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1 Introduction
Welcome to the Site Survey with Standalone AP Cookbook. Doing Site Survey for Aruba is theoretically impossible because without the controller you are not able to bring up the AP. In ArubaOS version 3.2 and above; there is a Remote AP feature called or “Always” mode which does away with such requirement. This guide provides step by step guide to setup such standalone site survey AP which will advertise SSID without a Controller.

2 Reference Documents
The following documents on the support website are considered critical reading to effectively setup the Standalone AP:

- ArubaOS™ 3.3.x User Guide and above
- ArubaOS™ 3.3.x Release Notes and above

The above documents can be found in the support.arubanetworks.com.

3 Equipment
You need the following equipment for this demonstration

- Any Aruba Controller
- 1 x Aruba AP
- Licenses for controller
  - PEF License
  - RAP License for 1 x AP
- ArubaOS version 3.3.1.x and above
- Serial Cables to Purge an AP (needed only to return AP to normal state after survey)
  - CA-SPOE-ADAPT-3 for AP60, 61, 65, 70
  - USB to Serial Cable, and DB9 to RJ45 Cable for AP 105,120, 121 and 125

Note: The demo configuration is design for A200 controller. However, you can use it on other model of Aruba controller.
4 Aruba Remote AP Introduction

Remote Access Point (RAP) solutions involve configuring a standard thin access point to provide a customer-defined level of service to the user by tunneling securely back to the corporate network over a wide area network. The WAN may be either be a private network such as a frame relay or MPLS network, or a public network such as a residential or commercial broadband Internet service. The same SSIDs, encryption, and authentication that exist on the corporate network are present on the RAP, or the administrator can choose to enable just a subset of the functionality of campus-connected APs. The Remote AP is a licensed feature, with each Remote AP requiring a separate license. For telecommuter or home-office applications, an Aruba RAP is much more than a simple home wireless device. It is instead an extension of all of services available on the corporate network including voice and video in a similar fashion to a branch office but with fewer configuration headaches. For instance, the user’s laptop will automatically associate with the RAP just as it would in the corporate network, and allows for centralized management of a truly mobile edge. Dual-mode voice devices can place and receive calls.
5  Setup
This document assumed that you have basic knowledge of Aruba. Please refer to the reference document if you need additional help.

- Upgrade to minimum 3.3.x
- Add PEF License
- Add RAP License

5.1  Configure VPN for Remote AP

Configuration> Advanced Services> VPN Services

Add VPN Pool for Remote AP

Add IKE Shared Secrets
5.2 Configure Authentication Server for VPN
Configuration>Security>Authentication>L3 Authentication
Set as default

5.3 Create RAP user
Configuration> Security> Authentication> Servers > Internal DB
Set the role as: default-vpn-role

5.4 Create AP Group

Configuration > AP Group
Add: Site-Survey AP Group

Create Virtual AP

Configuration > AP Group > Edit "Site-Survey"
Create SSID Profile

Configuration>AP Group> Edit “Site-Survey”
Change Remote-AP Operation to “Always”
Change Forward Mode to “bridge”
### 5.5 Provision AP

Set AP-Group: Site-Survey  
Enter IKE Shared Secret from section 5.1  
Setup Static IP address, Subnet Mask and Default Gateway for the AP  
Setup Master ip address (IP address of the Controller)

#### Wireless > AP Installation > Provision

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<tr>
<th>Parameter</th>
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<th>Description</th>
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<tbody>
<tr>
<td><strong>AP Parameters</strong></td>
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<td><strong>Master Discovery</strong></td>
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<td>Use AP Discovery Protocol</td>
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<td>Master Controller IP Address</td>
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<td>Subnet Mask</td>
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<td>Gateway IP Address</td>
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<tr>
<td>DNS IP Address</td>
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5.6 Reboot AP and connect back to Controller
Note the AP needs to be rebooted and connected to the Controller at least once for the RAP configuration to be push into the AP. You should see the SSID “Site-Survey” being advertised before proceeding.

5.7 Reboot AP without Controller
AP will bootup and advertise “Site-Survey” SSID.
Configure wireless client static IP address: 172.30.0.100/24
Perform ping to the AP: 172.30.0.99