



7200 Controller Partner Training

Hands-on Lab Guide: Migrating Configs from 3x00 Series Controller to 7200 series Local Controller and Backup Master Migration

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CHANGE REVISION HISTORY

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7200 Series Migration Summary

When adding Aruba 7200 series controllers to an existing Aruba deployment all current controllers must match the ArubaOS software version of the new 7200 controllers (AOS 6.2.x or greater).



Migration Summary

1. Prior to doing anything backup the controller data from your existing controllers using the “backup flash” command. This is best practice for any software upgrade and allows for a rapid recovery if anything goes wrong.
2. Upgrade all controllers on your network to the latest version of ArubaOS 6.2.x. This ensures that the image on your new controllers matches the image of the rest of the controllers in your network.
3. Backup the controller data again using the “backup flash”. The 6.2 configs and database will be saved. This will be used to bring the new 7200 controller online.
4. Transfer existing licenses to your new controller. Using the License Management Server (LMS) at <https://licensing.arubanetworks.com/>.
5. Install your new 7200 controller.
6. Install the backed up data on your new 7200 controller using the “restore flash” command.
7. Apply transferred and any new licenses.
8. Update interface configuration and change the hostname.
9. Confirm that your new controller operates as expected.

Important Points to Remember

- Not all Aruba controller models support ArubaOS 6.2.x. The following controllers support ArubaOS 6.2.x:
 - M3
 - 3000 Series (3200XM model only)
 - 600 Series (651 internal AP disabled in 6.2.x; 600 series RAP limit lowers to match CAP limit)
 - 7200 Series
- When replacing **redundant master controllers**, *always replace the **backup master** first* to avoid unintentional failover
- *If you are migrating to a 7200 Series controller from a controller not listed above, please contact Aruba support.*

BEFORE YOU BEGIN

Backup Flash

It is important to frequently back up all critical configuration data and files on the compact flash file system to an *external server* or *external mass storage device*.

*In the following sections the **Backup flash** command will be used to save the following:*

- Configuration data
- WMS database
- Local user database
- Licensing database
- Floor plan JPEGs
- Custom captive portal pages
- x.509 certificates
- Controller Logs

During the Flash backup process an archive file is created called **flashbackup.tar.gz**. When backing up multiple controllers it will be important to rename this file *so you can keep track of which controller it came from*. Ex: 3600_local1_flashbackup.tar.gz

If a custom filename is used, *it must be renamed back to the generic **flashbackup.tar.gz** prior to the restore process, or the controller will not accept it.*

License Transfer

Feature licenses are created using each controller's unique serial number plus the Certificate ID to generate the Installation Key and are only useable on the intended controller. When *replacing* a controller it is possible to transfer its licenses for use on the substituted controller via the License Management Server (LMS).

Before starting your migration you should transfer your licenses to the new controller platform unless purchasing a new set specifically for the 7200. Licenses are only transferable between “Next-Gen” controllers (65x, 3x00, M3, and 7200 series).

License Transfer Summary

1. Open a browser and navigate to <https://licensing.arubanetworks.com/> and login.
2. Navigate to **Certificate Management > Transfer certificate** and select the licenses you want to transfer.
3. All the certificates active on the controller of the license certificate you have selected will be displayed. Select all the certificates you would like to transfer.
4. Enter the serial number of the new controller and click **Transfer**.
5. When the transfer has been completed successfully, you will receive a new set of activation keys.

Upgrading to 6.2.x

ArubaOS 6.x is supported only on the newer MIPS controllers (M3, 3000 Series and 600 Series). Legacy PPC controllers (200, 800, 2400, SC1 and SC2) are NOT supported. DO NOT upgrade to 6.x if your deployments contain a mix of MIPS and PPC controllers in a master-local setup. In this case, any PPC controllers will need to be replaced / consolidated before upgrading to 6.2.x.

The 3200 controller originally shipped with 512MB memory where current 3200XM units ship with 1GB memory. The original 3200s with 512MB memory must have their memory upgraded to 1GB using an upgrade kit from Aruba Networks (3200-MEM-UG) prior to upgrading to AOS 6.2.

For proper operation, all controllers in the network must be upgraded with the same version of ArubaOS. For redundant (VRRP) environments, the controllers should be the same model for matching capacities.

Upgrading From an Older version of ArubaOS to AOS 6.2

As ArubaOS has evolved over recent years, there have been several changes made to the configuration format and the flash partition size (to name a few). For this reason, it *may not* be possible to upgrade a controller directly from an older ArubaOS version to the most current release. To upgrade to the latest ArubaOS version, the controller may have to be upgraded to an *interim* version first before upgrading to AOS 6.2.

Before you begin, verify the version of ArubaOS currently running on your controller. If you are running AOS 6.0.1.x or later you can upgrade directly to AOS 6.2. For versions prior to AOS 6.0.1.x refer to the Release Notes. An intermediate upgrade may be required.

To upgrade an existing multi-controller system to ArubaOS 6.2:

- Load the software image onto all controllers (including redundant master controllers).
- If all the controllers cannot be upgraded with the same software image and reloaded simultaneously, use the following guidelines:
 1. Remove the link between the master and local mobility controllers.
 2. Upgrade the software image, and then reload the master and local controllers one by one.
 3. Verify that the master and all local controllers are upgraded properly.
 4. Connect the link between the master and local controllers.
 5. Verify successful AP connectivity and expected AP count.

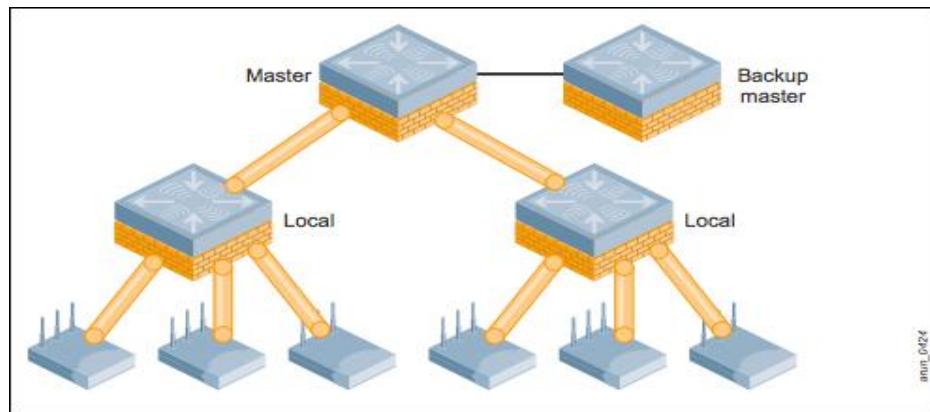
When upgrading the software in a multi-controller network (one that uses two or more Aruba controllers), special care must be taken to upgrade all the controllers in the network and to upgrade them in the proper sequence, as mentioned in the overview and detailed in the following Migration sections

Caveats

Before upgrading to any version of ArubaOS 6.2, take note of these known upgrade caveats.

- Control plane security is disabled when you upgrade from 3.4.x to 6.0.1 (control plane security is disabled in 6.0.1) and then to 6.2.
- If you want to downgrade to a prior version, and your current ArubaOS 6.2 configuration has control plane security enabled, disable control plane security before you downgrade.
- For more information on configuring control plane security and auto-certificate provisioning, refer to the ArubaOS 6.2 User Guide.

Lab 1: 7200 Migration - Local Controller Replacement



Classroom Equipment (remote access)

- 3600 running as Master and another 3600 running as Local running AOS 6.2. Only the Local will be modified.
- 7210 controller running AOS 6.2 to replace the 3600 Local.
- Connect to the "Guest-Demo" SSID. Launch a web browser to get to the Captive Portal page for guest access. Register and put your instructors e-mail for the Sponsor. After registering, wait for the instructor to approve the request before continuing.

