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1 Introduction

The Ayla Developer Portal is a UI-driven application environment that provides all of the tools required for our customers and developer partners to design and develop their connected products – there is no software development kit or coding required in the Ayla Cloud. The portal's primary use is in the definition and design of virtualizing a customer's connected product in the Ayla Cloud.

The Ayla Developer Portal provides tools to define templates and properties exported from the devices as well as the means to manage device-specific information. This includes features to set and get properties on the device remotely, thereby greatly enhancing the ability to perform simple tests during the development phases.

All configurations for the final product can be defined and fully tested before being deployed to field units. There are tools to create and apply rules and decision logic to devices for development and testing purposes. This includes testing of the OTA update deployment process on devices. Some of the main feature of the portal are as follows:

- Register new devices.
- View and configure a device.
- Design and customize a device.
- Browse and test Ayla's RESTful APIs in our API Browser to significantly reduce a developer's ramp-up time. The API Browser provides live, accurate, fully detailed input and output to users.

NOTE The Ayla Developer Portal is available in both the US and China Ayla Cloud Services.

1.1 About this Document

This document provides information on how to use the Ayla Developer Portal to manage and configure your Ayla Connected products.

1.2 Intended Audience

This document is written for all users of the Ayla Developer Portal. However, not all users have access to all views. You may find that you do not have access to some of the views described in this document. Access is determined by your company's policies.

1.3 Related Documentation

For additional information related to the content in this guide, refer to the following documents available on [Ayla Connection](#):

- *Ayla Customer Dashboard User's Guide* (AY006UDB3)
- *Device Onboarding: Ayla Registration Methods* (AY006FOR3)

1.4 Document Conventions

This document follows these Ayla documentation conventions:

- Ancillary information that is important to emphasize is shown as:

NOTE The commands provided in the example assume your evaluation board is `mw300_rd` and your chip is `mw300`. If otherwise, make the appropriate substitutions.

- Information on system failures or hazards that could damage a product, including data loss, is shown as:



CAUTION

Make sure that the appropriate data buffering is accounted for in deployed devices, especially where the loss of data is critical to the core functionality or the services provided by the systems.

1.5 Abbreviations and Acronyms

Abbreviations and acronyms used in this document are as follows:

OTA	Over the Air
AWS	Amazon Web Services
JSON	JavaScript Object Notation

2 Access the Ayla Developer Portal

The Ayla Developer Portal is available to customers and developer partners as a place to view users, devices, templates, and other information that requires review and updates.

This section provides steps on all actions needed to access the Ayla Developer Portal.

Depending on the global region, use the appropriate regional Developer Portal URL below.

- US & EU: <https://developer.aylanetworks.com/>
- CN: <https://developer.ayla.com.cn/>

2.1 Register for Developer Account

1. To sign up for a Developer account, navigate to your regional Developer Portal.

NOTE US & EU: <https://developer.aylanetworks.com/>

CN: <https://developer.ayla.com.cn/>

2. Click **SIGN UP**, as shown in Figure 1.

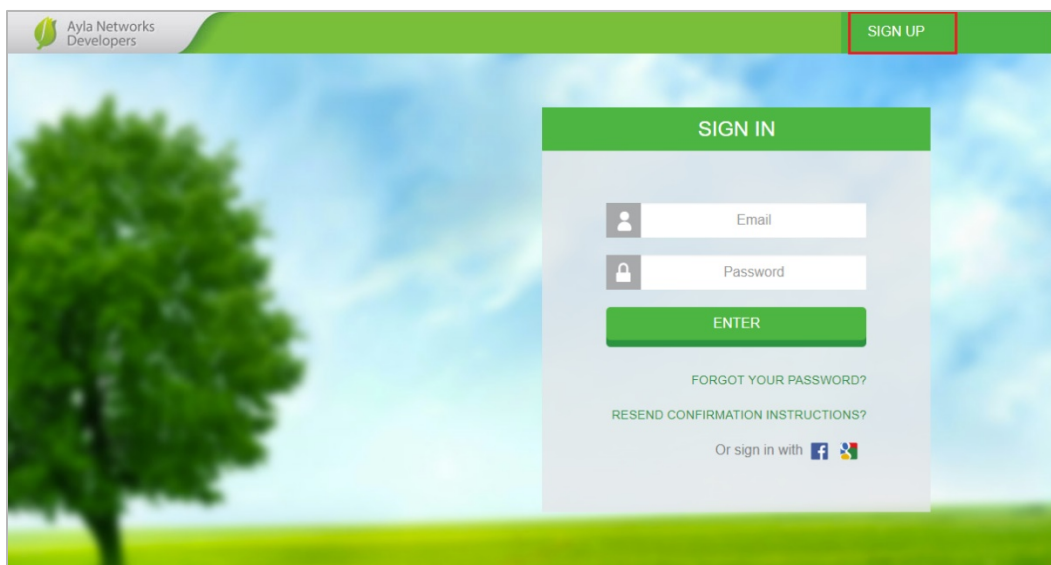


Figure 1: Sign-in Page for the Ayla Developer Portal

3. In the SIGN IN dialog box, enter the details:

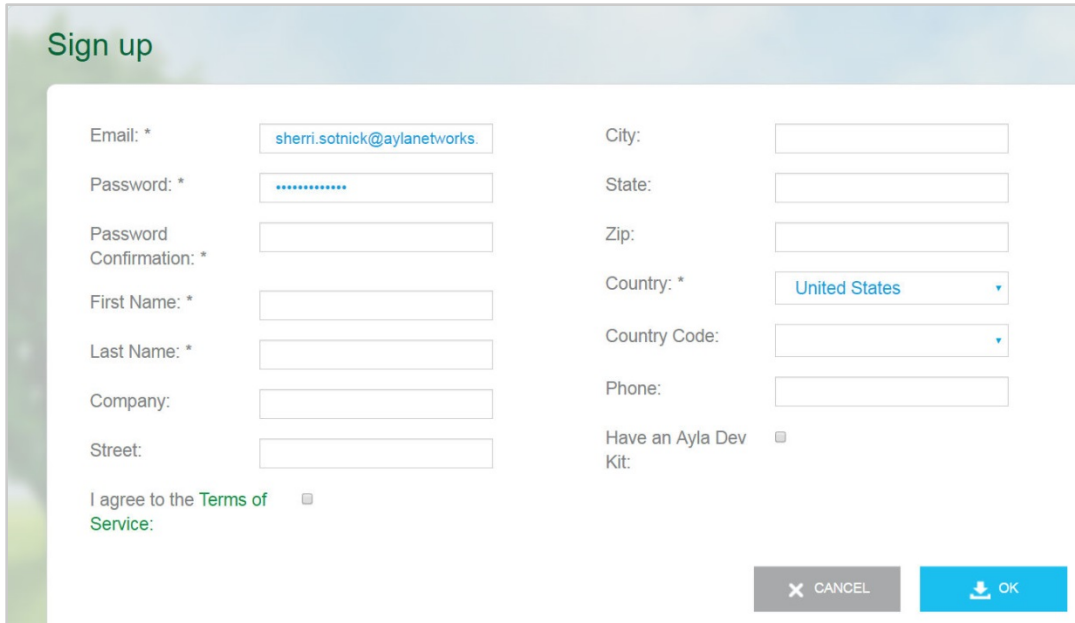


Figure 2: The Sign up Page

- Email / Password / Password Confirmation
 - First Name / Last Name
 - Company
 - Street, City, State, Zip, Country
 - Country Code, Phone
4. Select the checkbox for **Have an Ayla Dev Kit** if you already have one, and then enter the **Ayla Platform Dev Kit** number in the field that displays.
 5. Select the checkbox for **I agree to the Terms of Service**. (Click the Terms of Service link to review the terms.)
 6. Click **OK** to complete the registration process. A confirmation email is sent to the email address you entered on the Sign Up page.

- Click the link in the email to create an account in the Developer Center.

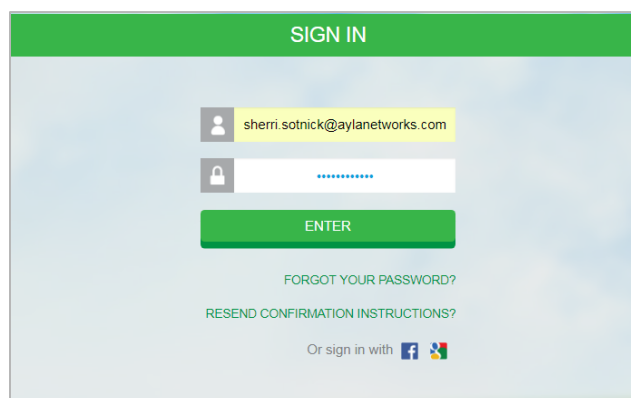


Figure 3: Home Page of the Ayla Developer Portal

2.2 Log In

2.2.1 Standard Log In

- Navigate to the URL for your region (US, EU, CN). This displays the Sign In dialog box.



- Enter your **Username**.

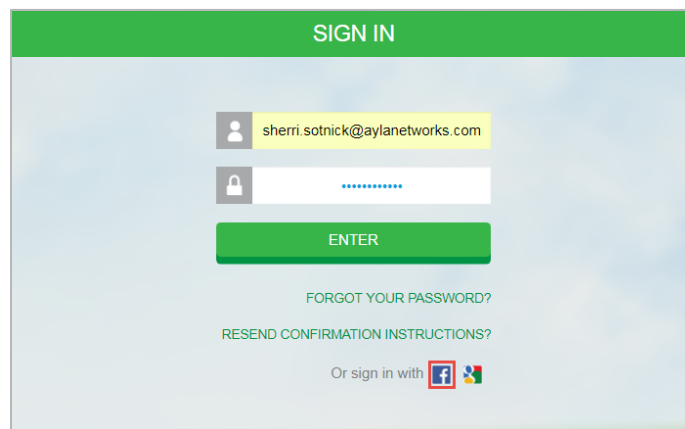
3. Enter your **Password** (8 to 120 characters, one uppercase letter, one lowercase letter, and one number)
4. Click **ENTER**.

NOTE After five (5) consecutive failed login attempts, the user account is locked on the system for thirty (30) minutes. After 30 minutes, the user account is unlocked and the user can make subsequent attempts (up to 5) and the process is repeated. Alternately, click the "Forgot your password link" to reset the user password.

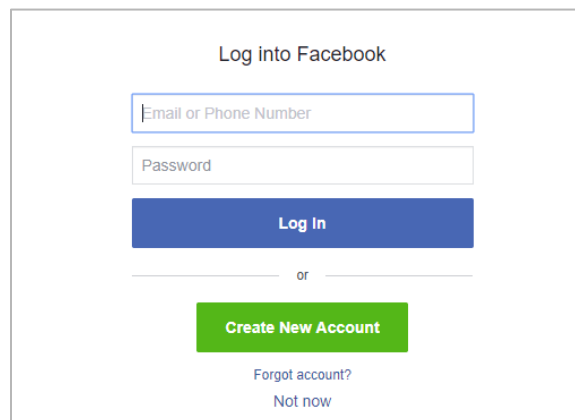
Any attempts (login or password reset) are blocked during the 30-minute period. (This 30-minute time period is not extended, regardless of any attempts during the lockout period.)

2.2.2 Login with Facebook

1. On the Login dialog box, click the Facebook logo.



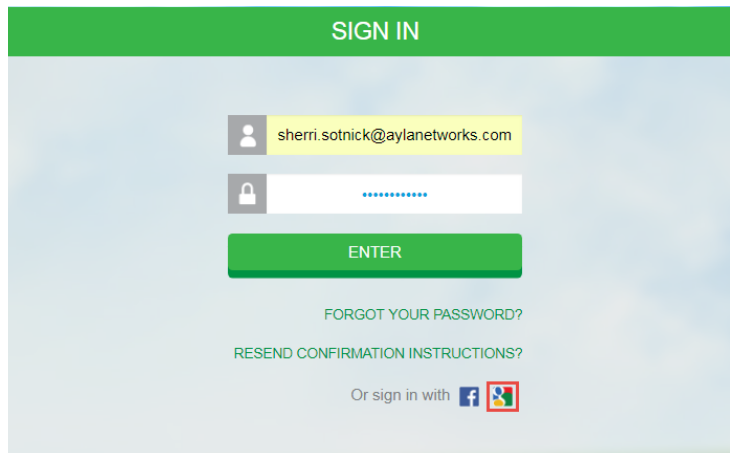
2. In the dialog box, enter the Facebook credentials and login.



This logs in the user to the Developer Portal.

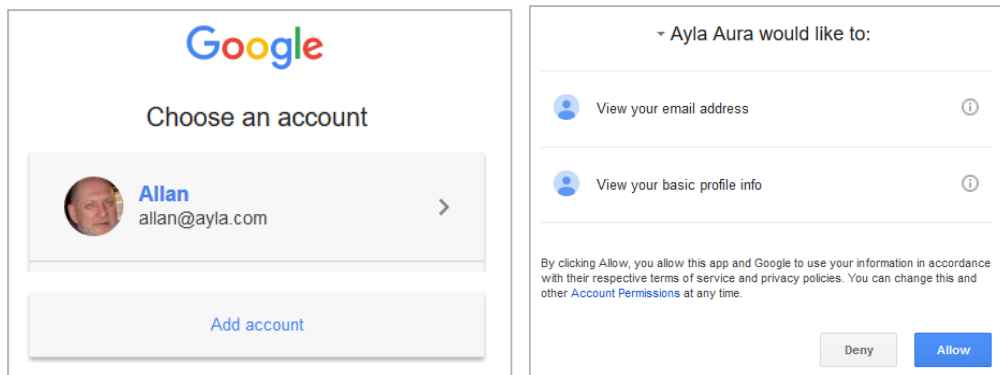
2.2.3 Login with Google

1. On the Login dialog box, click the Google logo.



The image shows a 'SIGN IN' dialog box with a green header. Below the header, there is a user selection area with a person icon and the email 'sherri.sotnick@aylanetworks.com'. Below that is a password field with a lock icon and a masked password '.....'. A green 'ENTER' button is positioned below the password field. Underneath the button are two links: 'FORGOT YOUR PASSWORD?' and 'RESEND CONFIRMATION INSTRUCTIONS?'. At the bottom, it says 'Or sign in with' followed by Facebook and Google icons.

