Lab 4 - AFC Integrations

Contents

Lab Overview

Lab time: 40 minutes

The AFC is a powerful platform for managing a Data Center Switching Fabric. It was designed to not only manage and integrate with HPE Aruba Data Center products, but also with 3rd party platforms such as VMware vSphere, Nutanix, AMD Pensando, and much more.

In this lab, we are going to use the Aruba Fabric Composer (AFC) to build the following integrations:

- Integrate with vSphere
- Integrate with AMD Pensando Policy and Services Manager (PSM)

Lab 4.1 - Integrate vSphere

Description

Using the AFC we will add an integration with VMware vSphere. This integration provides …

Validate

1. Open the AFC, click the **Configuration** menu, and select **Integrations** > **VMware vSphere**

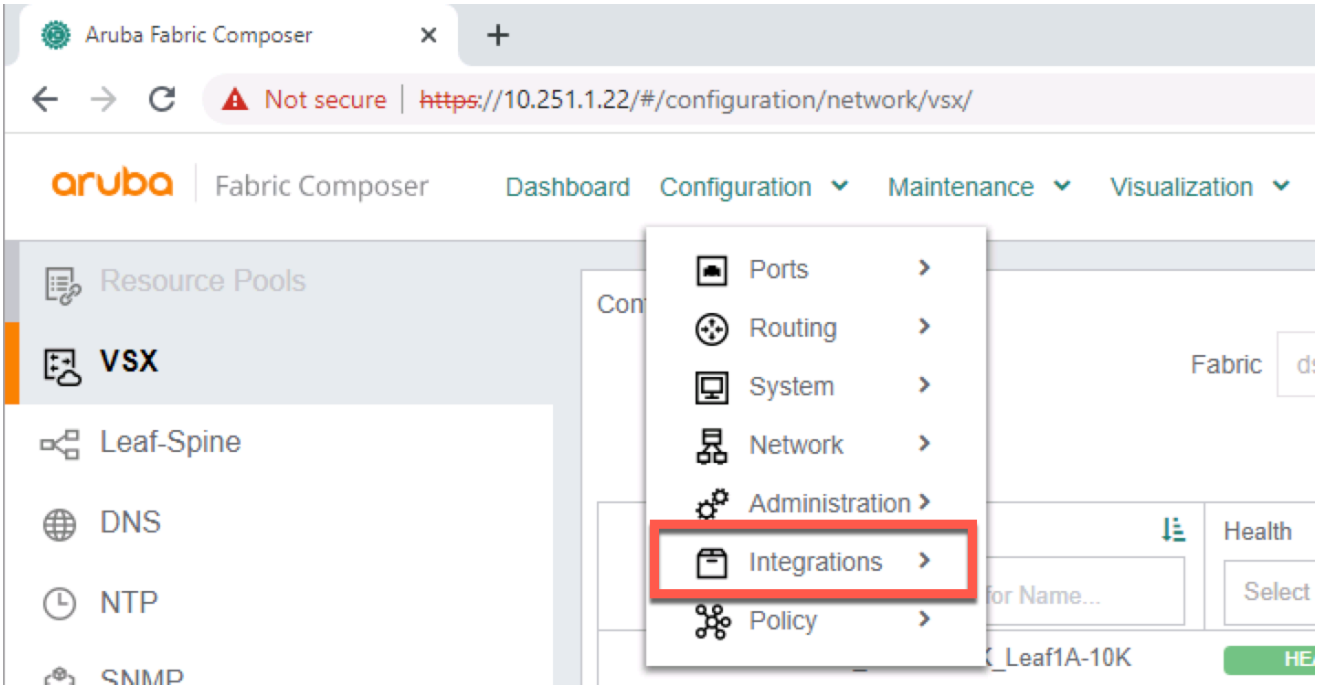

Fig. Lab 4 Integrations Menu

2. Using the **ACTIONS** menu, select **Add**.

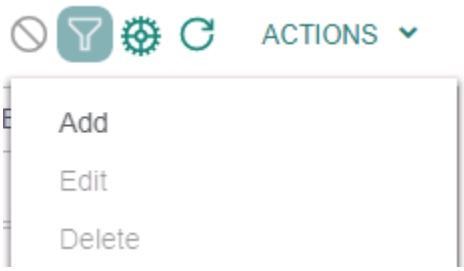

Fig. Lab 4 Add Integration

3. Add the vSphere integration by entering the following information in the form:

Step 1 - Host	
Name	dsf-vsphere
Description	vSphere Cluster
Host	`10.250.0.50`
Username	`lg[LG]@vsphere.local`
Password	`Aruba123!@#`
Click VALIDATE and NEXT	

Step 2 - Aruba Fabric	
