Deployment of CX switches with Aruba Central

Contents

1.1 Revision History

DATE	VERSION	EDITOR	CHANGES
15 Jan 2021	0.1	Ariya Parsamanesh	Initial version
20 Jan 2021	0.2	Ariya Parsamanesh	Added the core switches

2 6300 Stack Configuration

2.1 Introduction

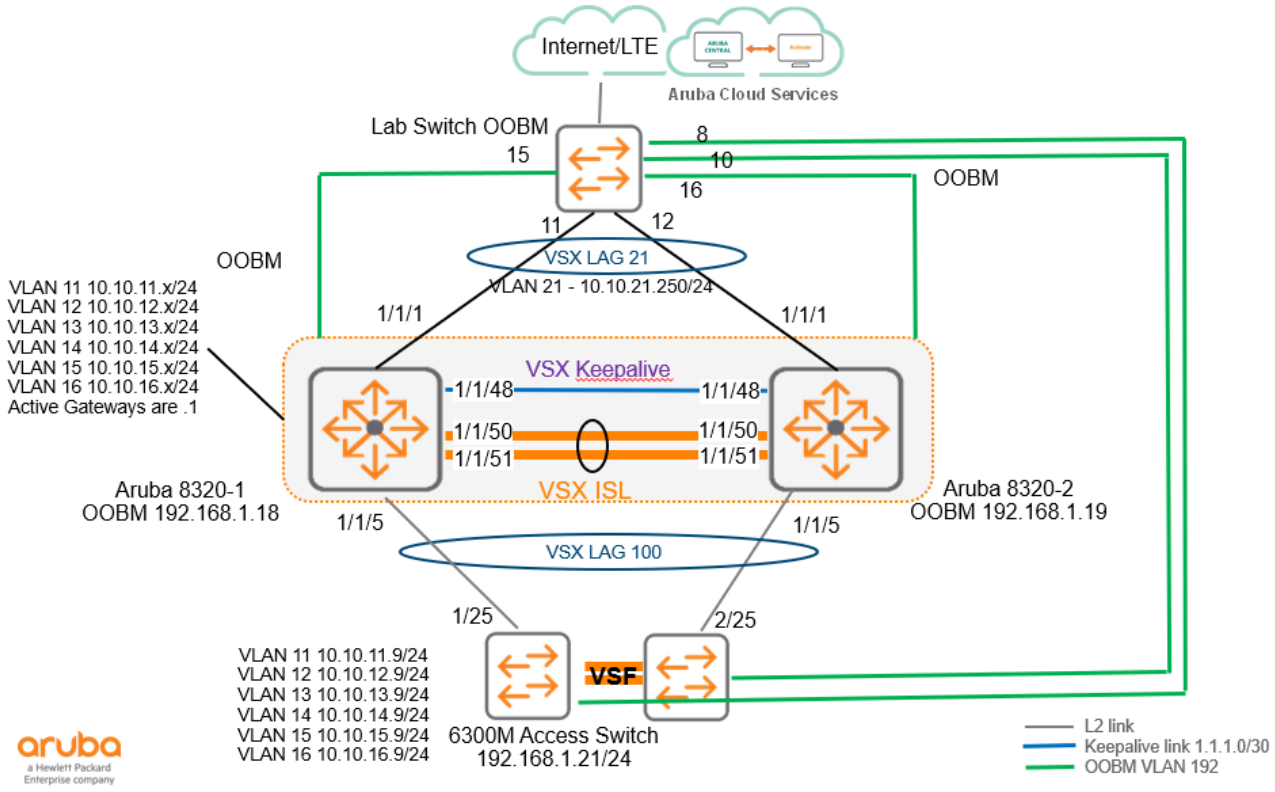
The aim of this short guide is to use the CX App to configure two 6300 switches in VSF and then use Aruba Central to further configure and manage them along with dual 832X core switches in VSX formation.

Our CX switches are using 10.05.0020 but the minimum version required to be managed by Aruba Central is 10.04.0020.

The CX switches are connected to the network through their out of band mgmt. interfaces.

2.2 Topology

Here is a simple topology that will be deployed.



2.3 Factory Default

The first task is to ensure the switch is in a factory default state.

```
!
6300-1# sh version
------------------------------------------------------------------------------
ArubaOS-CX
(c) Copyright 2017-2020 Hewlett Packard Enterprise Development LP
------------------------------------------------------------------------------
Version      : FL.10.05.0020
Build Date   : 2020-09-29 07:44:16 PDT
Build ID     : ArubaOS-CX:FL.10.05.0020:3cbfcce60961:202009291304
```

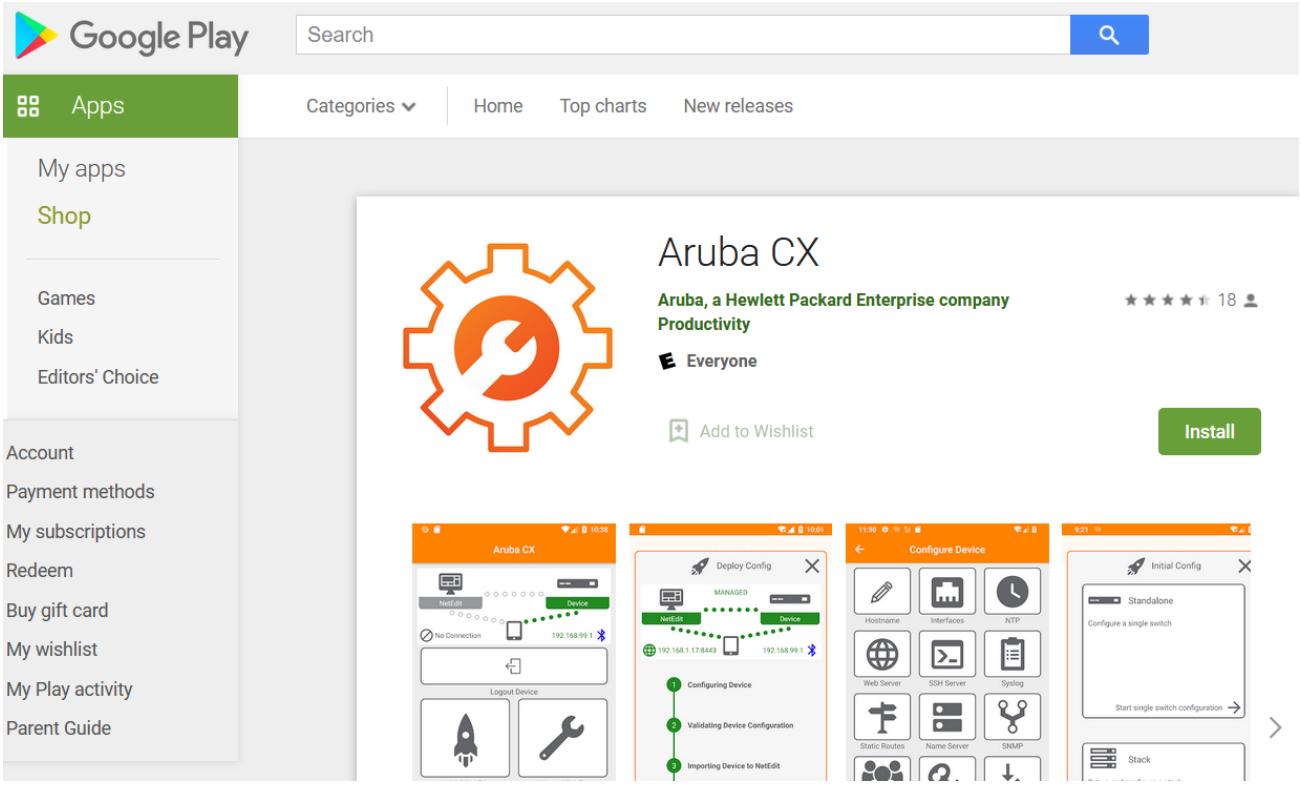
```
Build SHA    : 3cbfcce609617b0cf84a6b941a2b36c43dfeb2cb
Active Image : secondary

Service OS Version : FL.01.07.0002
BIOS Version       : FL.01.0002
6300-1#
6300-1# erase all zeroize
This will securely erase all customer data and reset the switch
to factory defaults. This will initiate a reboot and render the
switch unavailable until the zeroization is complete.
This should take several minutes to one hour to complete.
Continue (y/n)? y
The system is going down for zeroization.
6300-1#
```