2. Click the right-arrow to confirm the Google log-in process. Click **Allow** to proceed.



The image shows two side-by-side panels. The left panel is the Google account selection screen, featuring the Google logo, the text 'Choose an account', and a card for 'Allan' with the email 'allan@ayla.com' and a right-pointing arrow. Below the card is an 'Add account' button. The right panel is the Google permissions screen, titled 'Ayla Aura would like to:'. It lists two permissions: 'View your email address' and 'View your basic profile info', each with an information icon. Below the permissions is a paragraph of text explaining that clicking 'Allow' grants access to the app and Google, and that permissions can be changed later. At the bottom right are 'Deny' and 'Allow' buttons.

This logs in the user to the Developer Portal.

2.2.5 Forgot Password

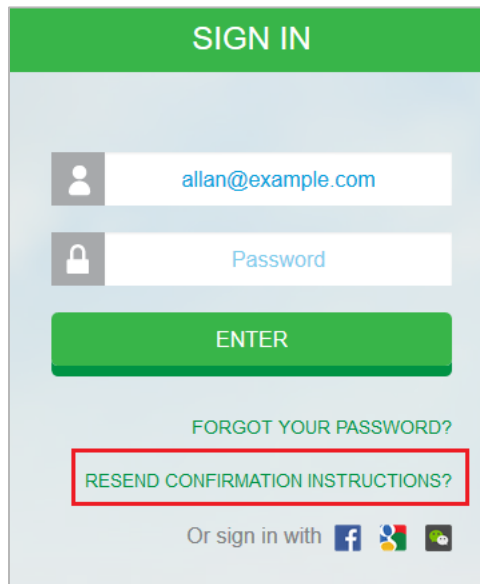
1. If you need to recover your login password, click **FORGOT YOUR PASSWORD**.

2. On the dialog box, enter your **Email**, and then click **ENTER**.

You receive an email to log in to the Developer Portal.

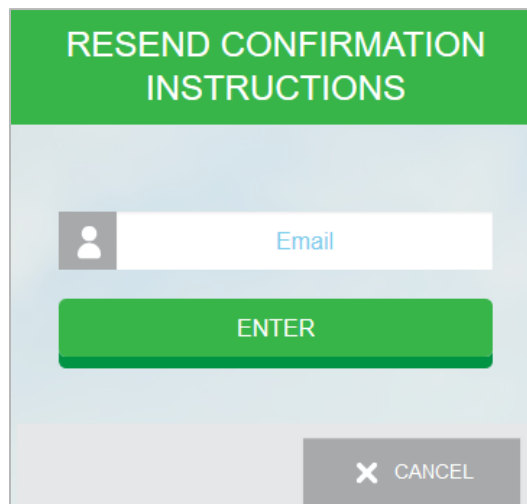
2.2.6 Resend Confirmation Instructions

1. If you need the credentials, click **RESEND CONFIRMATION INSTRUCTIONS**.



The SIGN IN dialog box has a green header with the text "SIGN IN". Below the header, there are two input fields: the first contains the email "allan@example.com" and the second is labeled "Password". Below these fields is a green button labeled "ENTER". Underneath the button is a link "FORGOT YOUR PASSWORD?". Below that is a link "RESEND CONFIRMATION INSTRUCTIONS?" which is highlighted with a red rectangular border. At the bottom, there is a text "Or sign in with" followed by icons for Facebook, Google, and Apple.

2. On the dialog box, enter your **Email** and click **ENTER**.



The RESEND CONFIRMATION INSTRUCTIONS dialog box has a green header with the text "RESEND CONFIRMATION INSTRUCTIONS". Below the header, there is an input field labeled "Email". Below the input field is a green button labeled "ENTER". At the bottom right of the dialog box is a grey button with a close icon and the text "CANCEL".

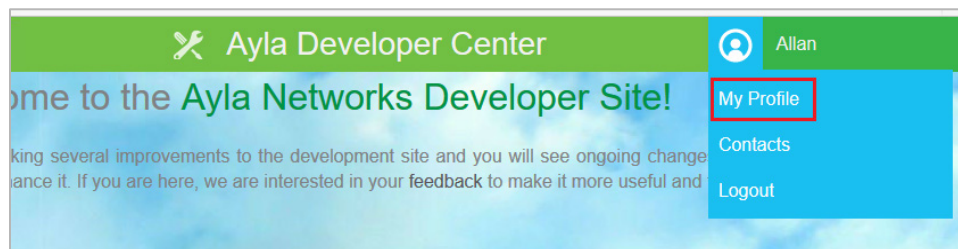
You receive an email with the original credentials.

2.3 Update Profile

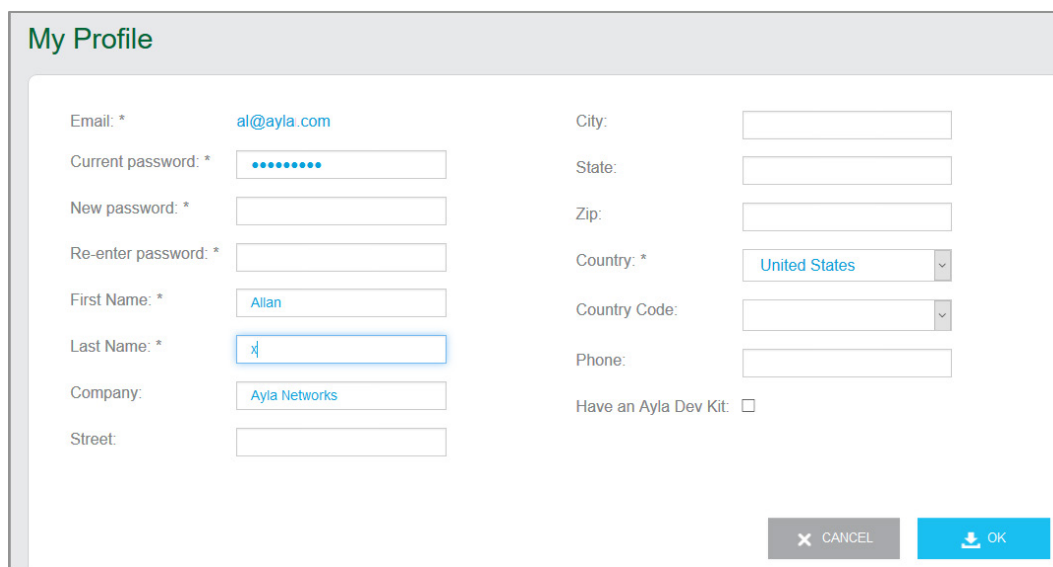
Upon a successful login, the Ayla Developer Center home page displays.



1. Place your mouse cursor over the person icon. In the drop-down, click **My Profile**.



2. On the My Profile page, make changes as needed.



The 'My Profile' form contains the following fields:

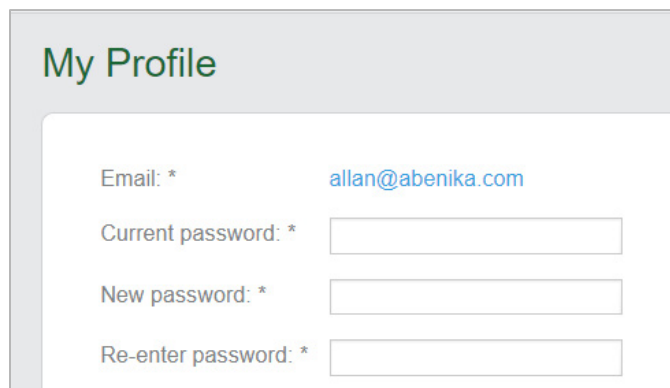
Field	Value
Email: *	al@ayla.com
Current password: *
New password: *	
Re-enter password: *	
First Name: *	Allan
Last Name: *	x
Company:	Ayla Networks
Street:	
City:	
State:	
Zip:	
Country: *	United States
Country Code:	
Phone:	
Have an Ayla Dev Kit:	<input type="checkbox"/>

Buttons: CANCEL, OK

3. When done, click **OK**.

2.3.1 Change Password

1. On the My Profile page, enter your Current Password.



The 'My Profile' form shows the 'Change Password' section with the following fields:

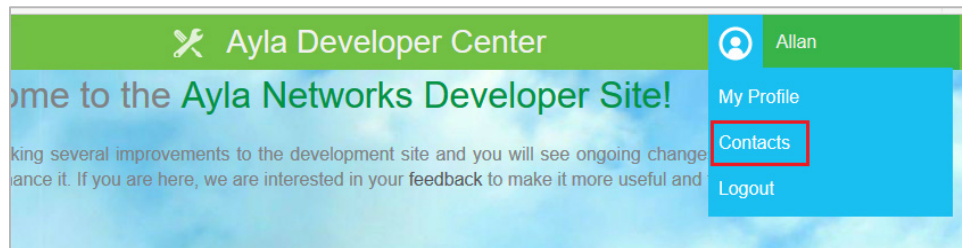
Field	Value
Email: *	allan@abenika.com
Current password: *	
New password: *	
Re-enter password: *	

2. Enter the **New Password** (must include one capital letter, one lower case letter, and one number.)
3. In **Re-enter password**, enter the new password again.
4. Click **OK**.

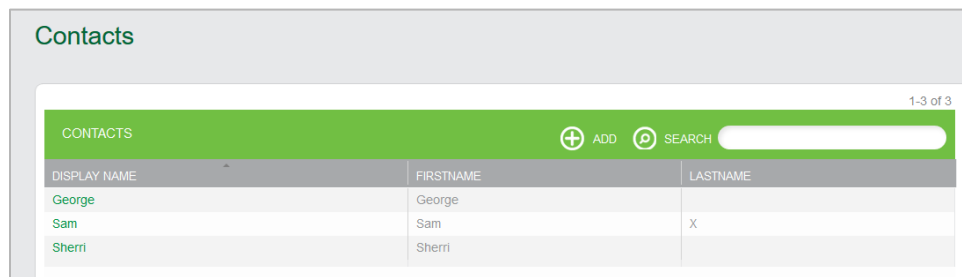
2.4 Manage Contacts

The Contacts page include individuals that are necessary or helpful.

1. To update contacts, on the Developer Center home page, place your mouse cursor over the person icon and click **Contacts**.



The Contacts page contains current contacts.



2. Click **ADD** to display the Contact dialog box. Enter details and click **OK**.

New Contact

Display Name:

Firstname:

Lastname:

Email:

Phone Country Code:

Phone Number:

Street Address:

Zip Code:

Country:

Metadata:

OEM Models: ☒ Iedevb

Send SMS: ☒

Send Emails: ☐

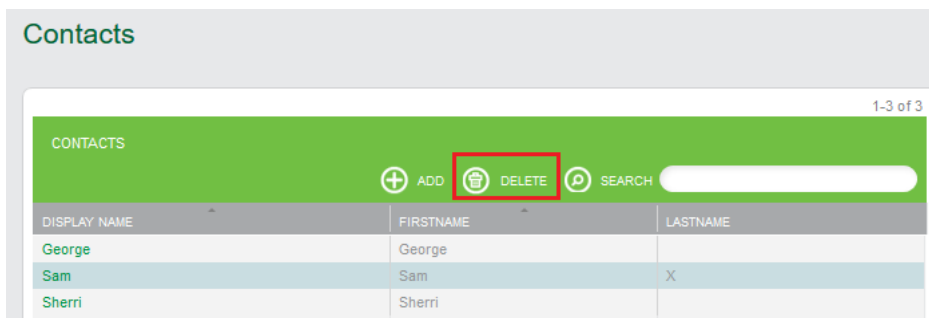
Send Pushes: ☒

SMS Acceptance:

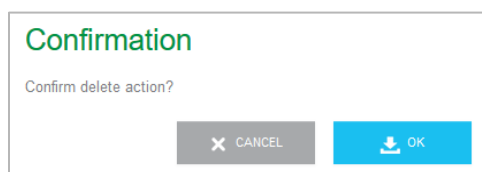
Email Acceptance:

Notes:

3. To change a Contact's details, on the Contact table listing, click the **Display Name**. On the dialog box, make updates, and click **OK**.
4. To delete a Contact, click on the row and click **DELETE**.



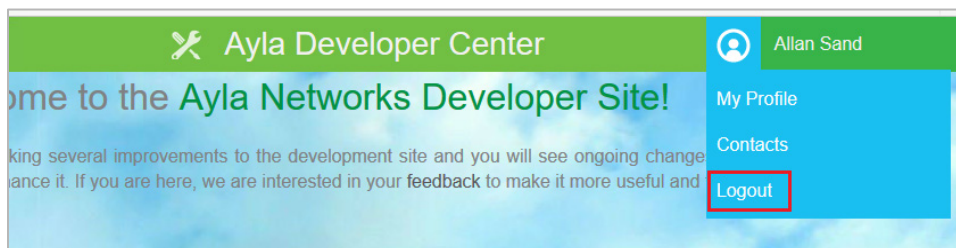
5. On the Confirmation dialog box, click **OK**.



