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Airgroup Configuration Documentation

Aruba AOS 6.x

Airgroup Configuration

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1 Deployment Considerations

Bonjour is Apple's implementation of zero-configuration networking (zeroconf), a group of technologies that includes service discovery, address assignment, and hostname resolution.

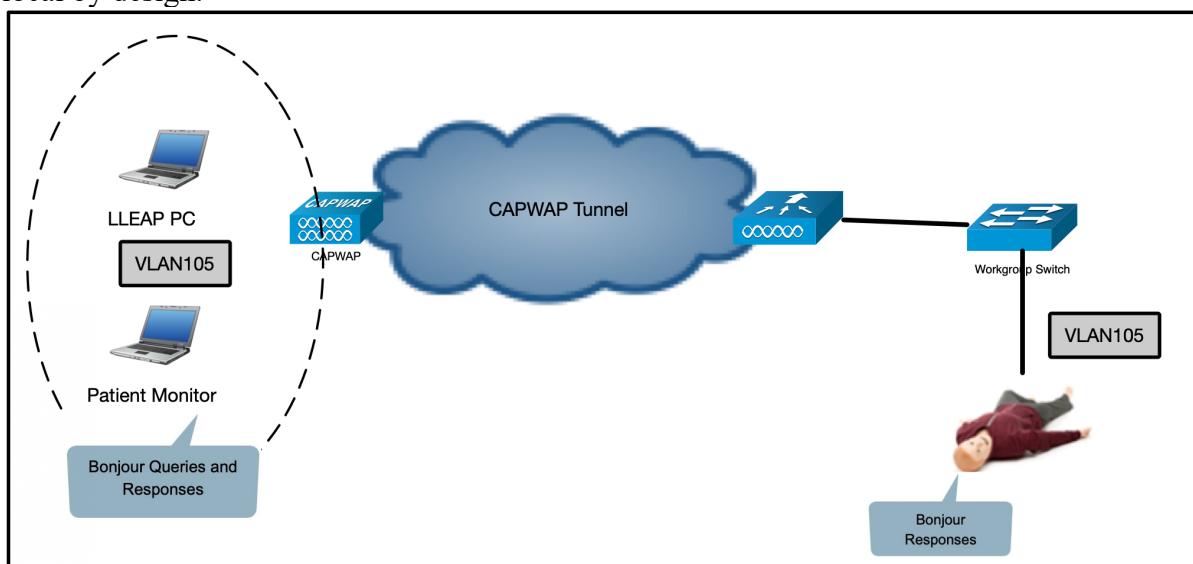
The following is a list of some of the Laerdal Medical devices that use this protocol for device discovery.

- SimMan3G
- Patient Monitor
- LinkBox
- Session Viewer

Each query or advertisement is sent to the Bonjour multicast address for delivery to all clients on the subnet. Apple's bonjour protocol relies on mDNS operating at UDP port 5353 and each query or advertisement are sent to the following reserved group addresses:

- IPv4 Group Address – 224.0.0.251
- IPv6 Group Address – FF02::FB

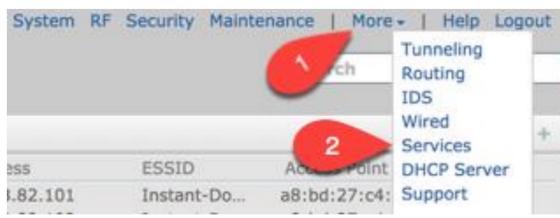
The addresses used by the Bonjour protocol are link-local multicast addresses and thus are only forwarded on the local L2 domain. Routers cannot use multicast routing to redirect the traffic because the time to live (TTL) is set to one, and link-local multicast is meant to stay local by design.



2 AirGroup Service

Define the AirGroup Service:

- Click on More
- Click on Service



2.1 Enable Bonjour Service

Select the Enable Bonjour check box to enable the services.

Services

AirGroup RTLS OpenDNS CALEA Network Integration Dynamic DNS Clarity Openflow IoT

<input checked="" type="checkbox"/> Enable Bonjour	<input type="checkbox"/> Enable Guest Bonjour multicast
<input checked="" type="checkbox"/> Enable DLNA	<input type="checkbox"/> Enable AirGroup across mobility domains

AirGroup Settings

4	airplay	<input checked="" type="checkbox"/>	airplay disallowed roles: airplay disallowed vlangs:	-- Edit -- Edit
	airprint	<input checked="" type="checkbox"/>		
	itunes	<input checked="" type="checkbox"/>		
	remotemgmt	<input type="checkbox"/>		
	sharing	<input checked="" type="checkbox"/>		
	googlecast	<input checked="" type="checkbox"/>		
	AmazonTV	<input checked="" type="checkbox"/>		
	DIAL	<input type="checkbox"/>		
	DLNA Media	<input checked="" type="checkbox"/>		

New Delete New Delete

ClearPass Settings

CPPM server 1: ArubaTME-ClearPass- E 5

CPPM server 2: -- Select Server --

Enforce ClearPass registration 6

7 OK Cancel

2.2 Create Airgroup Service

Select the new to create a new Airgroup service and enter the name of the service.

