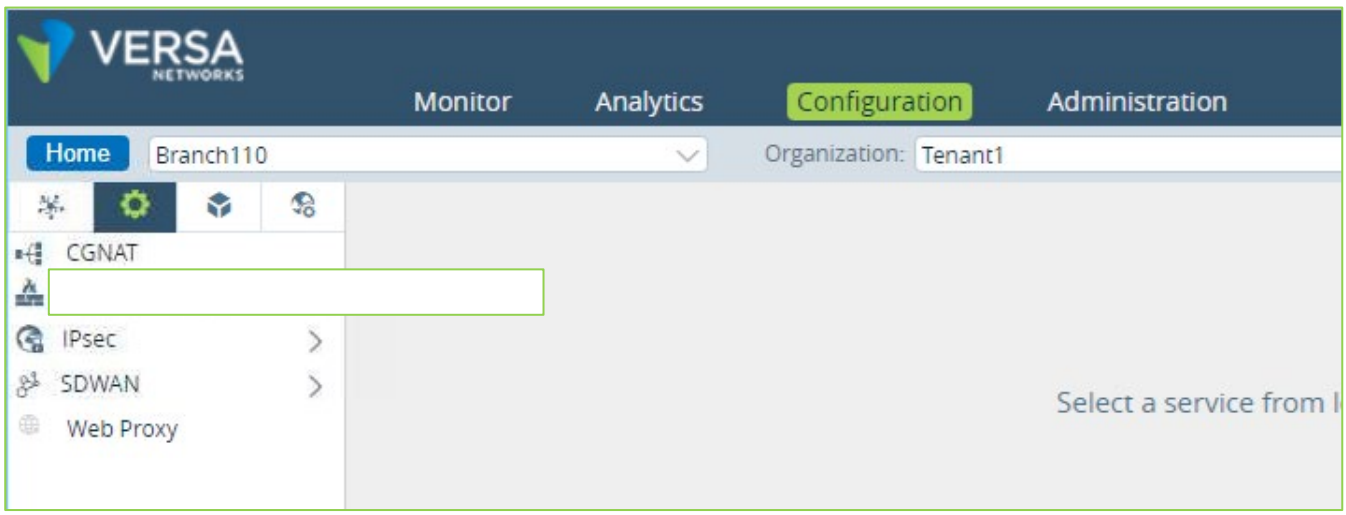
In the next lab steps you will:

- Verify that the changes have been applied to your device (security services changed from Next Gen Firewall to Stateful Firewall)
- Change your template services from SFW to NGFW services using the Template Workflow
- Re-deploy your template with the new services definition
- Apply the template changes to your device
- Verify that the security services changed from SFW to Next Gen Firewall services.

In the Versa Director dashboard, navigate to Administration > Appliances and locate your device in the appliances table.

Click your appliance in the Appliance table to open the Appliance Context mode of your device.

In the Appliance Context mode of your device, navigate to the Configuration > Services dashboard and fill in the diagram below:




Question: What types of security services are configurable on the device?