2.5 Logout/Exit Developer Center

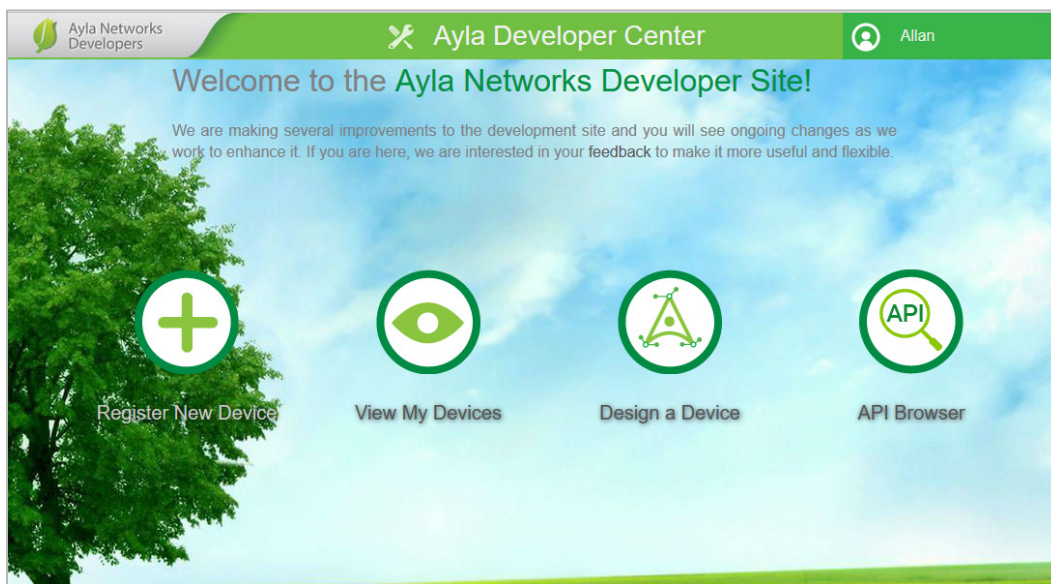
There are two ways to leave the Developer Center:

- To exit Developer Center, you can simply close the browser window.
- To log out from the Developer Center, hover over the person icon and click **Logout**.



3 Developer Center Navigation

After login, you are on the Developer Center Home page. In the main panel, there are four functional options:



- Register New Devices
- View My Devices
- Design a Device
- API Browser

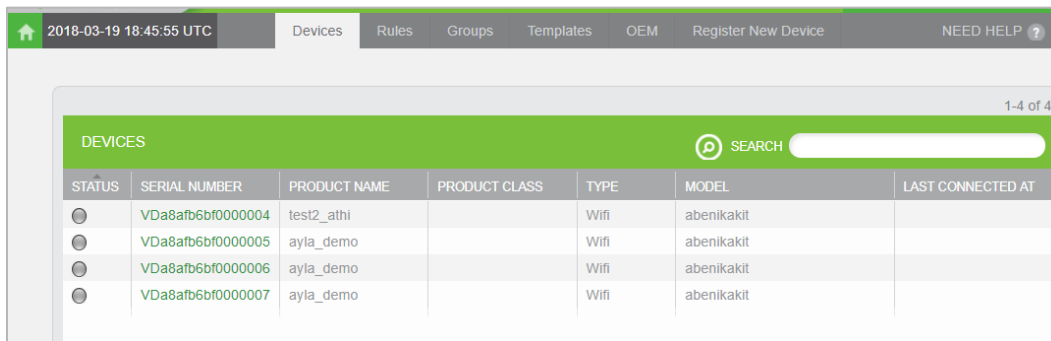
3.1 About Register New Devices

See [Register a New Device](#)

3.2 About View My Devices

See [Device Configuration Details](#)

Click the home page **View My Devices** link to display the Devices tab with table listing of devices.



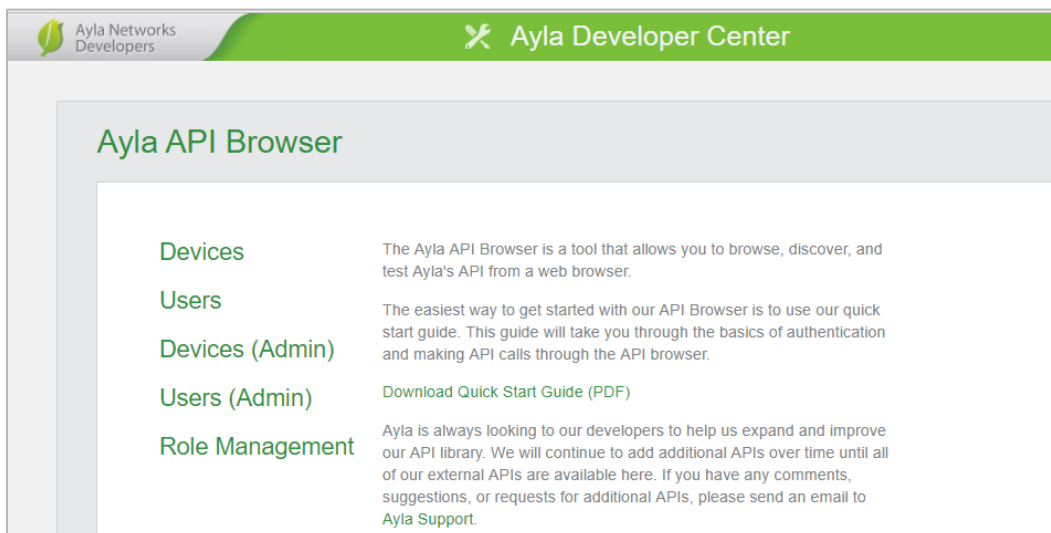
STATUS	SERIAL NUMBER	PRODUCT NAME	PRODUCT CLASS	TYPE	MODEL	LAST CONNECTED AT
	VDa8afb6bf00000004	test2_atthi		Wifi	abenikakit	
	VDa8afb6bf00000005	ayla_demo		Wifi	abenikakit	
	VDa8afb6bf00000006	ayla_demo		Wifi	abenikakit	
	VDa8afb6bf00000007	ayla_demo		Wifi	abenikakit	

3.3 About Design a Device

This displays the [Templates](#) tab where you create and update device templates.

3.4 About API Brower

1. Click the home page **API Browser** link to display the Ayla API Browser page.



[Devices](#)
[Users](#)
[Devices \(Admin\)](#)
[Users \(Admin\)](#)
[Role Management](#)

The Ayla API Browser is a tool that allows you to browse, discover, and test Ayla's API from a web browser.

The easiest way to get started with our API Browser is to use our quick start guide. This guide will take you through the basics of authentication and making API calls through the API browser.

[Download Quick Start Guide \(PDF\)](#)

Ayla is always looking to our developers to help us expand and improve our API library. We will continue to add additional APIs over time until all of our external APIs are available here. If you have any comments, suggestions, or requests for additional APIs, please send an email to [Ayla Support](#).

2. If this is the first time using the Ayla API Browser, click the **Download Quick Start Guide (PDF)** link.
3. Review the following navigation options on this page:

- Devices – opens this page

Ayla API Browser

auth_token

Devices

Information submitted via these API calls is not treated as Personal Information (PI/PII).

Device Service APIs are specific to the device entity and its associations, such as properties, schedules, and groups.

The Ayla Device Service (ADS) is the main service, which communicates with the device. The service is responsible for managing all of the data to and from the device. The device service provides the following functionality:

- Viewing data to and from the device.
- Notifies the device using a notification service, when there is new data or tasks for the device to perform.
- Manages the triggers for data updates. When a trigger fires, it requires an application that notifies the application service.

Devices : Devices	Show/Hide	List Operations	Expand Operations	Raw
DSNS : Devices Serial Numbers	Show/Hide	List Operations	Expand Operations	Raw
DeviceMetaData : Devices MetaData	Show/Hide	List Operations	Expand Operations	Raw
Properties : Properties	Show/Hide	List Operations	Expand Operations	Raw
Schedules : Device Schedules	Show/Hide	List Operations	Expand Operations	Raw
TimeZones : Time Zones	Show/Hide	List Operations	Expand Operations	Raw

- Users – opens this page

Ayla API Browser

auth_token

Users

Information submitted (typically a PUT call) via these APIs is treated as Personal Information (PI/PII), and encrypted-at-rest.

This section covers APIs specific to the user account management.

Several of these APIs initiate an email to the user signed in to the Ayla User Service account. You can upload a customized email template to the Ayla User Service through the OEM dashboard.

Users : APIs specific to the user account	Show/Hide	List Operations	Expand Operations	Raw
UserMetaData : User MetaData	Show/Hide	List Operations	Expand Operations	Raw
Share : Share	Show/Hide	List Operations	Expand Operations	Raw
Contacts : User Contacts	Show/Hide	List Operations	Expand Operations	Raw
UserLinks : Linked User Accounts	Show/Hide	List Operations	Expand Operations	Raw

- Devices (Admin) – opens this page:

Ayla API Browser

auth_token

Admin APIs of Device

Information submitted via these API calls is not treated as Personal Information (PI/PII).

This API doc demonstrates RESTful operations of Device for Admin Users.

Devices : Admin APIs of Device	Show/Hide	List Operations	Expand Operations	Raw
Notifications : Admin APIs of Notifications	Show/Hide	List Operations	Expand Operations	Raw
Address : Admin APIs of Device Address	Show/Hide	List Operations	Expand Operations	Raw
Triggers : Device Trigger APIs	Show/Hide	List Operations	Expand Operations	Raw

- Users (Admin) – opens this page:

Ayla API Browser

auth_token

Admin APIs of Users

Information submitted (typically a PUT call) via these APIs is treated as Personal Information (PI/PII), and encrypted-at-rest.

This API doc demonstrates RESTful operations of Users for Admin Users.

Users : Admin APIs of Users	Show/Hide	List Operations	Expand Operations	Raw
<hr/>				
UserMetaData : Admin APIs of User MetaData	Show/Hide	List Operations	Expand Operations	Raw
<hr/>				
Shares : Admin APIs of Shares	Show/Hide	List Operations	Expand Operations	Raw
<hr/>				
Contacts : Admin APIs for User Contacts	Show/Hide	List Operations	Expand Operations	Raw
<hr/>				
SSO : Single Sign On	Show/Hide	List Operations	Expand Operations	Raw

- Role Management – opens this page:

Ayla API Browser

auth_token

Role Management APIs

This API doc demonstrates RESTful operations of the Role Management system.










UserRoleManagement : User Role Management APIs	Show/Hide	List Operations	Expand Operations	Raw
<hr/>				
AdminUserRoleManagement : Admin User Role Management APIs	Show/Hide	List Operations	Expand Operations	Raw
<hr/>				
DeviceRoleManagement : Device Role Management APIs	Show/Hide	List Operations	Expand Operations	Raw
<hr/>				
AdminDeviceRoleManagement : Admin Device Role Management APIs	Show/Hide	List Operations	Expand Operations	Raw

4 Devices

You can use the Devices section to manage device configurations. On the home page, click the **View My Devices** icon.



On the Device tab, the table listing shows all available devices.

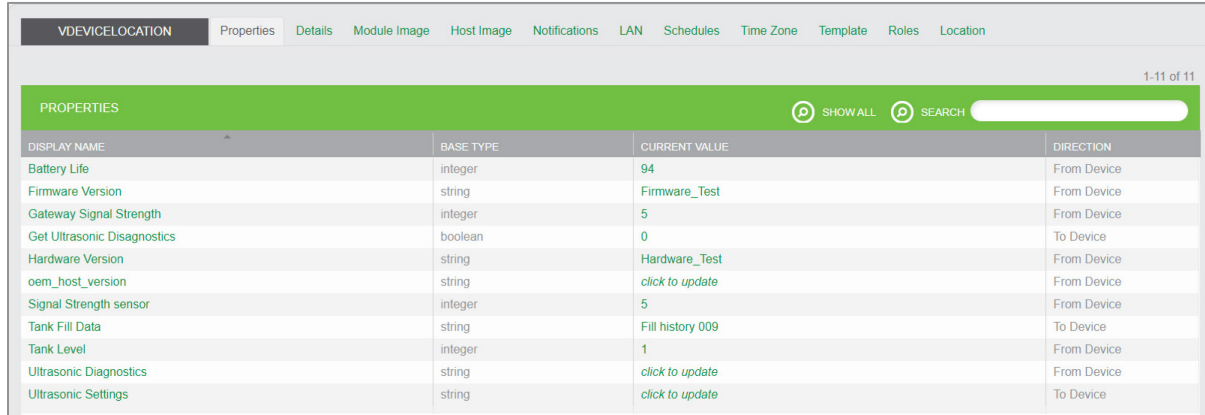
2017-04-18 16:24:39 UTC		Devices	Rules	Groups	Templates	OEM	Register New Device	NEED HELP ?
1-8 of 8								
<div>DEVICES</div> <div>  <input type="text" value="SEARCH"/> </div>								
STATUS	SERIAL NUMBER	PRODUCT NAME	PRODUCT CLASS	TYPE	MODEL	LAST CONNECTED AT		
	VD3f6cf4ac0000001	CoffeeMachineTest		Wifi	DemoCoffeeMachine			
	VD3f6cf4ac0000002	DoorLockTest		Wifi	DemoDoorLock			
	VD3f6cf4ac0000003	SmartIrrigationTest		Wifi	DemoSmartIrrigation			
	VD3f6cf4ac0000004	SmartLightTest		Wifi	DemoSmartLighting			
	VD3f6cf4ac0000005	test-aps		Wifi	Demo			
	VD3f6cf4ac0000006	Allan-test		Wifi	DemoCoffeeMachine			
	VD3f6cf4ac0000007	Test-APS-01		Wifi	Tstat-1			
	VD3f6cf4ac0000008	test-aps 02		Wifi	Tstat-1			

4.1 Device Navigation

To manage individual Device configuration details, click the device.

