AirGroup Configuration How-To with ClearPass 6.0.1
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1. AirGroup Configuration How-to with ClearPass 6.0.1

   Assumptions: ................................................................. 9
   Step 1: Controller Configuration ........................................ 9
   Step 2: ClearPass Setup .................................................. 11
   Testing ............................................................................. 17
   Troubleshooting ............................................................. 18
Figures

Figure 1 Configuring a UDP port for AirGroup’s RFC 3576 ........................................................................................................... 10
Figure 3 Airgroup AAA profile RFC 3576 server .......................................................................................................................... 11
Figure 4 Configure AirGroup Services ........................................................................................................................................... 11
Figure 5 Add a new controller for AirGroup Services ..................................................................................................................... 12
Figure 6 Configure AirGroup Services controller settings ......................................................................................................... 12
Figure 8 Adding a new Local User in CPPM .................................................................................................................................. 13
Figure 9 Create an AirGroup Administrator .................................................................................................................................. 14
Figure 10 Create an AirGroup Operator ......................................................................................................................................... 14
Figure 11 Local Users GUI screen ..................................................................................................................................................... 15
Figure 12 Create a device ................................................................................................................................................................... 15
Figure 13 Register Shared Device ....................................................................................................................................................... 16
Audience

This AirGroup Configuration How-To with ClearPass 6.0.1 is intended for system administrators and people who are setting up AirGroup configuration with ClearPass 6.0.1.

Typographic Conventions

The following conventions are used throughout this manual to emphasize important concepts.

<table>
<thead>
<tr>
<th>Type Style</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Italics</strong></td>
<td>Used to emphasize important items and for the titles of books.</td>
</tr>
<tr>
<td><strong>Boldface</strong></td>
<td>Used to highlight navigation in procedures and to emphasize command names and parameter options when mentioned in text.</td>
</tr>
<tr>
<td><strong>Sample template code or HTML text</strong></td>
<td>Code samples are shown in a fixed-width font</td>
</tr>
<tr>
<td><code>&lt;angle brackets&gt;</code></td>
<td>When used in examples or command syntax, text within angle brackets represents items you should replace with information appropriate to your specific situation. For example: ping <code>&lt;ipaddr&gt;</code> In this example, you would type “ping” at the system prompt exactly as shown, followed by the IP address of the system to which ICMP echo packets are to be sent. Do not type the angle brackets.</td>
</tr>
</tbody>
</table>
## Contacting Support

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Site</strong></td>
<td>arubanetworks.com</td>
</tr>
<tr>
<td><strong>Support Site</strong></td>
<td>support.arubanetworks.com</td>
</tr>
<tr>
<td><strong>Airheads Social Forums and Knowledge</strong></td>
<td>community.arubanetworks.com</td>
</tr>
<tr>
<td><strong>Base and Knowledge Base</strong></td>
<td></td>
</tr>
<tr>
<td><strong>North American Telephone</strong></td>
<td>1-800-943-4526 (Toll Free)</td>
</tr>
<tr>
<td></td>
<td>1-408-754-1200</td>
</tr>
<tr>
<td><strong>International Telephones</strong></td>
<td><a href="http://www.arubanetworks.com/support-services/aruba-support-program/contact-support/">http://www.arubanetworks.com/support-services/aruba-support-program/contact-support/</a></td>
</tr>
<tr>
<td><strong>Software Licensing Site</strong></td>
<td><a href="https://licensing.arubanetworks.com/">https://licensing.arubanetworks.com/</a></td>
</tr>
<tr>
<td><strong>End of Support information</strong></td>
<td><a href="http://www.arubanetworks.com/support-services/end-of-life-products/end-of-life-policy/">www.arubanetworks.com/support-services/end-of-life-products/end-of-life-policy/</a></td>
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<tr>
<td><strong>Wireless Security Incident Response Team (WSIRT)</strong></td>
<td><a href="http://www.arubanetworks.com/support-services/security-bulletins/">http://www.arubanetworks.com/support-services/security-bulletins/</a></td>
</tr>
</tbody>
</table>

### Support Email Addresses

- **Americas and APAC**
  - support@arubanetworks.com

- **EMEA**
  - emea_support@arubanetworks.com

- **WSIRT Email**
  - wsirt@arubanetworks.com

Please email details of any security problem found in an Aruba product.
1. **AirGroup Configuration How-to with ClearPass 6.0.1**

The purpose of this document is to walk through how-to setup AirGroup configuration with ClearPass 6.0.1. This document will use the Integrated Deployment Model.

