

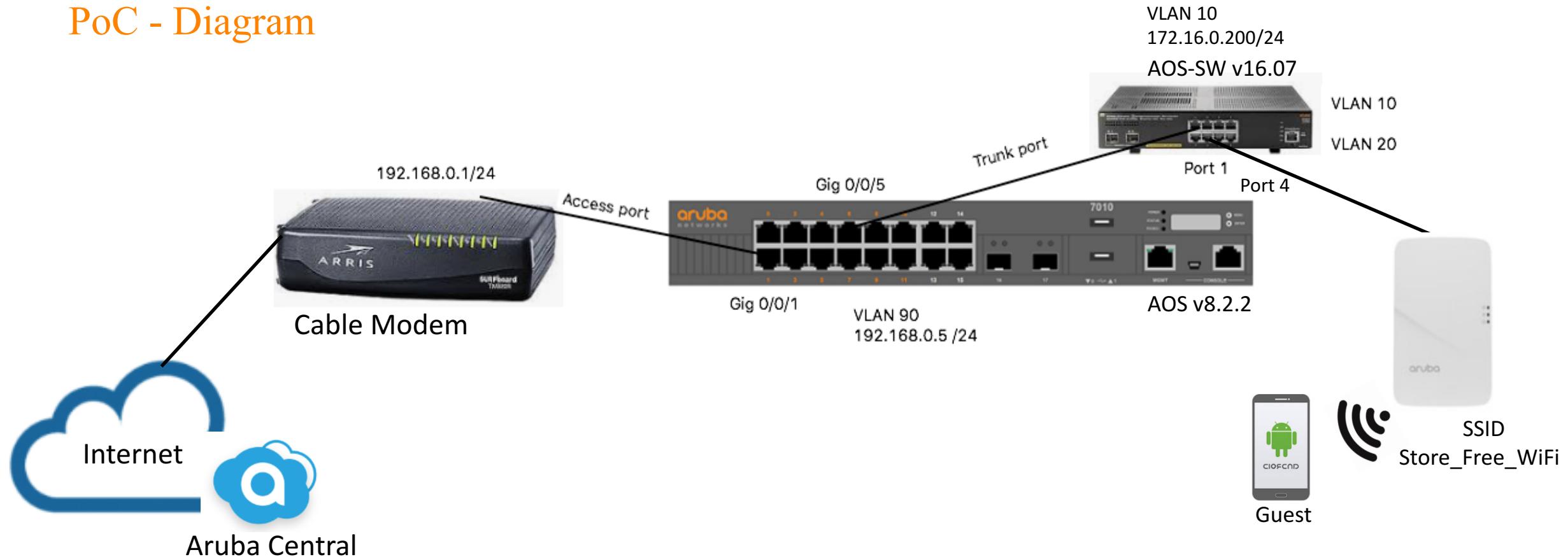


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WiFi Guest Service

PoC - Aruba Central

PoC - Diagram



VLAN 10: 172.16.0.0/24 - Employee/Management VLAN
VLAN 20: 192.168.10.0/24 - Guest VLAN <→ SSID “Store_Free_WiFi”
VLAN 90: 192.168.0.0/24 - Cable Modem VLAN

Agenda

- Setup Mobility Controller as Branch Gateway
- Setup Aruba switch 2930F via CLI
- Register AP 303H @Aruba Central
- Setup Aruba Central
 - Setup Facebook Wi-Fi
 - Setup Social Login Facebook
 - Import existing switch configuration and manage the switch via Aruba Central



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Setup Branch Gateway

Factory reset to Branch Gateway

```
(Aruba7010) [mynode] #write erase all
Controller will be factory defaulted. All the configuration and databases will be deleted. Controller will be reloaded. Press 'y' to proceed : [y/n]: y
sh: /mswitch/bin64/mongo: not found
Write Erase successful

System will now restart!
```

Power on the 7010 Branch Gateway

```
Auto-provisioning is in progress. It requires DHCP and Activate servers
Choose one of the following options to override or debug auto-provisioning...
'enable-debug'      : Enable auto-provisioning debug logs
'disable-debug'    : Disable auto-provisioning debug logs
'mini-setup'        : Start mini setup dialog. Provides minimal customization and requires DHCP server
'full-setup'        : Start full setup dialog. Provides full customization
'static-activate'   : Provides customization for static or PPPOE ip assignment. Uses activate for master information

Enter Option (partial string is acceptable): full

Are you sure that you want to stop auto-provisioning and start full setup dialog? (yes/no): yes

***** Welcome to the Aruba7010 setup dialog *****
This dialog will help you to set the basic configuration for the switch.
These settings, except for the Country Code, can later be changed from the
Command Line Interface or Graphical User Interface.

Commands: <Enter> Submit input or use [default value], <ctrl-I> Help
<ctrl-B> Back, <ctrl-F> Forward, <ctrl-A> Line begin, <ctrl-E> Line end
<ctrl-D> Delete, <BackSpace> Delete back, <ctrl-K> Delete to end of line
<ctrl-P> Previous question <ctrl-X> Restart beginning <ctrl-R> Reload box

Enter System name [Aruba7010]:
```

Complete the setup wizard

```
Enter Switch Role (standalone|md) [md]: standalone
Enter Controller VLAN ID [1]: 90
Enter Controller VLAN port [GE 0/0/0]: GE 0/0/1
Enter Controller VLAN port mode (access|trunk) [access]: access
Enter VLAN interface IP address [172.16.0.254]: 192.168.0.5
Enter VLAN interface subnet mask [255.255.255.0]: 255.255.255.0
Enter IP Default gateway [none]: 192.168.0.1
Do you wish to configure IPV6 address on vlan (yes|no) [yes]: no
Enter Country code (ISO-3166), <ctrl-I> for supported list: B0
You have chosen Country code B0 for Bolivia (yes|no)?: yes
Enter the controller's IANA Time zone [America/Los_Angeles]: America/LaPaz
Enter the controller's IANA Time zone [America/Los_Angeles]: America/Bogota
Enter Time in UTC [21:40:19]:
Enter Date (MM/DD/YYYY) [10/31/2018]:
Enter Password for admin login (up to 32 chars): *****
Re-type Password for admin login: *****

Current choices are:

System name: Aruba7010
Switch Role: standalone
Controller VLAN id: 90
Controller VLAN port: GE 0/0/1
Controller VLAN port mode: access
VLAN interface IP address: 192.168.0.5
VLAN interface subnet mask: 255.255.255.0
IP Default gateway: 192.168.0.1
Option to configure VLAN interface IPV6 address: no
Country code: B0
IANA Time Zone: America/Bogota

If you accept the changes the switch will restart!
Type <ctrl-P> to go back and change answer for any question
Do you wish to accept the changes (yes|no)yes
```

Check configuration made via wizard

```
User: admin  
Password:  
(Aruba7010) [mynode] #  
(Aruba7010) [mynode] #show version  
  
Aruba Operating System Software.  
ArubaOS (MODEL: Aruba7010), Version 8.2.2.1  
Website: http://www.arubanetworks.com
```

```
(Aruba7010) [mynode] #show vlan 90  
  
VLAN CONFIGURATION  
-----  
VLAN Description Ports AAA Profile Option-82  
--- --- --- --- ---  
90 VLAN0090 GE0/0/1 N/A Disabled  
(Aruba7010) [mynode] #  
(Aruba7010) [mynode] #show ip interface brief  
  
Interface IP Address / IP Netmask Admin Protocol VRRP-IP  
vlan 90 192.168.0.5 / 255.255.255.0 up up  
vlan 1 unassigned / unassigned up down  
loopback unassigned / unassigned up up  
mgmt unassigned / unassigned up down  
(Aruba7010) [mynode] #
```

← → C A Not Secure | <https://192.168.0.5:4343>

Apps Aruba Networks Websense Web Fil... Directory HPE Atmosphere 2017 ... Aruba Central - A... <https://community...> Aruba SE Dashbo... SE Self-paced Tra...


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Aruba7010

Log in

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- Config – Interfaces – Click on “+”

aruba MOBILITY CONTROLLER Aruba7010 ACCESS POINTS 0 | CLIENTS 0 | ALERTS 0 ? admin ▾

Mobility Controller > Aruba7010

Dashboard Configuration

VLANs IP Routes IPv6 Neighbors GRE Tunnels Pool Management OSPF Multicast

VLANs	
NAME	ID(S)
--	1,90

WLANS Roles & Policies Access Points AP Groups Authentication Services Interfaces

A red box highlights the “+” button in the bottom-left corner of the VLANs table.

- Vlans created

aruba MOBILITY CONTROLLER Aruba7010 ACCESS POINTS 0 0 CLIENTS 0 ALERTS 0 admin ▾

Mobility Controller > Aruba7010 Pending Changes ↻

NAME	ID(S)
Employee	10
Guest	20
--	1,90

+

Dashboard
Configuration
WLANs
Roles & Policies
Access Points
AP Groups
Authentication
Services
Interfaces
System
Tasks

• Interfaces – VLANs – VLAN90 – NAT Outside

The screenshot shows the Aruba Mobility Controller interface for the device Aruba7010. The VLANs tab is selected in the top navigation bar. The main table displays two VLAN entries:

ID	IPV4 ADDRESS	IPV6 ADDRESS	ENABLE NAT	PORT MEMBERS	ADMIN STATE	OPERATIONAL STATE	PD CLIENT	DHCP SETTINGS
90	192.168.0.5/255.255.2...	--	--	0/0/1	Enabled	N/A	Disabled	None
1	--	--	--	0/0/0/0/10,0/0/11,0/0...	--	--	Disabled	None

Below the table, the Port Members tab is selected under the IPv4 tab. The NAT outside option is highlighted with a red box.

Port Members **IPv4** **IPv6** **More**

▶ IP Address Assignment
▶ IGMP
▼ Other Option

NAT inside:
NAT outside: **(highlighted)**
Local-proxy ARP:
Inter-VLAN routing:
BCMC optimization:
Bandwidth contract: -None-
Enable ospf:

• Interfaces – VLANs – VLAN10 – NAT Inside

The screenshot shows the Aruba Mobility Controller interface for the Aruba7010 device. The top navigation bar includes the Aruba logo, device name, and user information (admin). The main menu on the left lists various configuration categories like Dashboard, Configuration, Services, and Interfaces. The VLANs tab is selected, showing a list of existing VLANs (Employee, Guest) and their counts (10, 20, 1,90). A table below lists VLAN IDs with columns for ID, IPv4 Address, IPv6 Address, Enable NAT, Port Members, Admin State, Operational State, PD Client, and DHCP Settings. VLAN 10 is selected, showing its details: IPv4 and IPv6 addresses are listed as dashes, and the 'ENABLE NAT' checkbox is checked. The 'Port Members' section shows options for IP Address Assignment, IGMP, and Other Options, with 'NAT inside:' checked. The 'Pending Changes' button is visible in the top right.

ID	IPV4 ADDRESS	IPV6 ADDRESS	ENABLE NAT	PORT MEMBERS	ADMIN STATE	OPERATIONAL STATE	PD CLIENT	DHCP SETTINGS
10	-	-	<input checked="" type="checkbox"/>	--	--	--	Disabled	None

Port Members **IPv4** **IPv6** **More**

- > IP Address Assignment
- > IGMP
- > Other Option
 - NAT inside:
 - NAT outside:

• Interfaces – VLANs – VLAN20 – NAT Inside

The screenshot shows the Aruba Mobility Controller interface for the Aruba7010 device. The top navigation bar includes the Aruba logo, device name, and user information (admin). The main menu on the left lists various configuration sections like Dashboard, Configuration, WLANs, Roles & Policies, Access Points, AP Groups, Authentication, Services, Interfaces (which is selected), System, Tasks, Diagnostics, and Maintenance.

The central workspace is focused on VLANs. The "VLANs" tab is active, showing a list of existing VLANs (Guest) and a table for VLAN ID 20. The table includes columns for ID, IPV4 ADDRESS, IPV6 ADDRESS, ENABLE NAT, PORT MEMBERS, ADMIN STATE, OPERATIONAL STATE, PD CLIENT, and DHCP SETTINGS. For VLAN 20, the "ENABLE NAT" field is checked, and the "PD CLIENT" field is set to "Disabled".

A detailed configuration panel for VLAN 20 is open at the bottom. It includes tabs for Port Members, IPv4 (selected), IPv6, and More. Under the IPv4 tab, there are sections for IP Address Assignment, IGMP, and Other Option. The "NAT inside:" checkbox is checked and highlighted with a red border. Below it, the "NAT outside:" checkbox is unchecked.

• Config – Interfaces - Ports – Click on GE 0/0/5 – Mode Trunk

aruba MOBILITY CONTROLLER Aruba7010

ACCESS POINTS 0 0 CLIENTS 0 ALERTS 0

Pending Changes

Dashboard

Configuration

- WLANS
- Roles & Policies
- Access Points
- AP Groups
- Authentication
- Services
- Interfaces**
- System
- Tasks
- Diagnostics
- Maintenance

Ports	VLANs	IP Routes	IPv6 Neighbors	GRE Tunnels	Pool Management	OSPF	Multicast			
GE-0/0/5	Enabled	✓	Not-defined	access	1	1	1-4094	✓	--	--
GE-0/0/6	Enabled	✓	Not-defined	access	1	1	1-4094	✓	--	--
GE-0/0/7	Enabled	✓	Not-defined	access	1	1	1-4094	✓	--	--
GE-0/0/8	Enabled	✓	Not-defined	access	1	1	1-4094	✓	--	--
GE-0/0/9	Enabled	✓	Not-defined	access	1	1	1-4094	✓	--	--
GE-0/0/10	Enabled	✓	Not-defined	access	1	1	1-4094	✓	--	--
GE-0/0/11	Enabled	✓	Not-defined	access	1	1	1-4094	✓	--	--
GE-0/0/12	Enabled	✓	Not-defined	access	1	1	1-4094	✓	--	--

GE-0/0/5

Admin state:

Speed: Mbps

Duplex:

PoE:

Trust:

Policy:

Mode:

Native VLAN:

Allowed VLANs:

• System - General – Clock NTP

The screenshot shows the Aruba Mobility Controller interface for an Aruba7010 device. The top navigation bar includes the Aruba logo, the device name 'MOBILITY CONTROLLER Aruba7010', and status indicators for ACCESS POINTS (0), CLIENTS (0), and ALERTS (0).

The left sidebar menu is collapsed, showing sections like Dashboard, Configuration, System (selected), and Maintenance.

The main content area has a tab bar with 'General' selected, followed by Admin, AirWave, CPSec, Certificates, SNMP, Logging, Profiles, Whitelist, and More.

Under the 'General' tab, the 'Clock' section is expanded. It shows the 'Set clock:' dropdown set to 'Using NTP' (highlighted with a red box) and the current date and time as '2018-10-31 18:03:09 (AST)'. The 'Time zone:' dropdown is set to 'Aruba: America/Aruba (UTC-04:00)' (also highlighted with a red box).

A table titled 'NTP Servers' is displayed, showing columns for IP ADDRESS, IBURST MODE, and AUTHENTICATION KEY ID. A '+' button is present at the bottom left of the table.

An 'Add NTP Server' dialog box is open at the bottom, with fields for 'IP version:' (set to 'IPv4'), 'IP address:' (containing '181.119.30.63' and highlighted with a red box), 'Iburst mode:' (unchecked), and 'Authentication key ID:' (empty).

• Submit Changes

The screenshot shows the Aruba Mobility Controller interface for the device Aruba7010. The left sidebar includes links for Dashboard, Configuration (WLANS, Roles & Policies, Access Points, AP Groups, Authentication, Services), Interfaces (System, Tasks), Diagnostics, and Maintenance. The main content area shows the VLANs tab selected under the Interfaces section. A modal window titled "Pending Changes" displays the configuration details for a group of interfaces. The modal content includes:

- Pending Changes for 1 Group**
- Mobility Controller > Aruba7010**
- Interfaces > Options:**
 - VLAN name = Employee
 - Assignment type = hash
 - VLAN name = Guest
 - Assignment type = hash
- Interfaces > VLANs:**
 - VLAN ID = 10
 - VLAN ID = 20
 - VLAN name = Employee
 - VLAN ID/Range = 10
 - VLAN name = Guest
 - VLAN ID/Range = 20
- Interfaces > Ports:**
 -

At the bottom of the modal are three buttons: "Close", "Discard changes" (in red), and "Deploy changes".

On the right side of the interface, there are sections for ACCESS POINTS (0), CLIENTS (0), and ALERTS (0). The top right corner shows the user is logged in as "admin". A red box highlights the "Pending Changes" link in the top right corner of the interface.