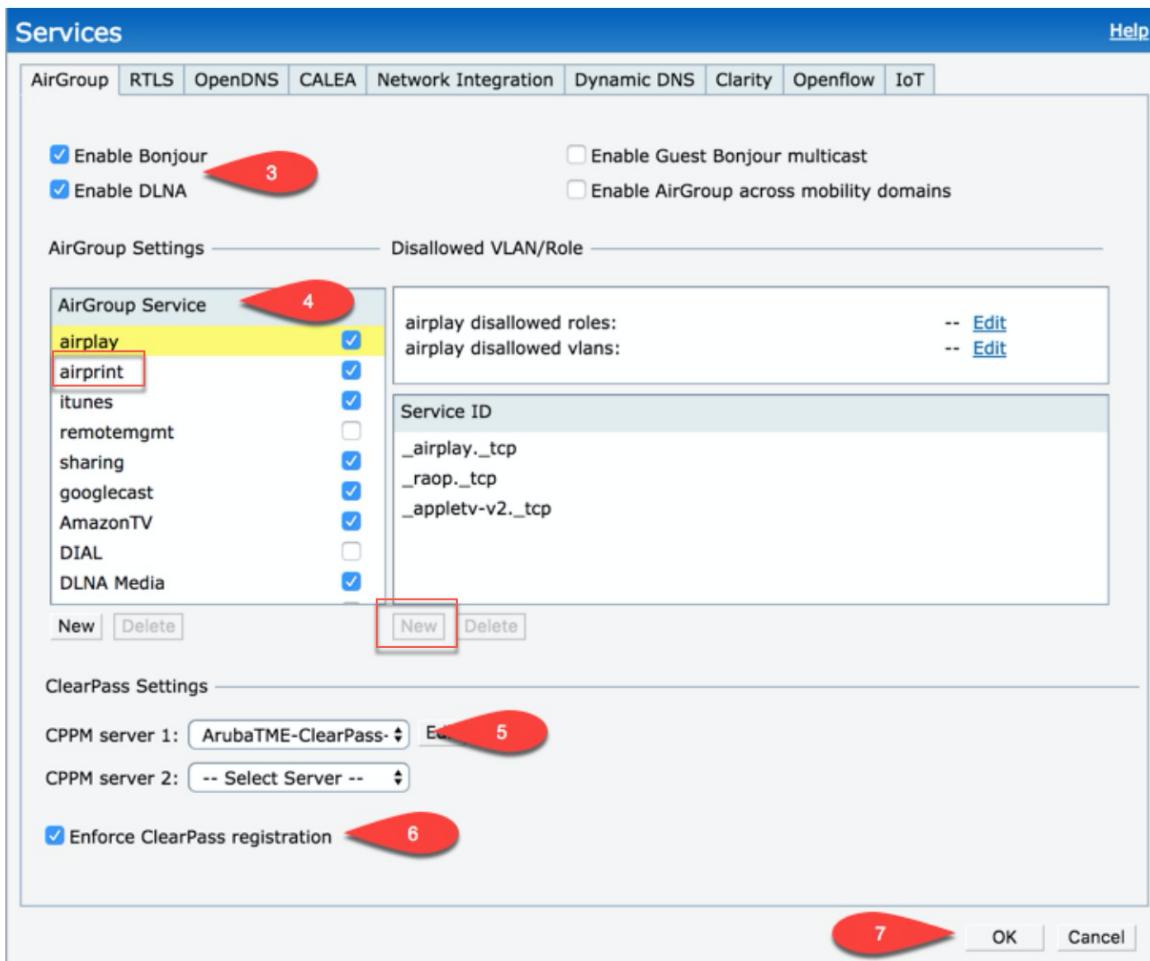
The screenshot shows the 'Services' configuration page with the 'AirGroup' tab selected. The interface is divided into several sections:

- AirGroup Settings:** Contains checkboxes for 'Enable Bonjour' (checked), 'Enable DLNA' (checked), 'Enable Guest Bonjour multicast' (unchecked), and 'Enable AirGroup across mobility domains' (unchecked). A red oval labeled '3' points to the 'Enable Bonjour' checkbox.
- AirGroup Service List:** A table with columns for Service ID and Status (checked or unchecked). The table includes rows for airplay, airprint, itunes, remotemgmt, sharing, googlecast, AmazonTV, DIAL, and DLNA Media. A red oval labeled '4' points to the 'airplay' row, which is highlighted yellow and has a checked status.
- Disallow VLAN/Role:** A section containing 'airplay disallowed roles:' and 'airplay disallowed vlangs:' with two 'Edit' links. A red oval labeled '5' points to the 'Edit' link for 'airplay disallowed vlangs:'.
- Service ID:** A list of TCP ports: _airplay._tcp, _raop._tcp, and _appletv-v2._tcp.
- New/Delete Buttons:** Buttons for creating ('New') and deleting ('Delete') services.
- ClearPass Settings:** Includes fields for 'CPPM server 1' (ArubaTME-ClearPass-) and 'CPPM server 2' (Select Server). A red oval labeled '6' points to the 'Enforce ClearPass registration' checkbox (checked).
- Buttons at the bottom:** 'OK' and 'Cancel' buttons, with a red oval labeled '7' pointing to the 'OK' button.

2.3 Airgroup Service Ids GUI Configuration

To add service ids to the Airgroup service profile select the service name and then click new.

Important Note: The mDNS “.local.” ending should not be added to the Aruba service IDs.



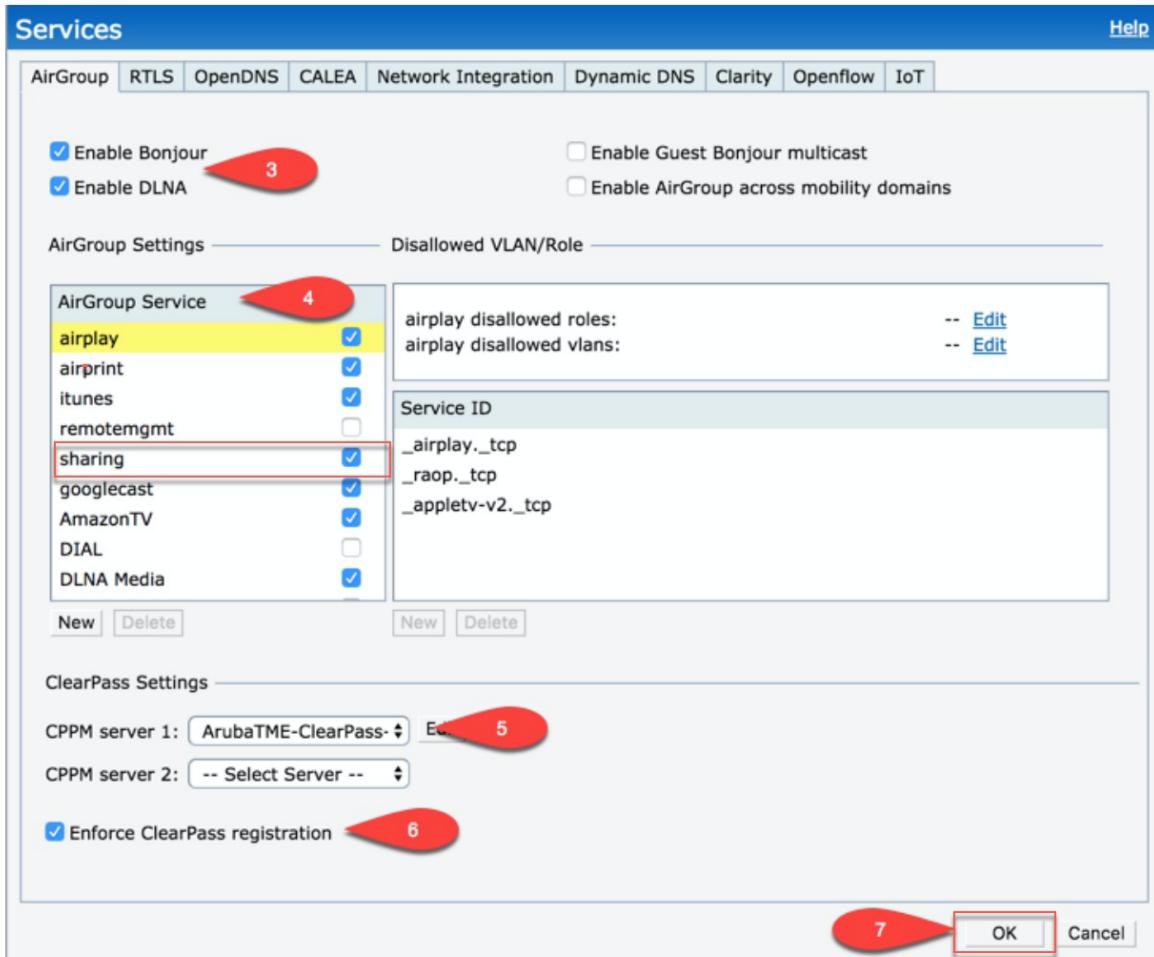
2.3.1 Airgroup Service and Service ids CLI Configuration