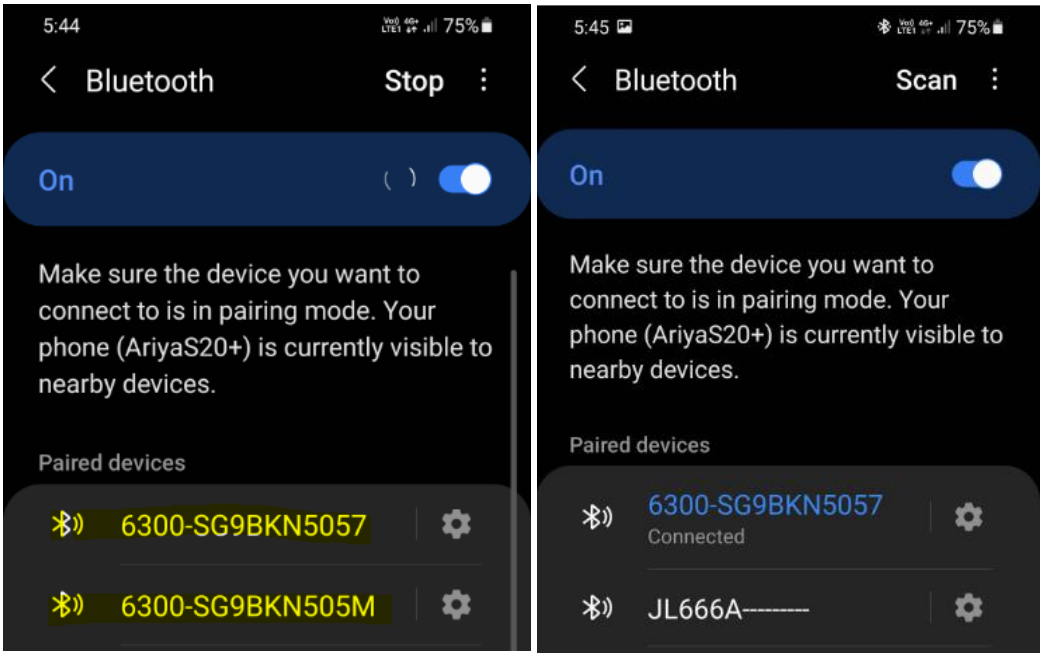
Once the switches have rebooted, you'll just connected them with the 2x stack DAC cables.

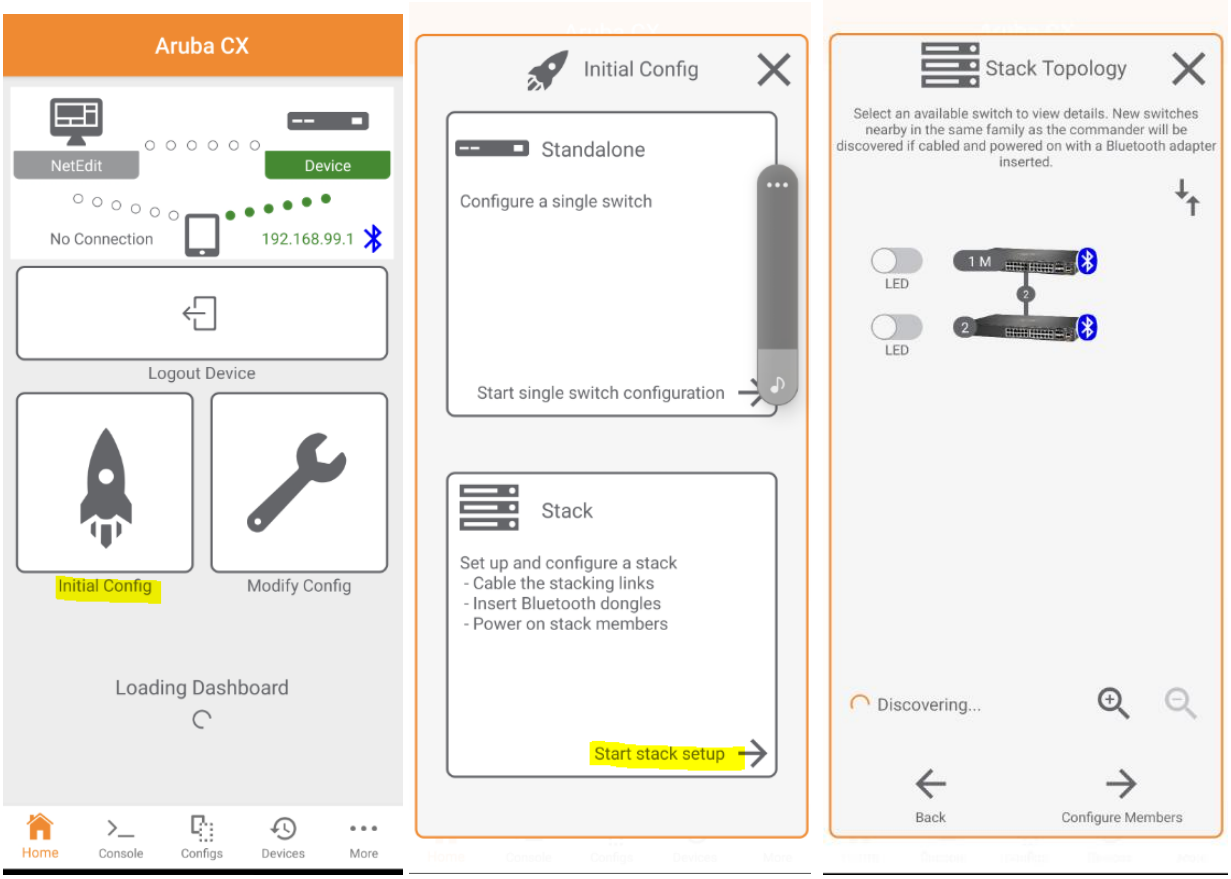
2.4 CX App Configuration

You can download the CX App from Google Play, the CX App version we are using here is 2.3.1

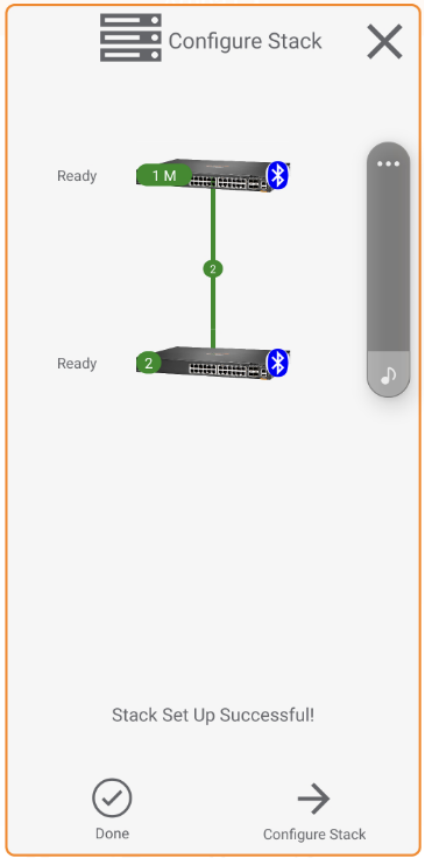


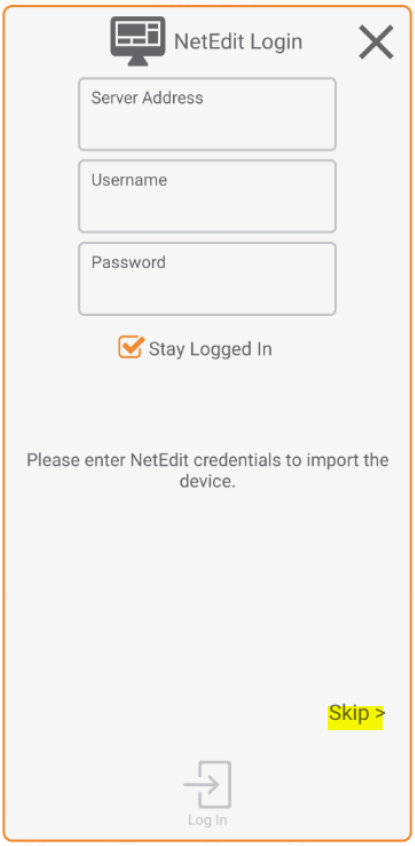
Once you have installed it ensure that the blue tooth and GPS are enabled and then try to connect to the switches. Here are the relevant screenshots on an android phone.