Lab 1 Objectives

- In this exercise remote equipment located in Aruba Networks SE Enablement Lab, located in our Sunnyvale HQ, will be utilized. There are 5 identically configured pods for student use. Please refer to the topology and IP information located in the Appendix. The instructor will assign Pod numbers prior to beginning the exercise.
- This lab will replace the 3600 Local with a 7200.

Lab 1 Summarized steps:

1. Take a *flash backup* from existing controllers BEFORE upgrading (*for safety*)
2. Upgrade existing controllers to 6.2.x (*MIPS controllers only*)
3. Take a *flash backup* from the controller to be replaced; copy to PC and/or USB drive
4. Stage/rack/install new 7200 controller
5. Install transferred/new licenses on 7200
6. Backup newly installed licenses on 7200
7. Copy/restore flash backup on new 7200
 - o Confirm data restored
8. Restore license backup on 7200
9. Update port/VLAN/IP config on 7200
10. Fallback/failsafe is to reconnect the old controller

Lab 1: Detailed Steps

1. Make sure all existing controllers have been upgraded to 6.2.x.
 - a. Connect to the console on all three controllers in your Pod per the IP / Console document in the Appendix.
 - b. Use the command “show version” to view the running version of AOS.
2. Back-up flash from the existing 3600 Local controller using the CLI command “backup flash”.
 - a. TFTP the file flashback.tar.gz to your TFTP server on your PC.

```
(3600_local_P1) #backup flash
Please wait while we tar relevant files from flash...
Please wait while we compress the tar file...
File flashback.tar.gz created successfully on flash.
Please copy it out of the switch and delete it when done.

(3600_local_P1) #dir
-rw-r--r-- 1 root root 17338 Dec 6 08:34 default.cfg
drwxr-xr-x 4 root root 1024 Dec 6 08:34 fieldCerts
-rw-r--r-- 1 root root 21760 Dec 6 09:29 flashback.tar.gz
-rw-r--r-- 1 root root 1796 Dec 6 06:23 licenses_3600P1_2
drwx----- 2 root root 1024 Dec 5 08:20 tpm
(3600_local_P1) #
(3600_local_P1) #copy flash: flashback.tar.gz tftp:<TFTP Server IP>flashbackup.tar.gz
```

3. Stage the new 7200 for your individual pod. Connect to your assigned pod via the console and set the IP address for Vlan 1 per the IP guide in the appendix. The instructor will have reset the 7200 to factory default for you. Run through the Default Startup Script.

```
Enter System name [Aruba7210]:
Enter Switch Role (master|local|standalone) [master]:
Enter VLAN 1 interface IP address [172.16.0.254]: 10.79.51.10
Enter VLAN 1 interface subnet mask [255.255.255.0]:
Enter IP Default gateway [none]: 10.79.51.1
Enter Country code (ISO-3166), <ctrl-I> for supported list: US
You have chosen Country code US for United States (yes|no)? : yes
Enter Time Zone [PST-8:0]:
Enter Time in UTC [10:53:30]: 02:57:45
Enter Date (MM/DD/YYYY) [12/2/2012]: 12/1/2012
Enter Password for admin login (up to 32 chars): *****
Re-type Password for admin login: *****
Enter Password for enable mode (up to 15 chars): *****
Re-type Password for enable mode: *****
Do you wish to shutdown all the ports (yes|no)? [no]:

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
Creating configuration... Done.

System will now restart!
```

4. Add licenses to the 7200 using the CLI command “license add”. Licenses are located in the License section of the appendix. This step will save you one reboot later.

```
(Aruba7210) #  
(Aruba7210) #license add < license # >
```

5. Backup newly installed licenses on the 7200 using the CLI command “license export”

```
(Aruba7210) #  
(Aruba7210) #license export < file name >
```

6. Restore the Flash Backup from the 3600 Local to the new 7200 using TFTP on the CLI.

```
(Aruba7210) #copy tftp: <your TFTP server IP> flashbackup.tar.gz flash: flashbackup.tar.gz  
(Aruba7210) #
```

```
(Aruba7210) #restore flash  
Please wait while we uncompress /flash/config/flashbackup.tar.gz...  
Please wait while we untar /flash/config/flashbackup.tar.gz...  
Flash restored successfully.  
Please reload (reboot) the switch for the new files to take effect.  
  
(Aruba7210) #
```



The controller may prompt to reboot for the changes to take effect, but...**DO NOT SAVE / write mem, or REBOOT YET!**

7. Restore Licenses & REBOOT. The 3600 licenses were included as part of the flash backup and are specific to the 3600. A reload of the 7200 licenses is now required using the CLI command “license import”. This is the file created in step 5.

```
(Aruba7210) #  
(Aruba7210) #license import < file name >  
Successfully imported 4 licenses to the license database from license_backup.db; please reload to make licenses take effect
```

8. Reboot the 7200 using the CLI command “reload”.



DO NOT SAVE! This will cause the factory default config to be saved to flash rather than the restored config.

```
(Aruba7210) #reload  
Do you want to save the configuration(y/n): n  
Do you really want to restart the system(y/n): y  
System will now restart!
```

9. Verify Flash Restore. As the 7200 reboots, connect to the serial console. Verify that the *same Vlans, IP interfaces, hostname, etc.*, as the 3600 local controller being replaced. The VLANs and IP interfaces from the 3600 Local should have been restored.

```
(3600_local_P1) #show vlan
VLAN CONFIGURATION
-----
VLAN  Description  Ports  AAA Profile
-----
1      Default      Pc1-7  N/A
10     VLAN0010        GE1/0-1 N/A
172    VLAN0172        Pc0    N/A
192    VLAN0192        N/A    N/A

(3600_local_P1) #show ip interface brief
Interface      IP Address / IP Netmask  Admin  Protocol
vlan 10        10.79.51.100 / 255.255.255.0  up     up
vlan 1         unassigned / unassigned  up     down
vlan 172       172.16.0.254 / 255.255.255.0  up     up
vlan 192       192.168.0.254 / 255.255.255.0  up     up
loopback       unassigned / unassigned  up     up
mgmt           unassigned / unassigned  down   down

(3600_local_P1) #show interface port-channel 0

Port-Channel 0 is administratively up
Hardware is Port-Channel, address is 00:0B:86:6E:4D:44 (bia 00:0B:86:6E:4D:44)
Description: Link Aggregate
Spanning Tree is disabled
Switchport priority: 0
Member port:
  GE 1/2, Admin is up, line protocol is down
  GE 1/3, Admin is up, line protocol is down
```

3600 Local Vlan and port assignment – before move

```
(3600_standby_P1) #show vlan
VLAN CONFIGURATION
-----
VLAN  Description  Ports  AAA Profile
-----
1      Default      GE0/0/0-0/1 GE0/0/2-0/5 Pc1-7  N/A
10     VLAN0010        N/A    N/A
172    VLAN0172        Pc0    N/A
192    VLAN0192        N/A    N/A

(3600_standby_P1) #show ip interface br
Interface      IP Address / IP Netmask  Admin  Protocol
vlan 10        10.79.51.12 / 255.255.255.0  up     up
vlan 1         unassigned / unassigned  up     up
vlan 172       172.16.0.254 / 255.255.255.0  up     down
vlan 192       192.168.0.254 / 255.255.255.0  up     down
loopback       unassigned / unassigned  up     up

(3600_standby_P1) #show interface port-channel 0

Port-Channel 0 is administratively up
Hardware is Port-Channel, address is 00:1A:1E:00:11:F8 (bia 00:1A:1E:00:11:F8)
Description: Link Aggregate
Spanning Tree is disabled
Switchport priority: 0
Member port:
```

7200 after Flash Restore. Note port changes

10. Modify Interface Settings & Hostname .The 7200 Series controllers use a different port numbering scheme than other Aruba controllers. Ports on the 7200 Series are numbered **slot/module/port**. Older controller ports are numbered **slot/port**. As a result the *flash backups* restored from older controllers to a 7200 will cause a loss of network connectivity since the ports don't match and all ports on the 7200 wind up assigned to the default Vlan (Vlan 1). Additionally, all ports will become untrusted. You must connect to your new controller using a serial connection to reconfigure port settings.