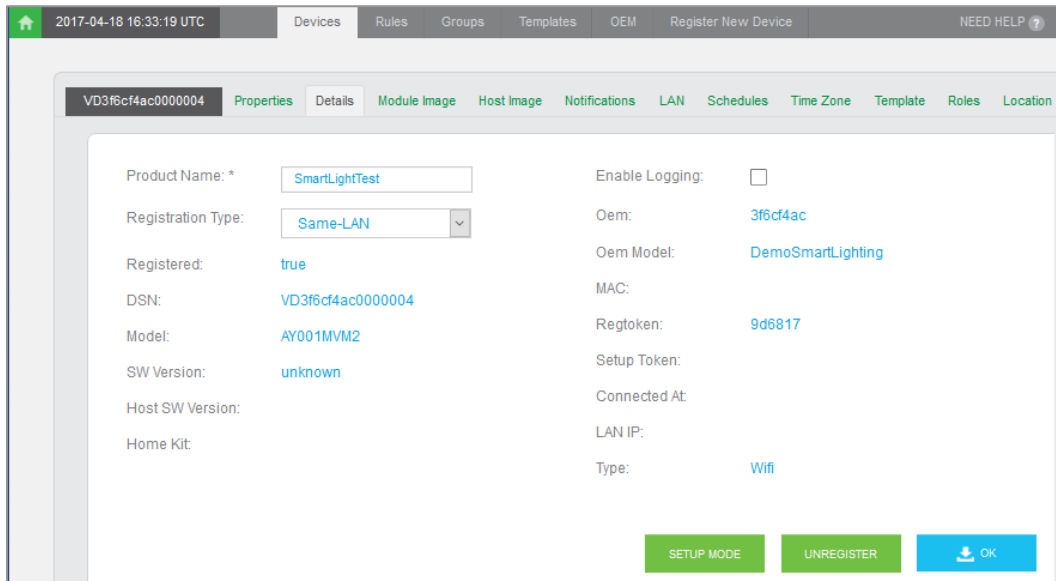
This displays the device sub-tabs:

- Properties



DISPLAY NAME	BASE TYPE	CURRENT VALUE	DIRECTION
Battery Life	integer	94	From Device
Firmware Version	string	Firmware_Test	From Device
Gateway Signal Strength	integer	5	From Device
Get Ultrasonic Diagnostics	boolean	0	To Device
Hardware Version	string	Hardware_Test	From Device
oem_host_version	string	click to update	From Device
Signal Strength sensor	integer	5	From Device
Tank Fill Data	string	Fill history 009	To Device
Tank Level	integer	1	From Device
Ultrasonic Diagnostics	string	click to update	From Device
Ultrasonic Settings	string	click to update	To Device

- Details



2017-04-18 16:33:19 UTC

Devices Rules Groups Templates OEM Register New Device NEED HELP ?

VD3f6cf4ac0000004 Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template Roles Location

Product Name: *

Registration Type:

Registered: true

DSN: VD3f6cf4ac0000004

Model: AY001MVM2

SW Version: unknown

Host SW Version:

Home Kit:

Enable Logging: ☐

Oem: 3f6cf4ac

Oem Model: DemoSmartLighting

MAC:

Regtoken: 9d6817

Setup Token:

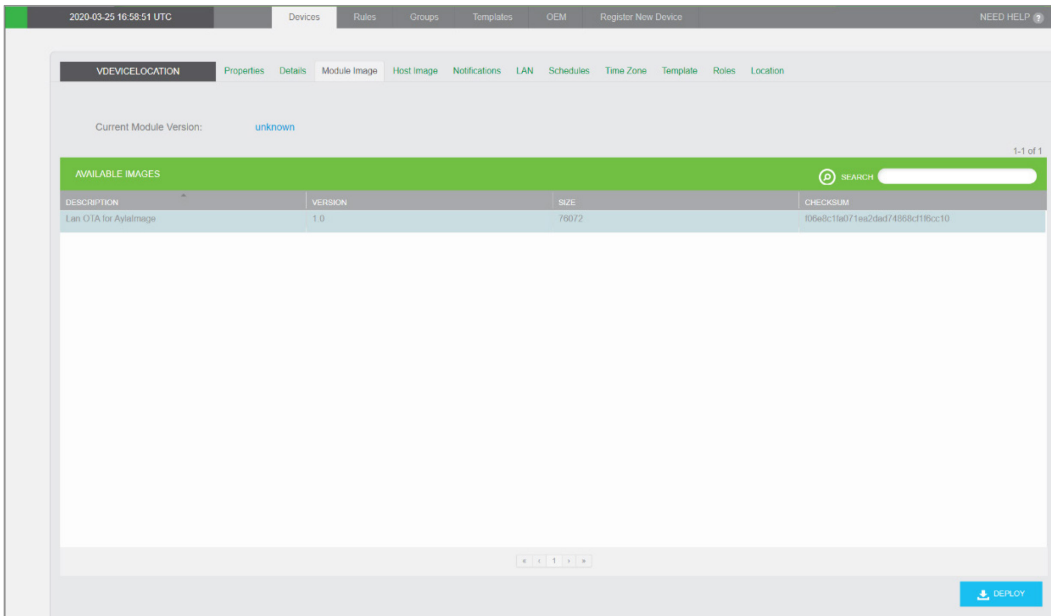
Connected At:

LAN IP:

Type: Wifi

SETUP MODE UNREGISTER OK

- Module Image



2020-03-25 16:58:51 UTC

Devices Rules Groups Templates OEM Register New Device NEED HELP ?

VDEVICELOCATION Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template Roles Location

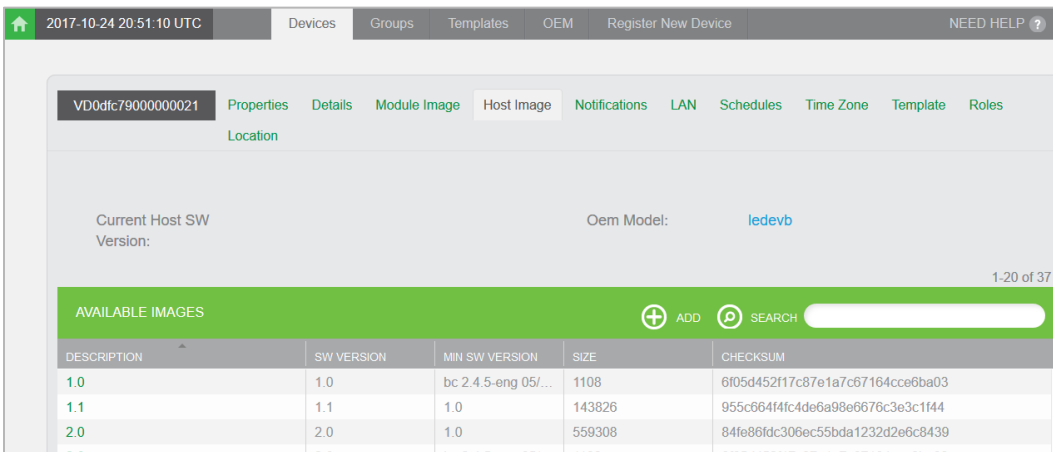
Current Module Version: unknown

AVAILABLE IMAGES 1-1 of 1

DESCRIPTION	VERSION	SIZE	CHECKSUM
Lan OTA for Aylaiimage	1.0	79072	809ebc19a071ea2da074869cd18cc10

DEPLOY

- Host Image



2017-10-24 20:51:10 UTC

Devices Groups Templates OEM Register New Device NEED HELP ?

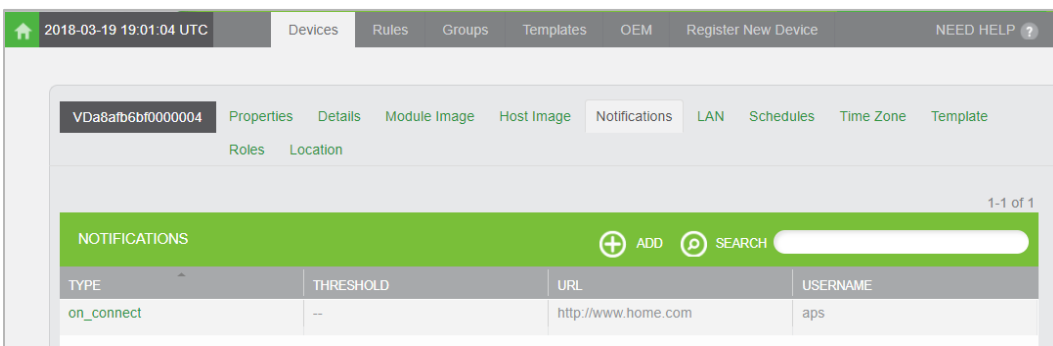
VD0dfc790000000021 Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template Roles Location

Current Host SW Version: Oem Model: ledvnb

AVAILABLE IMAGES 1-20 of 37

DESCRIPTION	SW VERSION	MIN SW VERSION	SIZE	CHECKSUM
1.0	1.0	bc 2.4.5-eng 05/...	1108	6f05d452f17c87e1a7c67164cce6ba03
1.1	1.1	1.0	143826	955c664f4fc4de6a98e6676c3e3c1f44
2.0	2.0	1.0	559308	84fe86fdc306ec55bda1232d2e6c8439
2.1	2.1	bc 2.4.5-eng 05/...	1108	6f05d452f17c87e1a7c67164cce6ba03

- Notifications



2018-03-19 19:01:04 UTC

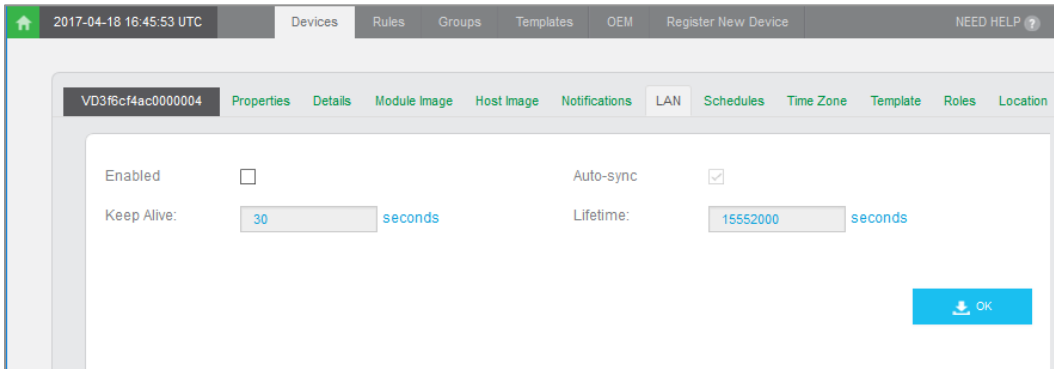
Devices Rules Groups Templates OEM Register New Device NEED HELP ?

VDa8afb6b000000004 Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template Roles Location

NOTIFICATIONS 1-1 of 1

TYPE	THRESHOLD	URL	USERNAME
on_connect	--	http://www.home.com	aps

- LAN



2017-04-18 16:45:53 UTC

Devices Rules Groups Templates OEM Register New Device NEED HELP ?

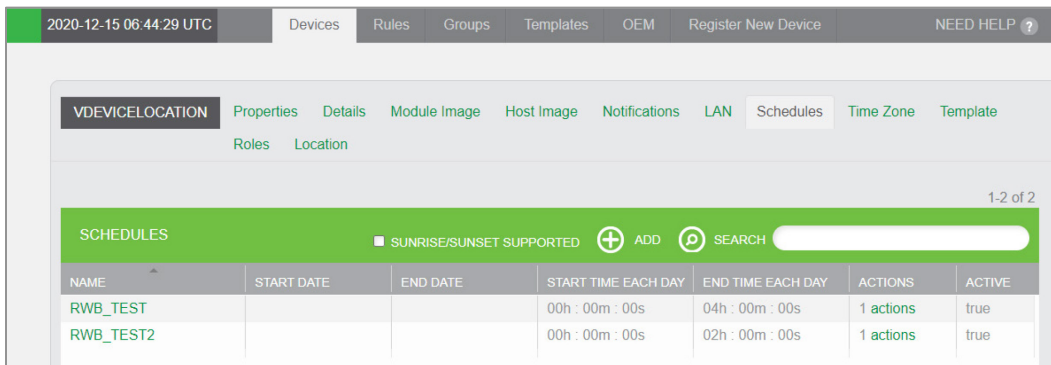
VD3f6cf4ac0000004 Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template Roles Location

Enabled ☐ Auto-sync ☒

Keep Alive: 30 seconds Lifetime: 15552000 seconds

OK

- Schedules



2020-12-15 06:44:29 UTC

Devices Rules Groups Templates OEM Register New Device NEED HELP ?

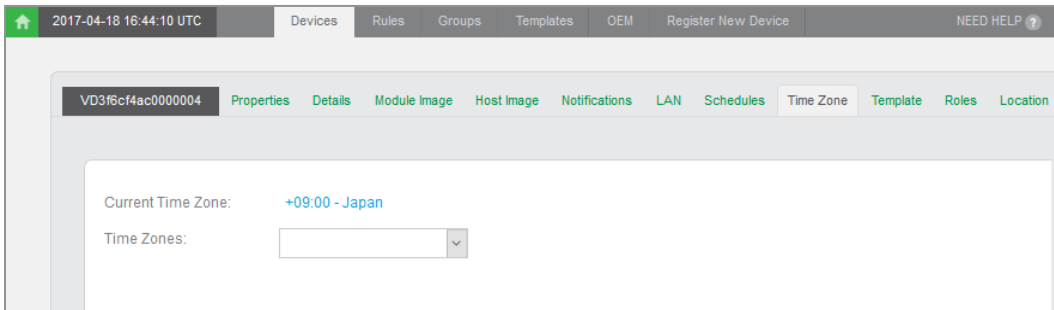
VDEVICELOCATION Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template Roles Location

1-2 of 2

SCHEDULES ☐ SUNRISE/SUNSET SUPPORTED + ADD @ SEARCH

NAME	START DATE	END DATE	START TIME EACH DAY	END TIME EACH DAY	ACTIONS	ACTIVE
RWB_TEST			00h : 00m : 00s	04h : 00m : 00s	1 actions	true
RWB_TEST2			00h : 00m : 00s	02h : 00m : 00s	1 actions	true

- Time Zone



2017-04-18 16:44:10 UTC

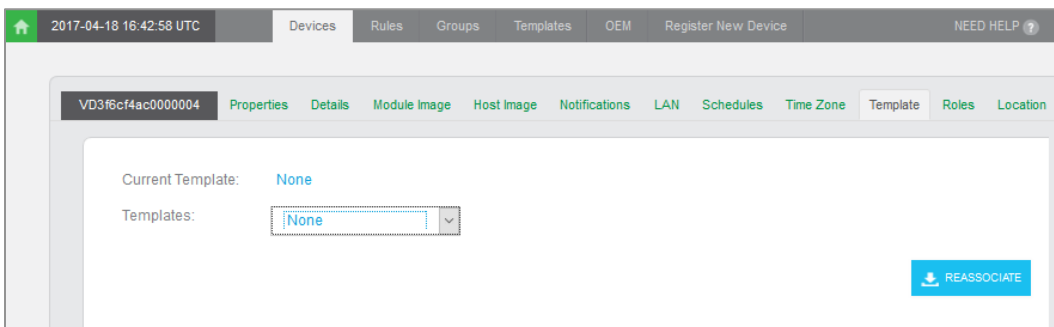
Devices Rules Groups Templates OEM Register New Device NEED HELP ?