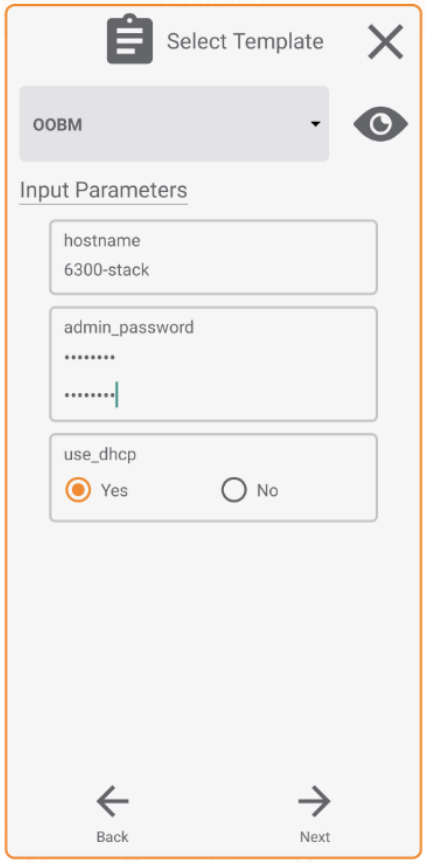

5:44
75%
Bluetooth
Stop
On
Make sure the device you want to connect to is in pairing mode. Your phone (AriyaS20+) is currently visible to nearby devices.
Paired devices
6300-SG9BKN5057
6300-SG9BKN505M
5:45
75%
Bluetooth
Scan
On
Make sure the device you want to connect to is in pairing mode. Your phone (AriyaS20+) is currently visible to nearby devices.
Paired devices
6300-SG9BKN5057
Connected
JL666A--------

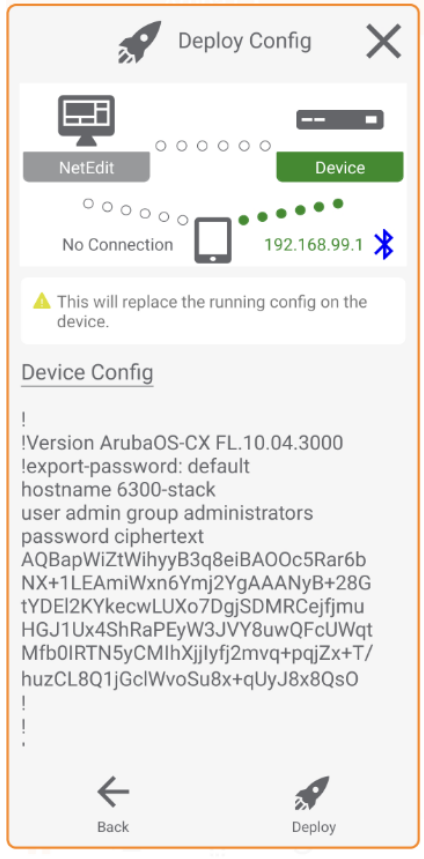

Aruba CX
NetEdit
Device
No Connection
192.168.99.1
Logout Device
Initial Config
Modify Config
Loading Dashboard
Home
Console
Configs
Devices
More
Initial Config
Standalone
Configure a single switch
Start single switch configuration
Stack
Set up and configure a stack
- Cable the stacking links
- Insert Bluetooth dongles
- Power on stack members
Start stack setup
Stack Topology
Select an available switch to view details. New switches nearby in the same family as the commander will be discovered if cabled and powered on with a Bluetooth adapter inserted.
LED
LED
Discovering...
Back
Configure Members

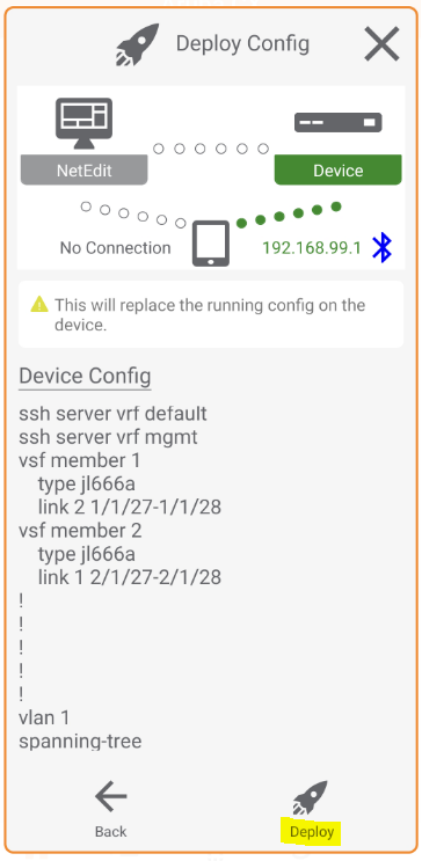

Configure Stack
Validating...
1 M
2
Booting...
2
Waiting for member(s) to boot

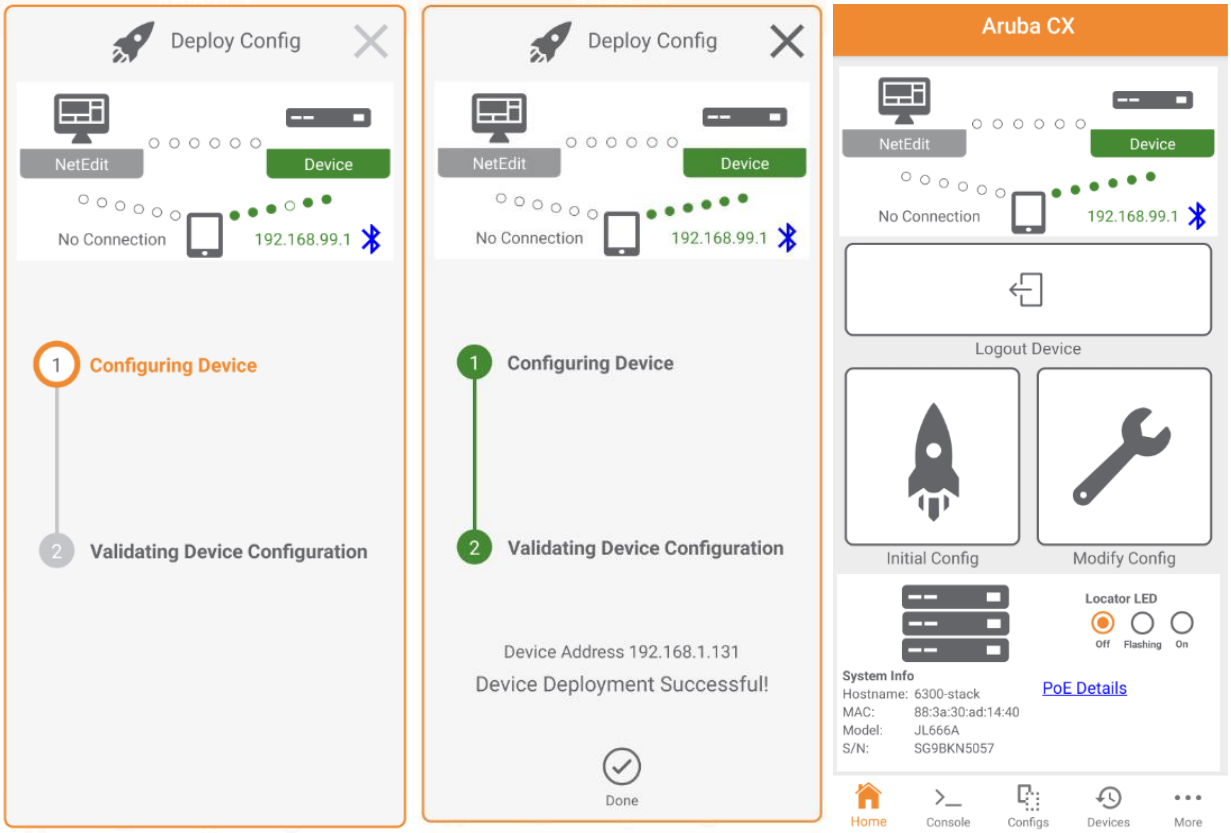

Configure Stack
Ready
1 M
2
Ready
2
Stack Set Up Successful!
Done
Configure Stack


NetEdit Login
Server Address
Username
Password
Stay Logged In
Please enter NetEdit credentials to import the device.
Skip >
Log In


Select Template
OOBM
Input Parameters
hostname
6300-stack
admin_password
use_dhcp
Yes
No
Back
Next


Deploy Config
NetEdit
Device
No Connection
192.168.99.1
This will replace the running config on the device.
Device Config
!
!Version ArubaOS-CX FL.10.04.3000
!export-password: default
hostname 6300-stack
user admin group administrators
password ciphertext
AQBapWiZtWihyyB3q8eiBAOOc5Rar6b
NX+1LEAmiWxn6Ymj2YgAAANyB+28G
tYDEl2KYkecwLUXo7DgjSDMRCejfjmu
HGJ1Ux4ShRaPEyW3JVY8uwQFcUWqt
Mfb0IRTN5yCMIhXjjIyfj2mvq+pqjZx+T/
huzCL8Q1jGclWvoSu8x+qUyJ8x8QsO
!
!
Back
Deploy