The 7200 now needs to have its VLANs and interfaces modified to match the new 7200 port scheme. This will need to be done with the new 7200 "out of band" and disconnected from the management network to avoid IP address conflicts.

- a. Change the hostname from 3600_Local_P1 to 7200_Local_P1.

```
(3600_local_P1) #
(3600_local_P1) #configure terminal
Enter Configuration commands, one per line. End with CNTL/Z

(3600_local_P1) (config) #hostname 7210_local_P1
(7210_local_P1) (config) #
(7210_local_P1) (config) #
```

- b. Disable the ports on the 7200 to prevent an IP conflict with the current 3600 in the lab. Use the command "interface gigabitethernet 0/0/0 shutdown"
- c. Adjust the port configuration and port-trust on the 7200 accordingly then write mem. The ports do not transfer properly due to the different port config in the 7200. Note: Port-trust status can be viewed with the command "show port status".

```
(7210_standby_P1) #configure t
Enter Configuration commands, one per line. End with CNTL/Z
(7210_standby_P1) (config) #interface range gigabitethernet 0/0/0-0/1
(7210_standby_P1) (config-range) # switchport access vlan 10
(7210_standby_P1) (config-range) #trusted
(7210_standby_P1) (config-range) #show vlan

VLAN CONFIGURATION
-----
VLAN  Description  Ports  AAA Profile
-----
1     Default        GE0/0/2-0/5 Pc1-7  N/A
10    VLAN0010       GE0/0/0-0/1  N/A
172   VLAN0172       Pc0         N/A
192   VLAN0192       N/A         N/A
```

- d. Correct the Port-Channel / LAG group ports and port-trust. The ports do not transfer properly due to the different port config in the 7200. Note: Port-trust status can be viewed with the command “show port status”.

```
(7210_standby_P1) (config-range) #interface port-channel 0
(7210_standby_P1) (config-channel)#add gigabitethernet 0/0/2
(7210_standby_P1) (config-channel)#add gigabitethernet 0/0/3
(7210_standby_P1) (config-channel)#trusted
(7210_standby_P1) (config-channel)#exit

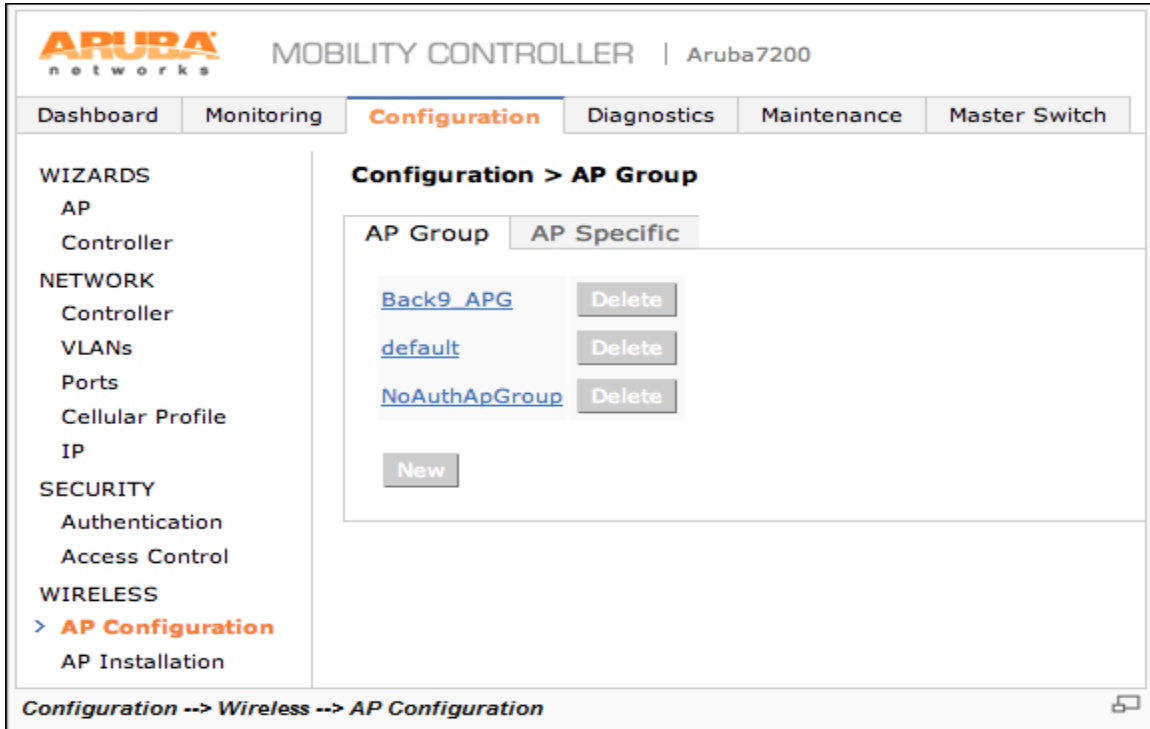
(7210_standby_P1) (config) #show interface port-channel 0

Port-Channel 0 is administratively up
Hardware is Port-Channel, address is 00:1A:1E:00:11:F8 (bia 00:1A:1E:00:11:F8)
Description: Link Aggregate
Spanning Tree is disabled
Switchport priority: 0
Member port:
  GE 0/0/2, Admin is up, line protocol is down
  GE 0/0/3, Admin is up, line protocol is down
Port-Channel 0 is TRUSTED

(7210_standby_P1) (config) #
```

11. The new 7200 controller should now be ready for the physical switchover.
Disconnect the existing local. Connect the new 7200 local.
- a. On the 3600 Local use the command “interface gigabitethernet 1/0 shutdown”
 - b. On the 7200 enable the ports “interface gigabitethernet 0/0/0 no shutdown”

12. After the new 7200 local has been up a few minutes, check to confirm the master has synced its WLAN config and data. Check to see if the AP groups have been pushed from the master.



ARUBA MOILITY CONTROLLER | Aruba7200

Dashboard Monitoring **Configuration** Diagnostics Maintenance Master Switch

WIZARDS

- AP
- Controller

NETWORK

- Controller
- VLANs
- Ports
- Cellular Profile
- IP

SECURITY

- Authentication
- Access Control

WIRELESS

- > **AP Configuration**
- AP Installation

Configuration > AP Group

AP Group AP Specific

[Back9_APG](#) [Delete](#)

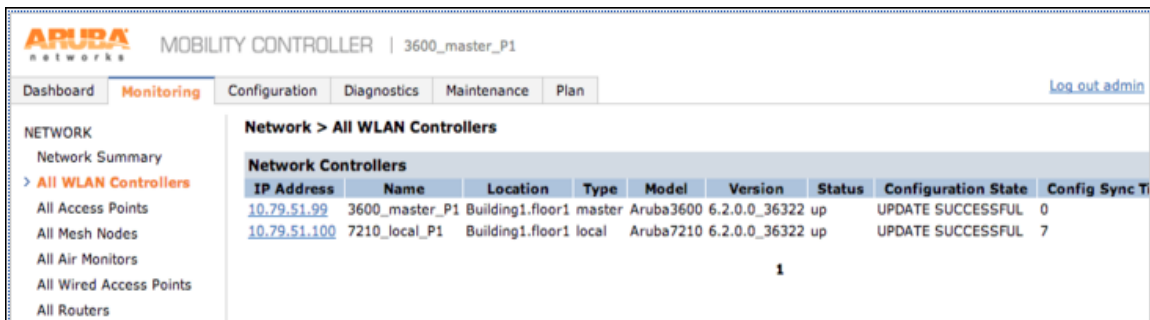
[default](#) [Delete](#)

[NoAuthApGroup](#) [Delete](#)

[New](#)

Configuration --> Wireless --> AP Configuration

The 3600 Master controller should also now show the 7200 as a local.