VD3f6cf4ac0000004 Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template Roles Location

Current Time Zone: +09:00 - Japan

Time Zones:

- Template



2017-04-18 16:42:58 UTC

Devices Rules Groups Templates OEM Register New Device NEED HELP ?

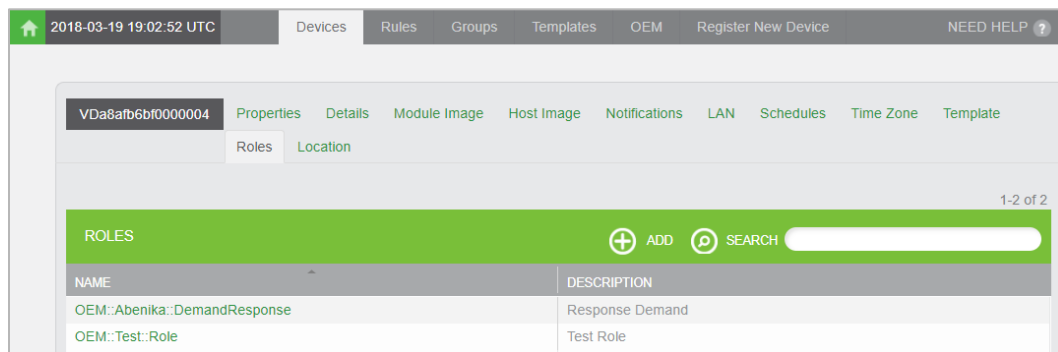
VD3f6cf4ac0000004 Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template Roles Location

Current Template: None

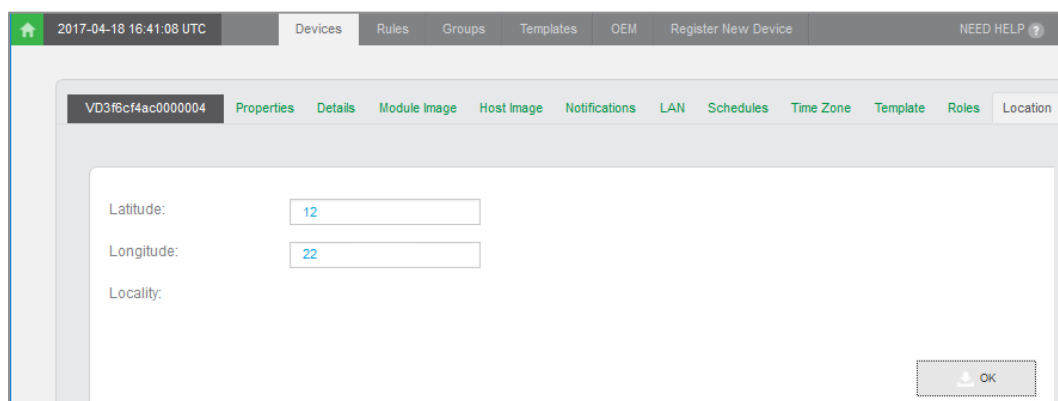
Templates:

REASSOCIATE

- Roles



- Location



4.2 Search Devices



The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.

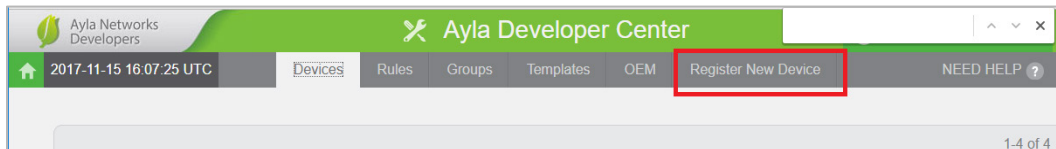
To restore the full list, remove/delete the text in the Search field.

4.3 Register New Device

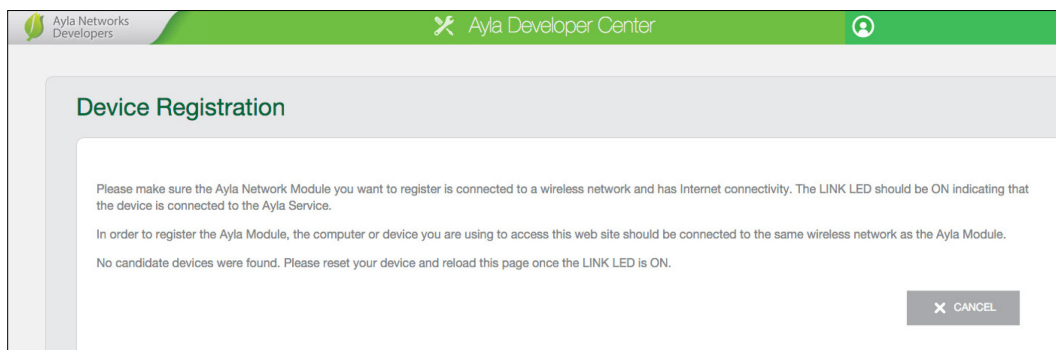
The computer or device used to access Ayla Developer Portal must be connected to the same wireless network as the device. Use the Ayla Developer Portal to register new devices. These can then be configured and managed. You must have an Ayla Developers account.

To register new devices, perform the following steps,:

1. On the Developer Portal, click the **Register New Device** link on the portal homepage.

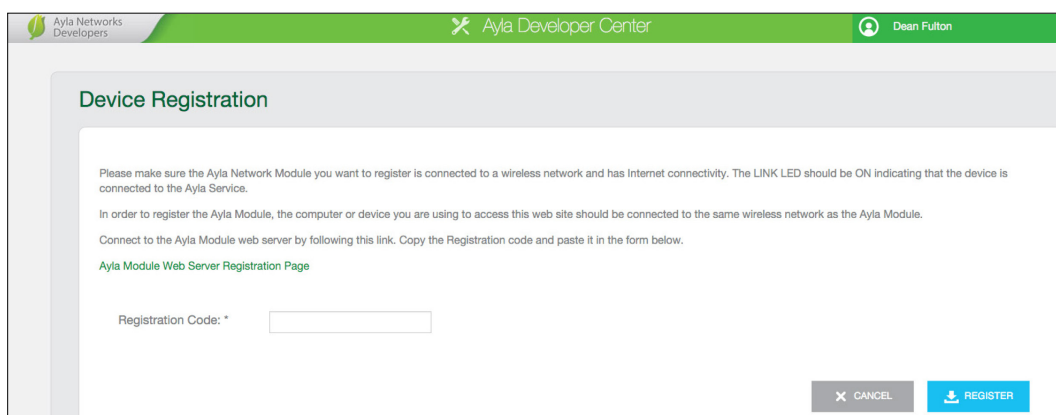


This opens the following screen:



NOTE If you do not see the Ayla Module Web Server Registration page, the device is not on the same network as the Developer Center.

2. Click the **Ayla Module Web Server Registration Page** link to obtain the registration code. The registration code is required to complete the device registration process.
3. Copy the six (6) digit registration code.
4. On the Device Registration page, enter the registration code.

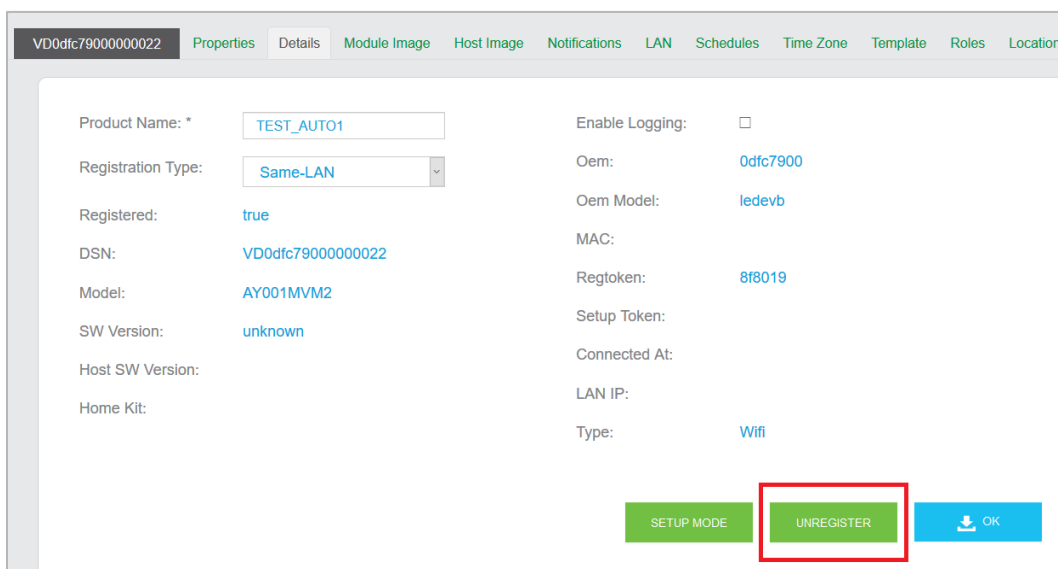


5. Click the **Register** button.
6. Repeat for all devices to be registered.

4.4 Unregister Devices

To unregister devices, perform the following steps:

1. On the **Devices** tab table listing, locate the device to unregister.
2. In the table listing, click the device **Serial Number**.
3. On the **Details** sub-tab, click **UNREGISTER**.

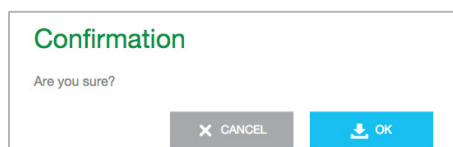


The screenshot shows the 'Details' sub-tab for a device with ID VD0dfc79000000022. The interface includes tabs for Properties, Details, Module Image, Host Image, Notifications, LAN, Schedules, Time Zone, Template, Roles, and Location. The 'Details' tab is active, displaying various device attributes in two columns. The 'UNREGISTER' button is highlighted with a red box.

Property	Value
Product Name: *	TEST_AUTO1
Registration Type:	Same-LAN
Registered:	true
DSN:	VD0dfc79000000022
Model:	AY001MVM2
SW Version:	unknown
Host SW Version:	
Home Kit:	
Enable Logging:	<input type="checkbox"/>
Oem:	0dfc7900
Oem Model:	ledvb
MAC:	
Regtoken:	8f8019
Setup Token:	
Connected At:	
LAN IP:	
Type:	Wifi

Buttons: SETUP MODE, UNREGISTER, OK

4. In the Confirmation dialog box, click **OK** to remove the device from the Device table listing.



A confirmation dialog box titled 'Confirmation' with the text 'Are you sure?'. It contains two buttons: 'CANCEL' and 'OK'.

Confirmation

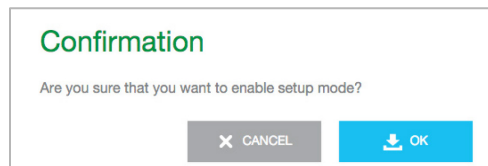
Are you sure?

CANCEL OK

4.5 Device Setup Mode

To register the device as if it were a new device, put the device in Setup Mode.

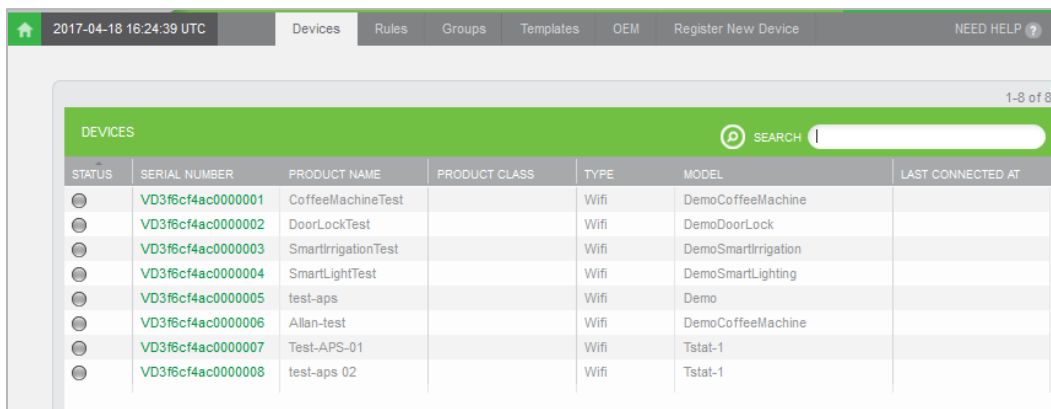
1. On the **Devices** tab table listing, locate the device and click the **Serial Number**.
2. On the **Details** sub-tab, click the **Setup Mode** button.
3. In the Confirmation dialog box, click **OK** to put the device in setup mode.