- Disable ADP via CLI

```
(Aruba7010) [mynode] (config) #no adp discovery
(Aruba7010) ^[mynode] (config) #write mem

Saving Configuration...

Partial configuration for /mm/mynode
-----
Contents of : /flash/ccm/partial/0/p=sc=mynode.cfg
no adp discovery
Configuration Saved.
(Aruba7010) [mynode] (config) #end
```

```
(Aruba7010) [mynode] #show adp config

ADP Configuration
-----
key          value
---          ---
discovery    disable
igmp-join    enable
igmp-vlan-id 0
(Aruba7010) [mynode] #
```

- Show running-config Branch Gateway

```
version 8.2
hostname "Aruba7010"
clock timezone America/Aruba -4
!
```

```
vlan 10
vlan 20
vlan 90
```

```
vlan-name Employee
vlan Employee 10
vlan-name Guest
vlan Guest 20
```

```
interface gigabitethernet 0/0/1
description "GE0/0/1"
trusted
trusted vlan 1-4094
switchport access vlan 90
!
```

```
interface gigabitethernet 0/0/5
description "GE0/0/5"
trusted
trusted vlan 1-4094
no poe
switchport mode trunk
!
```

```
interface vlan 90
ip address 192.168.0.5 255.255.255.0
ip nat outside
!

interface vlan 1
!

interface vlan 10
ip address 172.16.0.1 255.255.255.0
ip nat inside
!

interface vlan 20
ip address 192.168.10.1 255.255.255.0
ip nat inside
```

```
ip default-gateway 192.168.0.1
```

```
ntp server 181.119.30.63
```

```
country BO
```

```
adp discovery disable
```



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Setup switch via CLI

- Show running-config. 2930F switch

```
hostname "Aruba2930F_8G"
module 1 type jl258a
timesync ntp
ntp unicast
ntp server 129.6.15.28
ntp server 132.163.96.5
ntp server 186.118.171.89
ntp enable
time timezone -300
web-management ssl
ip route 0.0.0.0 0.0.0.0 172.16.0.1
interface 4
  name "Access Point"
  poe-lldp-detect enabled
  exit
interface 6
  name "Access Point2"
  poe-lldp-detect enabled
  exit
snmp-server community "public" unrestricted
```

```
vlan 1
  name "DEFAULT_VLAN"
  no untagged 4-5
  untagged 1-3,6-10
  ip address dhcp-bootp
  ipv6 enable
  ipv6 address dhcp full
  exit
vlan 10
  name "Employee"
  untagged 4-5
  tagged 1
  ip address 172.16.0.200 255.255.255.0
  dhcp-server
  exit
vlan 20
  name "Guest"
  tagged 1,4
  no ip address
  exit
```

```
dhcp-server pool "Employee"
  default-router "172.16.0.1"
  dns-server "8.8.8.8,8.8.8.9"
  domain-name "Customer"
  network 172.16.0.0 255.255.255.0
  range 172.16.0.2 172.16.0.199
  exit
dhcp-server enable
password manager

Aruba2930F_8G#
```



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Register AP 303H
Aruba Central

- Add AP and Assign subscriptions in Aruba Central



Central

CURRENT APP
GLOBAL SETTINGS

Manage Groups
View, edit and add configuration groups

Device Inventory
View an inventory of all your devices

Key Management
Track all your subscription keys

Subscription Assignment
Assign and modify device and service subscriptions

Labels and Sites
Create and manage labels and sites for monitoring

Users & Roles
Manage user access control to Aruba Central

<input checked="" type="checkbox"/>	YES	CND [REDACTED]	24 [REDACTED]	IAP-305-RW
<input checked="" type="checkbox"/>	YES	CND [REDACTED]	20:4 [REDACTED]	AP-303H-RW

NETWORK SERVICE SUBSCRIPTIONS

A Network Service subscriptions enable devices to participate in Cloud Guest networks, to be included in Presence Analytics, and to be monitored through Clarity.

DRAG AND DROP DEVICE(S) ONTO A SERVICE TO ASSIGN
TO SELECT MULTIPLE DEVICES SHIFT+CLICK OR CTRL+CLICK
TO REMOVE MULTIPLE DEVICES FROM A SERVICE, USE BATCH REMOVE

SUBSCRIPTIONS	DEVICES		SERIAL NUMBER	NAME	TYPE	LOCATION	SERVICES
ALL DEVICES	5	 DRAG < DROP		AP345 - Medellin	iap	Bogota, Colombia	2 (Clarity,Guest)
NO SUBSCRIPTIONS	1			Parents Room	iap	Bogotá, Colombia	3 (Clarity,Guest,PA)
Clarity	4			Tenerife AP305	iap	Bogotá, Colombia	3 (Clarity,Guest,PA)
Cloud Guest	4			CND [REDACTED]	20:4 [REDACTED]	Bogota, Colombia	3 (Clarity,Guest,PA)
Presence Analytics	3						
UCC	0						

 BATCH REMOVE SUBSCRIPTIONS

20 TOTAL SUBSCRIPTIONS
9 AVAILABLE

- PC connected to interface 4 -- Check access to Internet

```
en4: flags=8863<UP,BROADCAST,SMART,RUNNING,SIMPLEX,MULTICAST> mtu 1500
    options=4<VLAN_MTU>
    ether 3c:1[REDACTED]
    inet6 fe80::18[REDACTED] %en4 prefixlen 64 secured scopeid 0xe
    inet 172.16.0.3 netmask 0xffffffff00 broadcast 172.16.0.255
    nd6 options=201<PERFORMNUD,DAD>
    media: autoselect (1000baseT <full-duplex>)
    status: active
[Adolfos-MacBook-Pro:~ [REDACTED]$ 
[Adolfos-MacBook-Pro:~ [REDACTED]$ ping 8.8.8.8
PING 8.8.8.8 (8.8.8.8): 56 data bytes
64 bytes from 8.8.8.8: icmp_seq=0 ttl=120 time=20.103 ms
64 bytes from 8.8.8.8: icmp_seq=1 ttl=120 time=14.751 ms
```

- Factory reset to AP via console port

```
apboot> factory_reset
Clearing state...
Checking OS image and flags

Image is signed; verifying checksum... passed
Clearing image partition 0
512 bytes written to volume aos0
Erasing flash sector @ 0x3a0000... OK
Erasing UBIFS ...OK
done

Purging environment...
preserving os_partition (0)
Erasing SPI flash...Writing to SPI flash...done
Erasing SPI flash...Writing to SPI flash...done
apboot> boot
Booting OS partition 0
```

- Check DHCP -- 172.16.0.2 IP address assigned to AP

```
Starting DHCP
Getting an IP address...
Jan  1 00:00:37 udhcpc[2118]: udhcpc (v0.9.9-pre) started
Jan  1 00:00:37 udhcpc[2118]: send_discover: pkt num 0, secs 0
Jan  1 00:00:37 udhcpc[2118]: Sending discover...
Jan  1 00:00:39 udhcpc[2118]: send_selecting: pkt num 0, secs 512
Jan  1 00:00:39 udhcpc[2118]: Sending select for 172.16.0.2...
Jan  1 00:00:39 udhcpc[2118]: Lease of 172.16.0.2 obtained, lease time 86400
[ 61.218530] ip_time_handler: Got ip and packets on bond0 Started master election 5-0, rand 24
172.16.0.2 255.255.255.0
Running ADP...
cat: /tmp/master_ip: No such file or directory
Done. none controller was found.
Done. Master is
```

-
- AP 303 set as Master (IAP)

```
[ 166.380527] (08:02:27) !!! Init ---> Master
User:
```

- After 5min → Firmwave Upgrade from Aruba Central

```
20: [REDACTED]#  
The system is going down NOW !!  
Sending SIGKILL to all processes.  
Unmounting UBIFS completed.  
Please stand by while rebooting the system.
```

```
AP rebooted Thu Nov 1 06:54:59 UTC 2018; System cmd at uptime 0D 0H 8M 10S: Image Upgrade Successful  
shutting down watchdog process (nanny will restart it)...
```

```
<<<<      Welcome to the Access Point      >>>>
```

- AP managed from Aruba Central (athena-mgmt)

```
20: [REDACTED]# show ap debug cloud-server

IAP mgmt mode          :athena-mgmt
cloud config recved    :TRUE
autojoin mode           :disable
state diff              :disable
Device Cert status      :SUCCESS
Aruba Central server    :54.69.206.204
Aruba Central proxy server :None
Aruba Central redirect from :internal.central.arubanetworks.com
Aruba Central Protocol   :WSS
Aruba Central uptimes    :3m:31s
Aruba Central status      :Login_done

Cloud Debug Statistics
-----
Key                  Value
---                 ---
Connect establish success 1(1)
Login done times      1(1)
Connect retry times   1(1)
clarity send          2(2)
```

- AP is ready to be configured via Aruba Central

The screenshot shows the Aruba Central dashboard for the 'Home CI 159' network. The left sidebar includes links for 'aruba Central', 'CURRENT APP WIRELESS MANAGEMENT' (which is selected), 'Search Current App', and 'Wireless SSIDs'. The main content area displays a table of Access Points with the following data:

NAME	VC NAME	STATUS	IP ADDRESS	IP ASSIGNMENT	MODE	TYPE	2.4GHZ (CHAN...)	5GHZ (CHANN...)
● 20 [REDACTED]	IAP303	Online	172.16.0.2	DHCP	access	AP-303H	Auto	Auto



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Setup Aruba Central

- Site Label created and assigned to AP

aruba Central

CURRENT APP GLOBAL SETTINGS

Manage Groups View, edit and add configuration groups

Device Inventory View an inventory of all your devices

Key Management Track all your subscription keys

Subscription Assignment Assign and modify device and service subscriptions

Labels and Sites Create and manage labels and sites for monitoring

Users & Roles Manage user access control to Aruba Central

Certificates View, edit and add certificates

LABELS AND SITES

Labels are logical sets of devices which can be used for a variety of monitoring and reporting purposes. Each device can be associated with up to five labels, and a label can apply to as many devices as you want.

Sites allow you to group devices based on the location context

MANAGE SITES

DRAG AND DROP DEVICES TO ADD TO A SITE
TO SELECT MULTIPLE DEVICES SHIFT+CLICK C

CONVERT LABELS TO SITES

SITE NAME	ADDRESS	UNASSIGNED	PoC - Site
Bogota		2	Test
Medellin		1	
PoC - Site		0	

New Site Bulk upload

CONFIRM ACTION

⚠ Do you want to move selected devices to the Site – PoC - Site

Yes No

NAME GROUP TYPE

NAME	GROUP	TYPE
20:4c:03:20:22:90	Home CI 159	IAP
Tenerife AP305	Home CI 159	IAP
Parents Room	Home CI 159	IAP
AP345 - Medellin	Home CI 159	IAP

DRAG ← DROP

3 Sites

4 Device(s)

• Assign Label to AP

The screenshot shows the Aruba Central web interface. On the left, a sidebar lists various management sections: Manage Groups, Device Inventory, Key Management, Subscription Assignment, Labels and Sites, Users & Roles, and Certificates. The 'Labels and Sites' section is currently selected.

The main content area is titled 'LABELS AND SITES'. It contains descriptive text about labels and sites, and a 'MANAGE LABELS' section with instructions for dragging and dropping devices onto labels. A table lists labels with their device counts: ALL DEVICES (4), UNASSIGNED (2), Demo AP345 (0), Home (2), Insight (0), and PoC - Central Store (0).

A modal dialog box titled 'CONFIRM ACTION' is displayed in the center. It asks, 'Label PoC - Central Store will be applied to selected devices?' with 'Yes' and 'No' buttons. In the background, there is a table showing device details: GROUP, TYPE, and LABELS. The table includes rows for 'Home CI 159' (IAP, 0), 'Home CI 159' (IAP, 1), 'Parents Room' (IAP, 1), 'AP345 - Medellin' (IAP, 0), and 'Home CI 159' (IAP, 0).

At the bottom, there are buttons for 'Add Label', '4 Labels', 'Remove Label', and '4 Device(s)'. Navigation tabs for 'Labels' and 'Sites' are also visible at the top right of the main content area.

- Create a new group

aruba Central

CURRENT APP GLOBAL SETTINGS

Manage Groups View, edit and add configuration groups

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Users & Roles Manage user access control to Aruba Central

Certificates View, edit and add certificates

GROUPS

A group is a collection of devices with common configuration requirements. You can apply the same configuration to multiple devices in a group.

MANAGE DRAG AND DROPS TO SELECT

CREATE NEW GROUP

GROUP NAME PoC - Stores

USE AS A TEMPLATE GROUP (optional)

This allows configuration template to be applied for all the devices in the device group. Once designated as a Template Group, UI based configuration wizards cannot be used for this device group

PASSWORD

CONFIRM PASSWORD

Cancel Add Group

New Group

Clone Selected Group

2 Group(s)

Import Configuration to New Group

3 Device(s)

Need Help? ^

- Move the AP to the new Group

aruba Central

CURRENT APP GLOBAL SETTINGS

Manage Groups View, edit and add configuration groups

Device Inventory View an inventory of all your devices

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Users & Roles Manage user access control to Aruba Central

Certificates View, edit and add certificates

GROUPS

A group in Aruba Central acts like a primary configuration container for devices. You can combine devices with common configuration requirements into a single group and apply the same configuration settings to all the devices in the group.

MANAGE GROUPS

DRAG AND DROP CLUSTERS AND SWITCHES TO SELECT MULTIPLE DEVICES SHIFT+CLICK OR

▼ GROUP NAME	DEVICES
ALL CONNECTED DEVICES	3
UNASSIGNED DEVICES	0
default	0
Home CI 159	3
PoC - Stores	0

CONFIRM ACTION X

⚠ Moving 1 device(s) from Home CI 159 to PoC - Stores.

Moving devices to another group changes the configuration of the selected devices. Do you want to continue?

Yes **No**

New Group
Edit Selected Group

3 Group(s)

Assign Configuration to New Group

3 Device(s)

- Change the name to AP

aruba Central

CURRENT APP WIRELESS MANAGEMENT

Search Current App Find devices, clients and networks

Wireless SSIDs Add and edit wireless networks

Access Points View APs and set device parameters

RF Set Aruba Adaptive Radio Management

FILTER WIRELESS MANAGEMENT PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS) ▾

Access Points 1 Access Points

Access Points

NAME	VC NAME	STATUS	IP ADDRESS	IP ASSIGNMENT	MODE	TYPE	2.4GHZ (CHANN...	5GHZ (CHANNE...	⋮
● 2 PoC - Central Store	PoC - Central Store	Offline	172.16.0.2	DHCP	access	AP-303H	Auto	Auto	

5 10 25 50 Per Page ⏪ ⏴ ⏵ ⏩ Page: 1/1



- Change the name to AP

aruba Central

CURRENT APP WIRELESS MANAGEMENT

Search Current App
Find devices, clients and networks

Wireless SSIDs
Add and edit wireless networks

Access Points
View APs and set device parameters

RF
Set Aruba Adaptive Radio Management

Wireless IDS/IPS
Manage intrusion detection and prevention

Security
Set advanced security parameters

VPN
Manage controller VPN connections

DHCP
Manage DHCP scopes

FILTER WIRELESS MANAGEMENT
PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS) ▾

Access Points / 20:4c:03:20:22:90

Basic Info

Name: Floor1

AP Zone:

RF Zone:

Swarm Mode: Cluster ▾

Preferred Master:

IP Address For Access Point:

Get IP Address from DHCP server

Static

Radio

The screenshot shows the Aruba Central interface for managing wireless access points. On the left, a sidebar lists various management categories like Wireless SSIDs, Access Points, RF, and Security. The 'Access Points' section is currently selected and expanded. In the main content area, the 'Basic Info' tab is active. A red box highlights the 'Name' field, which contains the value 'Floor1'. Other fields shown include 'AP Zone', 'RF Zone', 'Swarm Mode' (set to 'Cluster'), 'Preferred Master' (disabled), and 'IP Address For Access Point' (set to 'Get IP Address from DHCP server'). Below the basic info, there's a 'Radio' section.

