User Manual

Enable Devices on Ayla Field Service

Version: 4.0
Date Released: June 14, 2017
Document Number: AY006UFS3-4

Contact Information

Ayla Networks TECHNICAL SUPPORT and SALES

Contact Technical Support: https://support.aylanetworks.com
or support@aylanetworks.com

Contact Sales: https://www.aylanetworks.com/company/contact-us

Ayla Networks REGIONAL OFFICES

HEADQUARTERS

Chicago	Silicon Valley	Boston
10 N. Martingale Road, Suite 400	4250 Burton Drive, Suite 100	275 Grove Street, Suite 2-400
Schaumburg, IL 601073	Santa Clara, CA 95054	Newton, MA 02466
	Phone: +1 408 830 9844	
	Fax: +1 408 716 2621	

Table of Contents

List of Figures

List of Tables

1 Introduction

This document describes how to launch/enable devices on Ayla Field Service.

1.1 Audience

This document is written for US (North America) and CN (China) OEMs. For EU (Europe) field deployment, contact your Customer Success Team.

1.2 Related Documentation

Manufacturing Guide (AY006UMF3)

Ayla Developers Portal User Manual (AY006UDP3)

Ayla OEM Dashboard User Manual (AY006DB3)

1.3 Customer Support

Technical support is available through the Ayla Support website at:
https://support.aylanetworks.com, or via email at support@aylanetworks.com.

2 Overview

Ayla Developer Service is where customers develop their connected products. In this environment, the customer does product development, implementation, and testing needed to ensure the product is ready for final production testing. Devices should not be moved/enabled on Ayla Field Service until they have been fully validated. The transition to the Ayla Field Service is a critical step to a production ready IoT product using the Ayla platform.

Follow the steps in this document for a successful transition.

NOTE	Ayla requires a 30-day advance notice from OEMs, before moving/enabling devices on the Field Service.

The Ayla Platform has two distinct cloud environments for use by our customers.

2.1 Ayla Developer Service

Ayla Service environment is used during the Customer Solution Development Phase. This is a multi-tenant live environment used by all our customers. Ayla Developer Service features include:

- Access to Ayla Development Tools
- End-to-End and Integration Testing
- Different SLAs from Ayla Field Service for updates and availability

2.2 Ayla Field Service

Ayla Service environment is used after the Customer Solution is in Production (in market). This is a multi-tenant live environment used by all our customers.

3   Field Trials on Ayla Developer Service

Preparation for moving to Field starts with Field trials on the Ayla Developer Service. Usually this is done internally or with a "friends and family" group of customers. As you work through the trials, review what you have learned. Integrate what you have learned into your product along with any enhancements you want to make.

Keep in mind that when devices running on the Ayla Developer Service are switched to the Field Service, field testers will need to re-register them. We recommend communicating this to field testers upfront when they begin testing.

The next step is to begin internal Field trials in the Ayla Field Service. At this point you want to notify Ayla with the information listed below.

3.1   When to Move from Development to Field

Customers should use the Ayla Developer Service to implement and test configurations. Consider moving to Field Service when the following criteria have been met:

- Successful testing with a reasonable amount of end users in real world situations
- Verification that Over the Air Updates (OTA) complete reliably
- Stable and vetted device code with no plans for major changes
- Stable and functionally complete mobile app (branding/UI changes are possible later)
- Finalized Ayla Device Template

3.2   Ayla Notification of Move to Field

You should have different instances of apps/services for development and field services. This allows for seamless operations on both environments and for testing of future releases

To get started with the Move to Field process, first notify Ayla. Submit a support ticket (via the Support Portal) or support@aylanetworks.com with the following information:

- The date you plan to move your units to Ayla Field Service.
- Which product(s) you plan to move, including the OEM model and OEM ID of each.
- The minimum number of units that remain on the Developer Service
- Create a new app id-secret pair.
- Approximate number of units to be included in the Field Service testing
- Total duration planned for trials in Field Service.
- Total number of units planned for first production run to after all Field Trials are completed.
- Quarterly projections devices to be launched year 1.

  Highlight any mass registration dates. For example, "Holiday season between Nov 1. - Jan. 15 is peak sales time. 10Ku expected to be activated to unique users between Dec 25 – Jan 1."
- Estimates on the number of daily notifications, average transactions and annual OTAs.