5 Device Configuration Details

This section provides procedures to manage device features and configurations. Each device has a set of sub-tabs to provide granular control of the device. To manage a device:

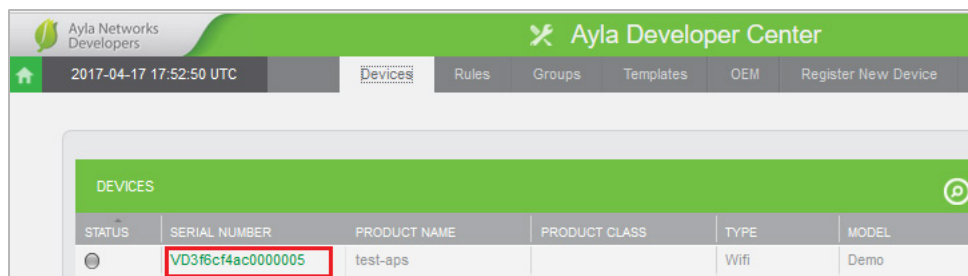
1. Click the Devices tab to show a table listing of all devices in your network.



The screenshot shows the 'Devices' tab in the Ayla Developer Center. At the top, there's a navigation bar with tabs: Devices, Rules, Groups, Templates, OEM, Register New Device, and a 'NEED HELP?' link. Below the navigation bar, there's a search bar and a table listing devices. The table has columns: STATUS, SERIAL NUMBER, PRODUCT NAME, PRODUCT CLASS, TYPE, MODEL, and LAST CONNECTED AT. There are 8 devices listed, with the first one highlighted.

STATUS	SERIAL NUMBER	PRODUCT NAME	PRODUCT CLASS	TYPE	MODEL	LAST CONNECTED AT
	VD3f6cf4ac0000001	CoffeeMachineTest		Wifi	DemoCoffeeMachine	
	VD3f6cf4ac0000002	DoorLockTest		Wifi	DemoDoorLock	
	VD3f6cf4ac0000003	SmartIrrigationTest		Wifi	DemoSmartIrrigation	
	VD3f6cf4ac0000004	SmartLightTest		Wifi	DemoSmartLighting	
	VD3f6cf4ac0000005	test-aps		Wifi	Demo	
	VD3f6cf4ac0000006	Allan-test		Wifi	DemoCoffeeMachine	
	VD3f6cf4ac0000007	Test-APS-01		Wifi	Tstat-1	
	VD3f6cf4ac0000008	test-aps 02		Wifi	Tstat-1	

2. To review, change, add, or delete Device details, locate the device in the table listing and click the Serial Number, as shown below.



The screenshot shows the 'Devices' tab in the Ayla Developer Center. The 'Serial Number' column for the device 'test-aps' (VD3f6cf4ac0000005) is highlighted with a red box. The table has columns: STATUS, SERIAL NUMBER, PRODUCT NAME, PRODUCT CLASS, TYPE, and MODEL.

STATUS	SERIAL NUMBER	PRODUCT NAME	PRODUCT CLASS	TYPE	MODEL
	VD3f6cf4ac0000005	test-aps		Wifi	Demo

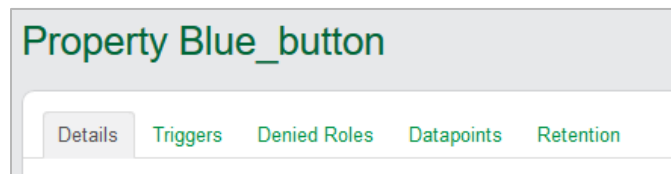
5.1 Properties tab (Search, Review, Configure)

On the Properties sub-tab, you can search and review device properties, as well as configure property triggers and their applications.

NOTE You can add, edit, and delete properties using the Ayla Template features. Click [here](#) for details.

VDEVICELOCATION			
Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template Roles Location			
1-11 of 11			
PROPERTIES			
SHOW ALL SEARCH			
DISPLAY NAME	BASE TYPE	CURRENT VALUE	DIRECTION
Battery Life	integer	94	From Device
Firmware Version	string	Firmware_Test	From Device
Gateway Signal Strength	integer	5	From Device
Get Ultrasonic Diagnostics	boolean	0	To Device
Hardware Version	string	Hardware_Test	From Device
oem_host_version	string	click to update	From Device
Signal Strength sensor	integer	5	From Device
Tank Fill Data	string	Fill history 009	To Device
Tank Level	integer	1	From Device
Ultrasonic Diagnostics	string	click to update	From Device
Ultrasonic Settings	string	click to update	To Device

For every property, you can search for specific details and use several sub-tabs (some with editable fields):



- Details sub-tab (read only)
- Triggers sub-tab
- Denied Roles sub-tab (read only)
- Datapoints sub-tab (read-only)
- Retention sub-tab (read only)

5.1.1 Properties > Search

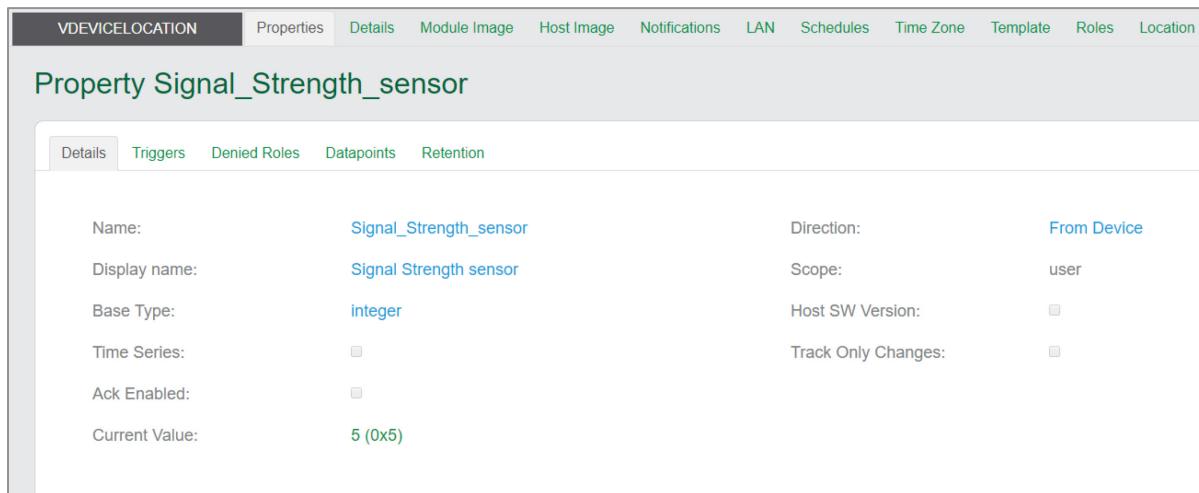
The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text.

5.1.2 Properties > Details sub-tab

On the Details sub-tab, you can review the parameters set for a property.



The screenshot shows the 'VDEVICELOCATION' page with the 'Details' sub-tab selected. The property name is 'Signal_Strength_sensor'. The 'Details' sub-tab is active, showing fields for Name, Display name, Base Type, Time Series, Ack Enabled, Current Value, Direction, Scope, Host SW Version, and Track Only Changes.

Name:	Signal_Strength_sensor	Direction:	From Device
Display name:	Signal Strength sensor	Scope:	user
Base Type:	Integer	Host SW Version:	<input type="checkbox"/>
Time Series:	<input type="checkbox"/>	Track Only Changes:	<input type="checkbox"/>
Ack Enabled:	<input type="checkbox"/>		
Current Value:	5 (0x5)		

The fields are as follows:

- **Name** – the name assigned to the property
- **Display Name** - a user-friendly name of the property
- **Time Series** checkbox:
 - If selected – when the device disconnects, the service queues data points to the device. Upon connection, all datapoints are sent to the device. From the device to the service, the host MCU queues all data items.
 - If unselected - datapoints are ignored whether the device is connected or disconnected.
- **Ack Enabled** checkbox:
 - If selected – when the Direction is configured as To Device, the service receives an ack (acknowledgement) if the property is updated, and the update is sent to the device.
 - If unselected - No ack (acknowledgement) is sent when the property changes.
- **Current Value** - the current value assigned to the property.
- **Direction** – the direction that the property is being sent (To Device or From Device).
- **Scope** – defines viewing permission of property:
 - **user** - the user can see the property.
 - **oem** - only the Ayla customer can see the property.
- **Host SW Version** checkbox:
 - If selected, the Ayla customer tracks the host software version.
 - If unselected, the Ayla customer does not track software version.

- **Track Only Changes** checkbox
 - If selected, only changes in the property state are logged, and if the value is the same, no datapoint is recorded.
 - If unselected, changes in the property state are not logged.

5.1.3 Properties > Triggers sub-tab (Search and Add New Triggers)

Search for Triggers

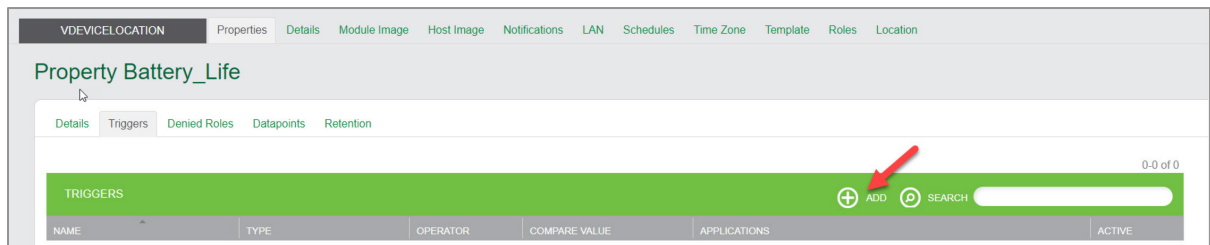
The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches for the entered characters.

If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text

Add a New Trigger

1. On the Device > Properties tab, click the **Triggers** sub-tab, and then click **ADD**.



2. In the New Trigger dialog box, enter a **Name** that matches the host application on the device.

New Trigger


Name:

Type: * always ▼

Active: ☒

✕ CANCEL OK

3. For the **Type** drop-down, select the condition that activates the trigger.
 - **always** - the trigger is always active.
 - **compare_absolute** - two additional fields display as shown below.



- **Compare type** drop-down (select from the list)
 - == (equal to)
 - > (greater than)
 - < (less than)
 - >= (greater than or equal to)
 - <= (less than or equal to)
 - **Value** - the value to compare against.
 - **on_change** - the trigger occurs only if there is a change.
4. **Active** checkbox
 - **Select** if the trigger is active.
 - **Unselect** if the trigger is inactive.
 5. Click **OK** to save the new property trigger.

When a new trigger is created, a notification application (one or more) must also be created, as described in Section 5.1.4. This is how the user can be notified when the trigger is activated.

TRIGGERS					
<div> + ADD 🔍 SEARCH <input type="text"/> </div>					
NAME	TYPE	OPE...	COMPAR...	APPLICATIONS	A...
dealer_r	always			email (1) forward (1)	true
On_change	on_cha...			click to add applications	true

5.1.4 Properties > Trigger sub-tab (Add Application)

Trigger applications can be added to device properties to specify actions when the trigger is activated. Options include:

- email
- sms
- forward
- push_ios
- push_android
- push_baidu

If there are no Applications for the Trigger:

1. On the Triggers table listing, in the Applications column, click **click to add applications**.

TRIGGERS					
<div> <div>+</div> <div>ADD</div> <div>🔍</div> <div>SEARCH</div> </div>					
NAME	TYPE	OPERAT...	COMPARE VALUE	APPLICATIONS	ACTIVE
Green_LED	always			click to add applications	true

If the property has a trigger application, a table listing is shown below the trigger table list.

2. To create another trigger application, in the Triggers table, click **ADD**.

Details Triggers Denied Roles Datapoints Retention

Name: Blue_button

Type: * always

Active: ☒

CANCEL

OK

1-1 of 1

APPLICATIONS

+

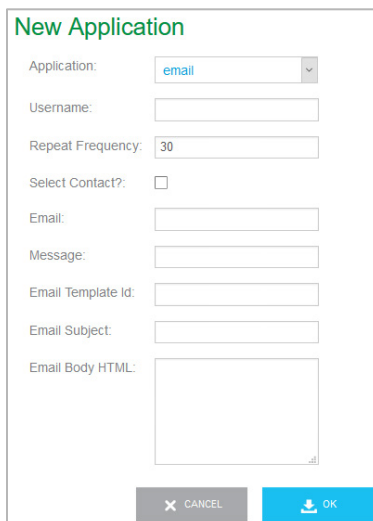
ADD

🔍

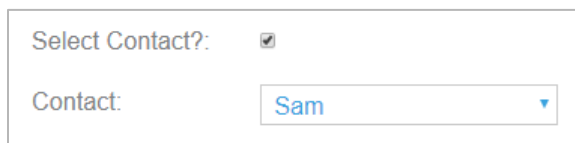
SEARCH

APPLICATION	USERNAME	VALUE
email	aps	email: aps@aps.com

3. In the New Application dialog box, for **Application** drop-down, select the type of application to create. (The dialog box changes based on the selection as described below.)

Application drop-down = **email**A screenshot of the 'New Application' form. It has a title 'New Application' in green. The form contains the following fields: 'Application:' with a dropdown menu showing 'email'; 'Username:' with a text input; 'Repeat Frequency:' with a text input showing '30'; 'Select Contact?:' with an unchecked checkbox; 'Email:' with a text input; 'Message:' with a text input; 'Email Template Id:' with a text input; 'Email Subject:' with a text input; and 'Email Body HTML:' with a larger text area. At the bottom are two buttons: 'CANCEL' with a close icon and 'OK' with a download icon.