- Firmware upgrade to recommended version

aruba Central

CURRENT APP MAINTENANCE

Search Current App Find devices, clients and networks

Firmware

Troubleshooting

Audit Trail

API Gateway

FIRMWARE

VIRTUAL CONTROLLERS

Switches - MAS Switches - Aruba Gateways

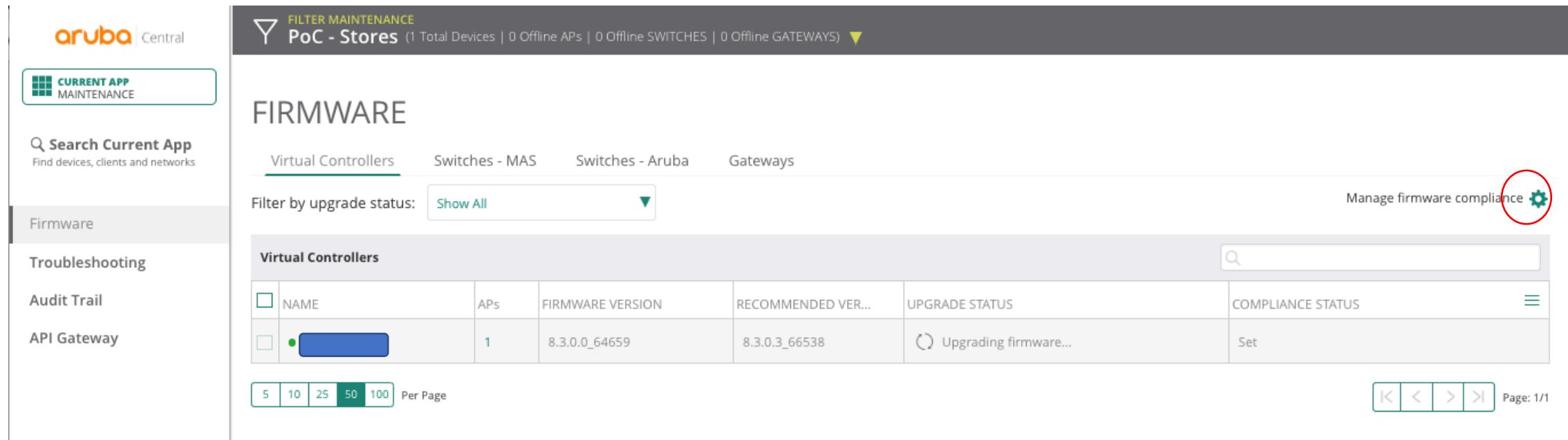
Filter by upgrade status: Show All

Manage firmware compliance 

NAME	APs	FIRMWARE VERSION	RECOMMENDED VER...	UPGRADE STATUS	COMPLIANCE STATUS
● [redacted]	1	8.3.0.0_64659	8.3.0.3_66538	Upgrading firmware...	Set

5 10 25 50 100 Per Page

< < > > Page: 1/1



Detailed description: This screenshot shows the Aruba Central interface for managing firmware. On the left, there's a sidebar with links for Current App Maintenance, Search Current App, Firmware, Troubleshooting, Audit Trail, and API Gateway. The main area is titled 'FIRMWARE' and has tabs for Virtual Controllers, Switches - MAS, Switches - Aruba, and Gateways. Under 'Virtual Controllers', it says '1 Total Devices'. A table lists one device: NAME (redacted), APs (1), FIRMWARE VERSION (8.3.0.0_64659), RECOMMENDED VER... (8.3.0.3_66538), UPGRADE STATUS (Upgrading firmware...), and COMPLIANCE STATUS (Set). At the bottom, there are buttons for page size (5, 10, 25, 50, 100) and navigation (<, <, >, >), along with a 'Page: 1/1' indicator. A red circle highlights the 'Manage firmware compliance' button with a gear icon.

- Check firmware version running

The screenshot shows the Aruba Central web interface under the 'CURRENT APP' tab, specifically the 'MAINTENANCE' section. The main title is 'PoC - Stores' with a note '(1 Total Devices | 0 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)'. Below this, the 'TROUBLESHOOTING' section is active, indicated by a green underline. The 'Access Points' tab is selected. On the left sidebar, 'Firmware' is expanded, with 'Troubleshooting' highlighted.

In the troubleshooting area, the 'AP Name:' dropdown is set to 'Floor1'. The 'Commands' tab is selected, shown by a green dot next to it. The 'Commands' dropdown is set to 'All Category'. Below it, a command history box contains the command 'show version'. At the bottom of this box, there are 'Run' and 'Auto Run' buttons, and a 'FILTER:' input field.

At the very bottom of the page, there are three buttons: 'Clear All', 'Export All', and 'Email'.

The main content area displays the output of the 'show version' command for the AP 'Floor1'. The output includes:

```
==== Troubleshooting session started. ====
=====
Output Time: 2018-11-02 14:08:52 UTC

COMMAND=show version
Aruba Operating System Software,
ArubaOS (MODEL: 303H) Version 8.3.0.3
Website: http://www.arubanetworks.com
(c) Copyright 2018 Hewlett Packard Enterprise Development LP.
Compiled on 2018-08-31 at 23:45:20 UTC (build 66538) by p4build
FIPS Mode :disabled

AP uptime is 24 minutes 12 seconds
Reboot Time and Cause: AP rebooted Fri Nov 2 13:41:10 UTC 2018; System cmd at uptime 0D 0H 11M 9S: Image Upgrade Successful
```

- Set installation type

aruba Central

CURRENT APP WIRELESS MANAGEMENT

Search Current App Find devices, clients and networks

Wireless SSIDs Add and edit wireless networks

Access Points View APs and set device parameters

RF Set Aruba Adaptive Radio Management

FILTER WIRELESS MANAGEMENT
PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS) ▼

Access Points / 20:4c:03:20:22:90

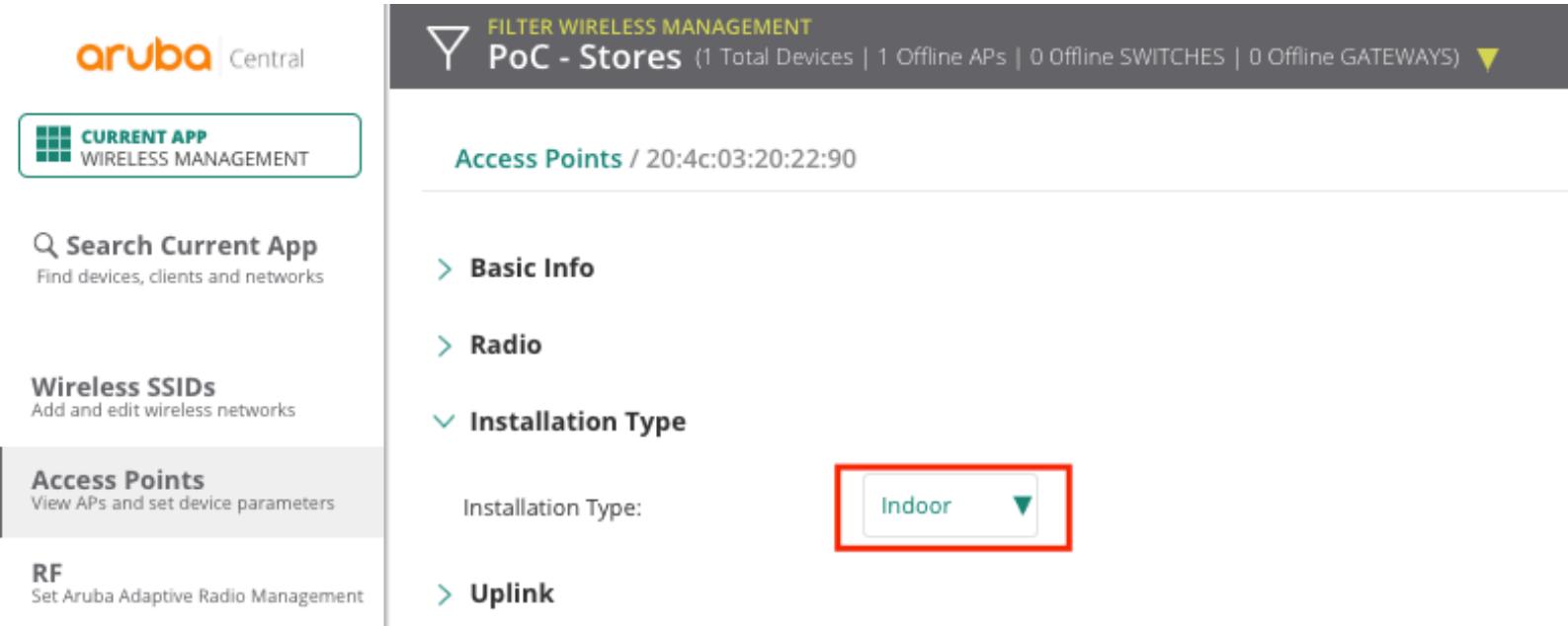
> Basic Info

> Radio

< Installation Type

Installation Type: Indoor ▼

> Uplink



- Enable DPI

The screenshot shows the Aruba Central web interface. At the top left is the Aruba Central logo. Below it is a navigation bar with a "CURRENT APP" button labeled "WIRELESS MANAGEMENT". The main content area has a title "PoC - Stores" with a subtitle "(1 Total Devices | 0 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)". A "FILTER WIRELESS MANAGEMENT" icon is also present. The left sidebar contains links for "Search Current App", "Wireless SSIDs", "Access Points", "RF", "Wireless IDS/IPS", "Security", "VPN", "DHCP", "Services" (which is currently selected), "System", and "Configuration Audit". The right panel is titled "Services" and lists several integration modules: "AirGroup", "Real Time Locating System", "OpenDNS", "CALEA", "Network Integration", and "AppRF™". A dropdown menu for "Deep Packet Inspection" is open, showing options "All" and "DPI".

FILTER WIRELESS MANAGEMENT

PoC - Stores (1 Total Devices | 0 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS) ▼

Services

- > AirGroup
- > Real Time Locating System
- > OpenDNS
- > CALEA
- > Network Integration
- < AppRF™

Deep Packet Inspection:

- All
- DPI

• Configure DHCP for Guest SSID

The screenshot shows the Aruba Central interface for managing wireless networks. The left sidebar lists various management options like Wireless SSIDs, Access Points, RF, Security, VPN, DHCP, Services, and System. The 'CURRENT APP' is set to 'WIRELESS MANAGEMENT'. The main area displays a summary for 'PoC - Stores' with 1 Total Device, 0 Offline APs, 0 Offline SWITCHES, and 0 Offline GATEWAYS. A modal window titled 'EDIT DHCP SCOPES' is open, showing the configuration for a scope named 'DHCP-Guest'. The configuration includes:

- Name:** DHCP-Guest
- Type:** Local
- VLAN:** 20
- Network:** 192.168.10.0
- Netmask:** 255.255.255.0
- Excluded Address:** 192.168.10.0 to 192.168.10.5 and 192.168.10.200 to 192.168.10.255
- Default Router:** 192.168.10.1

At the bottom of the modal are 'Cancel' and 'OK' buttons.

- Create splash page

The screenshot shows the Aruba Central web interface. The top navigation bar displays "aruba Central" and "PoC - Stores". A "FILTER GUEST ACCESS" dropdown is open, showing "(1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)". On the left sidebar, under the "CURRENT APP" section, there is a "GUEST ACCESS" button. Below it are sections for "Search Current App" (with a placeholder "Find devices, clients and networks"), "Overview" (Guest network overview), "Splash Page" (with a sub-note "Create customized splash pages" and a green button), and "Visitors" (Monitor guest sessions). The main content area is titled "Guest Access > Splash Pages". It features a "Splash Pages" table with three columns: NAME, TYPE, and STATE. A single row is listed: "default" (TYPE: Username/Password, Self-Registration, STATE: Shared). To the right of the table are icons for sorting (three horizontal lines) and creating a new entry (a red-bordered plus sign). At the bottom of the table are pagination controls (5, 10, 25, 50 items per page) and navigation arrows (left, right, first, last). The status "Page: 1/1" is also present.

NAME	TYPE	STATE
default	Username/Password, Self-Registration	Shared

5 10 25 50 Per Page

Page: 1/1

• Configure Redirect URL

The screenshot shows the Aruba Central Guest Access configuration interface for a 'New Splash Page'. The 'Configuration' tab is selected. The 'Name' field is set to 'Captive Portal'. The 'Type' dropdown is set to 'Anonymous'. Under 'Authentication Success Behavior', the 'Redirect URL' option is selected and highlighted with a red box, with the URL 'https://www.arubanetworks.com' entered. The 'Session Timeout' is set to 8 hours. The 'Share This Profile' toggle is turned on. At the bottom right, there are 'Cancel' and 'Next' buttons.

aruba Central

CURRENT APP
GUEST ACCESS

FILTER GUEST ACCESS
PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS) ▾

New Splash Page

① Configuration ② Customization ③ Localization

Name: Captive Portal

Type: Anonymous

Allow Internet In Failure

Override Common Name

Guest Key

Authentication Success Behavior:

Return to Original URL

Redirect URL https://www.arubanetworks.com

Session Timeout: 0 day(s) 8 hour(s) 0 minute(s)

Enable MAC Caching

Share This Profile:

Whitelist URL: + Add more URLs

Cancel Next

• Configure Logos, Background and Terms&Conditions

The screenshot shows the Aruba Central interface for configuring a new splash page. The top navigation bar displays 'aruba Central' and 'PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)'. On the left, a sidebar includes 'CURRENT APP' (selected), 'Search Current App', 'Overview', 'Splash Page', and 'Visitors'. The main content area is titled 'New Splash Page' and shows the 'Customization' step (Step 2). The customization options include:

- Background color: #000000
- Button color: #ff9900
- Header fill color: (empty input)
- Page font color: #bbbbbb
- Logo: A file input field with 'Browse...' and 'logo.png' selected, highlighted with a red box.
- Background Image: A file input field with 'Browse...' and 'background.png' selected, highlighted with a red box.

Below these, under 'Terms and Conditions Settings', there are three sections:

- Terms & Conditions: A text area containing the Spanish text: 'El CLIENTE acepta acceder y utilizar Internet WiFi en las tiendas únicamente para fines legales.' This section is also highlighted with a red box.
- Display 'I Accept' Checkbox: A dropdown menu set to 'Yes, display checkbox'.
- Display Option For Terms & Conditions: A dropdown menu set to 'Overlay'.

At the bottom right are 'Cancel', 'Back', and 'Next' buttons.

• Localization

The screenshot shows the Aruba Central interface for managing guest access. The top navigation bar displays "aruba Central" and "PoC - Stores" with a device count of 1 Total Devices. Below the navigation, a breadcrumb navigation bar shows three steps: Configuration (1), Customization (2), and Localization (3). A callout box highlights the "Localization" step.

Optional fields to localize (translate) guest portal's labels and text

Login Section

Login button title:	Acceder
Network login title:	PoC Stores
Login page title:	
Access denied page title:	
Logged in title:	
Username label:	
Username placeholder:	
Password placeholder:	
Email address placeholder:	
Register button title:	
Network login button title:	
Terms and Conditions title:	Terminos y condiciones
'I accept the Terms and Conditions' text:	Yo acepto los Terminos y Condiciones
Welcome Text:	Bienvenido al servicio gratuito de Wifi en PoC Stores

A yellow rounded rectangle highlights the "Terms and Conditions title" field and its associated text input field.

- Test Captive Portal



• Create Guest SSID

The screenshot shows the Aruba Central interface for managing wireless networks. The top navigation bar includes a search bar and tabs for 'FILTER WIRELESS MANAGEMENT' and 'PoC - Stores' (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS). The main area is titled 'Networks'.

Current App: WIRELESS MANAGEMENT

Search Current App: Find devices, clients and networks

Wireless SSIDs: Add and edit wireless networks

Access Points: View APs and set device parameters

RF: Set Aruba Adaptive Radio Management

Wireless IDS/IPS: Manage intrusion detection and prevention

Security: Set advanced security parameters

VPN: Manage controller VPN connections

Networks Table:

NAME	TYPE	SECURITY	ACCESS TYPE
wired-SetMeUp	guest		network-based
default_wired_port_profile	employee		unrestricted

A red box highlights the green '+' button at the bottom left of the table, indicating where to click to add a new network.

• Guest SSID – Limit Bandwidth

aruba Central

CURRENT APP WIRELESS MANAGEMENT

Search Current App Find devices, clients and networks

Wireless SSIDs Add and edit wireless networks

Access Points View APs and set device parameters

RF Set Aruba Adaptive Radio Management

Wireless IDS/IPS Manage intrusion detection and prevention

Security Set advanced security parameters

VPN Manage controller VPN connections

DHCP Manage DHCP scopes

Services Enable additional Central services

System Manage advanced system settings

Configuration Audit Review configuration status

FILTER WIRELESS MANAGEMENT
PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)

Name (SSID): Store_Free_WiFi

ESSID: Store_Free_WiFi

Type: Wireless Wired

Primary Usage: Employee Guest Voice

Broadcast/Multicast

Broadcast Filtering: ARP

DTIM Interval: 1 beacon

Multicast Transmission Optimization:

Dynamic Multicast Optimization:

Dynamic Multicast Optimization Channel Utilization: 90 %

Threshold:

+ Transmit Rates (Legacy Only)

+ Zone

- Bandwidth Limits

Airtime

Each Radio

Downstream: 1000 kbps Per User

Upstream: 500 kbps Per User

The screenshot shows the Aruba Central interface for managing wireless networks. On the left, a sidebar lists various management options like Access Points, RF, and Security. The main panel is titled 'PoC - Stores' and shows a single device named 'Store_Free_WiFi'. Configuration tabs include 'Broadcast/Multicast' (with ARP selected for broadcast filtering), 'Transmit Rates (Legacy Only)', and 'Zone'. The 'Bandwidth Limits' section is highlighted with an orange border and shows downstream and upstream bandwidth caps of 1000 and 500 kbps respectively, both set to 'Per User'.