Automate VLAN provisioning for ESX hosts directly connected to the fabric	YES
Automate VLAN provisioning for ESX hosts connected through intermediate …	NO
Automated PVLAN provisioning for ESX hosts directly connected to the fabric …	YES
Automated Endpoint Group Provisioning *	YES
Click NEXT	

Step 3 - vSphere	
Discovery Protocols	YES
Click NEXT	

Step 4 - Summary	
Review the summary and then ***Click APPLY***	

Expected Results

Verify that the integration is successfully connected as shown in the following screenshot.

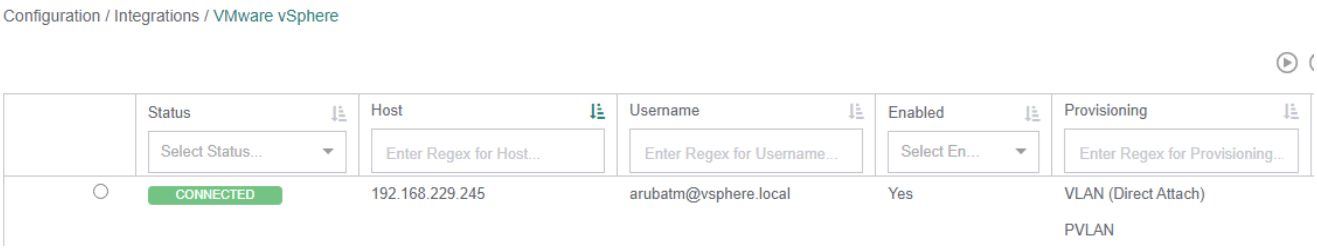

Fig. Lab 4 Connected vSphere

Lab 4.2 - AFC Host Visualization

Description

Once vSphere is integrated with AFC, AFC will use RESTful APIs to poll vSphere to gather an inventory of hosts, VMs, Networks, etc. We will explore the AFC Host Visualization in this lab.

Validate

1. Open the AFC, click the **Visualization** menu, and select **Hosts**

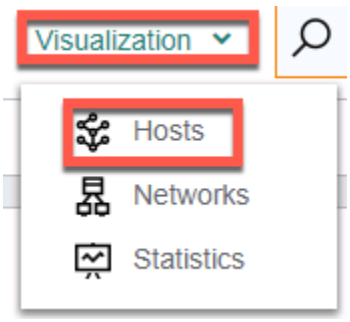

Fig. Lab 4 Visualizations Menu

2. At the bottom of the page go to the **VM** list (Click VMS) find and select your lab-groups workload servers. **LG[LG]WL01-v10-101** and **LG[LG]-WL02-v10-102**.

Note

You may have to expand the lower part of the screen to access this list. In this example, LG01 VM's are selected.