ARUBA MOILITY CONTROLLER | 3600_master_P1

Dashboard **Monitoring** Configuration Diagnostics Maintenance Plan [Log out admin](#)

NETWORK

- Network Summary
- > **All WLAN Controllers**
- All Access Points
- All Mesh Nodes
- All Air Monitors
- All Wired Access Points
- All Routers

Network > All WLAN Controllers

Network Controllers

IP Address	Name	Location	Type	Model	Version	Status	Configuration State	Config Sync Time
10.79.51.99	3600_master_P1	Building1.floor1	master	Aruba3600	6.2.0.0_36322	up	UPDATE SUCCESSFUL	0
10.79.51.100	7210_local_P1	Building1.floor1	local	Aruba7210	6.2.0.0_36322	up	UPDATE SUCCESSFUL	7

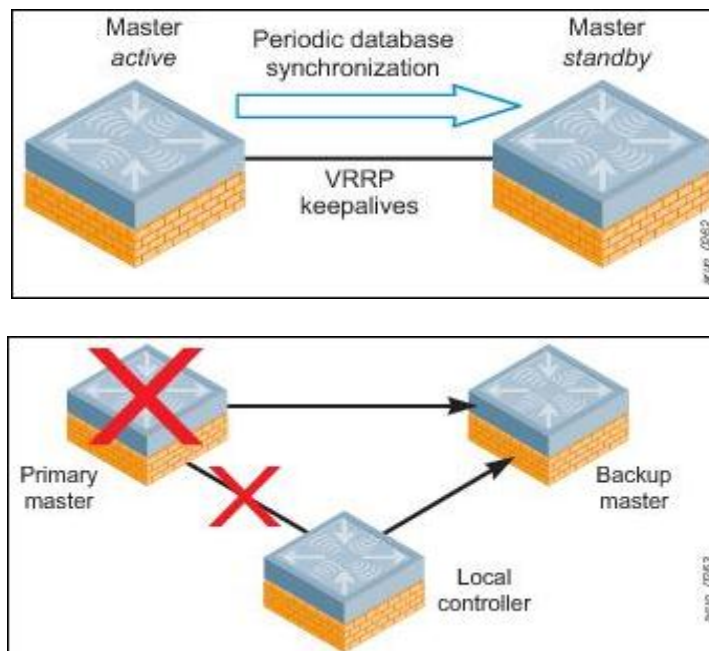
1

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Lab 2: 7200 Migration - Redundant Master Controller Replacement

7200 as Master controller

This exercise demonstrates migration of an existing Backup Master controller to a 7200 controller.



Classroom Equipment (remote access)

- 3600 running as Master and another 3600 running as Backup Master running AOS 6.2. Only the Backup Master will be modified.
- 7210 controller running AOS 6.2 to replace the 3600 Backup Master.

Lab 2 Objectives

- In this exercise remote equipment located in Aruba Networks SE Enablement Lab, located in our Sunnyvale HQ, will be utilized. There are 5 identically configured pods for student use. Please refer to the topology and IP information located in the Appendix. The instructor will assign Pod numbers prior to beginning the exercise.
- This lab will replace a 3600 Backup Master with a 7200.

Lab 2 Summarized Steps

Replace Backup-Master

1. Take a *flash backup* from existing controllers BEFORE upgrading (*for safety*)
2. Upgrade existing controllers to 6.2.x (*MIPS controllers only*)
3. Take a *flash backup* from the controller to be replaced; copy to PC and/or USB drive
4. Stage/rack/install new 7200 controller
5. Install transferred/new licenses on 7200
6. Backup newly installed licenses on 7200
7. Copy/restore flash backup on new 7200
 - o Confirm data restored
8. Restore license backup on 7200
9. Update port/VLAN/IP config on 7200
10. Fallback/failsafe is to reconnect the old controller

Lab 2 Detailed Steps

1. Make sure all existing controllers have been upgraded to 6.2.x.
 - a. Connect to the console on all three controllers in your Pod per the IP / Console document in the Appendix.
 - b. Use the command “show version” to view the running version of AOS.
2. Back-up flash from the existing 3600 Backup Master controller using the CLI command “backup flash”.
 - a. TFTP the file flashback.tar.gz to your TFTP server on your PC.

```
(3600_standby_P2) #backup flash
Please wait while we tar relevant files from flash...
Please wait while we compress the tar file...
File flashback.tar.gz created successfully on flash.
Please copy it out of the switch and delete it when done.

(3600_standby_P2) #dir
-rw-r--r-- 1 root root 17338 Dec 6 08:34 default.cfg
drwxr-xr-x 4 root root 1024 Dec 6 08:34 fieldCerts
-rw-r--r-- 1 root root 21760 Dec 6 09:29 flashback.tar.gz
drwx----- 2 root root 1024 Dec 5 08:20 tpm
(3600_standby_P2) #
(3600_standby_P2) #copy flash: flashback.tar.gz tftp: <your TFTP server IP> flashback.tar.gz
```

3. Stage the new 7200 for your individual pod. Connect to your assigned pod via the console and set the IP address for Vlan 1 per the IP guide in the appendix. Run through the Default setup script.

```
Enter System name [Aruba7210]:
Enter Switch Role (master|local|standalone) [master]:
Enter VLAN 1 interface IP address [172.16.0.254]: 10.79.52.10
Enter VLAN 1 interface subnet mask [255.255.255.0]:
Enter IP Default gateway [none]: 10.79.100.1
Enter Country code (ISO-3166), <ctrl-I> for supported list: US
You have chosen Country code US for United States (yes/no)? : yes
Enter Time Zone [PST-8:0]:
Enter Time in UTC [10:53:30]: 02:57:45
Enter Date (MM/DD/YYYY) [12/2/2012]: 12/1/2012
Enter Password for admin login (up to 32 chars): *****
Re-type Password for admin login: *****
Enter Password for enable mode (up to 15 chars): *****
Re-type Password for enable mode: *****
Do you wish to shutdown all the ports (yes/no)? [no]:

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
Creating configuration... Done.

System will now restart!
```

4. Add licenses to the 7200 using the CLI command “license add”. Licenses are located in the License section of the appendix. This will save you a reboot later.

```
(Aruba7210) #
(Aruba7210) #license add < license # >
Please reload the switch for the new service key to take effect.
```

5. Backup newly installed licenses on the 7200 using the CLI command “license export”.

```
(Aruba7210) #
(Aruba7210) #license export < filename >
Successfully exported 4 licenses from the license database to license_backup.db
```

6. Copy/Restore Flash Backup from the 3600 Backup Master to the new 7200 using TFTP on the CLI.

```
(Aruba7210) #copy tftp: <your TFTP server IP> flashback.tar.gz flash: flashback.tar.gz
(Aruba7210) #
```

```
(Aruba7210) #restore flash
Please wait while we uncompress /flash/config/flashbackup.tar.gz...
Please wait while we untar /flash/config/flashbackup.tar.gz...
Flash restored successfully.
Please reload (reboot) the switch for the new files to take effect.

(Aruba7210) #
```