- Guest SSID – Set VLAN and DHCP Server

The screenshot shows the Aruba Central interface for managing a wireless SSID. On the left, there's a sidebar with options like 'Search Current App', 'Wireless SSIDs', 'Access Points', and 'RF'. The main area has tabs for 'General', 'VLANs' (which is selected), 'Security', and 'Access'. Under 'VLANs', there are sections for 'Client IP Assignment' (set to 'Virtual Controller Assigned'), 'Client VLAN Assignment' (set to 'Custom' with 'DHCP-Guest (vlan:20)' selected), and 'VLAN ID'. A yellow box highlights the 'Custom' dropdown for Client VLAN Assignment.

Search Current App
Find devices, clients and networks

Wireless SSIDs
Add and edit wireless networks

Access Points
View APs and set device parameters

RF
Set Aruba Adaptive Radio Management

General VLANs Security Access

Client IP Assignment

Virtual Controller Assigned Network Assigned

Client VLAN Assignment

Default Custom

VLAN ID

DHCP-Guest (vlan:20) ▼

- Guest SSID – Set Captive Portal

aruba Central

CURRENT APP WIRELESS MANAGEMENT

Search Current App

Find devices, clients and networks

Wireless SSIDs

Add and edit wireless networks

Access Points

View APs and set device parameters

RF

Set Aruba Adaptive Radio Management

Wireless IDS/IPS

Manage intrusion detection and prevention

Security

Set advanced security parameters

VPN

Manage controller VPN connections

FILTER WIRELESS MANAGEMENT
PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)

Create a New Network

1 General 2 VLANs 3 Security 4 Access

Splash Page Type:

Cloud Guest

Captive Portal

Guest Captive Portal Profile:

Encryption:

Disable if uplink type is

Cancel Back Next

The screenshot shows the Aruba Central web interface for creating a new network. The top navigation bar indicates the current app is 'WIRELESS MANAGEMENT' and the location is 'PoC - Stores'. The main area is titled 'Create a New Network' and is divided into four steps: General, VLANs, Security, and Access. Step 3 (Security) is currently active, indicated by a green arrow. In the 'Splash Page' section, there is a dropdown menu labeled 'Splash Page Type' with two options: 'Cloud Guest' and 'Captive Portal'. The 'Captive Portal' option is highlighted with a red box. Below the dropdown, there is a toggle switch for 'Encryption' and a note about disabling the network if the uplink type changes. At the bottom right, there are 'Cancel', 'Back', and 'Next' buttons.

- Guest SSID – Deny access to Employee Network

aruba Central

CURRENT APP WIRELESS MANAGEMENT

Search Current App Find devices, clients and networks

Wireless SSIDs Add and edit wireless networks

Access Points View APs and set device parameters

RF Set Aruba Adaptive Radio Management

Wireless IDS/IPS Manage intrusion detection and prevention

Security Set advanced security parameters

VPN Manage controller VPN connections

FILTER WIRELESS MANAGEMENT PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS) ▼

Create a New Network

1 General 2 VLANs 3 Security 4 Access

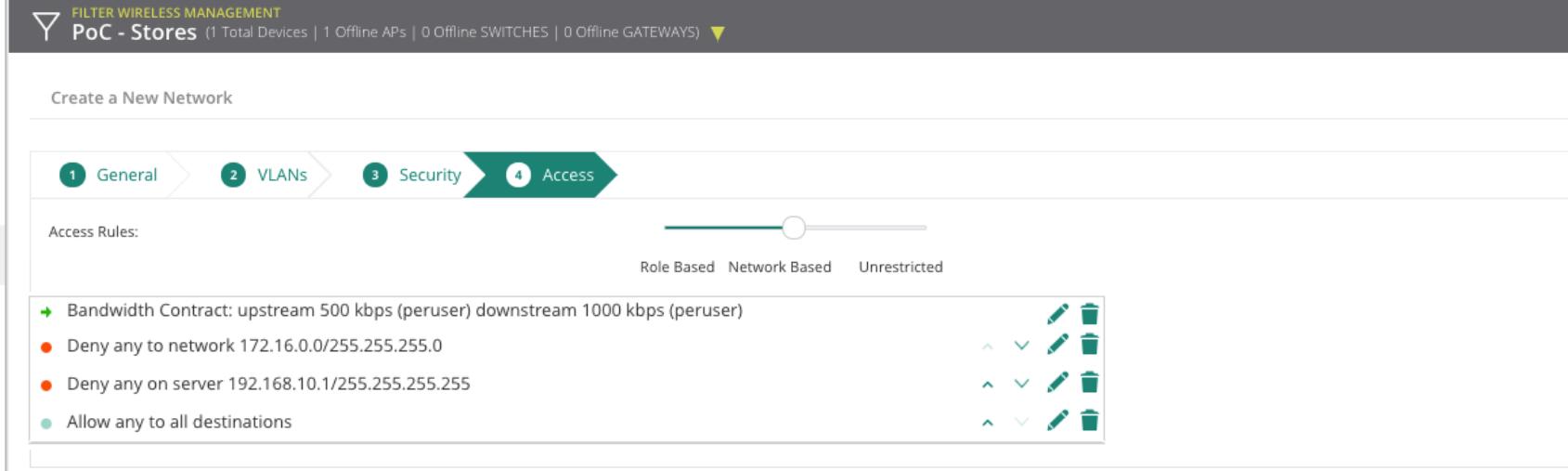
Access Rules:

Role Based Network Based Unrestricted

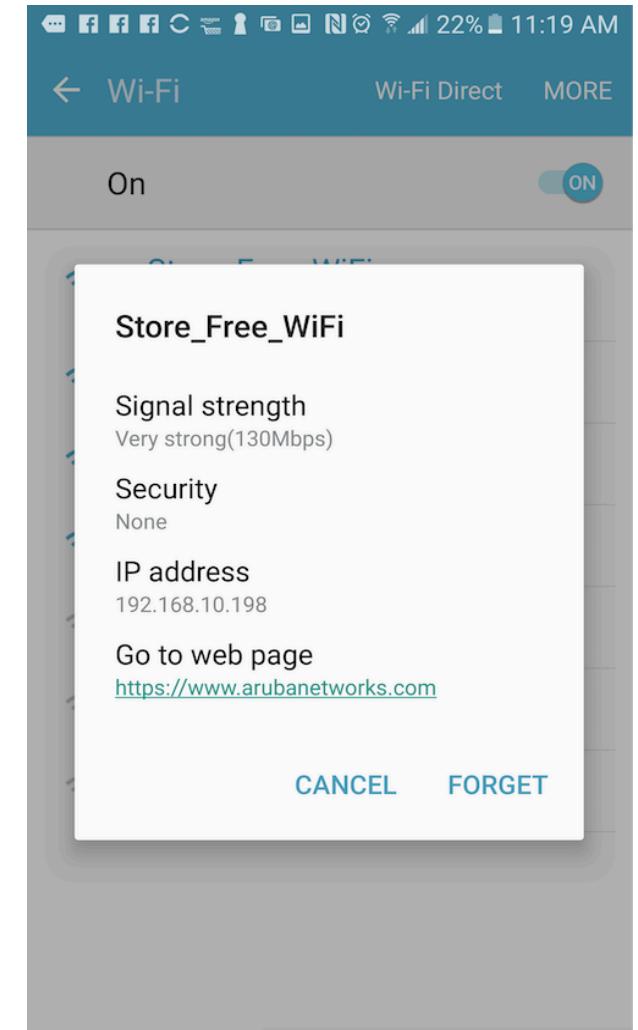
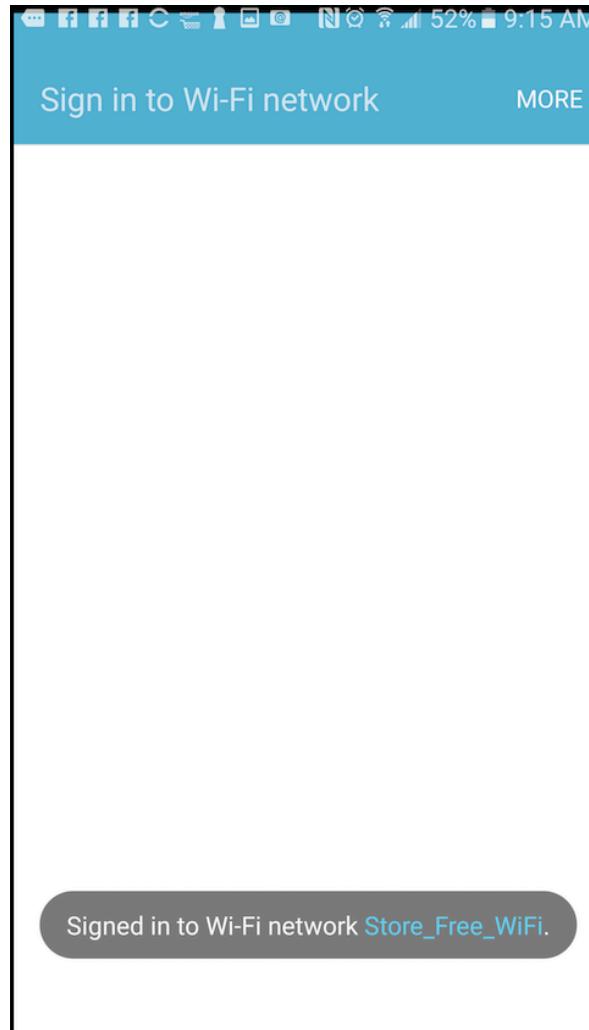
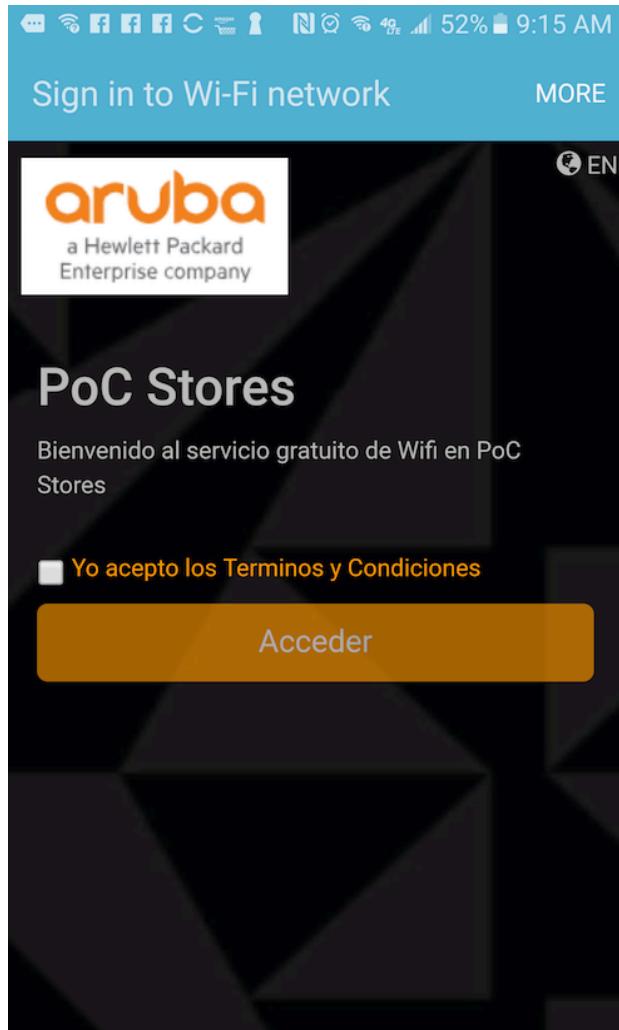
Bandwidth Contract: upstream 500 kbps (peruser) downstream 1000 kbps (peruser)

- Deny any to network 172.16.0.0/255.255.255.0
- Deny any on server 192.168.10.1/255.255.255.255
- Allow any to all destinations

Cancel Back Finish



- Testing service using Android - smartphone



- Guest SSID – Device connected

aruba Central

CURRENT APP
GUEST ACCESS

Search Current App
Find devices, clients and networks

Overview
Guest network overview

Splash Page
Create customized splash pages

Visitors
Monitor guest sessions

FILTER GUEST ACCESS
PoC - Stores (1 Total Devices | 0 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS) ▾

Guest Access > Visitors

Show visitors for network: Store_Free_WiFi ▾

Session

Session List

VISITORS	LOGIN TYPE	BROWSER	MAC ADDRESS	DEVICE TYPE	OS NAME	LOGIN TIME	SESSION TIME (SECS)
2C-0 [REDACTED]	anonymous	Chrome	2C-0 [REDACTED]	Android	Linux	11/02/18 09:11	421

5 10 25 50 Per Page

< < > >| Page: 1/1



a Hewlett Packard
Enterprise company

Setup Facebook Wi-Fi

- Create Facebook Page

Buscar Adolfo | Inicio | Crear | 1 2 | ? ▾

Crear una página

Conéctate con la comunidad de personas de Facebook en todo el mundo y haz conocer tu negocio o causa. Para empezar, elige una categoría para la página.

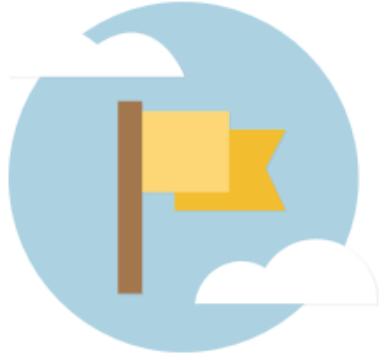
Negocio o marca

Conéctate con tus clientes, incrementa tu público y muestra tus productos con una página del negocio gratuita.

Nombre de la página

Categoría

 (?)



Comunidad o figura pública

Conéctate y comparte contenido con personas de tu comunidad, organización, equipo, grupo o club.

Al crear una página en Facebook, se aplican las [Pages, Groups and Events Policies](#).

Continuar Empezar

- Page created

The screenshot shows the Facebook 'Create Page' interface. At the top, the page title 'Demo-WifiLogin' is displayed, along with a profile picture placeholder and a search bar. The navigation bar includes links for 'Página', 'Bandeja de e...', 'Notificaciones', 'Estadísticas', 'Herramientas...', 'Administrar a...', 'Configuración', and 'Ayuda'. A user profile for 'Adolfo' is shown with a notification count of '3'.

The main content area features a dark background with various social media icons. On the left, a sidebar lists page management options: 'Crear nombre de usuario de la página' (highlighted), 'Inicio', 'Publicaciones', 'Opiniones', 'Videos', 'Fotos', 'Eventos', 'Información' (highlighted), 'Comunidad', 'Empleos', and 'Grupos'. The 'Información' section is expanded, showing 'GENERAL' details: 'Categoría' (Ciencia, tecnología e ingeniería), 'Nombre' (Demo-WifiLogin), and 'Nombre de usuario' (highlighted). Below this is the 'INFORMACIÓN DEL NEGOCIO' section, which includes a link to 'Editar Fecha de inicio'. On the right, there's a 'Historia' section with a placeholder for a timeline image, and a blue button labeled '+ Agregar un botón'.

<https://www.facebook.com/Demo-WifiLogin-303563190479308>

- Enter a location

Demo-WifiLogin

Página Bandeja de ... Notificaciones

Agregar una foto del perfil

Demo-WifiLogin
Crear nombre de usuario de la página

Me gusta Sígueme

Información

GENERAL

Categoría Cie...
Nombre Dem...
Nombre de usu...

INFORMACIÓN D...

Ubicación

Editar Fecha d...

Editar tipos d...

Editar Misión d...