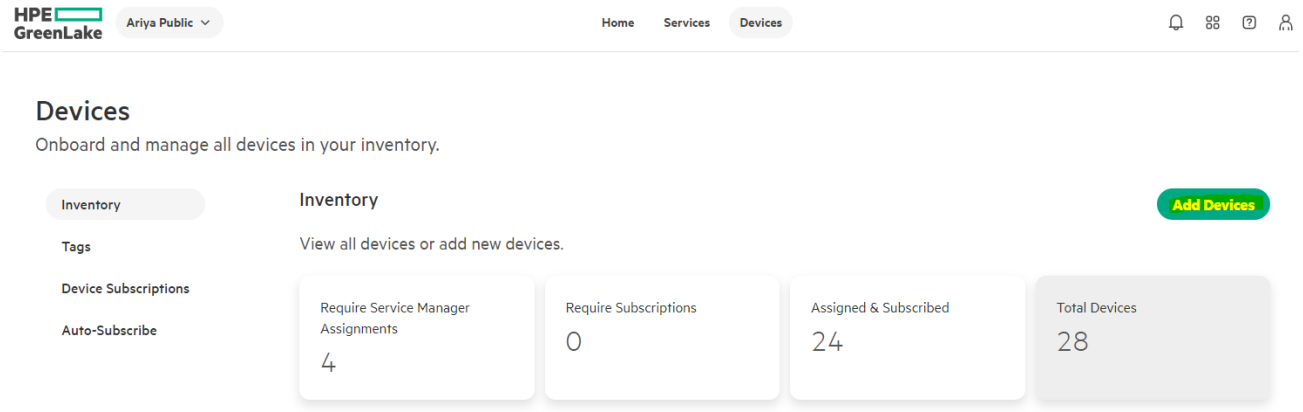

Deploy Config
NetEdit
Device
No Connection
192.168.99.1
This will replace the running config on the device.
Device Config
ssh server vrf default
ssh server vrf mgmt
vsf member 1
type jl666a
link 2 1/1/27-1/1/28
vsf member 2
type jl666a
link 1 2/1/27-2/1/28
!
!
!
!
!
vlan 1
spanning-tree
Back
Deploy

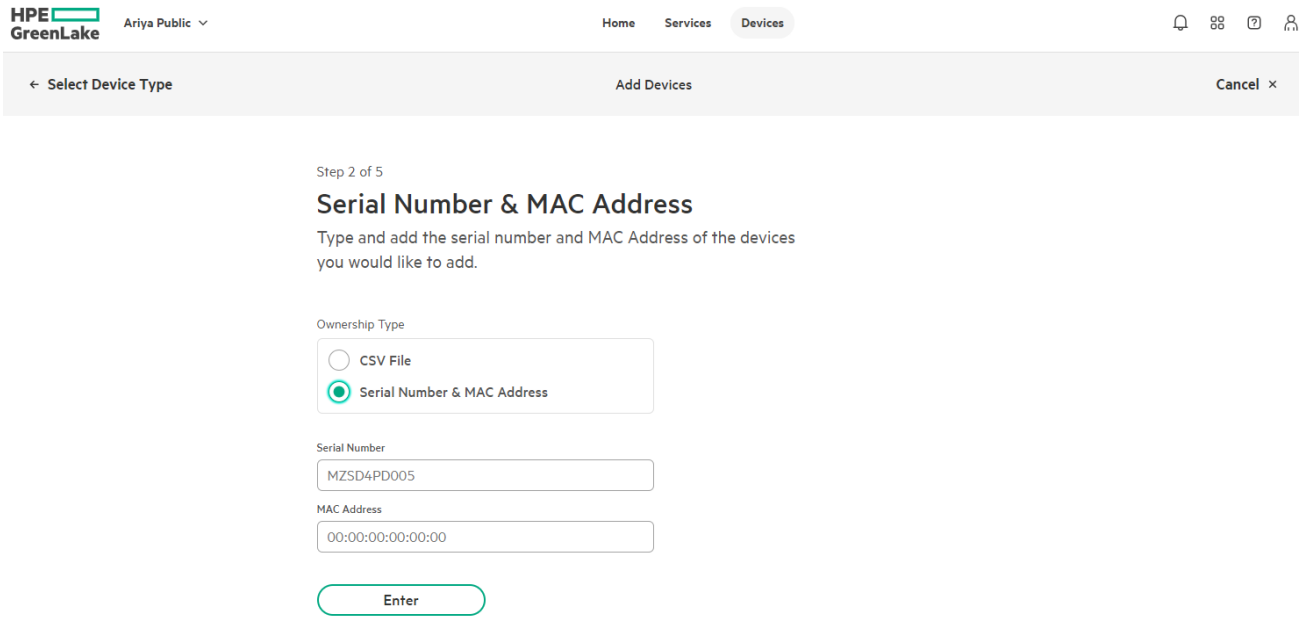


At this point the CX stack will use the mgmt. interface and if the DHCP services are available on that network, it will contact and register with Aruba Central.

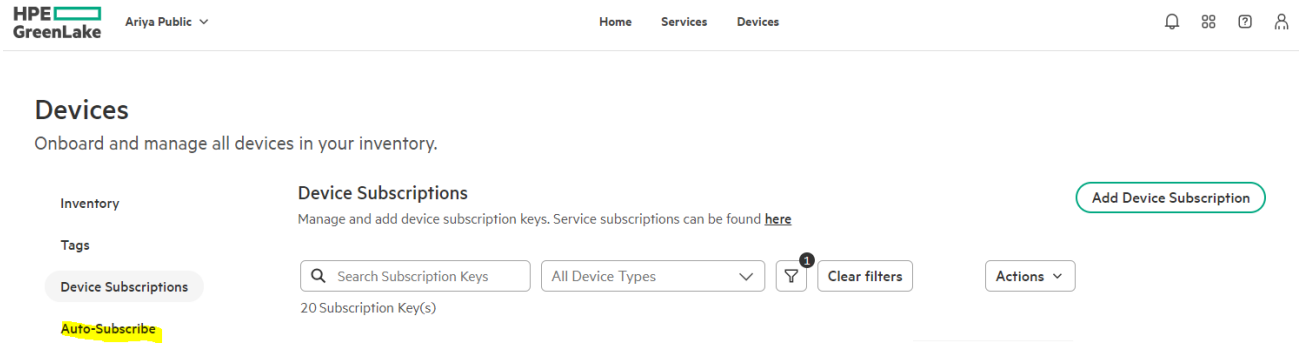
2.5 Aruba Central Initial Onboarding

You need to add the serial number and the MAC addresses of the CX switches to the HPE GreenLake inventory and once subscribe them. The following screen shot is showing that we have added the devices.