Use the **airgroupservice** command to define an AirGroup service using the command-line interface.

```
airgroupservice <name>
```

```
(host) (config) #airgroupservice SIM_SRV_GRP
(host) (config-airgroupservice) #description "SIM SERVICES"
(host) (config-airgroupservice) #id _simbridge._tcp
(host) (config-airgroupservice) #id _simmonitor._tcp
(host) (config-airgroupservice) #id _simlink._tcp
(host) (config-airgroupservice) #id _simse._tcp
(host) (config-airgroupservice) #id _simvca._tcp
(host) (config-airgroupservice) #id _simventures._tcp
(host) (config-airgroupservice) #id _http._tcp
(host) (config-airgroupservice) #id _workstation._tcp
(host) (config-airgroupservice) #id _ssh._tcp
(host) (config-airgroupservice) #id _lleafhost._tcp
(host) (config-airgroupservice) #id _ctgserver._tcp
```

2.4 Airgroup Enabled Service GUI Configuration



2.4.1 Airgroup Enabled Service CLI Configuration

Use the following command to enable or disable an AirGroup service:

```
airgroup service <string> enable|disable
```

Sample Configuration

```
(host) (config)#airgroup service SIM_SRV_GVP enable
```

2.5 AirGroup Service Verification

AirGroup Server Verification

- Click on AirGroup on the line next to Monitoring



Here you can see the AirGroup servers listed

Instant-Docmentation									Monitoring	IDS	AirGroup	Configuration	1 Alert	-
Airgroup Servers														
MAC	IP	Type	Host Name	Service	VLAN	Wired/Wireless	Group	CPPM						
f0:81:73:38:e4:66	192.168.82.100	mDNS	192-168-82-100	AmazonTV	82	wireless		■						
d0:d2:b0:9b:70:53	192.168.82.102	mDNS	Farley	airplay	82	wireless		■						
78:31:c1:d3:c0:ae	192.168.81.101	mDNS	Chriss-MacBook-Pro..	iTunes	81	wireless		■						

Click on the pin under CPPM (ClearPass) you can see the shared user list from ClearPass begin returned.

CPPM									
ClearPass Device Registration Information									
Device	device-owner	shared location-id AP-name	shared location-id AP-FQLN	shared location-id AP-group	shared user-list	shared group-list	shared role-list	CPPM-Req	CPPM-Resp
f0:81:73:38:e4:66	Farley		N/A	N/A	farley Farley 00714730107d Sati Chris			1	1

You can refer to the Verifying AirGroup Service for additional commands from the CLI for command outputs. These are consistent across Mobility Managed and Instant Deployments.

2.5.1 Airgroup Show Commands

```
(host) #show airgroup status
```

```
AirGroup Feature -----
```

```
Status
```

```
-----
```

```
Enabled
```

```
AirGroup Enforce Registration
```

```
-----
```

```
Status
```

```
-----
```

```
Enabled
```

```
AirGroup Service Information
```

```
-----
```

Service	Status
-----	-----

airplay	Enabled
---------	---------

airprint	Enabled
----------	---------

itunes	Disabled
--------	----------

remotemgmt	Enabled
------------	---------

sharing	Enabled
---------	---------

chat	Enabled
------	---------

```
allowall      Enabled
```

```
show airgroupservice
```

Sample Configuration

```
(host) # show airgroupservice
AirGroupService Details
-----
Service      Description      Disallowed-Role  Disallowed-VLAN  ID
-----      -----
airplay       AirPlay
airprint      AirPrint
itunes        iTunes
remotemgmt    Remote management
sharing       Sharing
#query-hits  #servers
-----  -----
11018        108
0            0
```

```
AirGroupService Details
```