Promocionar

Adolfo | Inicio | Crear | Ayuda | Ayuda

3

Editor de imágenes

Ubicación

General Contacto Ubicación Horario More

UBICACIÓN

Dirección Tiene dirección postal
110111 Bogotá Código postal

ARRASTRA EL MAPA PARA RECORTARLO

Los clientes visitan mi negocio en la dirección especificada (si desmarcas esta casilla, se ocultarán la dirección y las visitas)

Ubicación Se encuentra dentro de otro lugar
Agrega detalles (por ejemplo, dentro de la estación de trenes)

Estacionamiento Calle Valet
 Lado a lado
 Lado a lado

- Edit Captive Portal

The screenshot shows the Aruba Central web interface. On the left, there's a sidebar with navigation links: Overview, Splash Page (which is selected and highlighted in grey), and Visitors. The main content area has a header "FILTER GUEST ACCESS PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)". Below this is a sub-header "Guest Access > Splash Pages". The central part of the screen displays a table titled "Splash Pages" with three rows of data. The columns are NAME, TYPE, and STATE. The first row (highlighted in orange) contains "Captive Portal", "Anonymous", and "Shared". The second row contains "Captive Portal Home" and "Username/Password, Self-Registration" under TYPE, and "Unshared" under STATE. The third row contains "default" and "Username/Password, Self-Registration" under TYPE, and "Shared" under STATE. To the right of the table are icons for settings, view, edit, and delete. At the bottom of the table are buttons for "5", "10", "25", and "50" items per page, and a "Per Page" dropdown. At the very bottom right are navigation arrows and a "Page: 1/1" indicator.

NAME	TYPE	STATE
Captive Portal	Anonymous	Shared
Captive Portal Home	Username/Password, Self-Registration	Unshared
default	Username/Password, Self-Registration	Shared

5 10 25 50 Per Page

Page: 1/1

- Enable Facebook WiFi

aruba Central

CURRENT APP
GUEST ACCESS

Search Current App
Find devices, clients and networks

Overview
Guest network overview

Splash Page
Create customized splash pages

Visitors
Monitor guest sessions

FILTER GUEST ACCESS
PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS) ▾

Splash Page > Captive Portal

Configuration

Name: Captive Portal

Type: Anonymous Authenticated Facebook Wi-Fi

Facebook WiFi configuration: Configure now...

Allow Internet In Failure:

Override Common Name:

Share This Profile:

Simultaneous Login Limit: No Limit ▾

Whitelist URL: Add more URLs

Need Help? ▾ Feedback ▾

Cancel Save Settings

The screenshot shows the Aruba Central web interface. On the left, there's a sidebar with links for 'CURRENT APP' (highlighted), 'OVERVIEW', 'SPLASH PAGE', and 'VISITORS'. The main area is titled 'PoC - Stores' under 'FILTER GUEST ACCESS'. It shows '1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS'. Below this, it says 'Splash Page > Captive Portal'. A section titled 'Configuration' is open, showing a 'Name' field with 'Captive Portal' and a 'Type' field with 'Facebook Wi-Fi' selected (indicated by a red box). There are several configuration options below: 'Allow Internet In Failure' (off), 'Override Common Name' (off), 'Share This Profile' (on), 'Simultaneous Login Limit' set to 'No Limit', and a 'Whitelist URL' input field with a trash bin and plus sign icon. At the bottom, there are 'Need Help?' and 'Feedback' links, and buttons for 'Cancel' and 'Save Settings'.

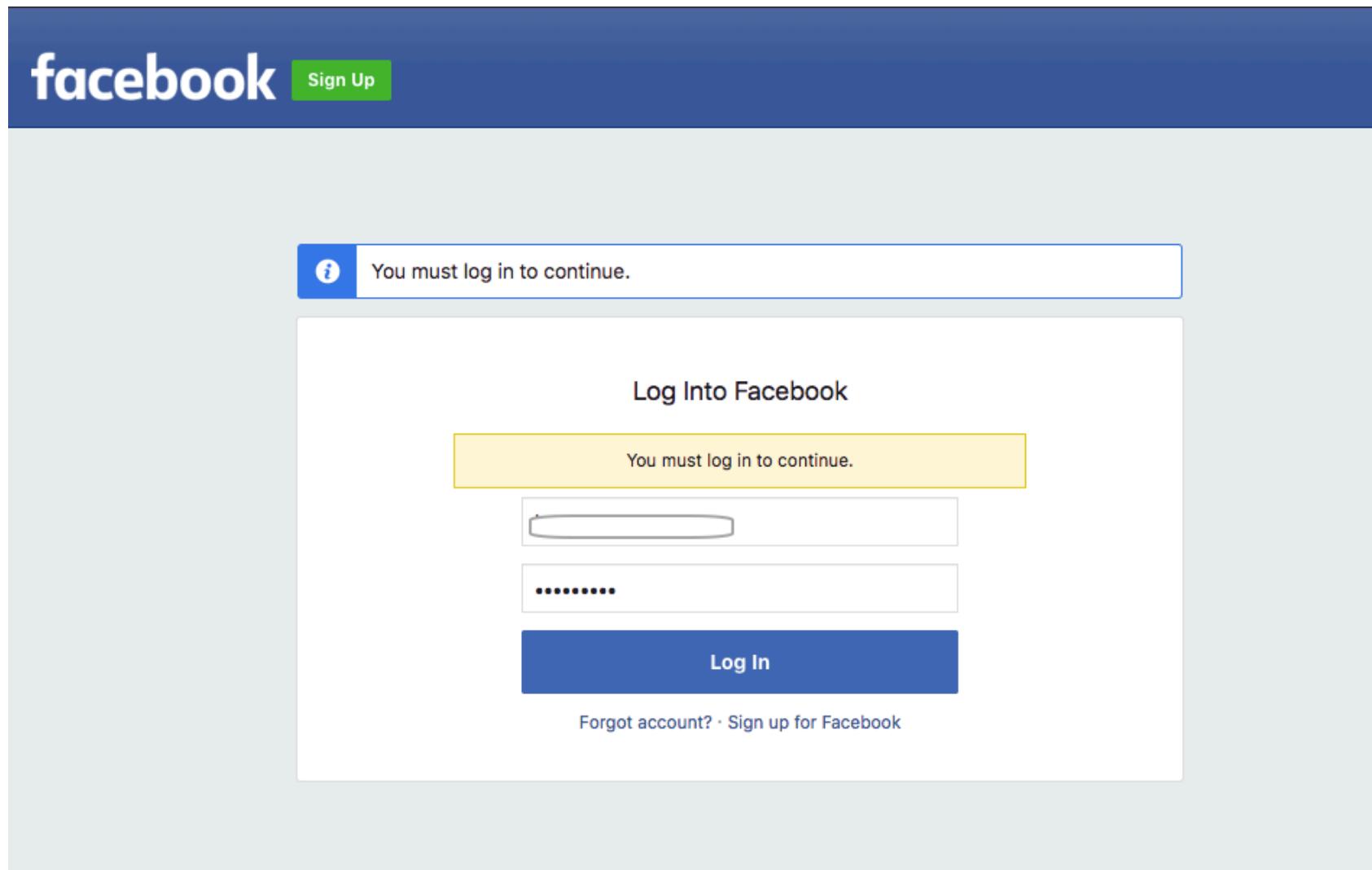
- Edit Facebook WiFi configuration

The screenshot shows the Aruba Central web interface for managing guest access. The top navigation bar displays "aruba Central" and the location "PoC - Stores". A sidebar on the left lists "CURRENT APP GUEST ACCESS", "Search Current App", "Overview", "Splash Page", and "Visitors". The main content area is titled "Splash Page > Captive Portal" and contains a "Configuration" section. The configuration details are as follows:

- Name:** Captive Portal
- Type:** Facebook Wi-Fi (selected)
- Facebook WiFi configuration:** [Edit now...](#) (button highlighted with a red box)
- Allow Internet In Failure:** Off (switch off)
- Override Common Name:** Off (switch off)
- Share This Profile:** On (switch on)
- Simultaneous Login Limit:** No Limit
- Whitelist URL:** (empty input field) + Add more URLs

At the bottom of the page are links for "Need Help?" and "Feedback".

- Enter facebook credentials



- Select Facebook page

Configuración de wifi de Facebook
facebookwifi1541162425256921

Página de Facebook

Para usar wifi de Facebook, debes ser administrador de una página de negocio local que tenga asociada una ubicación válida.

[Demo-WifiLogin ▾](#)

Modo de omisión

Tus clientes pueden omitir el registro. Para ello, pueden hacer clic en un enlace que lo permita o ingresar un código wifi que les proporciones.

Enlace para omitir registro [?]
 Requerir código wifi [?]

Duración de la sesión

Selecciona por cuánto tiempo tus clientes tendrán acceso a wifi después de que registren una visita.

[Tres horas ▾](#)

Condiciones del servicio

Opcional: agrega tus propias Condiciones del servicio [?]

[Ir al servicio de ayuda](#) [Guardar configuración](#)

Configuración de wifi de Facebook
facebookwifi1541162425256921

Se guardó tu configuración. Puedes cerrar esta ventana.

Página de Facebook

Para usar wifi de Facebook, debes ser administrador de una página de negocio local que tenga asociada una ubicación válida.

[Demo-WifiLogin ▾](#)

Modo de omisión

Tus clientes pueden omitir el registro. Para ello, pueden hacer clic en un enlace que lo permita o ingresar un código wifi que les proporciones.

Enlace para omitir registro [?]
 Requerir código wifi [?]

Duración de la sesión

Selecciona por cuánto tiempo tus clientes tendrán acceso a wifi después de que registren una visita.

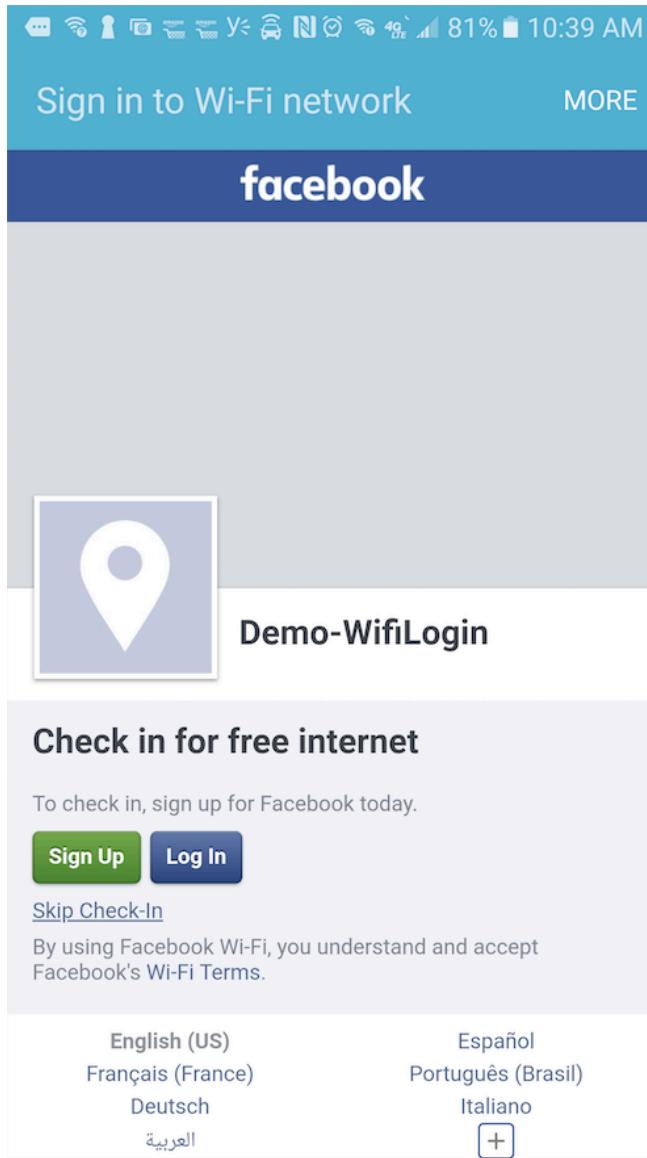
[Tres horas ▾](#)

Condiciones del servicio

Opcional: agrega tus propias Condiciones del servicio [?]

[Ir al servicio de ayuda](#) [Guardar configuración](#)

- Facebook Wi-Fi login enabled





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Setup Social Login Facebook

- Copy the URL mapped in the Splash page

aruba Central

CURRENT APP GUEST ACCESS

Search Current App
Find devices, clients and networks

Overview
Guest network overview

Splash Page
Create customized splash pages

Visitors
Monitor guest sessions

FILTER GUEST ACCESS
PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)

Guest Access > Splash Pages

Splash Pages

NAME	TYPE	STATE
Captive Portal	Facebook WiFi	Shared
Captive Portal Home	Username/Password, Self-Registration	Unshared
default	Username/Password, Self-Registration	Shared

5 10 25 50 Per Page

[eye] **[edit]** **[trash]**

[<] [<] [>] [>]

Page: 1/1

← → C <https://nae1.cloudguest.central.arubanetworks.com/portal/scope.cust-5003195/default/login>

Apps Aruba Networks Websense Web Fil... Directory HPE Atmosphere 2017 ... Aruba Central - A... https://community... Aruba SE Dashboard SE Self-paced Tra...



Iniciar sesión

Nombre de usuario

Password

Acepto los términos y condiciones

- Click on “Create new App”

The screenshot shows the top navigation bar of the Facebook for Developers website. It includes links for 'Documentos', 'Herramientas', 'Ayuda', and 'Mis apps'. A search bar is also present. Below the main content area, there is a message: 'En este momento no tienes apps integradas con Facebook.' To the right of this message is a green button with the text 'Crear una nueva app', which is highlighted with a yellow border. At the bottom of the page, there is a section titled 'IDIOMAS' with links to various language versions: Español, English (US), Français (France), Português (Brasil), Italiano, Deutsch, العربية, 中文(简体), 日本語, and an ellipsis (...).

- Name the app

Crear un nuevo identificador de la app

Empieza a integrar Facebook en tu app o sitio web

Nombre para mostrar

Correo electrónico de contacto

Al continuar, aceptas las [Políticas de la plataforma de Facebook](#)

[Cancelar](#)

[Crear identificador de la app](#)

- Click on Facebook Login - Setup

Agregar un producto

Panel Configuración Roles Alertas Revisión de la app

PRODUCTOS +

 Account Kit Creación de cuenta más simple sin contraseñas. Leer documentos Configurar	 Inicio de sesión con Facebook El producto de inicio de sesión social número uno del mundo. Leer documentos Configurar	 Audience Network Monetiza tu sitio web o app para celulares con anuncios nativos de tres millones de anunciantes de Facebook. Leer documentos Configurar
 Analytics Comprende cómo la gente interactúa con tu negocio en las apps, los dispositivos, las plataformas y los sitios web. Leer documentos Configurar	 Messenger Personaliza el modo en que interactúas con las personas en Messenger. Leer documentos Configurar	 Webhooks Suscríbete para recibir en tiempo real actualizaciones y notificaciones sobre cambios sin tener que llamar a la API. Leer documentos Configurar

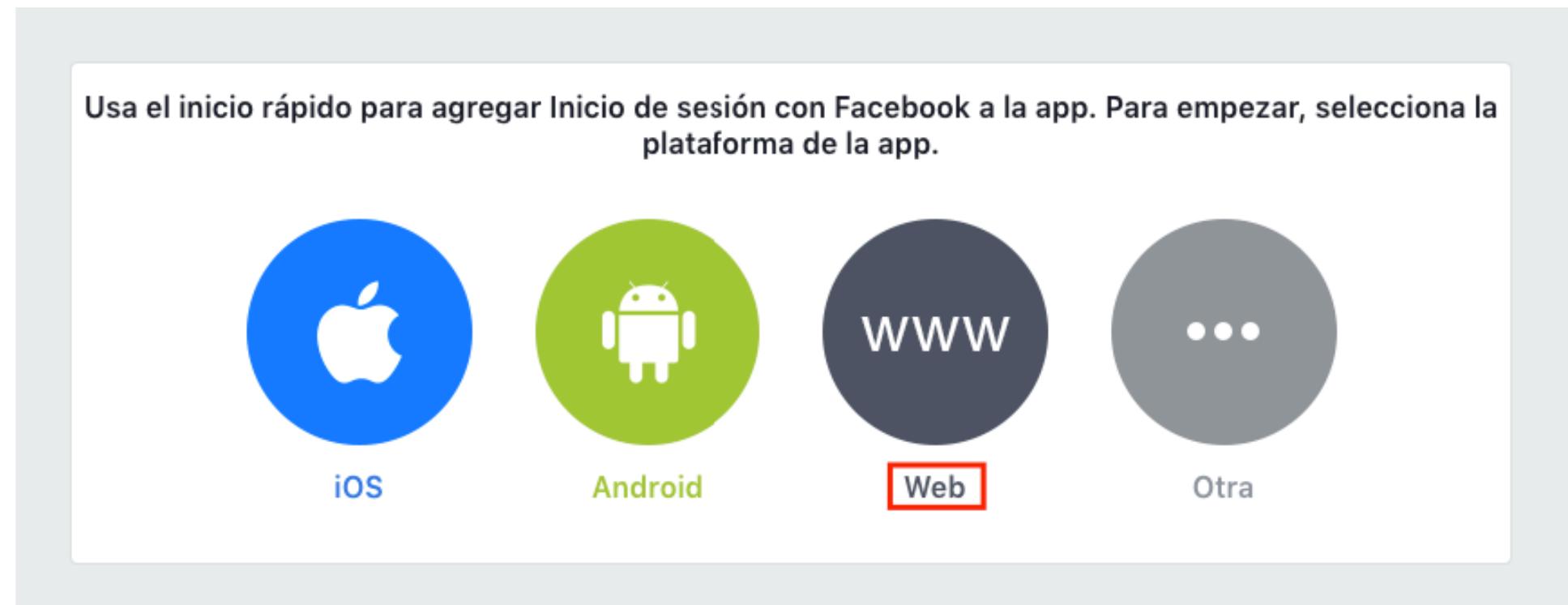
- Click on web

- Panel
- Configuración
- Roles
- Alertas
- Revisión de la app

PRODUCTOS (+)

- Inicio de sesión con Facebook
- Configuración

Inicio rápido



- Enter URL -- Aruba Central

The screenshot shows the Aruba Central web interface. On the left, there is a sidebar with the following menu items:

- Panel
- Configuración
- Roles
- Alertas
- Revisión de la app
- PRODUCTOS (+)
 - Inicio de sesión con Facebook
 - Configuración
 - Iniciar rápido
- Registro de actividad

The main content area has tabs for iOS, Android, Web, and Otra. The Web tab is selected, indicated by a blue underline. Below the tabs, there is a section titled "1. Infórmanos sobre tu sitio web". It contains the instruction "Proporcionáanos la URL de tu sitio web." and a text input field labeled "URL del sitio web" containing the value "https://nae1.cloudguest.central.arubanetworks.com". A yellow box highlights this input field. In the bottom right corner of the main content area, there is a "Save" button.