The controller may prompt to reboot for the changes to take effect, but...**DO NOT SAVE / write mem, or REBOOT YET!**

7. Restore Licenses & REBOOT. The 3600 licenses were included as part of the flash backup and are specific to the 3600. A reload of the 7200 licenses is now required using the CLI command “license import”. The file name is the name given in step 5.

```
(Aruba7210) #
(Aruba7210) #license import < filename >
Successfully imported 4 licenses to the license database from license_backup.db; please reload to make licenses take effect
```

8. Reboot the 7200 using the CLI command “reload”.



DO NOT SAVE! This will cause the factory default config to be saved to flash rather than the restored config.

```
(Aruba7210) #reload
Do you want to save the configuration(y/n): n
Do you really want to restart the system(y/n): y
System will now restart!
```

9. Disable the 3600 Backup Master’s connection to the network using the command “interface gigabitethernet 1/0 shutdown” to prevent an IP conflict with the newly restored 7200.
10. Verify Flash Restore. As the 7200 reboots, connect to the serial console and verify that the *same Vlans, IP interfaces, hostname, etc.*, were copied from the 3600 Backup Master controller being replaced.

```
(3600_standby_P1) #show vlan
VLAN CONFIGURATION
-----
VLAN  Description  Ports  AAA Profile
-----
1      Default      Pc1-7   N/A
10     VLAN0010     GE1/0-1 N/A
172    VLAN0172     Pc0     N/A
192    VLAN0192
(3600_standby_P1) #show ip interface brief
Interface          IP Address / IP Netmask  Admin  Protocol
vlan 10            10.79.51.12 / 255.255.255.0  up     up
vlan 1             unassigned / unassigned  up     down
vlan 172           172.16.0.254 / 255.255.255.0  up     up
vlan 192           192.168.0.254 / 255.255.255.0  up     up
loopback          unassigned / unassigned  up     up
mgmt              unassigned / unassigned  down   down

(3600_standby_P1) #show interface port-channel 0

Port-Channel 0 is administratively up
Hardware is Port-Channel, address is 00:0B:86:6E:4D:44 (bia 00:0B:86:6E:4D:44)
Description: Link Aggregate
Spanning Tree is disabled
Switchport priority: 0
Member port:
  GE 1/2, Admin is up, line protocol is down
  GE 1/3, Admin is up, line protocol is down
Port-Channel 0 is TRUSTED
```

3600 Local Vlan and port assignment – before move

```
(3600_standby_P1) (config) #show vlan
```

VLAN	Description	Ports	AAA Profile
1	Default	GE0/0/0-0/1 GE0/0/2-0/5	PC1-7
10	VLAN0010		N/A
172	VLAN0172	Pc0	N/A
192	VLAN0192		N/A

```
(3600_standby_P1) (config) #show ip interface br
```

Interface	IP Address	IP Netmask	Admin	Protocol
vlan 10	10.79.51.12	255.255.255.0	up	up
vlan 1	unassigned	unassigned	up	up
vlan 172	172.16.0.254	255.255.255.0	up	up
vlan 192	192.168.0.254	255.255.255.0	up	up
loopback	unassigned	unassigned	up	up

```
(3600_standby_P1) (config) #show interface port-channel 0
```

Port-channel 0 is administratively up
Hardware is Port-Channel, address is 00:1A:1E:00:11:F8 (bia 00:1A:1E:00:11:F8)
Description: Link Aggregate
Spanning Tree is disabled
Switchport priority: 0
Member port:
Port-channel 0 is TRUSTED

```
(3600_standby_P1) (config) #show port status
```

Slot-Port	PortType	adminstate	operstate	poe	Trusted	SpanningTree	PortMode
0/0/0	GE	Enabled	Up	Enabled	No	Disabled	Access
0/0/1	GE	Enabled	Down	Enabled	No	Disabled	Access
0/0/2	GE	Enabled	Down	Enabled	No	Disabled	Access
0/0/3	GE	Enabled	Down	Enabled	No	Disabled	Access
0/0/4	GE	Enabled	Down	Enabled	No	Disabled	Access
0/0/5	GE	Enabled	Down	Enabled	No	Disabled	Access

7200 after Flash Restore. Note port changes

The following example shows campus AP whitelist entries restored from the previous controller with Control Plane Security (CPSec) enabled.

```
(3600_standby_P2) #show whitelist-db cpsec
```

MAC-Address	Enable	State	Cert-Type	Description	Revoke Text	Last Updated
00:24:6c:c9:30:84	Enabled	certified-factory-cert	factory-cert			Fri Nov 30 09:09:06 2012
d8:c7:c8:c9:99:0d	Enabled	certified-factory-cert	factory-cert			Fri Nov 30 09:09:05 2012
00:24:6c:c3:3c:50	Enabled	certified-factory-cert	factory-cert			Fri Nov 30 09:09:05 2012
00:24:6c:c9:30:80	Enabled	certified-factory-cert	factory-cert			Fri Nov 30 09:09:05 2012
d8:c7:c8:c9:82:13	Enabled	certified-factory-cert	factory-cert			Fri Nov 30 09:09:05 2012
d8:c7:c8:c2:14:9b	Enabled	certified-factory-cert	factory-cert			Fri Nov 30 09:09:20 2012
d8:c7:c8:c0:fc:d8	Enabled	certified-factory-cert	factory-cert			Fri Nov 30 09:57:52 2012
d8:c7:c8:cb:37:b6	Enabled	certified-factory-cert	factory-cert			Fri Nov 30 09:56:48 2012
d8:c7:c8:cb:36:de	Enabled	certified-factory-cert	factory-cert			Fri Nov 30 09:56:32 2012

Total Entries: 9

11. Verify AP database restore. Although no APs have ever connected to this controller, the AP database for the existing redundant cluster has been restored on the new 7200

```
(3600_standby_P2) #show ap database

AP Database
-----
Name                Group      AP Type  IP Address  Status  Flags  Switch IP
-----
00:24:6c:c3:3c:50   Back9_APG  105     10.79.252.3  Down    2      10.79.100.113
00:24:6c:c9:30:80   Back9_APG  105     10.79.252.1  Down    2      10.79.100.113
00:24:6c:c9:30:84   Back9_APG  105     10.79.252.5  Down    2      10.79.100.113
d8:c7:c8:c0:fc:d8   Back9_APG  135     10.79.252.7  Down    2      10.79.100.113
d8:c7:c8:c2:14:9b   Back9_APG  105     10.79.252.6  Down    2      10.79.100.113
d8:c7:c8:c9:82:13   Back9_APG  105     10.79.252.2  Down    2      10.79.100.113
d8:c7:c8:c9:99:0d   Back9_APG  105     10.79.252.4  Down    2      10.79.100.113
d8:c7:c8:cb:36:de   Back9_APG  135     10.79.252.9  Down    2      10.79.100.113
d8:c7:c8:cb:37:b6   Back9_APG  135     10.79.252.8  Down    2      10.79.100.113

Flags: U = Unprovisioned; N = Duplicate name; G = No such group; L = Unlicensed
       I = Inactive; D = Dirty or no config; E = Regulatory Domain Mismatch
       X = Maintenance Mode; P = PPPoE AP; B = Built-in AP
       R = Remote AP; R- = Remote AP requires Auth; C = Cellular RAP;
       c = CERT-based RAP; 1 = 802.1x authenticated AP; 2 = Using IKE version 2
       u = Custom-Cert RAP
       M = Mesh node; Y = Mesh Recovery

Total APs:9
```

12. Modify Interface Settings & Hostname. The 7200 Series controllers use a different port numbering scheme than other Aruba controllers. Ports on the 7200 Series are numbered **slot/module/port**. Older controller ports are numbered **slot/port**. As a result the *flash backups* restored from older controllers to a 7200 controller will cause a loss of network connectivity since the ports don't match up. All ports on the 7200 will wind up assigned to the default Vlan (Vlan 1). Additionally, all ports will become untrusted. You must connect to your new controller using a serial connection to reconfigure port settings.