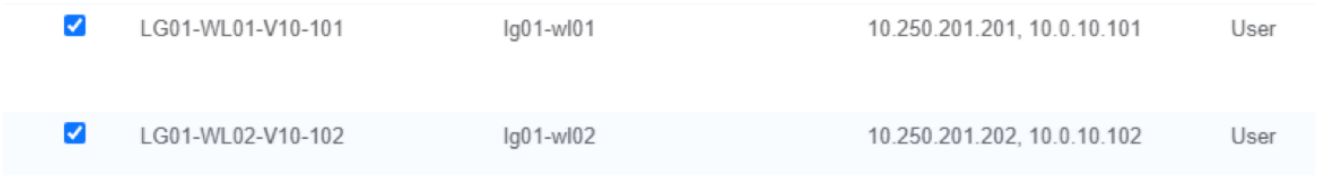

Fig. Lab 4 VM Workload List

Note

AFC Host Visualization defaults to Lab Group 01. Be sure to select your lab to see your diagram. Your lab will be 10.250.0.1**LG**, where **LG** is your Lab Group Number. You may have to expand the lower part of the screen to access the list. *LG01 VM's are selected in this example*

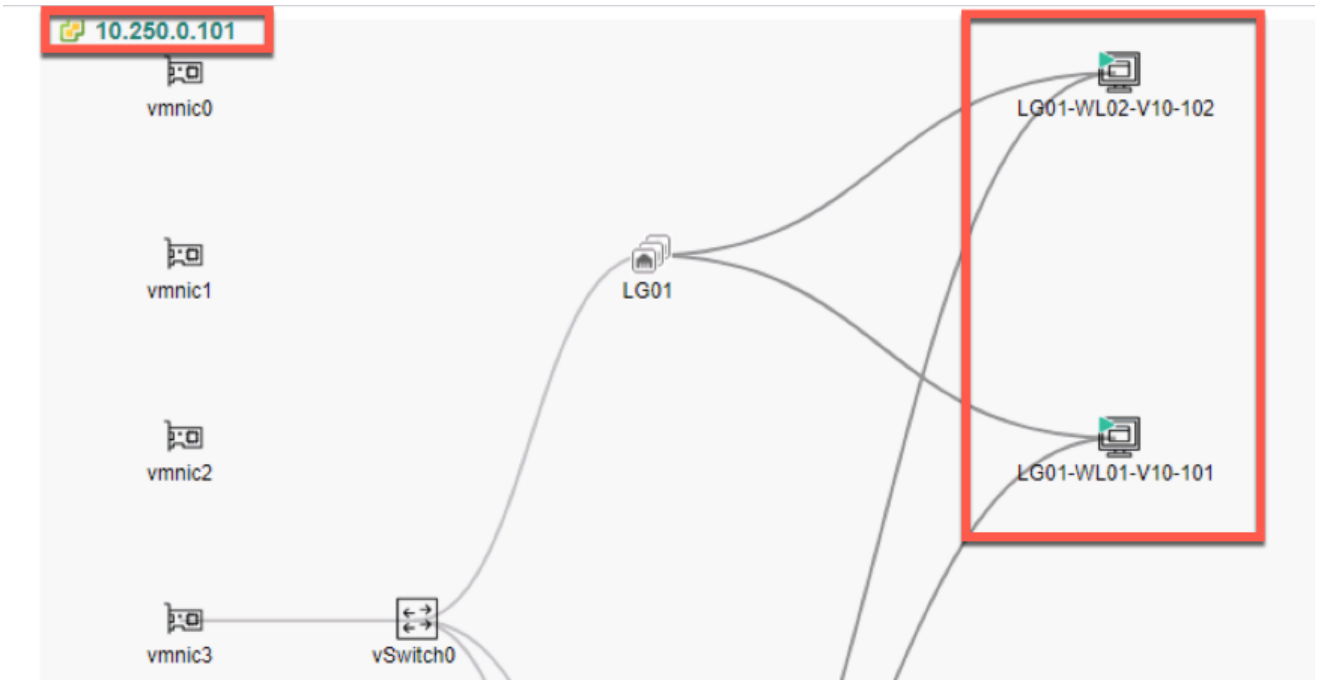

Fig. Lab 4 Host Visualization

Expected Results

Verify that the host address matches the one connected to your switches. Use the following

table as reference.