- Click on Settings

The screenshot shows a user interface with a sidebar on the left and a main content area on the right.

Sidebar (Left):

- Panel
- Configuración
- Roles
- Alertas
- Revisión de la app
- PRODUCTOS (+)
 - Inicio de sesión con Facebook
 - Configuración (highlighted)
 - Inicio rápido
- Registro de actividad

Main Content Area (Right):

Aprovecha al máximo la integración con la plataforma de Facebook.

Agrega Plugins sociales para que a las personas les resulte más fácil compartir historias o indicar que les gustan, o bien enviarlas a sus amigos en Facebook desde tu sitio web o app.

Callout Box (Top Right):

- Plugins sociales**
- Mira el contenido que tus amigos de Facebook compartieron, comentaron o indicaron que les gusta en internet.
- [Leer documentos](#)

Buttons (Bottom Right):

- Atrás

- Check OAuth client is set to “yes” and paste the URL -- append “/oauth/reply”

Social Login ▾ IDENTIFICADOR DE LA APP: 2 NO Estado: en desarrollo Ver

Panel Configuración Roles Alertas Revisión de la app

PRODUCTOS +
Inicio de sesión con Facebook
Configuración Inicio rápido

Registro de actividad

Configuración del cliente de OAuth

Sí No Acceso del cliente de OAuth
Activa el flujo estándar de token de cliente de OAuth. Protege tu app y evita un uso incorrecto de esta especificando qué URI de redireccionamiento del token quieras permitir mediante las siguientes opciones. Desactiva esta opción globalmente si no la usas. [?]

Sí No Acceso de OAuth web
Activa el acceso del cliente de OAuth basado en web. [?]

Sí No Aplicar HTTPS
Aplica el uso de HTTPS para los URI de redireccionamiento y el SDK de JavaScript. Muy recomendado. [?]

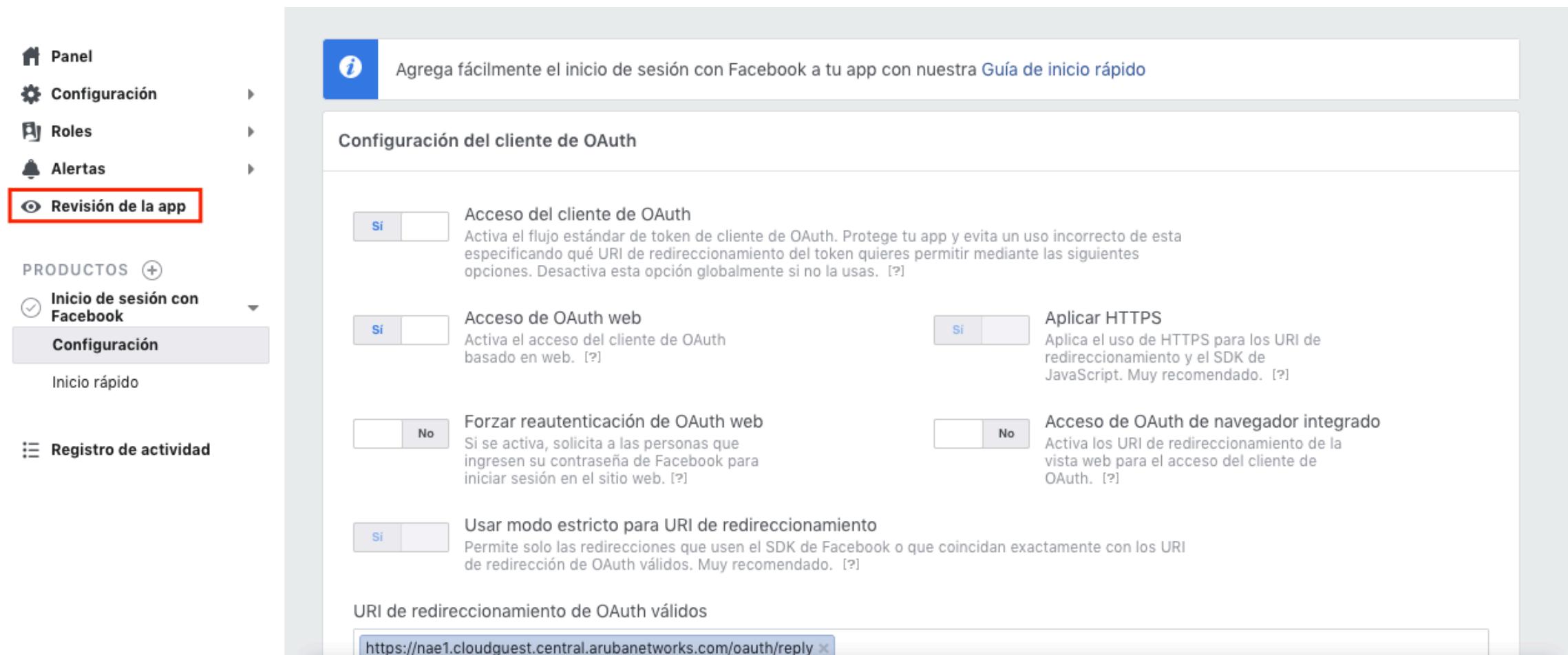
No Forzar reautenticación de OAuth web
Si se activa, solicita a las personas que ingresen su contraseña de Facebook para iniciar sesión en el sitio web. [?]

No Acceso de OAuth de navegador integrado
Activa los URI de redireccionamiento de la vista web para el acceso del cliente de OAuth. [?]

Sí No Usar modo estricto para URI de redireccionamiento
Permite solo las redirecciones que usen el SDK de Facebook o que coincidan exactamente con los URI de redirección de OAuth válidos. Muy recomendado. [?]

URI de redireccionamiento de OAuth válidos
`https://nae1.cloudguest.central.arubanetworks.com/oauth/reply`

- Click on “app review”



The screenshot shows the Aruba Networks interface for managing applications. On the left, there's a sidebar with navigation links: Panel, Configuración, Roles, Alertas, and Revisión de la app, which is highlighted with a red border. Below that is a section for PRODUCTOS with a plus sign, followed by Inicio de sesión con Facebook (with a checked checkbox) and Configuración. Under Configuración, there are links for Inicio rápido and Registro de actividad.

The main content area is titled "Configuración del cliente de OAuth". It contains several configuration options with "Sí" (Yes) and "No" buttons:

- Acceso del cliente de OAuth**: Describes activating the standard OAuth client token flow to protect the app. The "Sí" button is selected.
- Acceso de OAuth web**: Describes activating web-based OAuth client access. The "Sí" button is selected.
- Aplicar HTTPS**: Describes applying HTTPS to redirection URLs and JavaScript SDKs. The "Sí" button is selected.
- Forzar reautenticación de OAuth web**: Describes requiring users to reauthenticate on the website when they log in. The "No" button is selected.
- Acceso de OAuth de navegador integrado**: Describes enabling integrated browser OAuth redirection URLs. The "No" button is selected.
- Usar modo estricto para URI de redireccionamiento**: Describes permitting only strict redirection URIs. The "Sí" button is selected.

At the bottom, there's a field labeled "URI de redireccionamiento de OAuth válidos" containing the URL: `https://nae1.cloudguest.central.arubanetworks.com/oauth/reply`.

- Public the Facebook App

The screenshot shows the Facebook App Review interface. At the top, there's a header with "Social Login" and "IDENTIFICADOR DE LA APP: 29" followed by a blue redacted box. To the right is a switch labeled "NO" and "Estado: en desarrollo". On the left, a sidebar menu includes "Panel", "Configuración", "Roles", "Alertas", "Revisión de la app" (which is selected and highlighted in blue), "PRODUCTOS" (with a plus sign), "Inicio de sesión con Facebook" (with a checked checkbox), and "Registro de actividad". The main content area has a large button labeled "Enviar elementos para revisión" with the text "Algunas integraciones de Facebook requieren que tu aplicación se ponga a disposición del público antes de publicarla. Si deseas publicar la aplicación, envíala para su revisión, consulta nuestra Política de integración para obtener más información sobre la revisión." Below this is another button with the text "¿Quieres que Social Login sea la forma principal de iniciar sesión en tu sitio?". A modal dialog box titled "¿Hacer pública la app?" contains the text "¿Seguro que quieres publicar la app? Recuerda que debes enviar la app para su revisión antes de publicarla si usa permisos o funciones que requieren este proceso. Más información". It also asks "Selección una categoría antes de publicar la aplicación" and shows a dropdown menu with "Utilidad y productividad" selected. The "Confirmar" button at the bottom right of the dialog is highlighted with a red box. At the bottom of the main content area, it says "Tu app está en desarrollo y no está disponible para el público." with a note that the "Sí" button is also highlighted with a red box.

- Copy App ID and App Secret

The screenshot shows the 'Configuración' section of a web application, specifically the 'Básica' tab. On the left sidebar, the 'Básica' tab is selected and highlighted with a red box. The main form contains several input fields:

- Identificador de la app:** A field containing the value '2' followed by a blue redacted area.
- Clave secreta de la app:** A field containing a series of dots followed by a blue redacted area.
- Nombre para mostrar:** A field containing the value 'Social Login'.
- Espacio de nombres:** An empty field.
- Dominios de la app:** An empty field.
- Correo electrónico de contacto:** An empty field.

A 'Mostrar' button is located to the right of the App Secret field.

- Create a new splash page

The screenshot shows the Aruba Central interface for managing guest access. The left sidebar includes links for Overview, Current App (highlighted), Splash Page, and Visitors. The main content area displays a list of existing splash pages: "Captive Portal" (Facebook WiFi, Shared), "Captive Portal Home" (Username/Password, Self-Registration, Unshared), and "default" (Username/Password, Self-Registration, Shared). A red box highlights the "+" button in the top right corner of the list table, indicating where to click to create a new splash page. The top navigation bar shows the network name "PoC - Stores" and device counts.

NAME	TYPE	STATE
Captive Portal	Facebook WiFi	Shared
Captive Portal Home	Username/Password, Self-Registration	Unshared
default	Username/Password, Self-Registration	Shared

Per Page: 5 10 25 50 Page: 1/1

- Enter App ID and App Secret

The screenshot shows the Aruba Central interface for managing guest access. On the left, there's a sidebar with links for Overview, Search Current App, Splash Page, and Visitors. The main area is titled "PoC - Stores" and shows "1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS". The "New Splash Page" configuration screen is displayed, divided into three steps: Configuration (selected), Customization, and Localization. The "Configuration" step includes fields for Name (set to "Social Login"), Type (set to "Anonymous" on a slider), and options for Username/Password, Social Login (Facebook), Facebook Wi-Fi, and Twitter/Google+. At the bottom, two fields are highlighted with a red box: "Client ID" (value: 29...) and "Client Secret" (value: 7f...).

aruba Central

CURRENT APP
GUEST ACCESS

Search Current App
Find devices, clients and networks

Overview
Guest network overview

Splash Page
Create customized splash pages

Visitors
Monitor guest sessions

FILTER GUEST ACCESS
PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)

New Splash Page

1 Configuration 2 Customization 3 Localization

Name: Social Login

Type: Anonymous Authenticated Facebook Wi-Fi

Username/Password:

Social Login:

Facebook:

Twitter:

Google+:

Client ID: 29...

Client Secret: 7f...

- New splash page ready

aruba Central

FILTER GUEST ACCESS
PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS) ▼

CURRENT APP
GUEST ACCESS

SEARCH Current App
Find devices, clients and networks

Overview
Guest network overview

Splash Page
Create customized splash pages

Visitors
Monitor guest sessions

Guest Access > Splash Pages

Splash Pages

NAME	TYPE	STATE
Captive Portal	Facebook WiFi	Shared
Captive Portal Home	Username/Password, Self-Registration	Unshared
default	Username/Password, Self-Registration	Shared
Social Login	Social Login	Shared

5 10 25 50 Per Page

◀ ▶ ⌂ ⌃ Page: 1/1

NAME	TYPE	STATE
Captive Portal	Facebook WiFi	Shared
Captive Portal Home	Username/Password, Self-Registration	Unshared
default	Username/Password, Self-Registration	Shared
Social Login	Social Login	Shared

- Edit the Wireless SSID

The screenshot shows the Aruba Central interface for Wireless Management. The top navigation bar includes the Aruba logo, the current app name 'PoC - Stores', and a filter section. The main content area is titled 'Networks' and displays a table of wireless networks. The table has columns for NAME, TYPE, SECURITY, and ACCESS TYPE. The first row, 'Store_Free_WiFi', is highlighted in orange and has edit and delete icons. The other two rows are standard grey. The left sidebar lists other management sections: 'Wireless SSIDs', 'Access Points', and 'RF'.

NAME	TYPE	SECURITY	ACCESS TYPE
Store_Free_WiFi	guest	open system	network-based
wired-SetMeUp	guest		network-based
default_wired_port_profile	employee		unrestricted

- Security – Splash page Profile

The screenshot shows the Aruba Central interface for Wireless Management. The top navigation bar displays "aruba Central" and "PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)". The left sidebar lists several management options: CURRENT APP (WIRELESS MANAGEMENT), Search Current App (Find devices, clients and networks), Wireless SSIDs (Add and edit wireless networks), Access Points (View APs and set device parameters), RF (Set Aruba Adaptive Radio Management), and Wireless IDS/IPS (Manage intrusion detection and prevention). The main content area is titled "Networks > Configuration - Store_Free_WiFi". It includes tabs for General, VLANs, Security (which is selected), and Access. Under the Security tab, there is a "Splash Page" section. The "Splash Page Type:" dropdown is set to "Cloud Guest", with a list of options: Captive Portal (checked), Captive Portal Home, default, Social Login (selected), and -- New --. The "Guest Captive Portal Profile:" field is empty. The "Encryption:" field is also empty. A note at the bottom says "+ Disable if uplink type is".