_____

Question: Were the changes you made applied to the device? _____

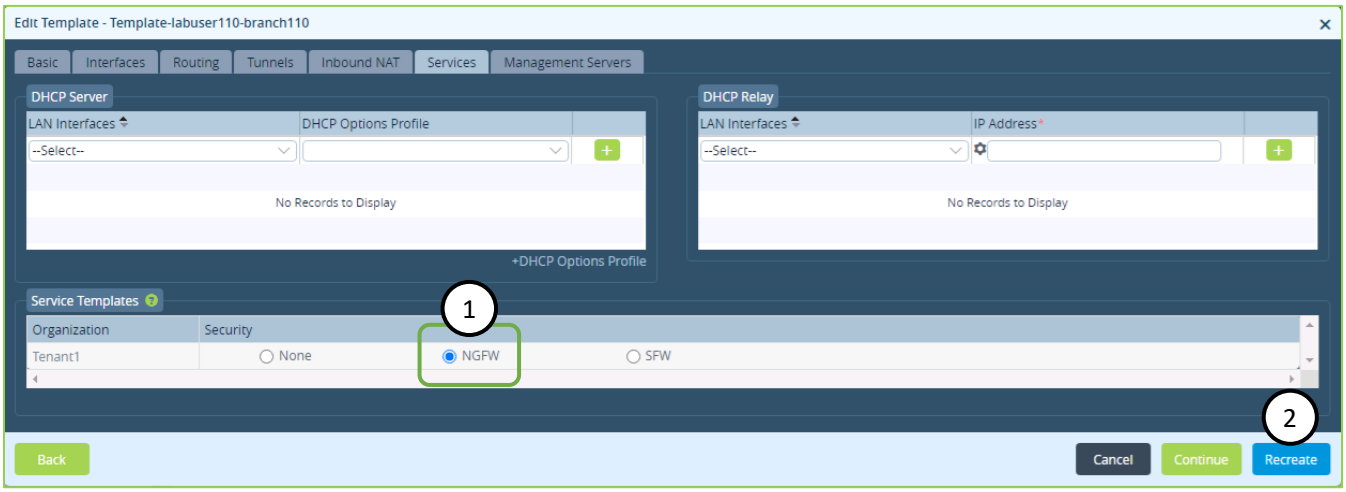
Next you will change the services available on your device back to Next Gen Firewall services by changing your template using the Template workflow.

Click the Home button next to your device name to exit Appliance Context mode. This returns you to the main Versa Director user interface.

In the main Versa Director user interface, navigate to Workflows Template > Templates to display the saved Device Template workflows.

Locate your Template workflow in the table and click the workflow to open it for modification.

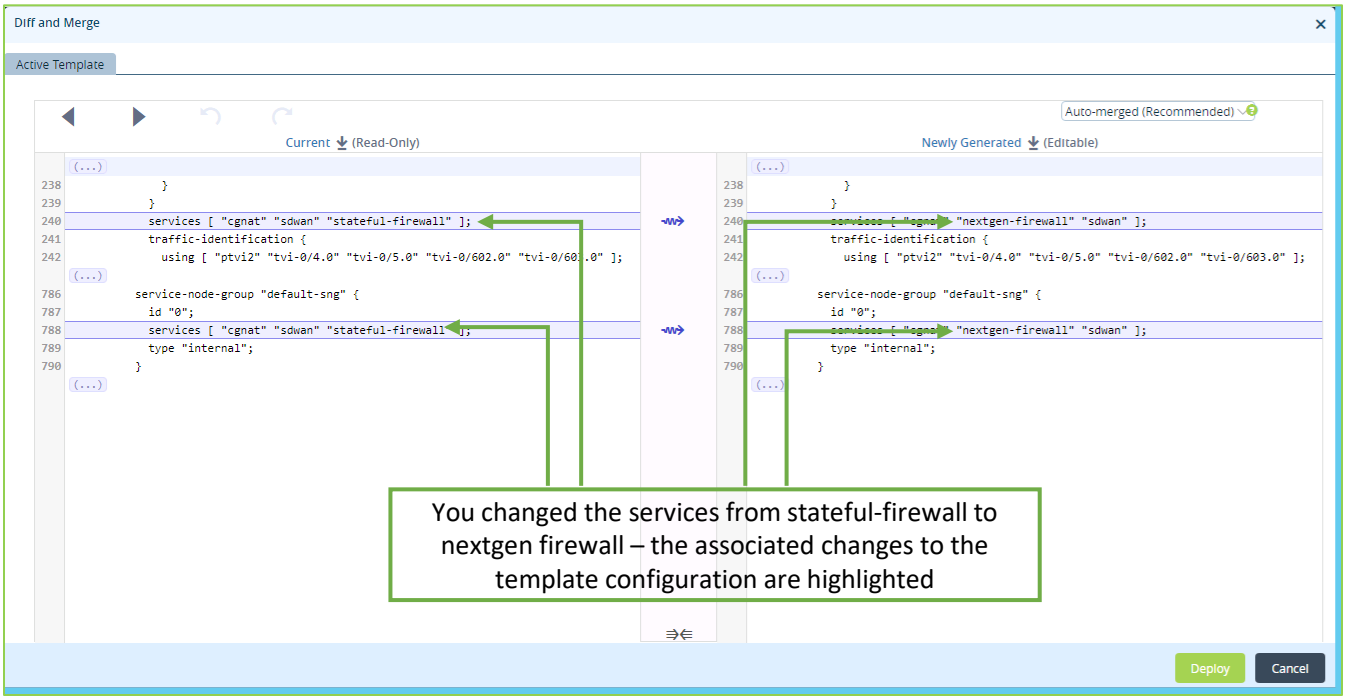
In your Template workflow, navigate to the Services tab.