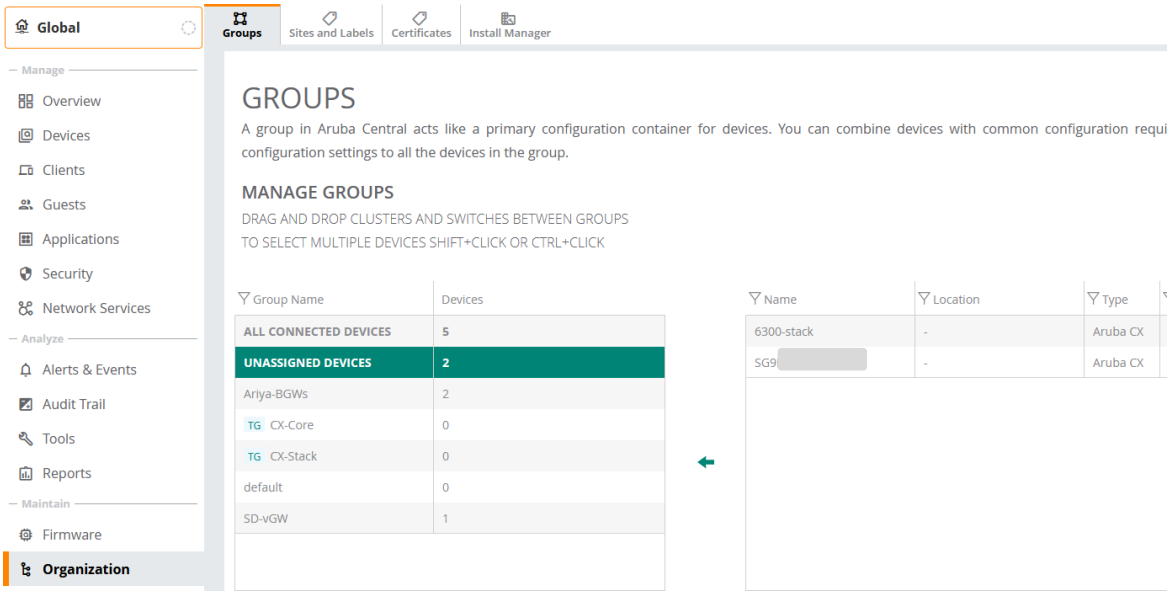




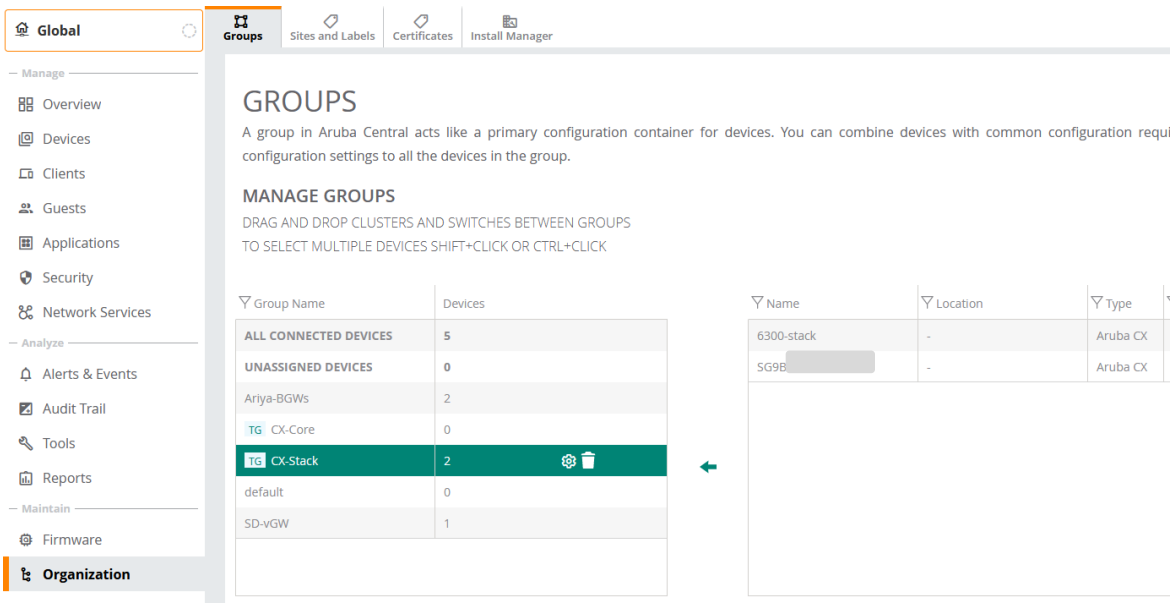
Then you need to ensure these switches are also subscribed manually or use auto-subscription.



Once this is done and the CX switches are configured to be in a stack using CX App, they will contact Aruba Central and will end up in the un-provision group.

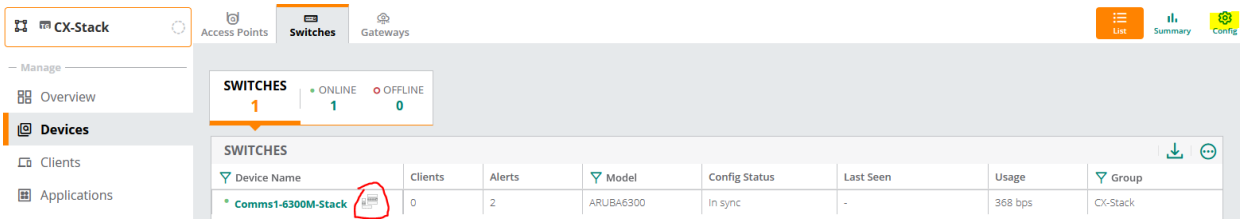


And now we'll move them into the CX-stack group.

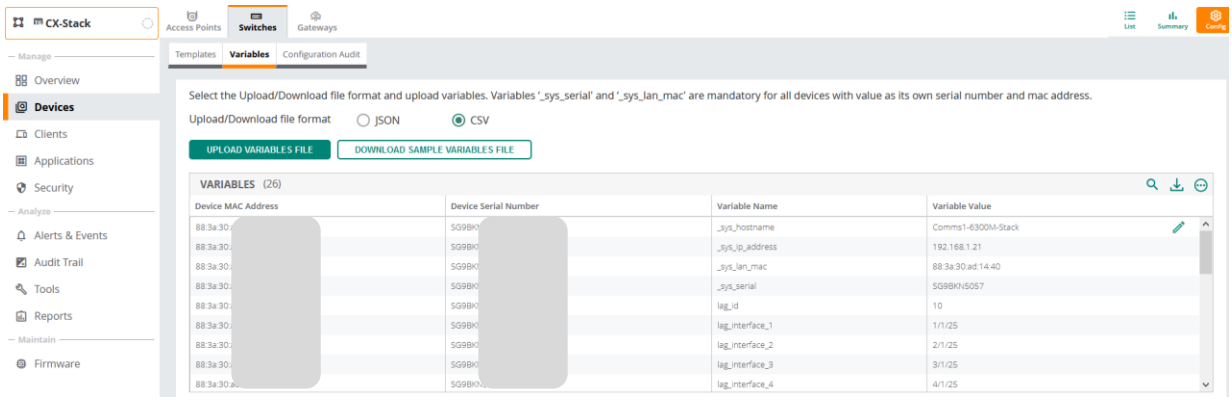


2.6 Aruba Central Template groups

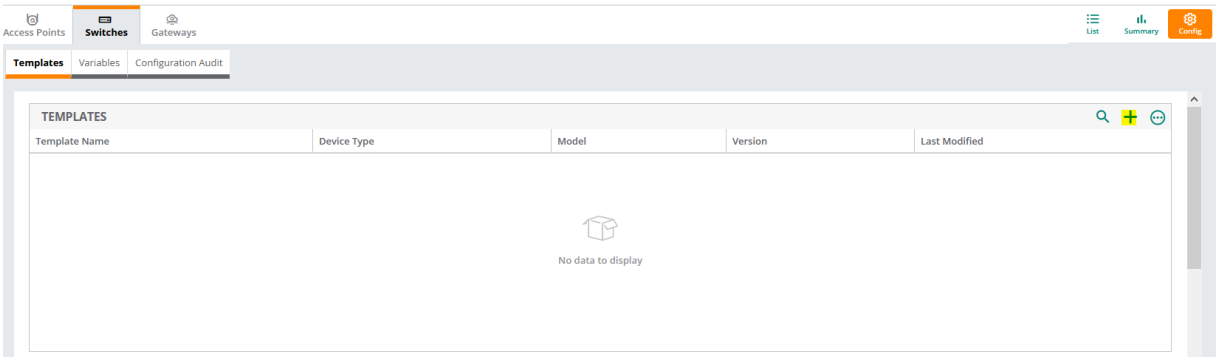
So now when the switches are powered on again you should see a stack



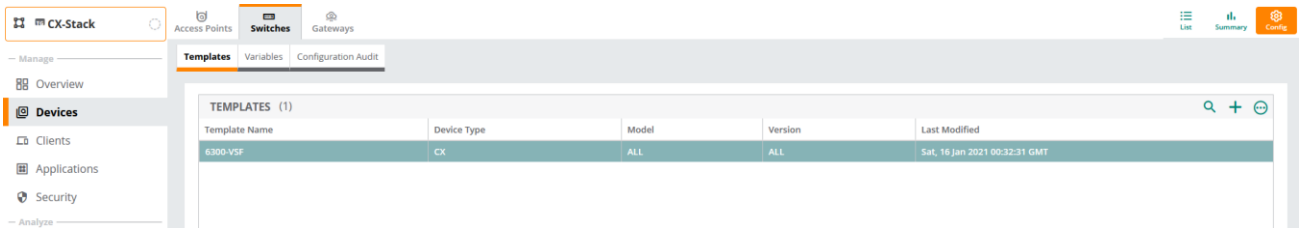
We then create the variables and upload it.



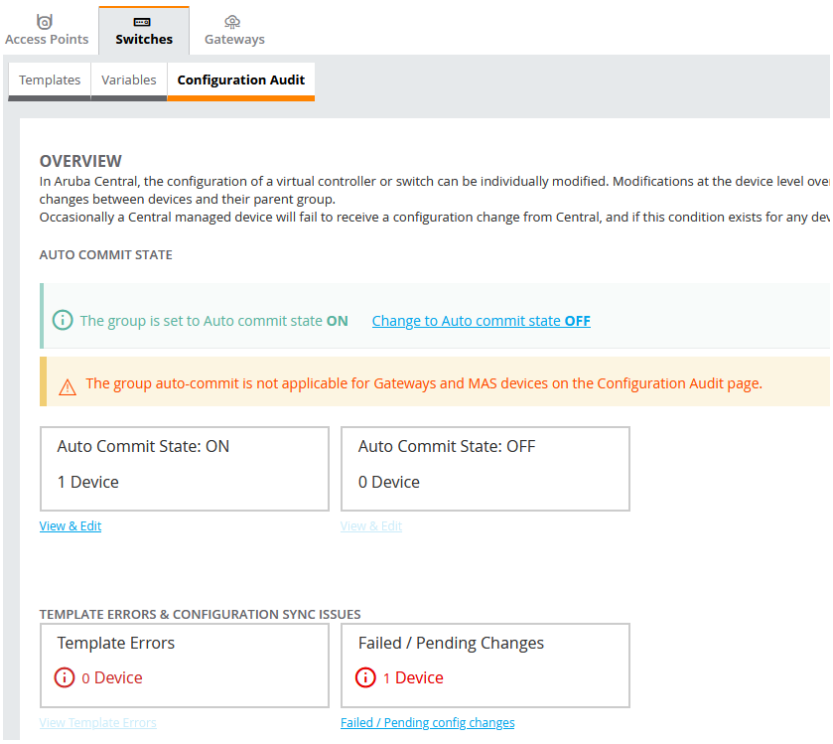
After that we have to create the template.