- Enter **Username** (shown in the greeting of the notification message)
- Enter **Repeat Frequency** of application (seconds between repeating this trigger application)
- If the **Select Contact?** checkbox is selected, select a contact in the Contact drop-down list (which includes available contacts from your [Contact List](#))

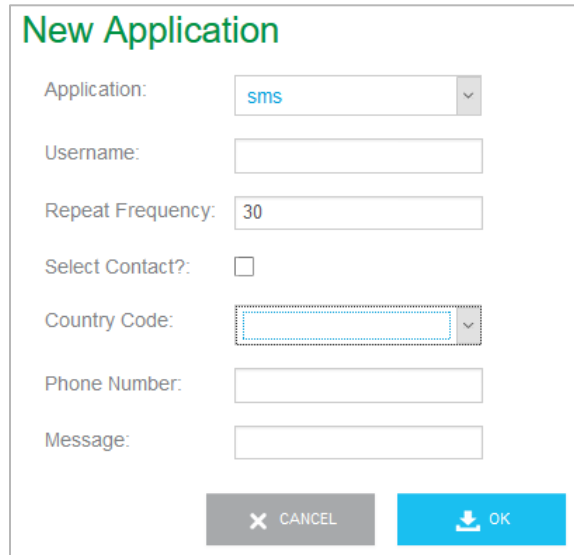
A screenshot of a form section. It has a label 'Select Contact?:' followed by a checked checkbox. Below it is a label 'Contact:' followed by a dropdown menu showing 'Sam'.

If this checkbox is not selected, in **Email**, enter the email address where information should be sent.

A screenshot of a form section. It has a label 'Select Contact?:' followed by an unchecked checkbox. Below it is a label 'Email:' followed by a text input field.

- Enter **Message** – the message to be sent to the recipient.
- Enter **Email Template Id** - if a template is available.
- Enter **Email Subject** - the subject line of email.
- Enter **Email Body HTML** – any HTML code needed.
- Click **OK**.

Application drop-down = **sms**



New Application

Application:

Username:

Repeat Frequency:

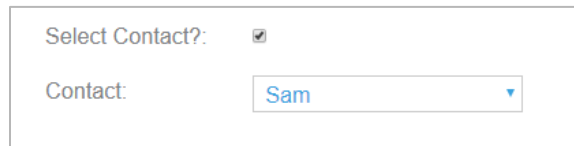
Select Contact?: ☐

Country Code:

Phone Number:

Message:

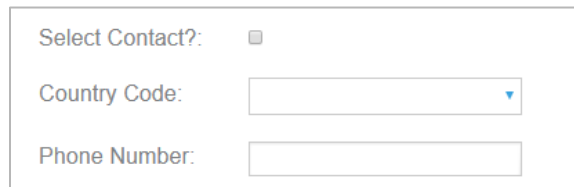
- Enter **Username** - which is used in the greeting of the notification message.
- Enter **Repeat Frequency** of application - the seconds between the repeat of this trigger application.
- If **Select Contact?** checkbox is selected, from the Contact drop-down, select a contact. (The list of available contacts from your [Contact List](#))



Select Contact?: ☒

Contact:

If the checkbox is not selected, enter the **Country Code** (phone country code) and **Phone Number**.



Select Contact?: ☐

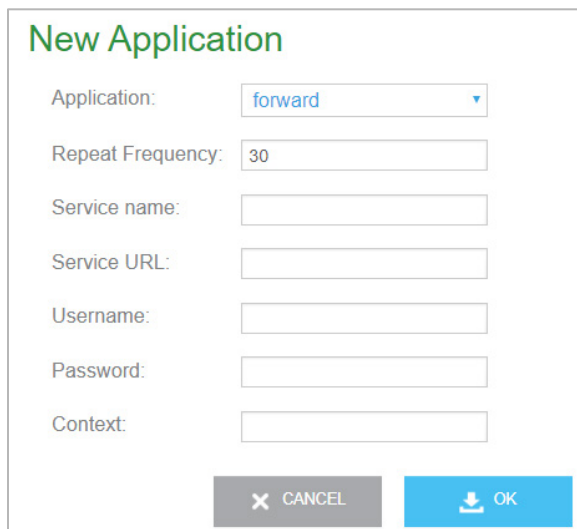
Country Code:

Phone Number:

- In **Message**, enter the message to be sent to the recipient. Note that SMS messages longer than 160 characters are split into two messages.

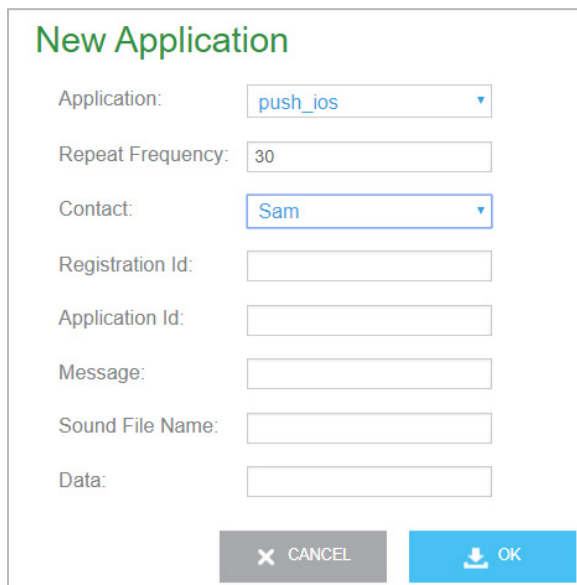
NOTE Message length should be a maximum of 120 characters to allow for overhead (e.g. notification object name length is 20, etc.).

- Click **OK**.

Application drop-down = **forward**

The 'New Application' form for the 'forward' application. It includes fields for Application (dropdown), Repeat Frequency (text), Service name (text), Service URL (text), Username (text), Password (text), and Context (text). At the bottom are CANCEL and OK buttons.

- Enter **Repeat Frequency** of application - seconds between the repeat of this trigger application.
- Enter **Service name** - name of the forwarding service.
- Enter **Service URL** - URL to which notification should be sent.
- Enter **Username** - login credentials to service URL if needed.
- Enter **Password** - login credentials to service URL if needed.
- Enter **Context**
- Click **OK**.

Application drop-down = **push_ios**

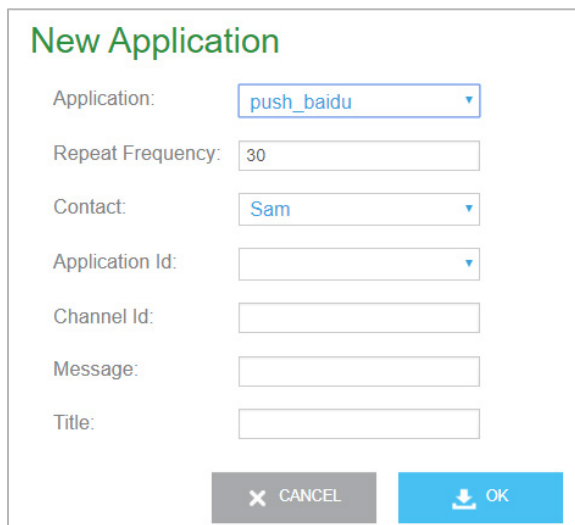
The 'New Application' form for the 'push_ios' application. It includes fields for Application (dropdown), Repeat Frequency (text), Contact (dropdown), Registration Id (text), Application Id (text), Message (text), Sound File Name (text), and Data (text). At the bottom are CANCEL and OK buttons.

- Enter **Repeat Frequency** of application (seconds between the repeat of this trigger application).
- On **Contact** drop-down - select the individual; see [Contact List](#).
- Enter **Registration Id**.
- Enter **Application Id**.
- Enter **Message** - message to be sent to the recipient - up to 4K characters.
- Enter **Sound File Name** - sound to be played when message is received.
- Enter **Data** - contextual information.
- Click **OK**.

Application drop-down = **push_android**

- Enter **Repeat Frequency** of application (in seconds)
- On **Contact** drop-down (select the individual – see [Contact List](#))
- Enter **Registration Id**.
- Enter **Message** (message to be sent to the recipient – up to 4K characters)
- Enter **Sound File Name**. (sound to be played when message is received)
- Enter **Data** (contextual information)
- Click **OK**.

Application drop-down = **push_baidu**

A screenshot of a 'New Application' form. The form has a title 'New Application' in green. It contains several fields: 'Application:' with a dropdown menu showing 'push_baidu'; 'Repeat Frequency:' with a text input containing '30'; 'Contact:' with a dropdown menu showing 'Sam'; 'Application Id:' with a dropdown menu; 'Channel Id:' with a text input; 'Message:' with a text input; and 'Title:' with a text input. At the bottom, there are two buttons: a grey 'CANCEL' button with a close icon and a blue 'OK' button with a download icon.

- Enter **Repeat Frequency** of application (in seconds)
- In **Contact** drop-down list, select the individual – see [Contact List](#).
- In **Application Id** drop-down, select item.
- Enter **Channel Id**.
- Enter **Message** (message to be sent to the recipient – up to 4K characters)
- Enter **Title**.
- Click **OK**.

5.1.5 Properties > Denied Role sub-tab

Use this tab to review roles that restrict the user's read or write permissions. The specified denied role restricts a user with this role from specific device operations. Denied roles are configured in Templates on the Ayla Customer Dashboard; search for "Templates Properties tab" in Ayla Dashboard Help on [Ayla Connection](#).

The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters. If there are no matches, the table listing is blank. To restore the full list, remove/delete the text in the search field.

5.1.6 Properties > Datapoints sub-tab

NOTE Datapoints can be created in the [Ayla Customer Dashboard](#), not on the Ayla Developer Portal. Datapoints are read-only on this tab. For information on how to create datapoints, search for "datapoints" in Ayla Dashboard Help on [Ayla Connection](#).

On the device's property, click the Datapoints sub-tab.

Property Test_OrangeLED

Details Triggers Denied Roles Datapoints Retention

Limit:

1-1 of 1

DATAPOINTS						
CREATED AT DEVICE (UTC)	CREATED AT CLOUD (UTC)	UPDATED AT CLOUD (UTC)	FETCHED AT	VALUE	METADATA	ECHO
	2020-08-20T06:13:02Z	2020-08-20T06:13:02Z	mark as fetched	https://ads-dev.aylane...		false

Table column description:

- Created At Device (UTC) - The date/time that the datapoint was generated in the device. This is only used for batch datapoints generated for the device.
- Created At Cloud (UTC) - The date/time that the datapoint was generated in the Ayla Cloud.
- Updated At Cloud (UTC) - For file properties, this represents the date/time that the file is uploaded after the initial file property datapoint is created in the Ayla Cloud. For all other device property base types (boolean, integer, decimal, string, and message), the timestamp is the same as in the Created At Cloud (UTC) column.
- Fetched At – If you click the mark as fetched link and confirm this datapoint as fetched (completed), the time the datapoint was marked as fetched is shown in this column.
- Value – The value of the property datapoint. For example, for a file property datapoint, this is a location URL.
- Metadata - This is information used by customer.
- Echo - The options are: False/True.

To only show a limited number of datapoints:

1. In **Limit** field, enter the number of datapoints to be displayed in the table listing.
2. Click **REFRESH**.

You may also use the Search function, which is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters. If there are no matches, the table listing is blank. To restore the full list, remove/delete the text in the search field.

5.1.7 Properties > Retention sub-tab

You can review the details of your data retention policy for device properties. This is the length of time that the property data is saved (the default is 90 days). Refer to the following example:

Property Battery_Life

Details Triggers Denied Roles Datapoints Retention

Days: 30

The retention setting is configured in the [Ayla Customer Dashboard](#), not on the Ayla Developer Portal. For information on how to do this, search for “retention tab” in Ayla Dashboard Help on [Ayla Connection](#).

5.2 Properties tab (Edit/Delete Options)

From the Properties tab, you can edit and delete the following configurations:

- The current value for properties (edit only)
- Triggers sub-tab, which includes trigger applications (edit and delete)

This section describes these editing and deleting capabilities.