In the Services tab:

1. Change the services to NGFW
2. Click Recreate

When an existing template is changed by updating the Template workflow, Versa Director will prompt you to confirm/validate the changes by doing a Difference (diff and merge) validation. The changes to the template will be displayed, and the administrator is required to verify and deploy the changes:



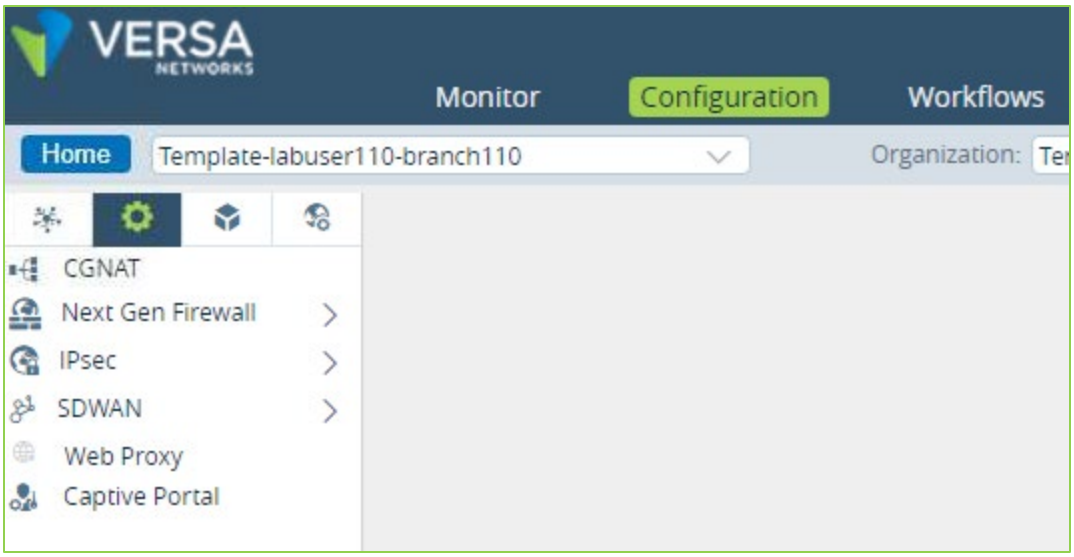
Click Deploy to apply the workflow changes to the template, and to re-write the template data.

**Verify the Template Changes, and Apply the Update to your Device**

Navigate to *Configuration* > *Templates* > *Device Templates*. Ensure that the *Tenant1* organization is selected in the left-side menu.

Locate and open the device template that you just updated through the Device Template workflow.

In the *Services* tab of the template configuration, verify that the Next Gen Firewall services are present in the template.