The 7200 now needs to have its VLANs and interfaces modified to match the new 7200 port scheme. This will need to be done with the new 7200 "out of band" and disconnected from the management network to avoid IP address conflicts.

- a. Change the hostname from 3600_standby_px to 7200_standby_<pod#>.

```
(3600_standby_P2) #
(3600_standby_P2) #configure terminal
Enter Configuration commands, one per line. End with CNTL/Z

(3600_standby_P2) (config) #hostname 7210_standby_P2
(7210_standby_P2) (config) #
(7210_standby_P2) (config) #
```

- b. Disable the ports on the 7200 to prevent an IP conflict with the current 3600 in the lab. Use the command "interface gigabitethernet 0/0/0 shutdown"

- c. Adjust the port configuration and port-trust on the 7200 accordingly then write mem. The ports do not transfer properly due to the different port config in the 7200. Note: Port-trust status can be viewed with the command “show port status”.

```
(7210_standby_P1) #configure t
Enter Configuration commands, one per line. End with CNTL/Z
(7210_standby_P1) (config) #interface range gigabitethernet 0/0/0-0/1
(7210_standby_P1) (config-range) # switchport access vlan 10
(7210_standby_P1) (config-range) #trusted
(7210_standby_P1) (config-range) #show vlan
```

VLAN CONFIGURATION			
VLAN	Description	Ports	AAA Profile
1	Default	GE0/0/2-0/5 Pc1-7	N/A
10	VLAN0010	GE0/0/0-0/1	N/A
172	VLAN0172	Pc0	N/A
192	VLAN0192		N/A

- d. Correct the Port-Channel / LAG group ports and port-trust. The ports do not transfer properly due to the different port config in the 7200. Note: Port-trust status can be viewed with the command “show port status”.

```
(7210_standby_P1) (config-range) #interface port-channel 0
(7210_standby_P1) (config-channel)#add gigabitethernet 0/0/2
(7210_standby_P1) (config-channel)#add gigabitethernet 0/0/3
(7210_standby_P1) (config-channel)#trusted
(7210_standby_P1) (config-channel)#exit

(7210_standby_P1) (config) #show interface port-channel 0

Port-Channel 0 is administratively up
Hardware is Port-Channel, address is 00:1A:1E:00:11:F8 (bia 00:1A:1E:00:11:F8)
Description: Link Aggregate
Spanning Tree is disabled
Switchport priority: 0
Member port:
  GE 0/0/2, Admin is up, line protocol is down
  GE 0/0/3, Admin is up, line protocol is down
Port-Channel 0 is TRUSTED

(7210_standby_P1) (config) #
```

11. The new 7200 controller should now be ready for the physical switchover.
Disconnect the existing local. Connect the new 7200 local.
- On the 3600 Local use the command “interface gigabitethernet 1/0 shutdown”
 - On the 7200 enable the ports “interface gigabitethernet 0/0/0 no shutdown”

12. The virtual router configuration from the existing backup master should have been added to the 7200 with the flash restore...

```
(7210_standby_P2) (config) #show vrrp

Virtual Router 10:
  Description backup-master
  Admin State UP, VR State MASTER
  IP Address 10.79.100.251, MAC Address 00:00:5e:00:01:0a, vlan 1
  Priority 100, Advertisement 1 sec, Preemption Disable Delay 0
  Auth type PASSWORD, Auth data: *****
  tracking is not enabled
```

The 7200 should now have the *Standby* controller role.

The screenshot shows the Aruba Mobility Controller web interface for the 7210_standby_P2 controller. The 'Configuration' tab is selected, and the 'System Settings' sub-tab is active. The 'Controller Role' is set to 'Standby (To change Controller role, please remove Master Controller redundancy configuration.)'. Other settings include 'Master IP Address' as 10.79.52.100, 'IPSec Key (IKE PSK)' as n/a, 'Retype IPSec Key (IKE PSK)' as n/a, and 'FQDN (optional)' as n/a. A message at the bottom states 'Automatic role change to STANDBY'.

15. Verify Successful Database Sync. Another view from the current *Active-Master* controller showing the 7200 as the *backup-master*. Note the status for the 7200 in the *Configuration State* column. If **UPDATE SUCCESSFUL** is listed there, then the controller sync is working.

Monitoring --> Network --> ALL WLAN Controllers

The screenshot shows the Aruba Mobility Controller web interface for the 3600_active_P2 controller. The 'Monitoring' tab is selected, and the 'All WLAN Controllers' view is active. A table titled 'Network Controllers' displays the status of two controllers:

IP Address	Name	Location	Type	Model	Version	Status	Configuration State	Config
10.79.52.11	3600_active_P2	Building1.floor1	master	Aruba3600	6.2.0.0_36322	up	UPDATE SUCCESSFUL	0
10.79.52.12	7210_standby_P2	Building1.floor1	standby	Aruba7210	6.2.0.0_36322	up	UPDATE SUCCESSFUL	17

A message at the bottom states 'Controller Sync is GOOD!'.

Replace *Active-master*

Now that the 7200 is up and running as the Backup Master the Active Master VRRP Priority can be changed to a lower priority than that configured on the Backup Master to trigger a failover.

Once failed over follow the same steps as moving the Master Backup.....

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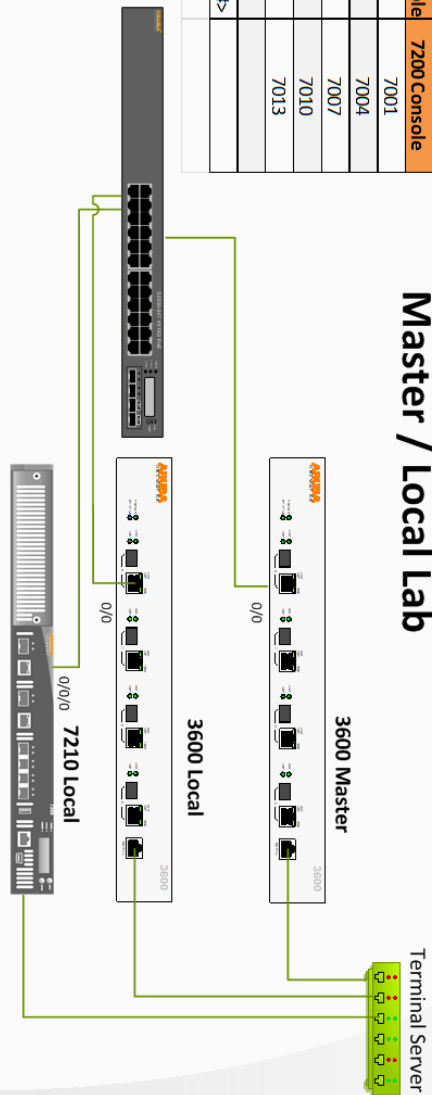
Appendix

