GFence Integration
with Aruba ALE
Configuration guide
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Introduction

The Analytics and Location Engine (ALE) works with Aruba WLANs to collect presence data about Wi-Fi-enabled devices. This data is integrated with G # (GFence) solution, which translates it into actionable business intelligence. GFence is a platform, which allows you to make safe decisions, aimed at increasing the performances of your sales object, through deeper understanding of your customer’s needs. By using a detailed analysis of trends, including retaining visitors in the house and zone movement, and through real-time interaction with your visitors, you can quickly adjust to your customer’s needs. GFence is a scalable product, which can be implemented on multiple locations of interest, while keeping a single centralized place for administration and report generation.

1. Prerequisites

The following Aruba components are needed in order to use Saga GFence Solution:
- Aruba Instant Access Point (InstantOS 6.4 or higher) or Campus Access Points and Mobility Controller (ArubaOS 6.4 or higher)
- Airwave Network Management Platform (8.0.8 or higher)
- Analytics and Location Engine (ALE 2.0.0.10 or higher)

2. Overview

GFence was qualified in cooperation with Aruba. Aruba Wi-Fi infrastructure consists of the following hardware components: Aruba Wi-Fi Access Points (AP), Wi-Fi Controller (optional with IAP), AirWave, and Analytics and Location Engine (ALE). Aruba Wi-Fi infrastructure, installed inside a public space, has a capability to communicate with Wi-Fi enabled devices and transfer useful data to ALE, which then interprets data and calculates it into specific appearances of devices. GFence, a transactional-analytical solution, is processing data received from the ALE near real-time and migrating it into its analytical base. Based on this data, complex reports are generated, based on a set of predefined filters.
3. Configuration

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Configuring Aruba ALE

Before proceeding with the ALE configuration, make sure your AP placements are done correctly in VisualRF in AirWave.

1. Login to ALE web-based dashboard.
2. Navigate to ‘Configuration’ > ‘Source’, then choose appropriate data source and port:
   • Controller + port 4343
   • IAP + port 8088
Select 'Configuration' > 'Mode' > 'Context with device location' (estimated).

4. Click on ‘+’ to add new AirWave Server.

5. Enter the **server IP address** in the IP Address text box, and then click Next.

6. Import floorplans from AirWave using the following: Enter the username and password for the AirWave server, or select the check box for Upload backup from AirWave instead to locate and select a backup VisualRF file, and then click Next.

7. Select the floorplan required for data extraction (all floors, or a subset of floors). Click Next to pull relevant data from the AirWave server and store it in the ALE database.

8. Click **Apply** button to save your configuration.

9. Select 'Configuration' > 'Options' > 'General' > make sure 'Enable Anonymization' is off.
10. If you have not be prompted to regenerate the Positioning Database (PDB), you can do so through the Maintenance tab.
11. To add an NTP server, enter the IP address of the server in the corresponding text box.

**Configuring Aruba AirWave**

1. Login to AirWave web-based dashboard
2. Select ‘Groups’ > then choose appropriate group that will be updated
3. Within the appropriate group, select ‘Templates’ > Click on to edit the template for chosen group

4. Within the ‘Edit’ section, add the following:

```
ale-server x.x.x.x:8088
```
Configuring Aruba Instant cluster

1. Login to IAP dashboard
2. Navigate to ‘More’ > ‘Services’ > ‘RTLS’
3. Check the option Analytics & Location Engine
4. Enter ALE Server’s IP address and appropriate port number (e.g. x.x.x.x:8088)

*Note – Port 8088 is used for communication between IAP and ALE

5. Click ‘OK’
6. Navigate to ‘System’ > ‘Admin’ > Enter the AirWave settings

Configuring Captive Portal

1. Within the IAP Web dashboard, select ‘Networks’ > ‘New’
2. Enter desired Guest network name (SSID) and primary usage Guest, then click Next.
5. Under the security tab, choose Splash page type *External* and click on New in order to create Captive portal profile.

5. Within the Captive portal profile choose the one you created, then click on Next.
6. Navigate to Access tab > choose Role-based. On the right, under the Roles click on New to create Pre-authentication role.
7. Within the Rules tab, click on new to create appropriate rules.

8. Click OK, then New again to create more rules.
9. Choose:

*Rule type* – Access control
*Service* – Network and https
*Action* – deny
10. Click OK.
11. Set priorities as it is shown in the picture below and choose appropriate pre-authentication role, then click Finish.

For more information regarding Aruba visit: http://www.arubanetworks.com/
For information regarding Saga visit: https://www.arubanetworks.com/partners/ecosystem/
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