Lab Group	vSphere Host	Lab Group	vSphere Host
01	10.250.0.101	06	10.250.0.106
02	10.250.0.102	07	10.250.0.107
03	10.250.0.103	08	10.250.0.108
04	10.250.0.104	09	10.250.0.109
05	10.250.0.105	10	10.250.0.110

Note

Verify you see the physical connections to your leaf group. If you do not see the connections, the ports may be down on the switches. You can use show interface brief on the command line of the switch and look for port 1/1/1 on each switch.

Lab 4.3 - Integrate PSM

Description

Using the AFC we will now add an integration with the AMD Pensando Policy and Services Manager (PSM). PSM provides centralized management and visibility of all stateful services running in the infrastructure. AFC acts as an abstraction layer for some of the PSM stateful functions.

Validate

1. Open the AFC, click the **Configuration** menu, and select **Integrations** > **Pensando PSM**

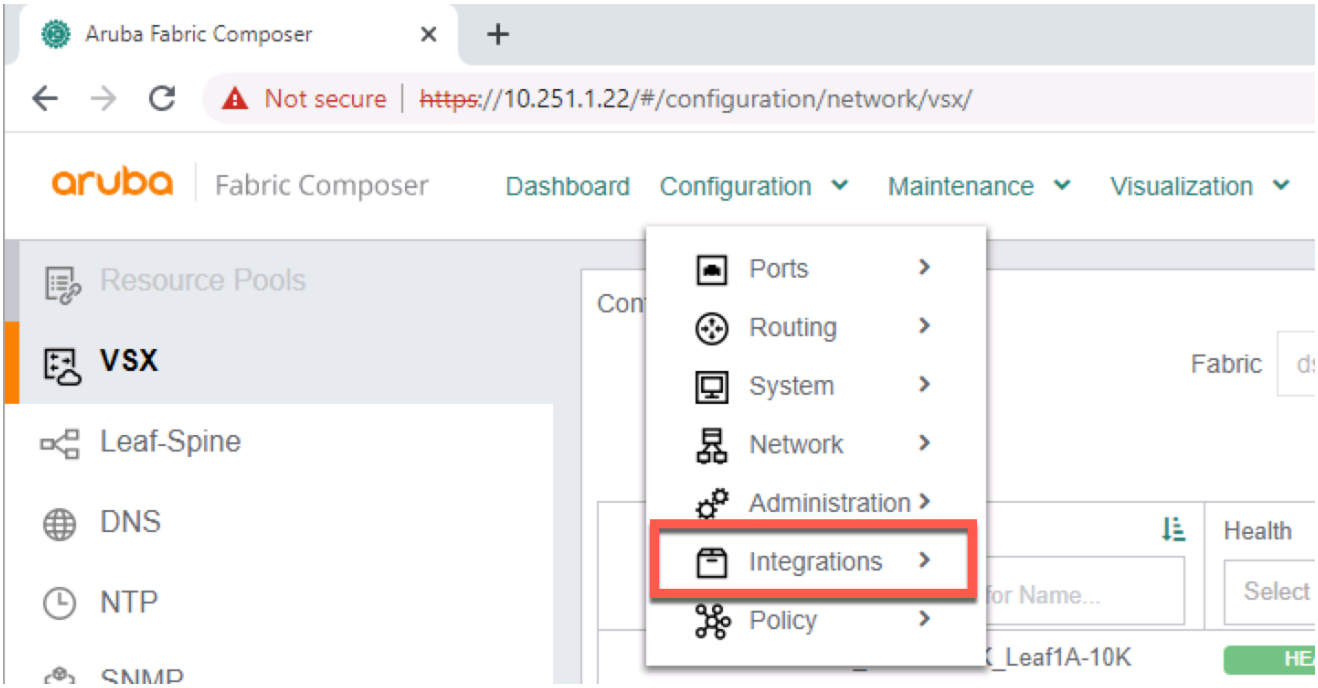

Fig. Lab 4 Integrations Menu

2. Use the **ACTIONS** menu to select **Add**

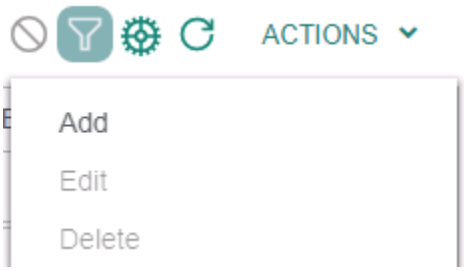

Fig. Lab 4 Add Integration

3. Add the Pensando PSM Integration by entering the following information in the form:

Step 1 - Host	
Name	dsf-psm
Description	Policy and Services Manager
Host	`10.250.2[LG].31` - where **LG** is your labgroup number
Username	`admin`
Password	`Pensando0$` (Pensando + zero + dollar)
Click VALIDATE and NEXT	

Step 2 - Settings	
Fabric	dsf
Enable auto decommissioning for switches deleted from the system	YES
Enable auto VLAN placement on all switches when creating a Network	YES
VMware vCenters	Select the vSphere server
NEXT	

Step 4 - Summary	
Review the summary and then ***Click APPLY***	

Expected Results

Verify that the integration is successfully connected and **HEALTHY** as shown in the following

screenshot.

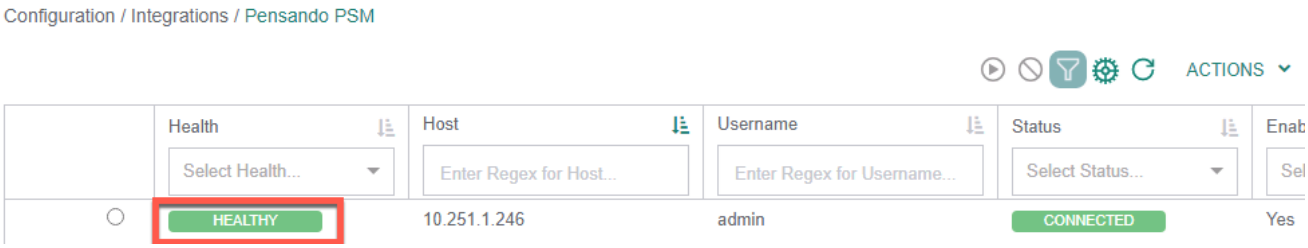

Fig. Lab 4 Connected PSM

> **Note**
>
> If the health is not green, wait a few moments and refresh the page.

Lab 4.4 - Access PSM

Description

We will log into the PSM to verify that the the AFC integration was successful. AFC should have added the two CX 10000 Switches (also called Distributed Services Switch or DSS) to the PSM.

Validate

Using the web browser in your RDP client, open the PSM using the following URL and credentials:

URL: https://10.250.2LG.31
Username: `admin`
Password: `Pensando0$`

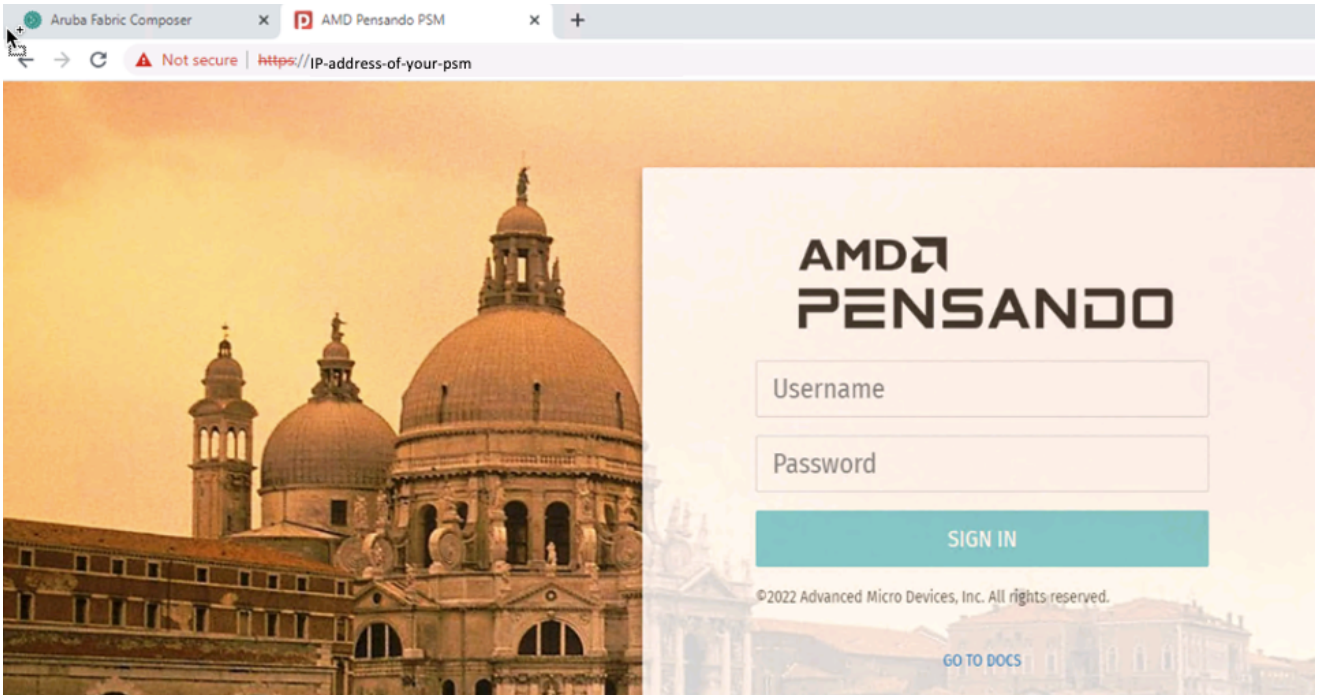

Fig. Lab 4 PSM Login

Expected Results

Once logged into the PSM, navigate to **System** > **DSS** and verify that the CX 10000 Switches are in the healthy state.

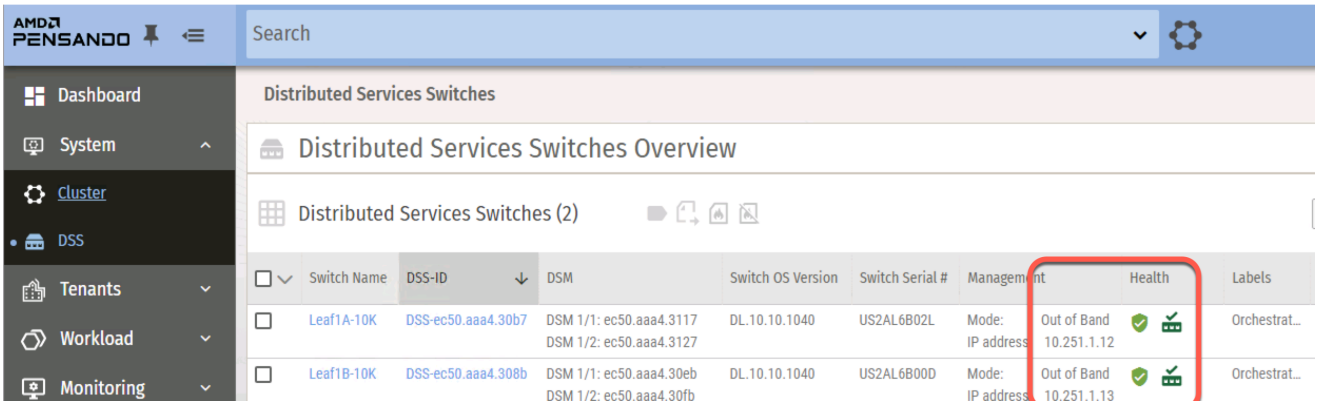

Fig. Lab 4 DSS Overview

Lab 4 Summary

- During this lab, we added third party integrations to the Aruba Fabric Composer
- We added an integration to vSphere from AFC
    - We verified the integration, by using the Host Visualization feature in the AFC

- We added an integration with the AMD Policy and Services Manager
- We accessed the PSM to verify that the integration was successful and that both CX 10000 switches were added by AFC to PSM