FILTER WIRELESS MANAGEMENT
PoC - Stores (1 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)

Networks > Configuration - Store_Free_WiFi

General VLANs Security Access

Splash Page

Splash Page Type:

Cloud Guest

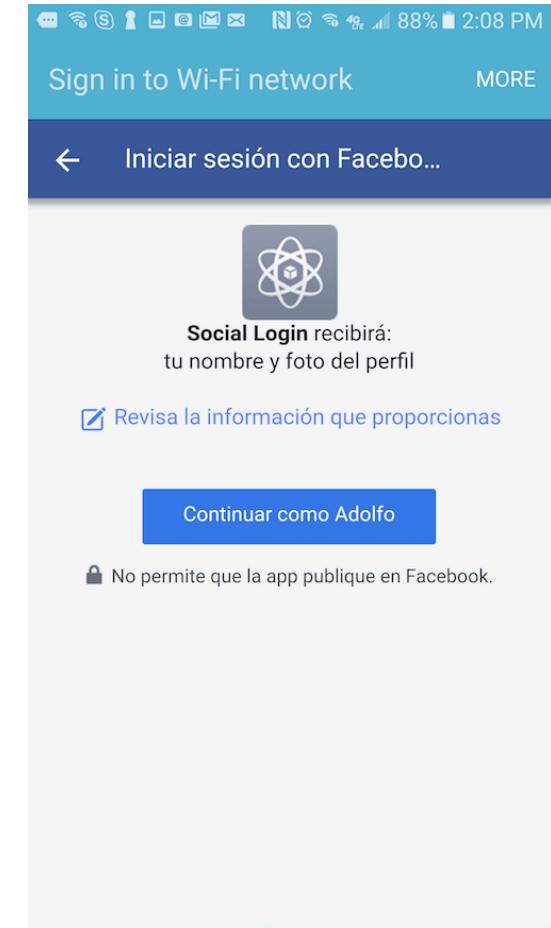
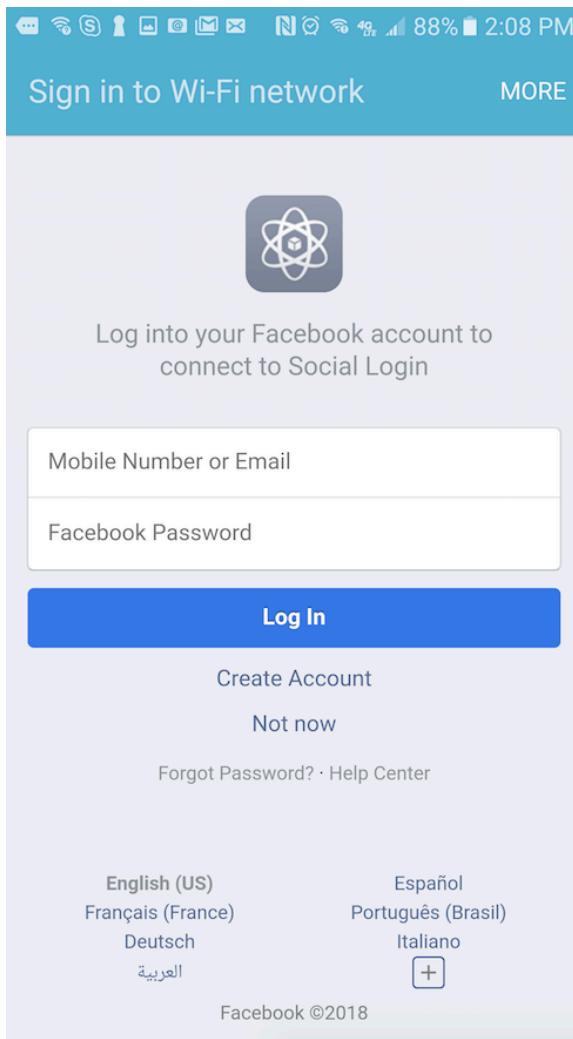
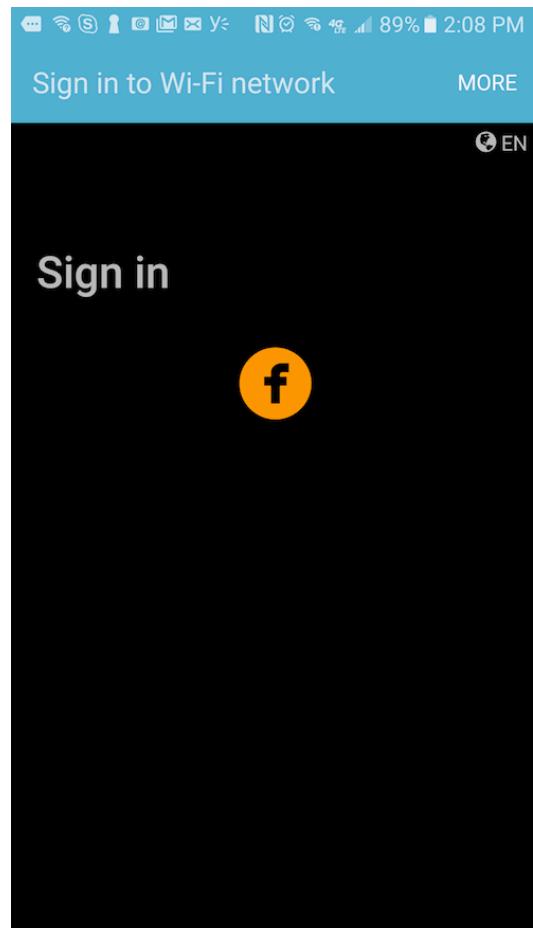
- Captive Portal
- Captive Portal Home
- default
- Social Login**
- New --

Guest Captive Portal Profile:

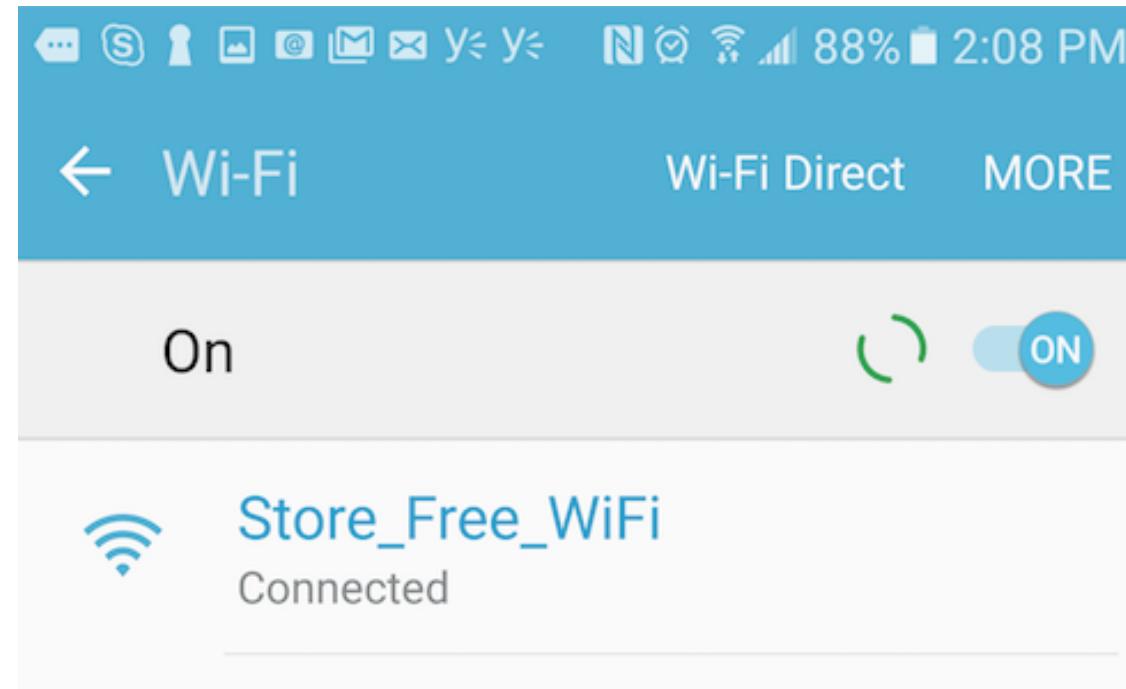
Encryption:

+ Disable if uplink type is

- Testing



- Done!





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Import switch configuration to Aruba Central

- Check serial and MAC Address

```
Aruba2930F_8G# show system

Status and Counters – General System Information

System Name      : Aruba2930F_8G
System Contact   :
System Location  :

MAC Age Time (sec) : 300

Time Zone        : -300
Daylight Time Rule : None

Software revision : WC.16.07.0002
ROM Version      : WC.16.01.0004
Base MAC Addr    : 94f[REDACTED]
Serial Number    : CN8[REDACTED]

Up Time          : 41 mins
CPU Util (%)     : 0
Memory – Total   : 342,635,008
                  Free    : 223,744,800

IP Mgmt – Pkts Rx : 250
                  Pkts Tx : 273
Packet – Total   : 6600
Buffers          Free    : 4347
                  Lowest  : 4341
                  Missed  : 0

Aruba2930F_8G#
```

- Check default gateway and DNS server config

```
Aruba2930F_8G# show ip
```

```
Internet (IP) Service
```

```
IP Routing : Disabled
```

```
Default Gateway : 172.16.0.1
```

```
Default TTL : 64
```

```
Arp Age : 20
```

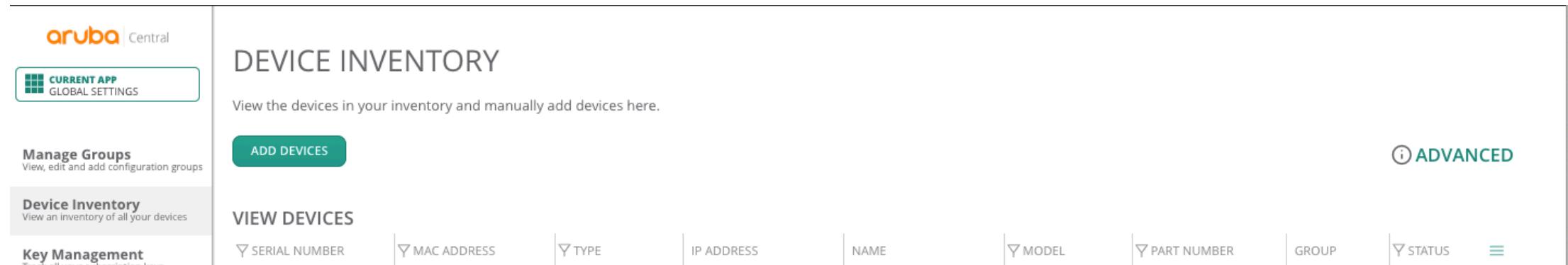
```
Domain Suffix :
```

```
DNS server :
```

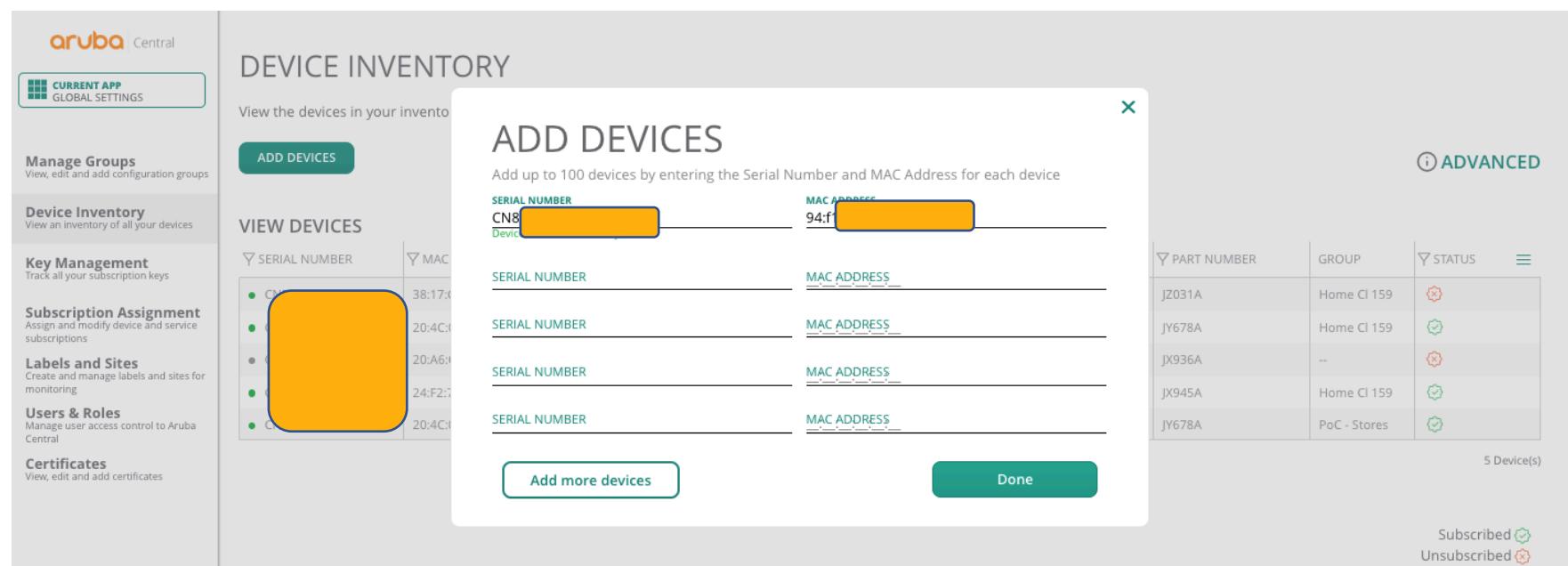
VLAN	IP Config	IP Address	Subnet Mask	Proxy ARP	
				Std	Local
DEFAULT_VLAN	DHCP/Bootp				
Employee	Manual	172.16.0.200	255.255.255.0	No	No
Guest	Manual	192.168.10.200	255.255.255.0	No	No

```
Aruba2930F_8G#
```

• Add switch to Aruba Central



The screenshot shows the Aruba Central interface. On the left sidebar, under the "Device Inventory" section, there is a link labeled "View an inventory of all your devices". The main content area is titled "DEVICE INVENTORY" and contains the sub-instruction "View the devices in your inventory and manually add devices here." A green "ADD DEVICES" button is located at the top right of this section. Below it, a table header titled "VIEW DEVICES" lists columns: SERIAL NUMBER, MAC ADDRESS, TYPE, IP ADDRESS, NAME, MODEL, PART NUMBER, GROUP, STATUS, and a three-dot menu icon. The "STATUS" column includes icons for "Subscribed" (green checkmark) and "Unsubscribed" (red X).



This screenshot shows the Aruba Central interface with a modal window titled "ADD DEVICES" overlaid. The modal instructions say "Add up to 100 devices by entering the Serial Number and MAC Address for each device". It contains two rows of input fields for "SERIAL NUMBER" and "MAC ADDRESS". The first row has entries "CN8" and "94:f1". The second row has empty fields. Below the modal, the "VIEW DEVICES" table from the previous screenshot is visible, showing five devices with their respective details. At the bottom of the modal, there are "Add more devices" and "Done" buttons. The status bar at the bottom right indicates "5 Device(s)" and provides links for "Subscribed" and "Unsubscribed".

• Assign subscription to Switch

aruba Central

CURRENT APP GLOBAL SETTINGS

Manage Groups
View, edit and add configuration groups

Device Inventory
View an inventory of all your devices

Key Management
Track all your subscription keys

Subscription Assignment
Assign and modify device and service subscriptions

Labels and Sites
Create and manage labels and sites for monitoring

Users & Roles
Manage user access control to Aruba Central

Certificates
View, edit and add certificates

SUBSCRIPTION ASSIGNMENT

Use the options below to assign Device Management, Foundation and Network Service subscriptions to devices.

DEVICE SUBSCRIPTIONS i

A device management subscription entitles the subscribed device to be managed in Aruba Central and enables most functionality.

Auto Subscribe OFF
You must select devices below to assign subscriptions to them

DEVICES (1 TO BE SUBSCRIBED 0 TO BE UNSUBSCRIBED)

<input type="checkbox"/> SUBSCRIBED	SERIAL NUMBER	MAC ADDRESS	MODEL
<input checked="" type="checkbox"/> NO	CN	94:	2930F
<input type="checkbox"/> NO	CN	38:	AP-345-RW
<input checked="" type="checkbox"/> YES	CN	20:	AP-303H-RW
<input type="checkbox"/> NO	CN	20:	AP-305
<input checked="" type="checkbox"/> YES	CN	24:	IAP-305-RW
<input checked="" type="checkbox"/> YES	CN	20:	AP-303H-RW

Total number of devices: 6

UPDATE SUBSCRIPTION

- Enter the command “include-credentials”

```
Aruba2930F_8G(config)# include-credentials
```

```
***** CAUTION *****
```

This will insert possibly sensitive information in switch configuration files, and as a part of some CLI commands output. It is strongly recommended that you use SFTP rather than TFTP for transfer of the configuration over the network, and that you use the web configuration interface only with SSL enabled.