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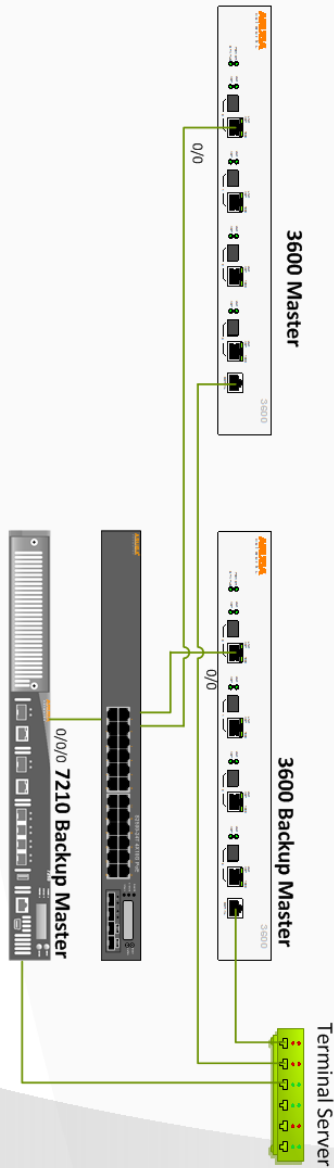
Lab Topology

Student	3600 L / BM Console	7200 Console
Pod 1	7003	7001
Pod 2	7006	7004
Pod 3	7009	7007
Pod 4	7012	7010
Pod 5	7015	7013
Term Server	10.79.10.11 <port#>	

Master / Local Lab



Master / Backup Master Lab



Lab IP addresses and Terminal Server Ports

Terminal Server: 10.79.10.12 <port#>			Controller pwd. user: admin		pwd: admin1			
TFTP Server: 10.79.254.10								
Controller	Flash Backup File	MASTER/LOCAL	Stack/Slot/Port	Telnet Port	VLAN ID	Flash Backup File	MASTER/MASTER Redundant	
Pod 1 : 10.79.51.0/24 Def. GW 10.79.51.1								
7200	(reset only)	10.79.51.10	GE 0/0/0	7001	1 (all ports)	(reset only)	10.79.51.10	
3600 Master	masterP1bak	10.79.51.99 (master)	GE 1/0	7002	10	activeP1bak	10.79.51.11 (active)	
		172.16.0.1	GE 1/2-3 (Pc0)		172		172.16.0.1	
		192.168.0.1	N/A		192		192.168.0.1	
3600 Local / Master Backup	localP1bak	10.79.51.100 (local)	GE 1/0-1	7003	10	backupP1bak	10.79.51.12 (backup)	10.79.51.100 (VIP)
		172.16.0.254	GE 1/2-3 (Pc0)		172		172.16.0.254	
		192.168.0.254	N/A		192		192.168.0.254	
Pod 2 : 10.79.52.0 /24 Def. GW 10.79.52.1								
7200	(reset only)	10.79.52.10	GE 0/0/0	7004	1 (all ports)	(reset only)	10.79.52.10	
3600 Master	masterP2bak	10.79.52.99 (master)	GE 1/0	7005	10	activeP2bak	10.79.52.11 (active)	
		172.16.0.1	GE 1/2-3 (Pc0)		172		172.16.0.1	
		192.168.0.1	N/A		192		192.168.0.1	
3600 Local / Master Backup	localP2bak	10.79.52.100 (local)	GE 1/0-1	7006	10	backupP2bak	10.79.52.12 (backup)	10.79.52.100 (VIP)
		172.16.0.254	GE 1/2-3 (Pc0)		172		172.16.0.254	
		192.168.0.254	N/A		192		192.168.0.254	
Pod 3 : 10.79.53.0 /24 Def. GW 10.79.53.1								
7200	(reset only)	10.79.53.10	GE 0/0/0	7007	1 (all ports)	(reset only)	10.79.53.10	
3600 Master	masterP3bak	10.79.53.99 (master)	GE 1/0	7008	10	activeP3bak	10.79.53.11 (active)	
		172.16.0.1	GE 1/2-3 (Pc0)		172		172.16.0.1	
		192.168.0.1	N/A		192		192.168.0.1	
3600 Local / Master Backup	localP3bak	10.79.53.100 (local)	GE 1/0-1	7009	10	backupP3bak	10.79.53.12 (backup)	10.79.53.100 (VIP)
		172.16.0.254	GE 1/2-3 (Pc0)		172		172.16.0.254	
		192.168.0.254	N/A		192		192.168.0.254	
Pod 4 : 10.79.54.0 /24 Def. GW 10.79.54.1								
7200	(reset only)	10.79.54.10	GE 0/0/0	7010	1 (all ports)	(reset only)	10.79.54.10	
3600 Master	masterP4bak	10.79.54.99 (master)	GE 1/0	7011	10	activeP4bak	10.79.54.11 (active)	
		172.16.0.1	GE 1/2-3 (Pc0)		172		172.16.0.1	
		192.168.0.1	N/A		192		192.168.0.1	
3600 Local / Master Backup	localP4bak	10.79.54.100 (local)	GE 1/0-1	7012	10	backupP4bak	10.79.54.12 (backup)	10.79.54.100 (VIP)
		172.16.0.254	GE 1/2-3 (Pc0)		172		172.16.0.254	
		192.168.0.254	N/A		192		192.168.0.254	
Pod 5 : 10.79.55.0 /24 Def. GW 10.79.55.1								
7200	(reset only)	10.79.55.10	GE 0/0/0	7013	1 (all ports)	(reset only)	10.79.55.10	
3600 Master	masterP5bak	10.79.55.99 (master)	GE 1/0	7014	10	activeP5bak	10.79.55.11 (active)	
		172.16.0.1	GE 1/2-3 (Pc0)		172		172.16.0.1	
		192.168.0.1	N/A		192		192.168.0.1	
3600 Local / Master Backup	localP5bak	10.79.55.100 (local)	GE 1/0-1	7015	10	backupP5bak	10.79.55.12 (backup)	10.79.55.100 (VIP)
		172.16.0.254	GE 1/2-3 (Pc0)		172		172.16.0.254	
		192.168.0.254	N/A		192		192.168.0.254	