**Assumptions:**

1. Controller is running the latest AirGroup AOS Technology Release (at the time of this document it was 6.1.3.4-Airgroup).
2. ClearPass 6.0.1 non-Beta version is installed.
3. **IPv6 is disabled** on the controller (command: `no ipv6 enable`).
4. Aruba Wireless and ClearPass 6 Integration Guide setup has already been completed.
5. An SSID with a PSK is setup for testing.
6. An up-to-date AppleTV is available for testing.
7. An Apple computer running Mountain Lion (10.8.2) or an iOS device running iOS 6 is available for testing.

**Step 1: Controller Configuration**

Use SSH to login to the controller and run the following command in configure terminal mode:

```
airgroup enable
firewall cp permit proto 17 ports 21234 21234
```

In the controller GUI, navigate to **Configuration->Advanced Services->All Profiles.** Expand **Other Profiles.** Click on **Airgroup AAA profile.** You **must** configure a UDP port for AirGroup's RFC 3576. You **cannot** use the default 3799. In the sample below, UDP port 21234 is used. Enter the port number in the 'Configure UDP port to receive RFC 3576 server requests' field and click **Apply.**
Click on **Server Group** under **Airgroup AAA profile**. Select the ClearPass 6 server group that was created in the Aruba Wireless and ClearPass 6 Integration Guide.

**Figure 2** ClearPass 6 server group previously created

Click **Apply**.

Click on RFC 3576 server under **Airgroup AAA profile**.
Again, use the RFC 3576 server that points to ClearPass 6 which was created in the previous setup guide. Click **Apply**.

**Step 2: ClearPass Setup**

Open up ClearPass Guest and navigate to **Administration->AirGroup Services**. Click ‘Configure AirGroup Services’.

**Figure 4 Configure AirGroup Services**

Click ‘Add a new controller’.
Figure 5 Add a new controller for AirGroup Services

**AirGroup Services 6.0.1-22806 Configuration**

Set the configuration options for AirGroup Services 6.0.1-22806.

![Configuring AirGroup Services](image)

Enter the appropriate information.

**Note:** The port used in these setup instructions is 21234 and the shared secret was configured in the previous setup guide (where aruba123 was used as an example).

Figure 6 Configure AirGroup Services controller settings

**AirGroup Services 6.0.1-22806 Configuration**

Set the configuration options for AirGroup Services 6.0.1-22806.

![Configuring AirGroup Services](image)

Click **Save Configuration**.

In order to demonstrate AirGroup, either an AirGroup Administrator or AirGroup Operator account must be created. Go to the ClearPass Policy Manager GUI, and navigate to **Configuration->Identity->Local Users**.
Figure 7 Configuration - >Identity - >Local Users selection

Click **Add User**.

Figure 8 Adding a new Local User in CPPM

Create an **AirGroup Administrator**.
In this example, as in past documentation, the password used is test123. Click Add.

Now click Add User, and create an AirGroup Operator:

Click Add to save the ‘AirGroup Operator’ login.

The ‘AirGroup Administrator’ and ‘AirGroup Operator’ IDs will be displayed in the Local Users GUI screen.
Navigate to the ClearPass Guest GUI and click the **Logout** button so that you are presented with the ClearPass Guest Login page. Enter the airgroup-admin login and password.

Click on **Create Device**.

The following page is displayed:
For testing purposes, add your test AppleTV device name and MAC address; but leave the other fields blank.

Click **Register Shared Device**.
Testing

Disconnect your AppleTV and OSX Mountain Lion/iOS 6 devices if they were previously connected to the wireless network. Remove their entries from the controller's user table as follows:

Find the MAC address

“show user table”

Delete them from the table

“aaa user delete mac 00:aa:22:bb:33:cc”

Reconnect both devices. You should be able to connect to the AppleTV from the other device. In order to limit access to the AppleTV, open up the ClearPass Guest GUI, logging in as the user that created the device (airgroup-admin or airgroup-oper were the example usernames in this document) and navigate to List Devices. Click on the test AppleTV. Click Edit. Now add a username to the Shared With field that is not the username being used to login with the OSX Mountain Lion/iOS 6 device.

Disconnect and remove the OSX Mountain Lion/iOS 6 device from the controller's user table. Reconnect the device, again not using the username that you added to the Shared With field. The AppleTV should not be available to this device.

Disconnect the OSX Mountain Lion/iOS 6 device and delete it from the controller's user table. Reconnect using the username that was added to the Shared With field. The OSX Mountain Lion/iOS 6 device should once again have access to the AppleTV.
Troubleshooting

Problem:
Limiting devices has no affect.

Solution:
Make sure that IPv6 is disabled.

Problem:
OSX Laptop running Mountain Lion can AirPlay to the AppleTV, but iOS devices cannot.

Solution:
Make sure that IPv6 is disabled.