4 "Move to Field" Checklist

Below is a list of the steps to completing your move to field:

4.1 Customer Responsibilities

Table 1 – Customer Responsibilities Checklist

Check (as done)	To Do	Description
	Confirm Region	Confirm which field region devices will be connected to (US, China)
	Confirm firmware	Host MCU and module firmware should be finalized before transition to Ayla Field Service
	Define Model ID	Create unique OEM Model ID for Ayla Field Service (must be different from the Developer Service Model ID)
	Define App – ID	Create unique Mobile Application ID and Secret for Ayla Field Service
	Create Field Version of the Mobile Apps	The mobile apps must be configured to work with the field service. At this point separate apps for Dev and Field are required.
	Configure SMTP settings	Input customer specific SMTP settings (customers should have their own SMTP servers, both primary and secondary)
	Define email templates	Define email templates and upload them to Ayla OEM Dashboard
	Confirm OEM Users	Confirm list of OEM users, roles and responsibilities
	Confirm OAuth Credentials	Input any additional OAuth settings as required
	Confirm Trigger Intervals	Set trigger intervals as required
	Confirm OAuth Applications	Confirm all OAuth applications to be utilized

Check (as done)	To Do	Description
	Create device template	Create unique device template for Ayla Field Service
	Confirm usage statistics	Be aware of usage statistics of devices
	Confirm OTA functionality	Implement test plans for OTA functionality, if not using OTA, Ayla sign off required
	Confirm escalation path	Know how to contact Ayla for any support needs throughout process
	Prepare production procedures	iOS app certification, HomeKit certification, module procurement, manufacturing processes and connectivity test plans in place
	Provide a List of Development Devices to move to Field	Identify which development devices need to be moved to field
	Provide Logs for Field Device Activation	For new devices, the customer should provide manufacturer activation logs for the field service.

4.2 Ayla Responsibilities

Table 2 – Ayla Responsibilities Checklist

To Do	Description
Confirm products/feature availability	Work with Ayla support team to confirm all required products/features available on Ayla Field Service
Confirm receipt of Field Notification from Customer	Verify details/estimates received from customer and convey to engineering and product team
Activate field devices	Move identified development devices to Field and activate new field devices
Create DNS entries	Create DNS entries for the Field OEM Model, app-ids and stream-id

5   Configuration Details

5.1   Device Configuration

This section lists the device configuration actions performed by the OEM and Ayla.

5.1.1   OEM Actions

1. Configure development units of an OEM model with a `-dev` suffix. For example:
   `xyz123-dev`

2. Configure field units with the OEM model. Ensure your field OEM model is distinct from your Development Service Model. For example:
   `xyz123`

3. Build and configure field units using the OEM config scripts.

4. Locate the `log.txt` file generated in the configuration process and send to your Ayla Customer Success Representative.

5. Send the field OEM model to your Ayla Customer Success Representative.

5.1.2   Ayla Actions

1. Create a DNS entry to point the OEM model to the selected Field Service.

2. Format for the DNS entry: `<OEM model>-<OEM id>-device.aylanetworks.com`

3. Example: `xyz123-acme-device.aylanetworks.com`

4. Use the `log.txt` file received from the OEM to activate the units on Field Service.

6 Mobile Application Configuration

Mobile application development process is a development cycle and production cycle equivalent to product cycles. Customers need to be aware of the review cycle associated with the transition from development to general availability of mobile applications.

- iOS applications should be submitted to Apple certification at least one week in advance of the expected publish date.

  This may be longer for HomeKit certification.

- Android generally has less review requirements, however to be safe submit at least one week in advance of the expected publish date.

6.1 OEM Actions

1. Launch the application (Apple App or Google Play) that is required to function in Field Service. Use the `app_id` and `app_secret`, for example, `App-123`.

   NOTE   It is strongly recommended the App ID always contain the OEM ID. Development apps should use a different set of `app_id` and `app_secret`, for example: `AppdDev-oemid123-id`, where the OEM ID is `oemid123`.

2. Send the field `app_id` to your Ayla Customer Success Representative.

6.2 Ayla Actions

1. Create a DNS entry to point the field `app_id` to the selected field service.
2. Format for the DNS entry: <app_id>-device.aylanetworks.com

   For example: AppdDev-oemid123-id -device.aylanetworks.com.

7 Service Configuration

7.1 OEM Actions

The final template version of the product should be deployed to Field Service from the OEM Dashboard. Ayla recommends you keep a separate template on the Ayla Developer Service, for testing and modification for postproduction.