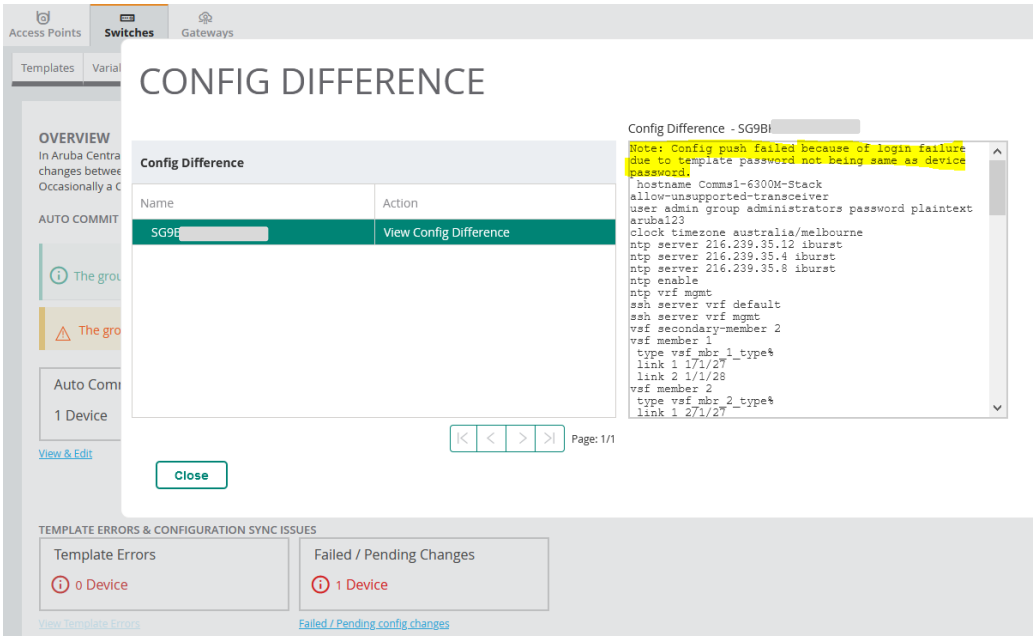


As soon as you save the template Aruba Central will try to push it to the switches in that group.



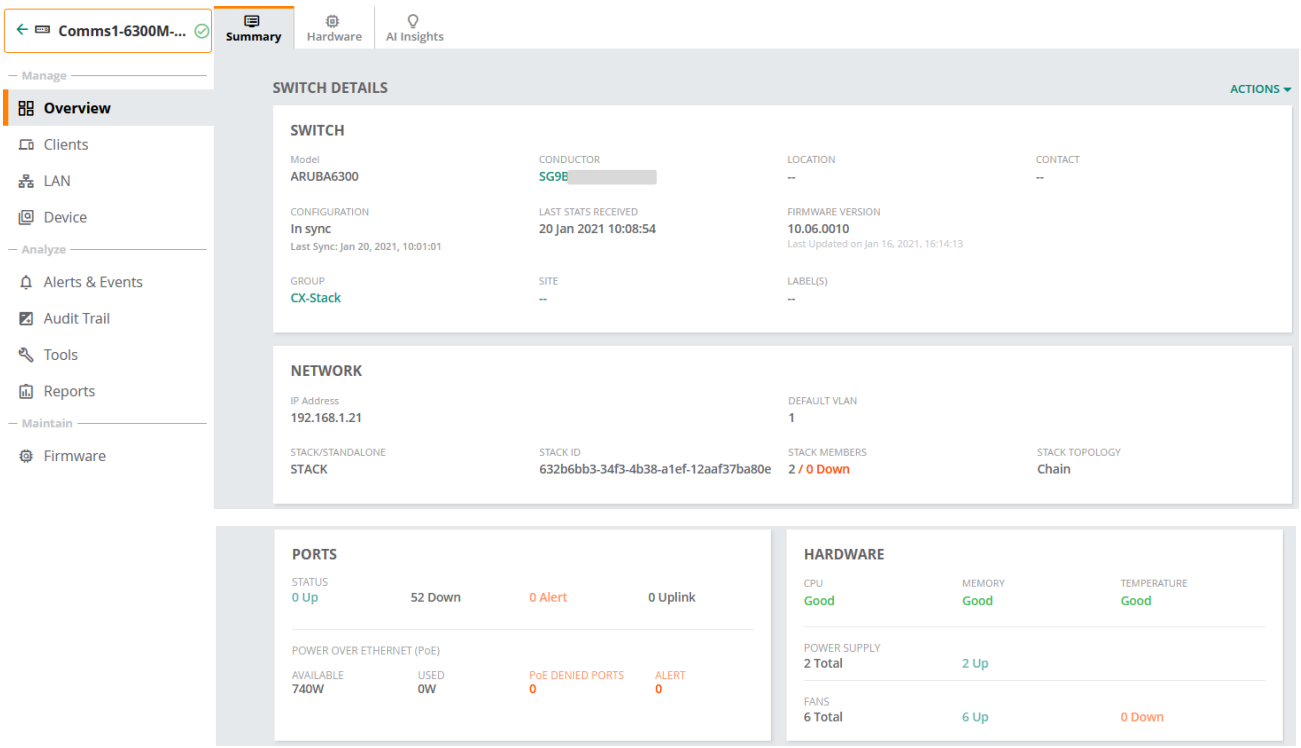
Here is the sample where the push has failed.



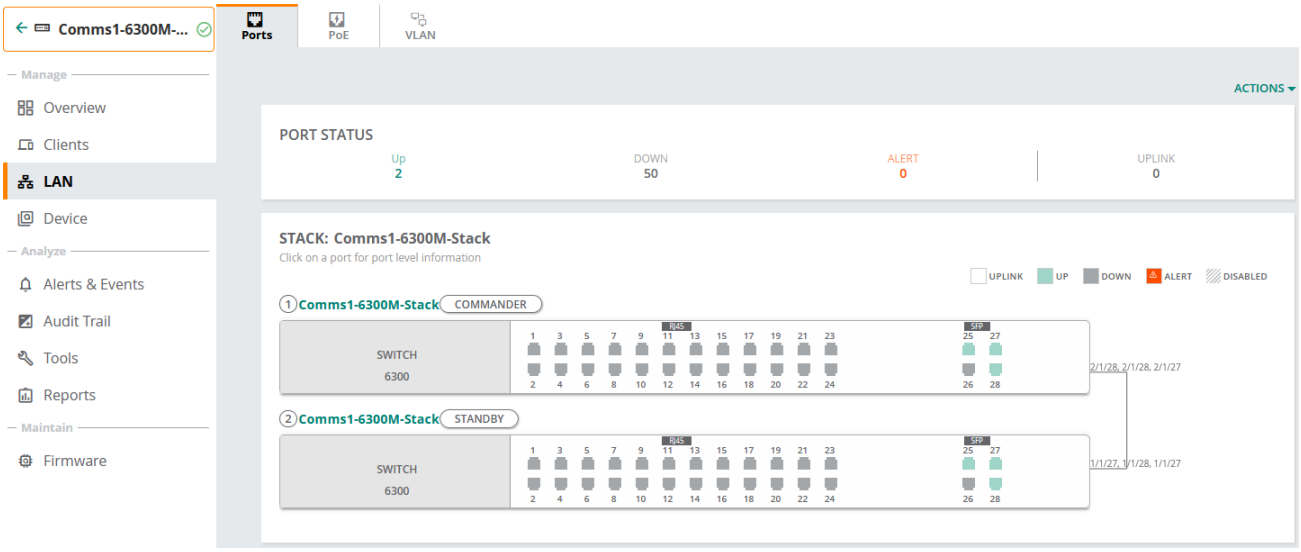


2.7 Aruba Central Monitoring

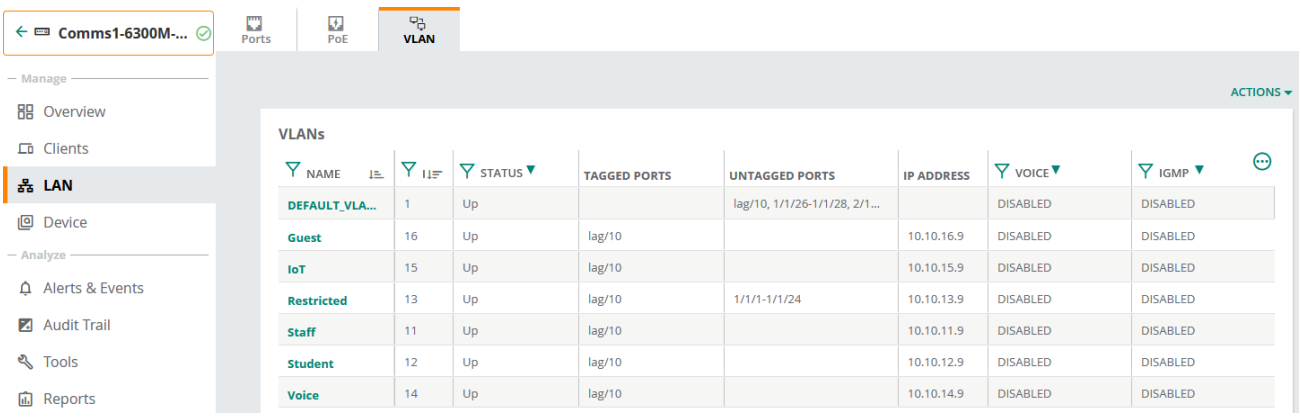
Once you are finished with the configuration, you can view the stack from the monitoring section.