Controller Licenses

Controller	Serial #	Keys	Service Type	License File
Pod 1				
7200	BA0001097	7pWLyZ3J-HAfPQR9c-5C7GdiMQ-LIJKdDMn-lpgUckfU-9EM	PEFV	Lic_P1_7200
		Z7sOXZNJ-YoDcz7h8-Z++3bZla-8ntmkWG1-FDgKtOmP-Mxw	RFProtect: 512	
		eAEkRWx2-MepalEWH-3GPKhZ8N-QH0n8mKg-JF52NojU-MqQ	PEFNG: 512	
		3WOvBWrQ-HmmrANqp-8m4SbLYJ-XFGuGAJd-dCleoSov-vcA	Access Points: 512	
3600-1	AK0023686	Js8pZkpM-79kxD0G+-Uu4Usp6z-GTNw7OTH-hC+a/wf6-UsY	PEFV	lic_P1_3600-1
		dzkgvE6l-HgJSwGCS-a02/oGdi-P3xKAU60-LK4xzP/3-t4Q	RFProtect: 512	
		aU61yMx/-WNioPn/a-mcgtzhgK-Y0u2kk4i-5slWdu1H-Ces	PEFNG: 512	
		fYSeADuN-Rwn1ELiy-fW6Wy7RM-EzmfY0zM-rZuDW5Bm-oMs	Access Points: 512	
3600-2	AK0024015	Ij dj3mfb-cH11SwmI-O4ZZIpqt-sBuN51hO-rWLC8+By-R0c	RFProtect: 512	lic_P1_3600-2
		uLboMsmG-r48VReDr-PD7n3FJq-d9WNbAI4-MJ/jrTVZ-oYU	PEFNG: 512	
		tuYvygWq-R4m1Bjft-YwOr0wk+-SYKXj+I1-zDUkabjh-4XE	PEFV	
		RFCIElXG-PwpN9C9D-SzxEOF80-+Sjt6tqf-TpLvsOIT-KHk	Access Points: 512	
Pod 2				
7200	BA0001011	hasfWm2M-3pBT5cFB-AS7OZH5a-bly13Gpm-xEDrII3v-NjM	PEFV	Lic_P2_7200
		YHStT6Cm-J+6fIOVt-cvpsjpcL-0j4X13x9-NH1y8w4c-n38	RFProtect: 512	
		m12Q9ry3-unvj0kqf-X1ufKaER-QSKQ0jjJ-w0Z6PhrG-IZQ	PEFNG: 512	
		ljcT9zOk-+73YgJMs-sfsBKTAX-hsjUIDla-5a/D5WGJ-eCs	Access Points: 512	
3600-1	AK0023689	CsOWCe9g-Sf+0DKp5-xIioZHNZ-GOY4N0Mm-PJ08wrVF-ArM	PEFV	lic_P2_3600-1
		obt8LBUu-vY9ksJOk-9i0YqQMt-x46It0Hm-cFlzqMi7-A88	RFProtect: 512	
		Ci7xzyYm-oudqTR5Z-dBdaryUN-mA5E2Akh-0QPnbjDX-X1s	PEFNG: 512	
		DkbwLLOK-KnPCDvKT-ZhQthuiX-VQ8EyICG-TfVCiXeE-Kfw	Access Points: 512	
3600-2	AK0023706	pdVgxzSZ-p91/DMav-7nXTKdEC-m9srQiT9-GD6tZLKO-Z8E	RFProtect: 512	lic_P2_3600-2
		iIKN/MRN-NYfoYHKb-Bd2nzvq9-IcS41rnt-VpFhA/cr-sKA	PEFNG: 512	
		/oyzeWng-fYRPeGAF-Rz7vuWqW-UMgfCKfs-xyBC1In4-+PM	PEFV	
		iMBzkuh6-QouhOdtX-B4m/3Iiz-02fF8GgN-gyVDpdVV-SMs	Access Points: 512	
Pod 3				
7200	BA0001031	z+oCI1aw-R79SkVaU-9c1Eq7QF-Mu+CovMf-Jh9i8ifr-9ak	PEFV	Lic_P3_7200
		Sv97WGOU-XB8JbTau-e7veIBf4-Y3S8T9sy-YZQaguxH-Z/s	RFProtect: 512	
		1NjArHY/-0/iS6H7e-qQqLy4Lu-nAicOwYs-yEGwULCA-+z4	PEFNG: 512	
		qC1/mRiX-8OemBySV-h1Rp/jpJ-6vHmHUfU-aYGnIP6Z-rzs	Access Points: 512	
3600-1	AK0023703	UImmq6Un-PIQVVF+q-B1SKL6wU-dUgBq+Jt-cNZjP872-YFs	PEFV	lic_P3_3600-1
		4hMQcGtE-fCkAgkOr-gfrwguoW-364ae00k-4+LaaJm4-AvA	RFProtect: 512	

		Ye0ORiqO-/pzE0UgR-xginHGmi-NIitM1RP-B2HXemof-dos	PEFNG: 512	
		eheWGzGJ-XK0VUD7V-Dqy47ENJ-MWz1ls3r-CSgcbNsO-Juw	Access Points: 512	
3600-2	AK0023464	sfBDrP5h-SEf1YXbN-G4TWrfJf3-Vym4NcwD-IU8vrm90-Wz4	RFPProtect: 512	lic_p3_3600-2
		Biztry/x-Qd+yIMxR-FdSI4eKO-u0EpgDoF-K+OZwQs6-1KY	PEFNG: 512	
		qXu0fqVG-iruGLIG7-2bZNFIn9-mPpA8514-+u9C3Dah-Dyg	PEFV	
		LARLU1ij-TPD/Cg47-0wIhY4x/-d9pTtGsm-HKw8DqBN-9d0	Access Points: 512	
Pod 4				
7200	BA0000150	8UmtCxMI-CeC5Cjex-Tw0hUd0o-SrQMzIDz-dQBL6FDt-17w	PEFV	Lic_P4_7200
		khkoqCVR-uBGgYCPV-yZzhCS9W-TRuEIQjj-cb6ntxX0-ySo	RFPProtect: 512	
		vmu/UIX5-zO0gNbl0-pOXGxrfx-9W6rmRIk-Licdquhl-oPw	PEFNG: 512	
		ZEFpsydo-7cc6bcFR-UitXUbKQ-AG7UdaME-XcDQTSiS-ZmQ	Access Points: 512	
3600-1	AK0023667	s3tWmjzy-tdHtfQY-fH6TCM70-nwh4UmmE-uZY+WVn1-Exg	PEFV	lic_P4_3600-1
		HpWA82//-PcRrJbY5-wf7OZ0+r-5MLRPTc9-CUhg/bwU-D4I	RFPProtect: 512	
		mQBdGbU3-scDQHd/7-+INwDI8d-wq8A2swl-WaqCMPZ5-TAE	PEFNG: 512	
		EFJbWzII-/GEDLvT9-9cu2Pg1J-wr/GI+W1-6675Z72e-+w8	Access Points: 512	
3600-2	AK0024030	Z1Ts/PfN-TO9xh2jN-Ygnxawtm-yEA+BSqM-1A3m1KzH-J+8	RFPProtect: 512	lic_P4_3600-2
		jojqgIrt-qci10oIs-Y5s6wf3r-05m+IzHz-DL/PRSB5-vJ4	PEFNG: 512	
		RlhTzjC-BNM7ZYLz-7wfPbBB/-9ikcuKIX-rh/5RxY/-unc	PEFV	
		buWk5C+2-S46YFmNH-ZIUEmTia-dfkH4oca-kOOQk3/k-LZQ	Access Points: 512	
Pod 5				
7200	BA0001022	K+ELisIZ-AuLgtSgI-YEP2N+uh-ZinCktx6-AM9sbOSx-TDU	PEFV	Lic_P5_7200
		EBU9vKfG-tIbcWZd4-Wn7+71Ux-H7ggJkNA-a66fg+4+-o+I	RFPProtect: 512	
		I8zPfvSc-NcZ61vt9-EVVUMBek-sG2GBsNJ-QHrKgbq1-Ih8	PEFNG: 512	
		k0bSWZIC-UO3KmCap-AMRph6t+-+g5YC+sj-83MJ+XXP-t1U	Access Points: 512	
3600-1	AK0023694	2TDGfE4v-ICjYWINx-VNqkw94A-vI6oJe4/-UES0wPd1-rSk	PEFV	lic_P5_3600-1
		3fsBaAtu-lZq7P5Im-ZDddPFax-3+E4LikK-f9iL5ZLo-4Ow	RFPProtect: 512	
		NSF6In6b-4hgwePpe-G1cDKhI7-MQmMQqaw-P4+iNgv5-/Rk	PEFNG: 512	
		w4kB2H1L-oILrXSMN-fBXo4ybr-EoPaWZJ5-ois2Bivd-J3o	Access Points: 512	
3600-2	AK0023665	AMNJyJs2-TFoCki08-UVT8uIGI-KMV72LER-sMltCPTI-oBc	RFPProtect: 512	lic_P5_3600-2
		OfGoJluI-YkYwBJbx-XTFJY/rl-vyHr6mvl-sS34JGoR-Ayg	PEFNG: 512	
		I/bYH7nU-ZZjnoHny-93v48WUU-uovbiM4y-5AKe8yYX-SOs	PEFV	
		KbAqJ3Qj-dIZBs7hL-z0C7EOVY-LcaZfx/6-YJ7KkAT/-6IA	Access Points: 512	

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