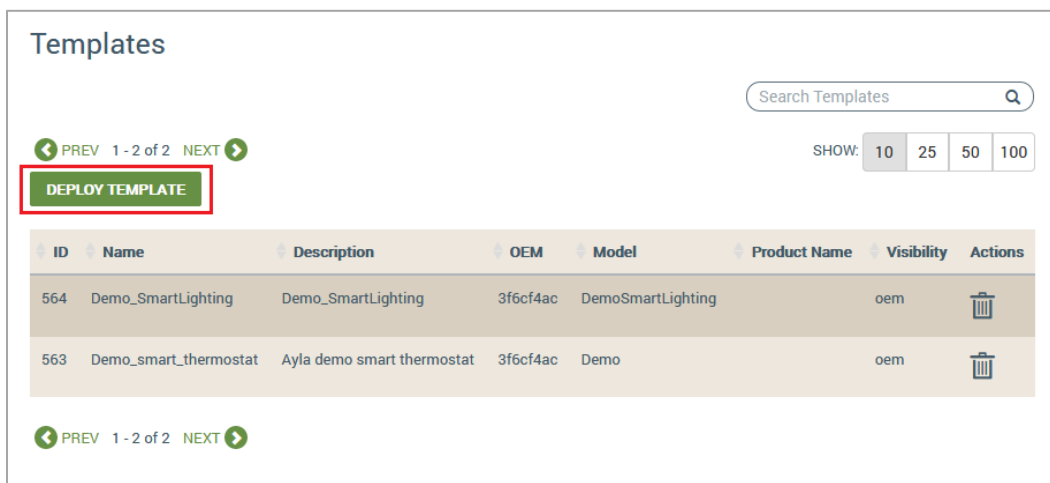In the Ayla Field Service Dashboard, follow the directions below.

1. To access the Templates table listing, on the Navigation Menu, click **Templates**.

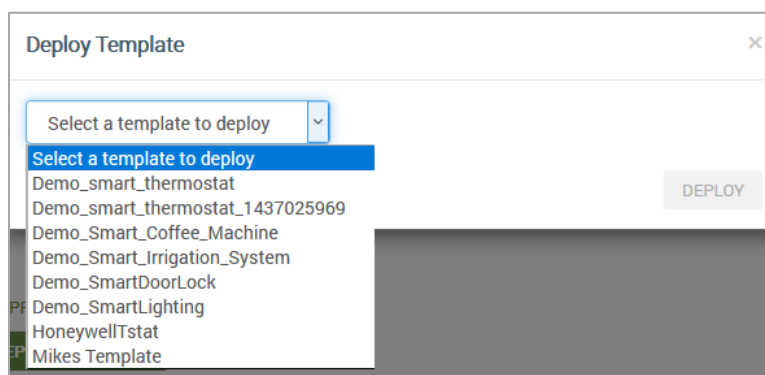Figure 1 - Ayla Dashboard – Navigation Menu
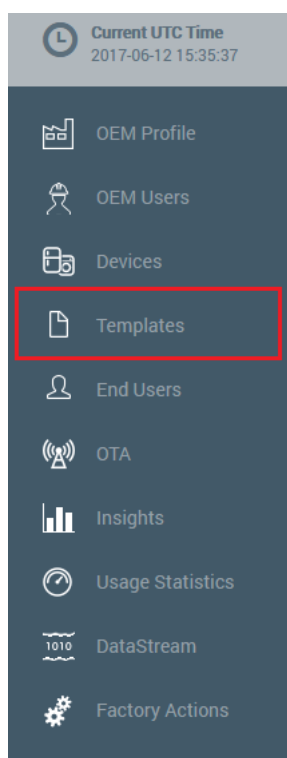
2. This displays the Templates page. Click **DEPLOY TEMPLATE**.

Figure 2 - Ayla Dashboard – Templates Page

3. On the Deploy Template dialog box, click the drop-down to show a list of templates.

Figure 3 - Ayla Dashboard – Deploy Template dialog box

NOTE	Ayla recommends clearly identifying the template intended for the Field Service with a tag or addendum. Figure shows an example of the **FS** tag.

4. Select the template from the listing and click **DEPLOY**.

    In this example, Demo_Smart_Coffee_Machine is selected. Refresh the page and the template is available on the Field Service Dashboard.

Figure 4 - Ayla Dashboard – New Deployed Template

NOTE   You can click the template to review details about the template.

5. To distribute to devices, the typical flow would be to initiate an OTA that requests and delivers the new template.

7.2   Ayla Action

Verify the production template was accurately deployed to the selected Field Service.

8 End-to-End Test Requirement

8.1 OEM Action

After all configuration steps are completed, use the field unit and the development application to test the end-to-end functionality of your system.

For testing, use a fresh unit from the factory and go through an out of the box setup, provisioning, and any additional steps expected for a successful user flow.

9 Field Services (OEM Dashboard)

The OEM Dashboard (https://dashboard.aylanetworks.com) provides access to devices on the Ayla Field Service. See the *Ayla OEM Dashboard User Manual (*AY006UDB0*)* document for details.

4250 Burton Drive, Santa Clara, CA 95054
Phone: +1 408 830 9844
Fax: +1 408 716 2621