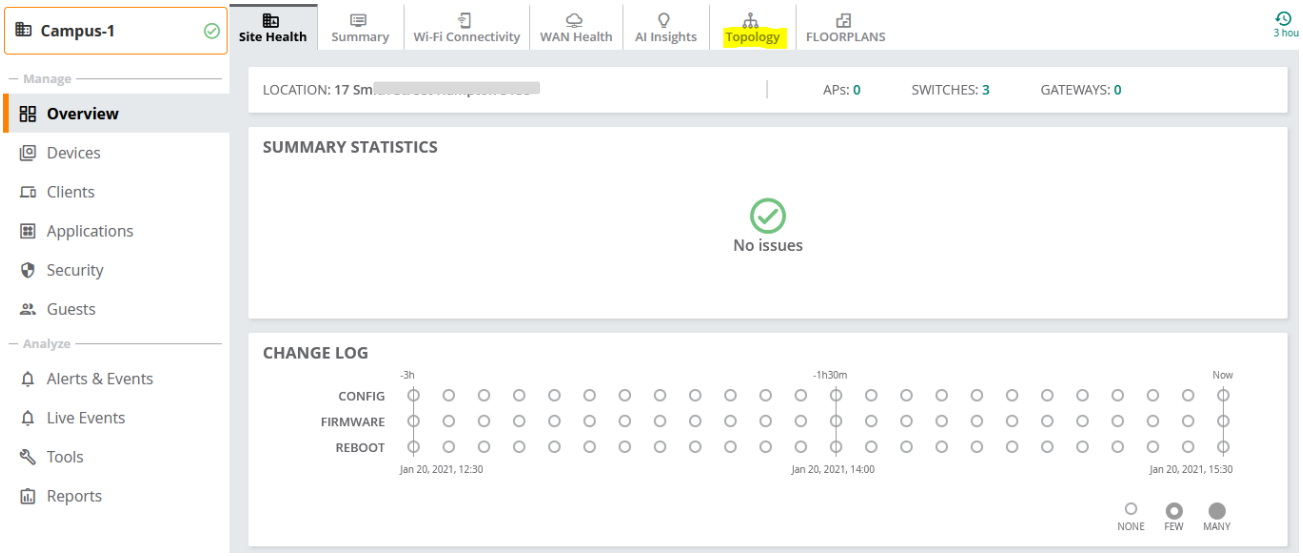
Here is the Port view for the stack.

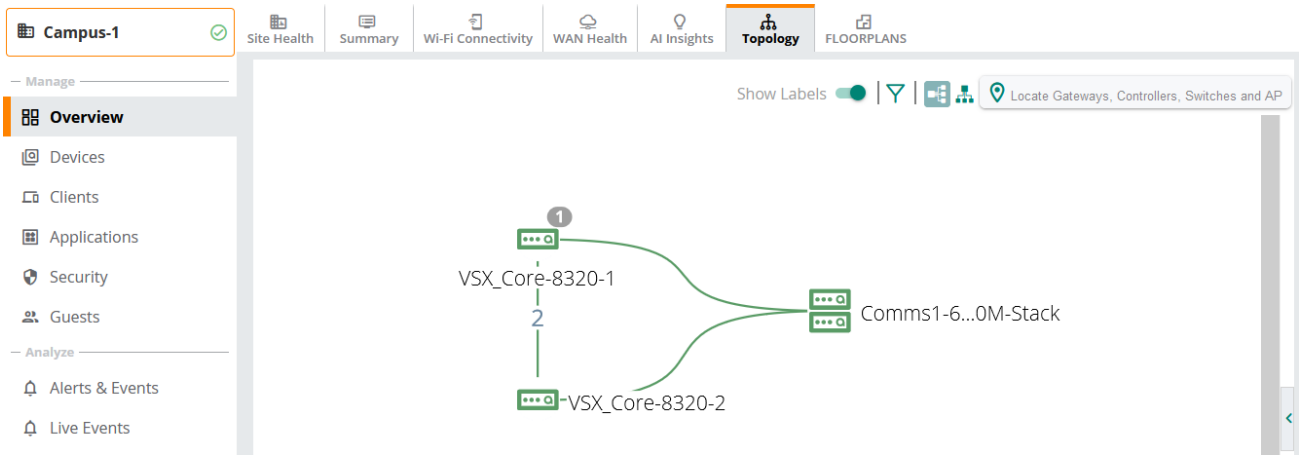


And the VLAN view

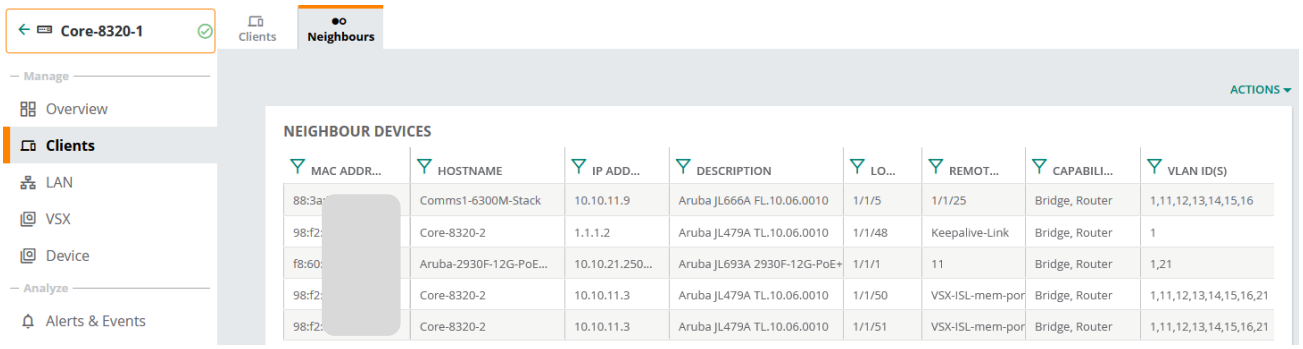


Once you create a site and add the switches to it, then you could also view the topology





And here is the neighbor table.

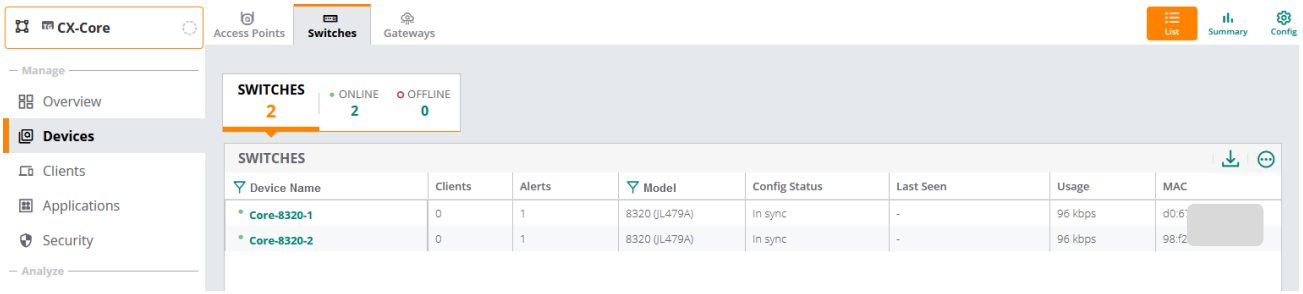


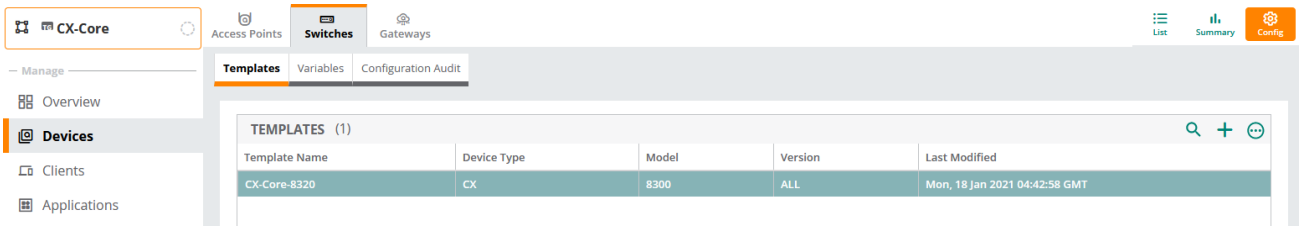
3 832X Configuration

As with the 6300 switches, you need to add the 832X switches to the inventory and then add it to a template based group.