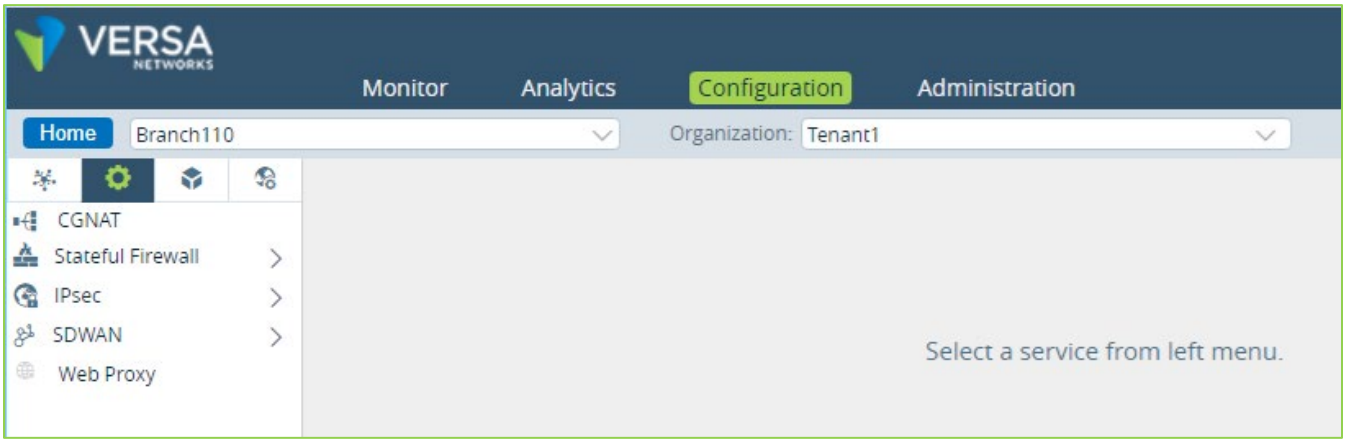



Navigate to the Monitor > Devices dashboard. Ensure that the Tenant1 organization is selected in the left-side menu.

Locate your device in the Devices table, and open your device. This places you in Appliance Context mode for your device (in the same way that clicking your device in the Administration > Appliances table places you in Appliance Context mode).

From Appliance Context mode, navigate to the *Configuration* > *Services* dashboard.

Question: What security services do you think will be available on the device (answer is on the next page): _____