Erasing configurations with 'include-credentials' enabled will erase stored passwords and security credentials. The system will reboot with the factory default configuration.

```
Aruba2930F_8G(config)#
```

- Set the management VLAN, DNS server and cloud provisioning

```
Aruba2930F_8G# conf t
Aruba2930F_8G(config)# management-vlan 10
Aruba2930F_8G(config)#
Aruba2930F_8G(config)# end
Aruba2930F_8G#
```

```
Aruba2930F_8G(config)#
Aruba2930F_8G(config)# ip dns server-address priority 1 8.8.8.8
Aruba2930F_8G(config)#
Aruba2930F_8G(config) #
```

```
Aruba2930F_8G# conf t
Aruba2930F_8G(config)# aruba-central enable
Aruba2930F_8G(config)#
Aruba2930F_8G#
```

```
Aruba2930F_8G# conf t
Aruba2930F_8G(config)# activate provision force
Aruba2930F_8G(config)#
Aruba2930F_8G#
```

- Switch registered to Aruba Central

```
Aruba2930F_8G# show log -r
Keys:  W=Warning  I=Information
       M=Major    D=Debug E=Error
---- Reverse event Log listing: Events Since Boot ----
I 11/28/18 16:33:09 03125 mgr: Startup configuration changed by SNMP. New seq.
    number 15
I 11/28/18 16:33:09 05258 central: Aruba Central support mode is disabled.
I 11/28/18 16:32:56 00471 ssl: SSL certificate: CN =JL258A OU = HP Networking
    EVPG O = Hewlett-Packard Development Company ST = CA C = US,
    serialNumber = CNU[REDACTED] BaseMAC 94f[REDACTED]
I 11/28/18 16:32:56 00468 ssl: User 'cloud': logged into SSL/TLS session for
    IDEVID from (null)
I 11/28/18 16:32:55 05101 amp-server: AMP server configuration is disabled due
    to first configuration.
I 11/28/18 16:32:55 05221 activate: The device is provisioned with the Central
    https://internal.central.arubanetworks.com/ws.
I 11/28/18 16:32:55 03125 mgr: Startup configuration changed by SNMP. New seq.
    number 14
I 11/28/18 16:32:55 05622 activate: Trusted Anchor Certificate received from
    Activate server is successfully installed.
I 11/28/18 16:32:55 05223 activate: Successfully established connection with the
    Activate server;parsing final provision service response.
I 11/28/18 16:32:51 05226 activate: Successfully resolved the Activate server
    address device.arubanetworks.com to 104.36.249.201.
I 11/28/18 16:32:15 04910 ntp: All the NTP server associations reset.
```

- Switch in Central as “unprovisioned”

aruba | Central

CURRENT APP GLOBAL SETTINGS

Manage Groups
View, edit and add configuration groups

Device Inventory
View an inventory of all your devices

Key Management
Track all your subscription keys

Subscription Assignment
Assign and modify device and service subscriptions

DEVICE INVENTORY

View the devices in your inventory and manually add devices here.

ADD DEVICES

VIEW DEVICES

SERIAL NUMBER	MAC ADDRESS	TYPE	IP ADDRESS	NAME	MODEL	PART NUMBER	GROUP	STATUS	⋮
● CN [REDACTED]	94:F [REDACTED]	switch	172.16.0.200	Aruba2930F_8G	2930F	JL258A	unprovisioned		
● CN [REDACTED]	38:1 [REDACTED]	iap	172.16.0.8	AP345 - Medellin	AP-345-RW	JZ031A	Home CI 159		

• Create new Template Group

The screenshot shows the Aruba Central web interface. On the left, a sidebar lists various management options: Manage Groups, Device Inventory, Key Management, Subscription Assignment, Labels and Sites, Users & Roles, and Certificates. The 'Manage Groups' option is highlighted. At the top center, a modal window titled 'CREATE NEW GROUP' is open. Inside the modal, the 'GROUP NAME' field contains 'Access_switch_stores'. Below this, there is an optional checkbox labeled 'USE AS A TEMPLATE GROUP (optional)' which is checked. A descriptive text explains that this allows a configuration template to be applied to all devices in the group. At the bottom of the modal are two buttons: 'Cancel' and 'Add Group'. The background of the main interface shows a 'GROUPS' section with a brief description and some device-related data.

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CURRENT APP GLOBAL SETTINGS

Manage Groups View, edit and add configuration groups

Device Inventory View an inventory of all your devices

Key Management Track all your subscription keys

Subscription Assignment Assign and modify device and service subscriptions

Labels and Sites Create and manage labels and sites for monitoring

Users & Roles Manage user access control to Aruba Central

Certificates View, edit and add certificates

GROUPS

A group in Aruba Central acts like a primary configuration container for devices. You can combine devices with common configurations into a single group and apply them to the entire group.

MANAGE GROUPS

DRAG AND DROPS TO SELECT

Y GROUPS

ALL CATEGORIES

UNASSIGNED

default

Home

PoC - S

CREATE NEW GROUP

X

GROUP NAME

Access_switch_stores

USE AS A TEMPLATE GROUP (optional)

This allows configuration template to be applied for all the devices in the device group. Once designated as a Template Group, UI based configuration wizards cannot be used for this device group

Cancel Add Group

New Group

Clone Selected Group

3 Group(s)

Import Configuration to New Group

- Move the switch to the new Template Group

aruba Central

CURRENT APP GLOBAL SETTINGS

Manage Groups
View, edit and add configuration groups

Device Inventory
View an inventory of all your devices

Key Management
Track all your subscription keys

Subscription Assignment
Assign and modify device and service subscriptions

Labels and Sites
Create and manage labels and sites for monitoring

Users & Roles
Manage user access control to Aruba Central

Certificates
View, edit and add certificates

GROUPS

A group in Aruba Central acts like a primary configuration container for devices. You can combine devices with common configuration requirements into a single group and apply the same configuration settings to all the devices in the group.

MANAGE GROUPS
DRAG AND DROP CLUSTERS AND SWITCHES TO SELECT MULTIPLE DEVICES SHIFT+CLICK

▽ GROUP NAME	DEVICE COUNT
ALL CONNECTED DEVICES	4
UNASSIGNED DEVICES	1
TG - Access_switch_stores	0
default	0
Home CI 159	2
PoC - Stores	1

CONFIRM ACTION

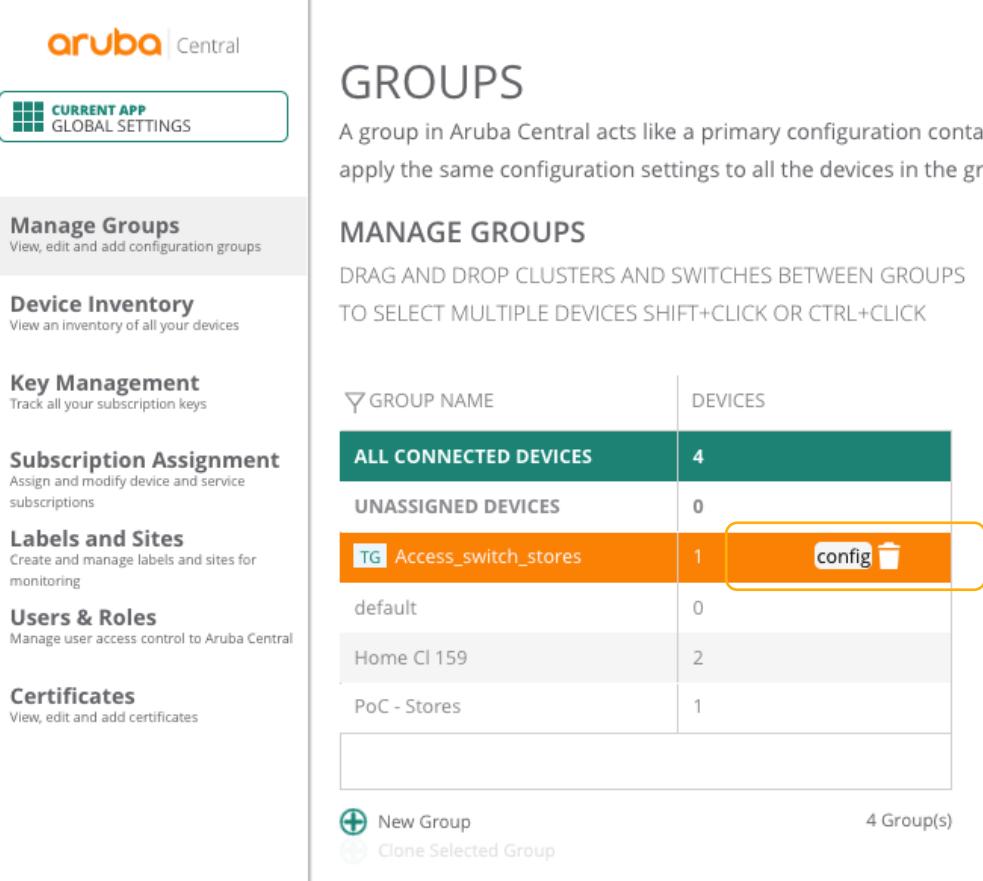
⚠ Moving 1 device(s) from unprovisioned to Access_switch_stores. Moving devices to another group changes the configuration of the selected devices. Do you want to continue?

Yes **No**

NAME	TYPE	SERIAL #	MAC ADDR.
Aruba	Aruba Switch	CN84HKZ0HP	94:f1:28:8b:e7:70
Aruba	IAP	CNDLK2R12X	20:4c:03:20:22:90
Aruba	IAP	CNFBK51112	38:17:c3:c0:18:ea
Aruba	IAP	CNDZJSS895	24:f2:7f:c8:c0:92

New Group 4 Group(s) Import Configuration to this Group 4 Device(s)

- Click on “config” template



Groups

A group in Aruba Central acts like a primary configuration container for devices. You can combine devices with common configuration requirements into a single group and apply the same configuration settings to all the devices in the group.

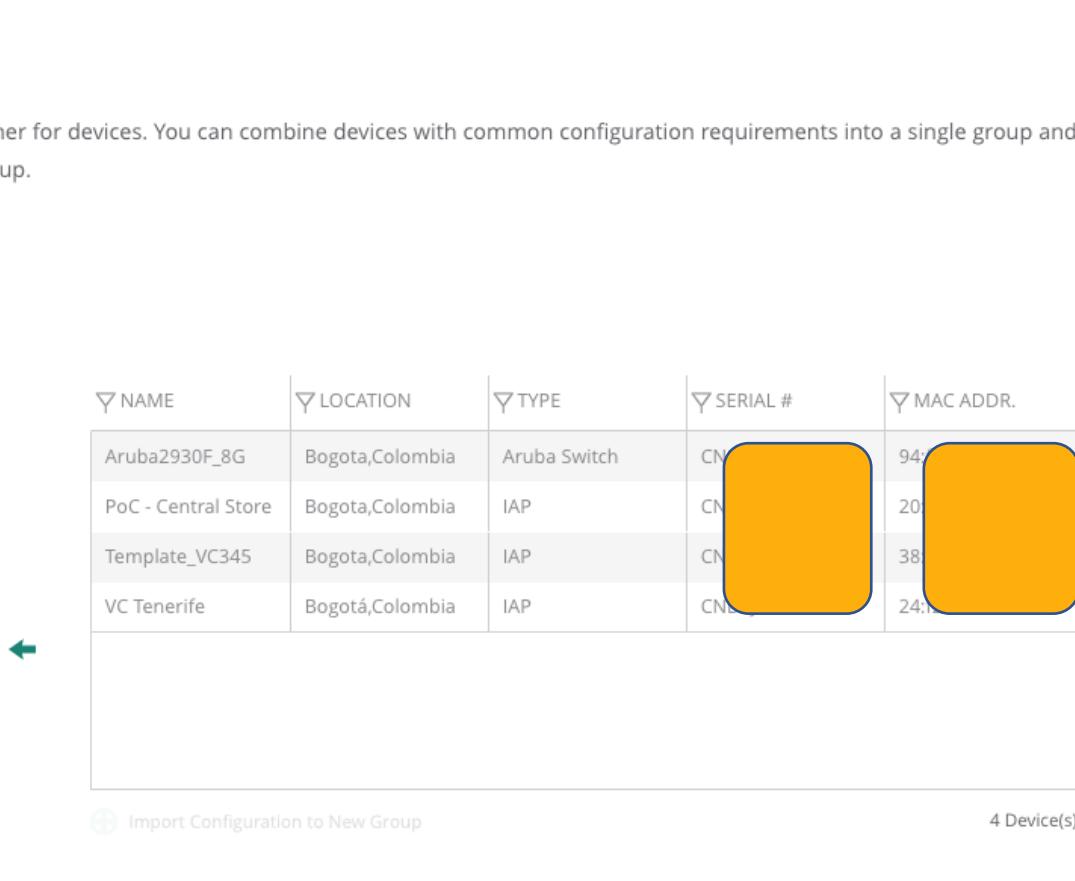
MANAGE GROUPS

DRAG AND DROP CLUSTERS AND SWITCHES BETWEEN GROUPS
TO SELECT MULTIPLE DEVICES SHIFT+CLICK OR CTRL+CLICK

GROUP NAME	DEVICES
ALL CONNECTED DEVICES	4
UNASSIGNED DEVICES	0
TG Access_switch_stores	1
default	0
Home CI 159	2
PoC - Stores	1

New Group **Clone Selected Group**

4 Group(s)



NAME	LOCATION	TYPE	SERIAL #	MAC ADDR.
Aruba2930F_8G	Bogota,Colombia	Aruba Switch	CN 94:12:34:56:78:9A	94:12:34:56:78:9A
PoC - Central Store	Bogota,Colombia	IAP	CN 20:12:34:56:78:9B	20:12:34:56:78:9B
Template_VC345	Bogota,Colombia	IAP	CN 38:12:34:56:78:9C	38:12:34:56:78:9C
VC Tenerife	Bogotá,Colombia	IAP	CNS 24:12:34:56:78:9D	24:12:34:56:78:9D

Import Configuration to New Group

4 Device(s)

- Click on “+”

aruba Central

CURRENT APP WIRELESS MANAGEMENT

Search Current App
Find devices, clients and networks

Templates

Variables

Configuration Audit

FILTER GLOBAL SETTINGS
TG Access_switch_st... (0 Total Devices | 0 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS) ▾

Templates

TEMPLATE NAME	DEVICE TYPE	MODEL	VERSION	LAST MODIFIED	More
No data to display					

+

- Create the new template importing the existing configuration

The screenshot shows the Aruba Central interface with the 'WIRELESS MANAGEMENT' app selected. A search bar at the top right contains the text 'Access_switch_st...'. The main area displays a list of devices under the heading 'FILTER GLOBAL SETTINGS'.

A modal window titled 'ADD TEMPLATE' is open. It contains the following fields:

- Template Name:** 2930F-8p-access-store
- Device:** Aruba Switch
- Model:** 2930F
- Version:** ALL
- Part Name:** (ALL)

Below these fields, there is a note: "If Templates/variables are modified, entire configuration will be pushed and switches with firmware version lower than 16.05 will be rebooted."

Under the 'Select a device to import configuration' section, a dropdown menu is open, showing a list of devices. One device, 'Aruba2930F_8G', is highlighted with a yellow border. To the right of the dropdown is a green button labeled 'Import Template'.

At the bottom of the modal, there are two buttons: 'Cancel' on the left and 'Save' on the right.

- Click on save to create the new template

The screenshot shows the Aruba Central interface with the 'WIRELESS MANAGEMENT' app selected. In the top navigation bar, there is a 'FILTER GLOBAL SETTINGS' section with a 'TG' icon and the text 'Access_switch_st... (1 Total Devices | 0 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS)'. Below this, a modal window titled 'ADD TEMPLATE' is open. Inside the modal, there is a note: 'Not applicable if stacking is enabled'. A dropdown menu labeled 'Select a device to import configuration' shows 'Aruba2930F_8G' selected. Next to it is a 'Import Template' button. Another note below says: 'Importing configuration from a device will replace the existing template'. The 'Template' code area contains the following configuration:

```
1 #This template is imported from device "Aruba2930F_8G" with serial "CN841
2
3 %_sys_template_header%
4 hostname "%_sys_hostname%"
5 %_sys_module_command%
6 no cwpmp enable
7 include-credentials
8 password manager user-name "manager" sha1 "499eab0b928d4aleb6ae0a5976d39c
9 timesync ntp
10 ntp unicast
11 ntp server 129.6.15.28
12 ntp server 132.163.96.5
13 ntp server 186.118.171.89
14 ntp enable
15 time timezone -300
16 web-management ssl
17 ip dns server-address priority 1 8.8.8.8
18 ip route 0.0.0.0 0.0.0.0 172.16.0.1
19 interface 4
20   name "Access Point"
21   poe-lldp-detect enabled
22 exit
```

At the bottom left of the modal is a 'Cancel' button, and at the bottom right is a 'Save' button.

- Done! Switch is managed by Central

aruba Central

CURRENT APP MONITORING & REPORTS

Search Current App

Find devices, clients and networks

Network Overview

View Aruba device performance and security

Network Health

View potential network issues

Label Health

View potential network issues

FILTER MONITORING & REPORTS

All Devices (5 Total Devices | 1 Offline APs | 0 Offline SWITCHES | 0 Offline GATEWAYS) ▾

TEMPORAL FILTER 3 HOURS ▾

NETWORK OVERVIEW APs ▾ SWITCHES List of Online Switches (1) ▾ GATEWAYS ▾ SECURITY ▾

Switches Stacks

Switches (1)

NAME	GROUP	IP ADDRESS	AVG USAGE	LABELS	SITE NAME	UPLINK PORTS	⋮
● Aruba2930F_8G	Access_switch_stores	172.16.0.200	5 kbps				

5 10 25 50 Per Page

◀ ◀ ▶ ▶| Page: 1/1