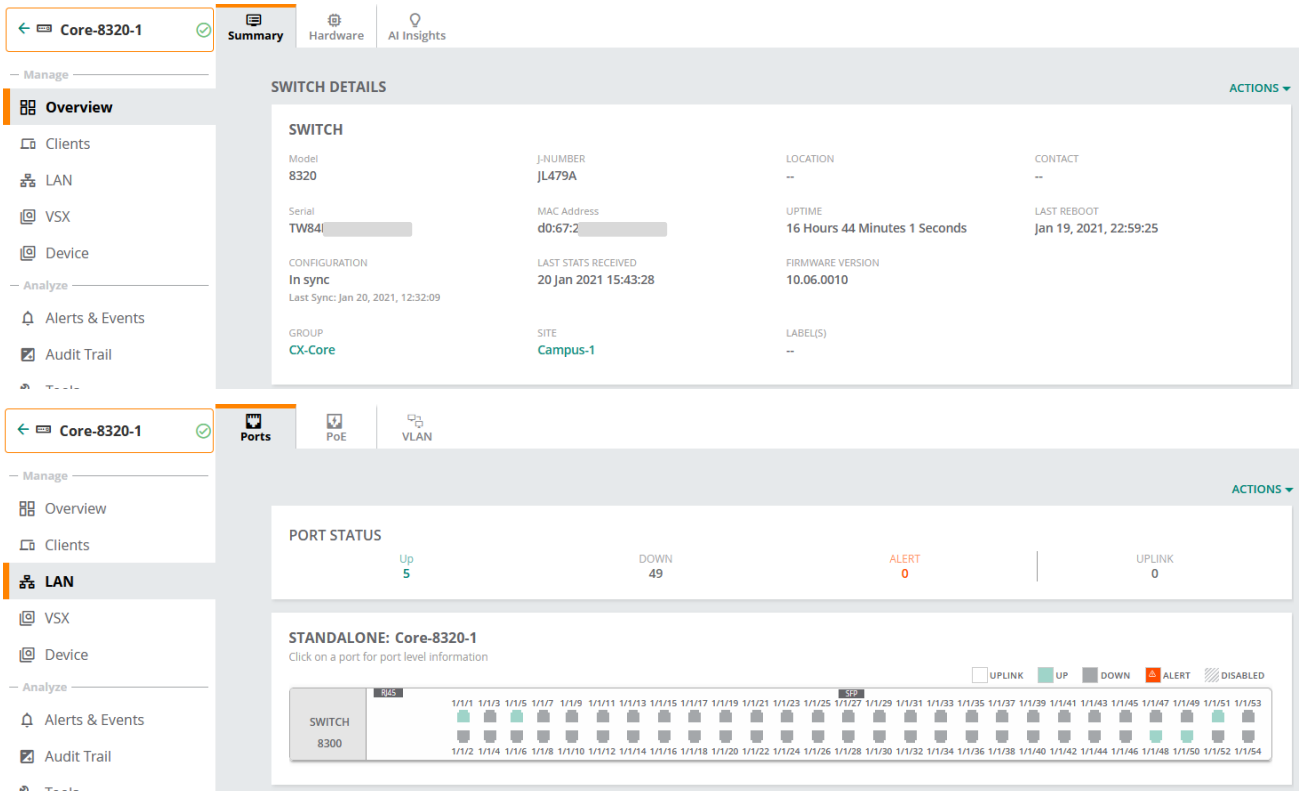
3.1 Aruba Central Template

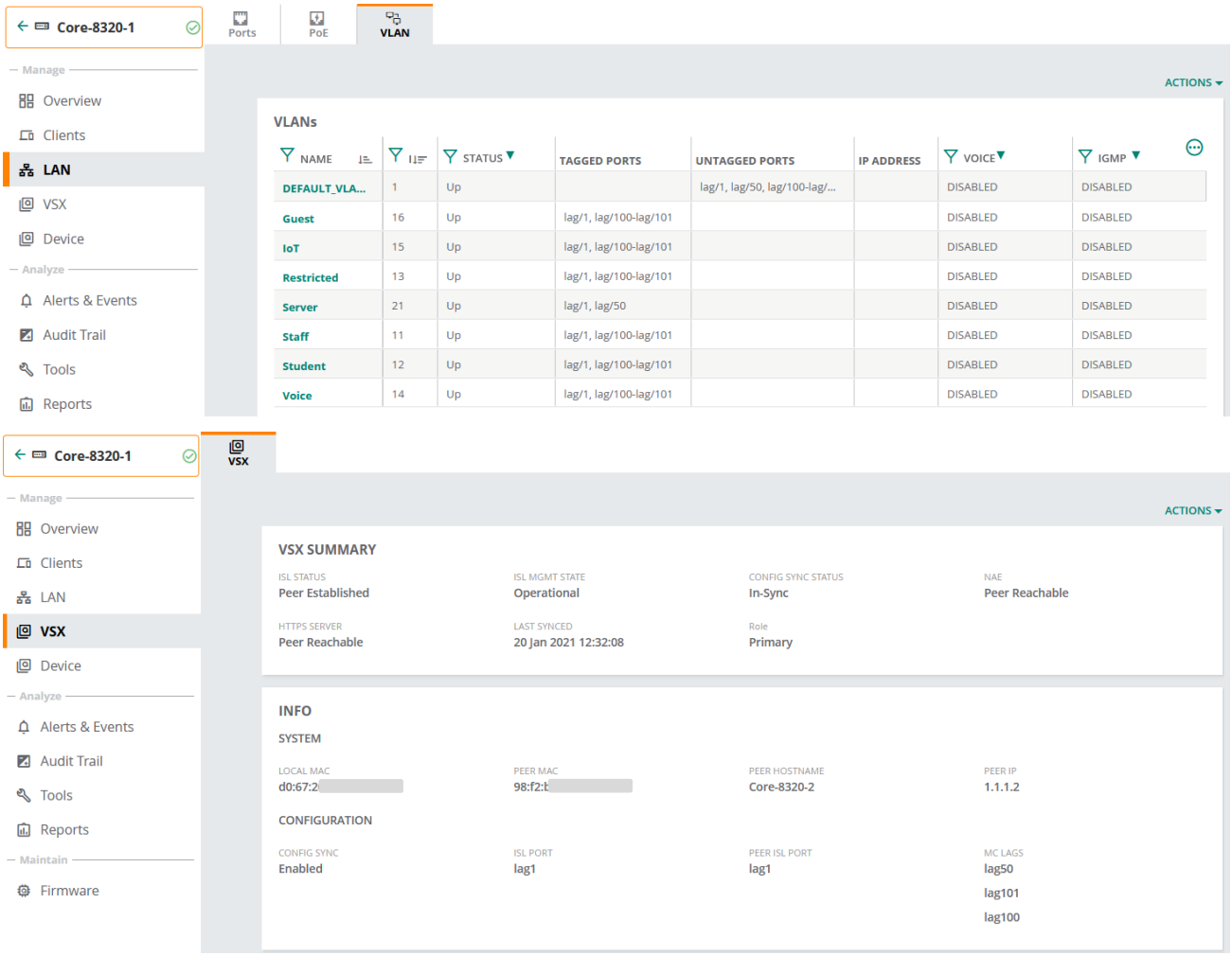
Please refer to Appendix, for the details of template and variables that were used in this deployment.





Here is the device view of Core-1 switch.




Core-8320-1
Ports
PoE
VLAN
Manage
Overview
Clients
LAN
VSX
Device
Analyze
Alerts & Events
Audit Trail
Tools
Reports
ACTIONS
VLANs
NAME
STATUS
TAGGED PORTS
UNTAGGED PORTS
IP ADDRESS
VOICE
IGMP
DEFAULT_VLA... 1 Up lag/1, lag/50, lag/100-lag/... DISABLED DISABLED
Guest 16 Up lag/1, lag/100-lag/101 DISABLED DISABLED
IoT 15 Up lag/1, lag/100-lag/101 DISABLED DISABLED
Restricted 13 Up lag/1, lag/100-lag/101 DISABLED DISABLED
Server 21 Up lag/1, lag/50 DISABLED DISABLED
Staff 11 Up lag/1, lag/100-lag/101 DISABLED DISABLED
Student 12 Up lag/1, lag/100-lag/101 DISABLED DISABLED
Voice 14 Up lag/1, lag/100-lag/101 DISABLED DISABLED
Core-8320-1
VSX
Manage
Overview
Clients
LAN
VSX
Device
Analyze
Alerts & Events
Audit Trail
Tools
Reports
Maintain
Firmware
ACTIONS
VSX SUMMARY
ISL STATUS
Peer Established
ISL MGMT STATE
Operational
CONFIG SYNC STATUS
In-Sync
NAE
Peer Reachable
HTTPS SERVER
Peer Reachable
LAST SYNCED
20 Jan 2021 12:32:08
Role
Primary
INFO
SYSTEM
LOCAL MAC
d0:67:2
PEER MAC
98:f2:b
PEER HOSTNAME
Core-8320-2
PEER IP
1.1.1.2
CONFIGURATION
CONFIG SYNC
Enabled
ISL PORT
lag1
PEER ISL PORT
lag1
MC LAGS
lag50
lag101
lag100