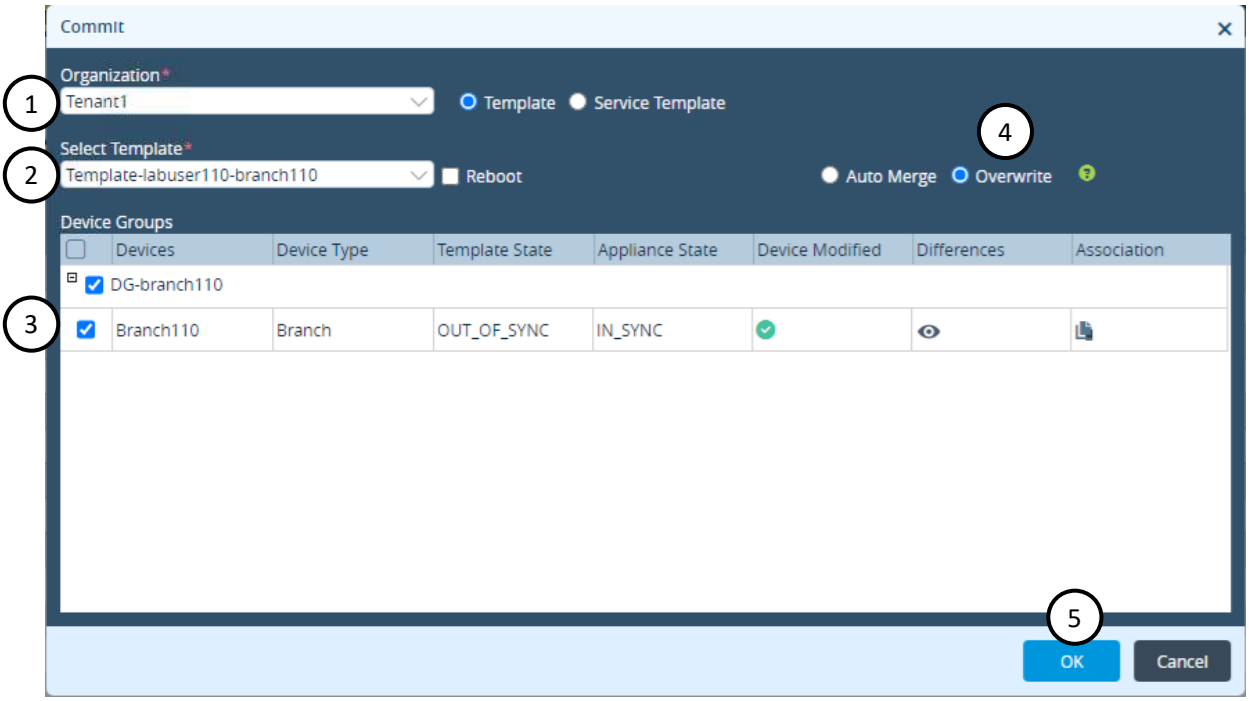

The Stateful Firewall services are still present on the device. Although you modified the template and verified the changes, the template changes haven't been committed to the devices that reference the template.

Click the Home button next to your appliance name to exit Appliance Context mode.

From the main Versa Director user interface, click Commit Template.

From the Commit dialog:

1. Select the Tenant1 organization
2. Select your template from the Select Template drop-down menu
3. Select your device from the device list
4. Ensure that Overwrite is selected
5. Click OK to commit the changes to the device.



**Verify the Changes on the End Device**

Now that you have committed the template changes to your device, you will verify the changes one more time.

From the Versa Director user interface, navigate to Administration > Appliances and locate you device in the appliance list. Click your appliance to open the Appliance Context dashboard.

In the Appliance Context dashboard, navigate to Configuration > Services.

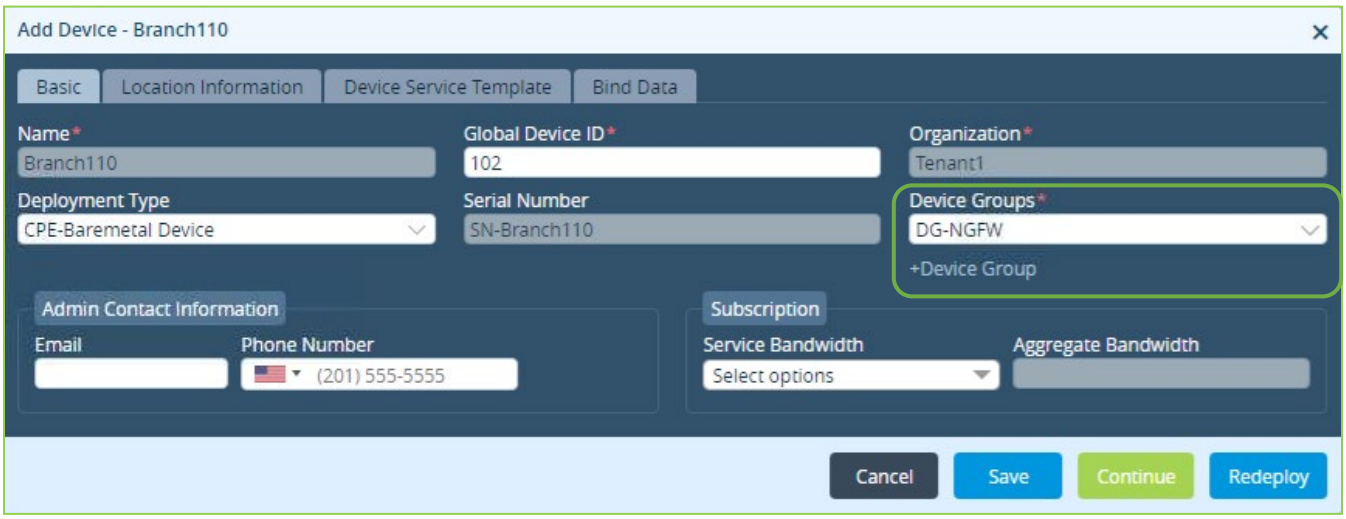
Question: Did the available services change from Stateful Firewall to Next Gen Firewall? _____

# Exercise 6: Reset the Lab Environment

In this lab part you will:

- Re-assign your device to the Base-Template-NGFW template by re-assigning the Device Group in your Device workflow
- Commit the changes to reset your device configuration to the base configuration
- Delete your user-created Device Template Workflow (which will delete the template associated with the workflow)
- Delete the user-created Device Group that you created during this lab.

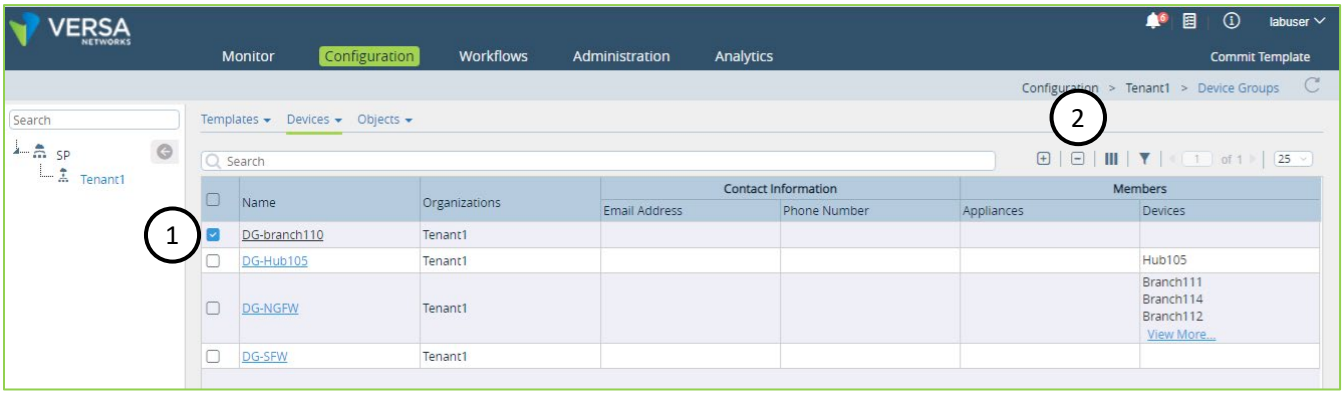
1. Navigate to the Workflows > Devices > Device hierarchy to display the saved Device workflows.
2. Locate **your device** workflow in the Device Workflow table and click the workflow to open it.
3. In the Device workflow, set the Device Group to DG-NGFW.
4. Click Redeploy to update your device workflow and save the changes.



Navigate to the *Configuration > Devices > Device Groups* dashboard.

In the *Device Groups* table:

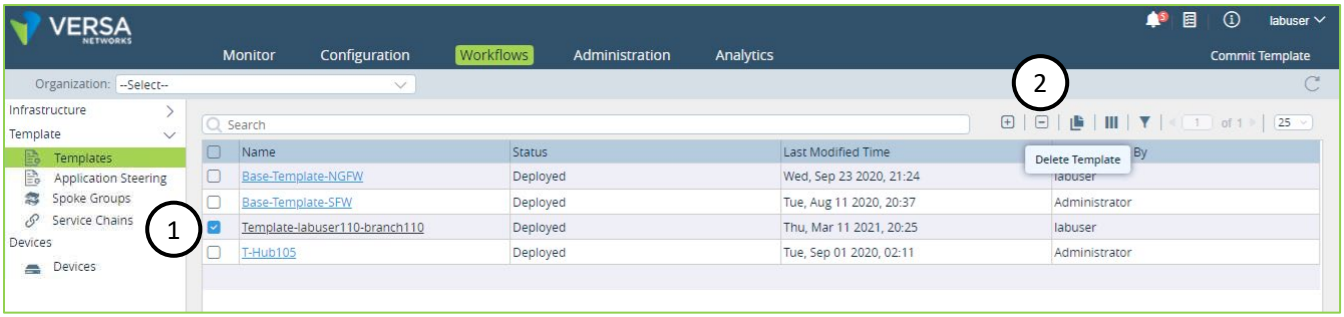
1. Check the box next to your user-defined device group
2. Click the — button to remove your user-defined device group.
3. Confirm the device group deletion




Navigate to the *Workflows > Template > Templates* dashboard.

In the *Templates* workflow table:

1. Check the box next to your user-defined template
2. Click the — button to remove your user-defined template.
3. Confirm the wokflow deletion




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