5.2.1 Properties > Change Current Value

From the Developer Portal, you can change the current value for a property. To do this, click the current value in the table listing of the Properties page, as shown below:

VDEVICELOCATION Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template Roles Location			
1-11 of 11			
PROPERTIES SHOW ALL SEARCH			
DISPLAY NAME	BASE TYPE	CURRENT VALUE	DIRECTION
Battery Life	integer	94	From Device
Firmware Version	string	Firmware_Test	From Device
Gateway Signal Strength	integer	5	From Device
Get Ultrasonic Diagnostics	boolean	0	To Device
Hardware Version	string	Hardware_Test	From Device
oem_host_version	string	click to update	From Device
Signal Strength sensor	integer	5	From Device
Tank Fill Data	string	Fill history 009	To Device
Tank Level	integer	1	From Device
Ultrasonic Diagnostics	string	click to update	From Device
Ultrasonic Settings	string	click to update	To Device

Then, make your changes in the dialog box that displays, as shown below:

Property Battery Life

Base Type integer

New Value: 94

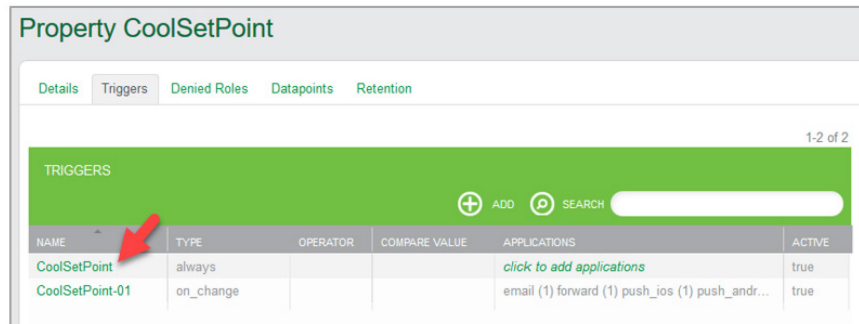
Metadata (key/value): Key Value

CANCEL

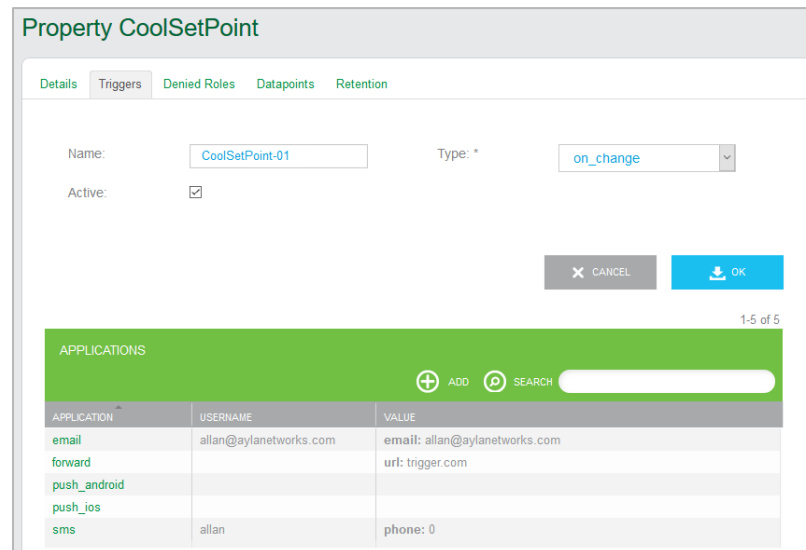
OK

5.2.2 Properties > Trigger sub-tab (Edit Triggers)

1. On the Triggers sub-tab, click the trigger name in the table listing, as shown below.



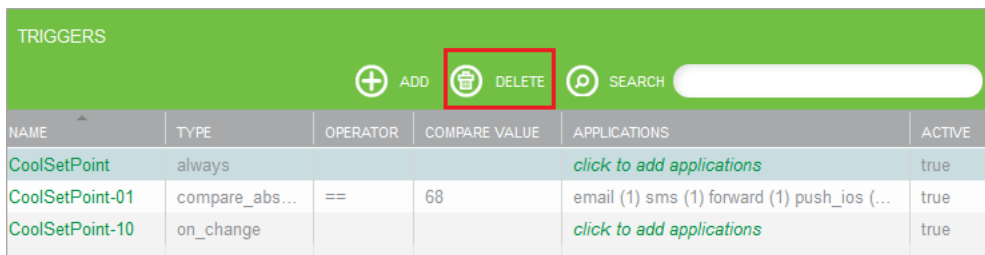
2. In the dialog box for the trigger (shown below), edit the fields as follows:



- **Name** (name of the property trigger).
 - **Active** checkbox
 - **Select** (if schedule template is active)
 - **Unselect** (if schedule template is inactive)
 - **Type** drop-down (change as needed) – options are:
 - **Always**
 - **compare_absolute**
 - **on_change**
3. If you make any changes, click **OK**.

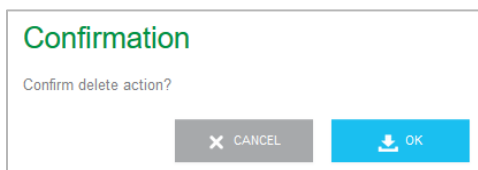
5.2.3 Properties > Trigger sub-tab (Delete Triggers)

1. In the Triggers table listing, select the trigger to delete, and click **DELETE**.



TRIGGERS					
NAME	TYPE	OPERATOR	COMPARE VALUE	APPLICATIONS	ACTIVE
CoolSetPoint	always			click to add applications	true
CoolSetPoint-01	compare_abs...	==	68	email (1) sms (1) forward (1) push_ios (...)	true
CoolSetPoint-10	on_change			click to add applications	true

2. In the Confirmation dialog box, click **OK**.

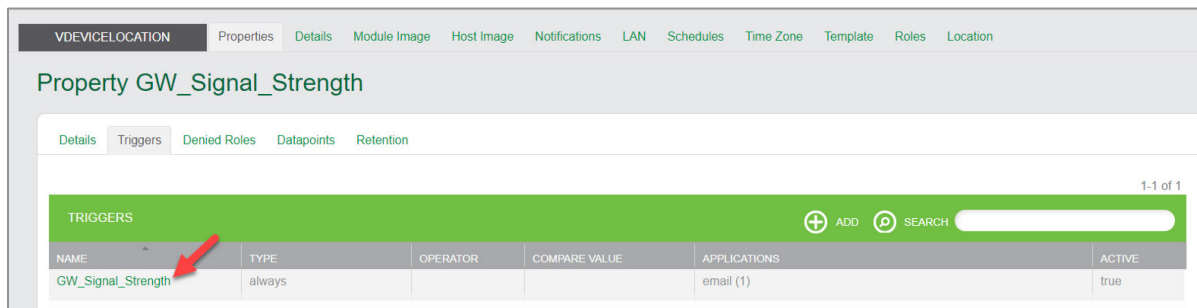


Confirmation

Confirm delete action?

5.2.4 Properties > Triggers sub-tab (Edit Applications)

In the Triggers table listing, click the name of the trigger for the application you wish to edit (shown below).

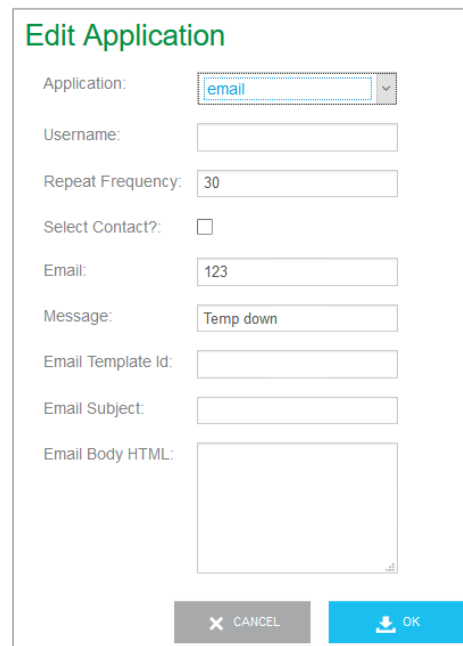


TRIGGERS					
NAME	TYPE	OPERATOR	COMPARE VALUE	APPLICATIONS	ACTIVE
GW_Signal_Strength	always			email (1)	true

Click the application, such as email, to open the dialog box in which you edit the parameters. The remainder of this section explains how to edit each trigger application.

Trigger Applications – email

When you click the **email** application, the following dialog box opens:



The dialog box is titled "Edit Application". It contains the following fields:

- Application:** A dropdown menu with "email" selected.
- Username:** A text input field.
- Repeat Frequency:** A text input field with the value "30".
- Select Contact?:** A checkbox that is currently unchecked.
- Email:** A text input field with the value "123".
- Message:** A text input field with the value "Temp down".
- Email Template Id:** A text input field.
- Email Subject:** A text input field.
- Email Body HTML:** A large text area for HTML content.

At the bottom of the dialog box are two buttons: "CANCEL" (with a close icon) and "OK" (with a download icon).

Edit these fields as needed:

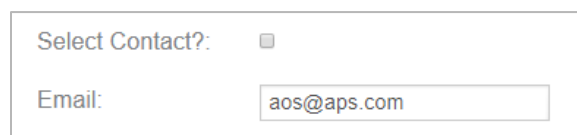
- **Username** (which is also the greeting in the notification message)
- **Repeat Frequency**
- **Select Contact** checkbox

If selected, the **Contacts** drop-down displays (as shown below):



This form shows the "Select Contact?" checkbox checked. Below it is a "Contact:" label followed by a dropdown menu.

If unselected, the **Email** displays (as shown below):



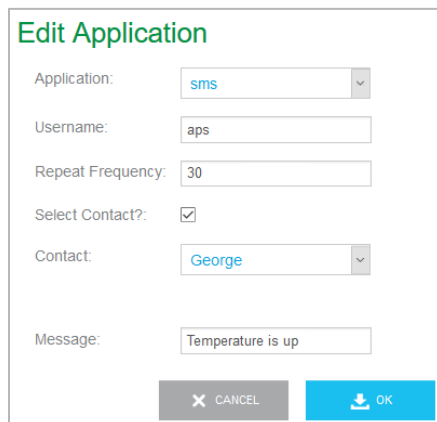
This form shows the "Select Contact?" checkbox unchecked. Below it is an "Email:" label followed by a text input field containing the email address "aos@aps.com".

- **Message**
- **Email Template Id**
- **Email Subject**
- **Email Body HTML**

If you make any changes, click **OK**.

Trigger Applications – sms

When you click the **sms** application, the following dialog box opens:

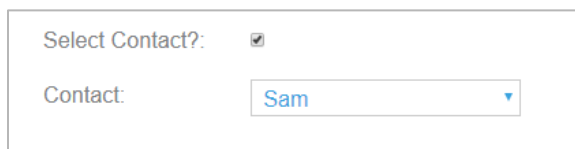


The 'Edit Application' dialog box contains the following fields:

- Application: sms (dropdown)
- Username: aps (text input)
- Repeat Frequency: 30 (text input)
- Select Contact?: ☒ (checkbox)
- Contact: George (dropdown)
- Message: Temperature is up (text input)
- Buttons: CANCEL, OK

Edit these fields as needed:

- **Username** (which is also the greeting in the notification message)
- **Repeat Frequency**
- **Registration ID**
- **Select Contact?** checkbox –When selected, click a contact name in the **Contact** drop-down list (as shown below), which includes all of the contacts from your [Contact List](#).)



This section shows the 'Select Contact?' checkbox checked and the 'Contact' dropdown menu displaying 'Sam'.

If the **Select Contact?** checkbox is not selected, click the appropriate information **Country Code** and **Phone Number** the respective drop-down lists.



This section shows the 'Select Contact?' checkbox unchecked, with 'Country Code' and 'Phone Number' dropdown menus available.

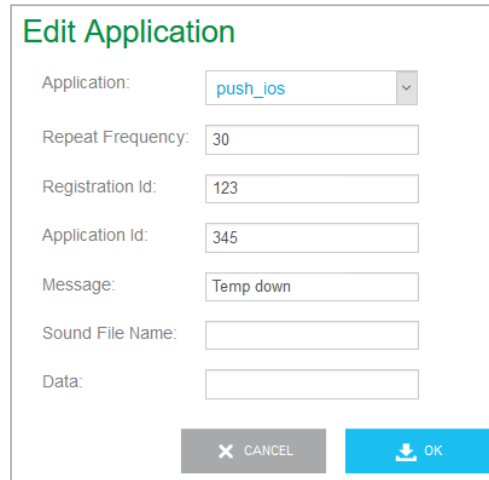
- **Message** - This is the message to be sent to the recipient – SMS messages longer than 160 are split into two messages.

NOTE The message length should be maximum of 120 characters to allow for overhead (i.e, notification object name length is 20, etc.).

If you make any changes, click **OK**.

Trigger Applications – push_ios

When you click the **push_ios** application, the following dialog box opens:



Edit Application

Application:

Repeat Frequency:

Registration Id:

Application Id:

Message:

Sound File Name:

Data:

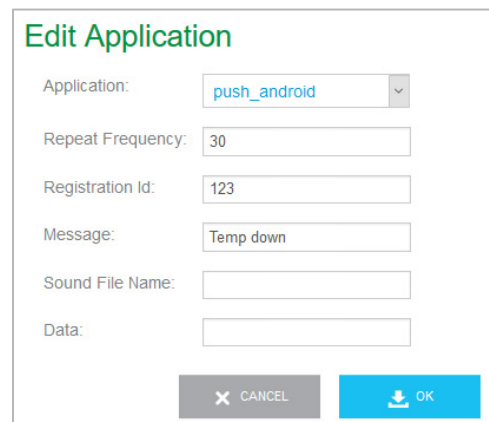
Edit these fields as needed:

- **Repeat Frequency**
- **Registration Id**
- **Application Id**
- **Message** (can be up to 4K characters)
- **Sound File Name**
- **Data** (contextual information)

If you make any changes, click **OK**.

Trigger Applications – push_android

When you click the **push_android** application, the following dialog box opens:



Edit Application

Application:

Repeat Frequency:

Registration Id:

Message:

Sound File Name:

Data:

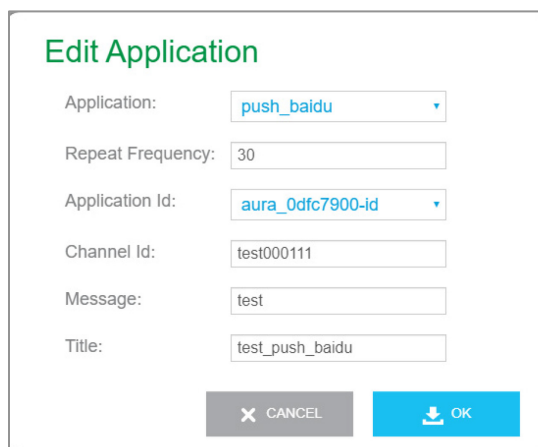
Edit these fields as needed:

- **Repeat Frequency**
- **Registration Id**
- **Message** (can be up to 4K characters)
- **Sound File Name**
- **Data** (contextual information)

If you make any changes, click **OK**.

Type drop-down = push_baidu

When you click the **push_baidu** application, the following dialog box opens:



The dialog box is titled "Edit Application" in green. It contains the following fields:

- Application: push_baidu (dropdown menu)
- Repeat Frequency: 30 (text input)
- Application Id: aura_0dfc7900-id (dropdown menu)
- Channel Id: test000111 (text input)
- Message: test (text input)
- Title: test_push_baidu (text input)

At the bottom, there are two buttons: a grey "CANCEL" button with a close icon and a blue "OK" button with a download icon.

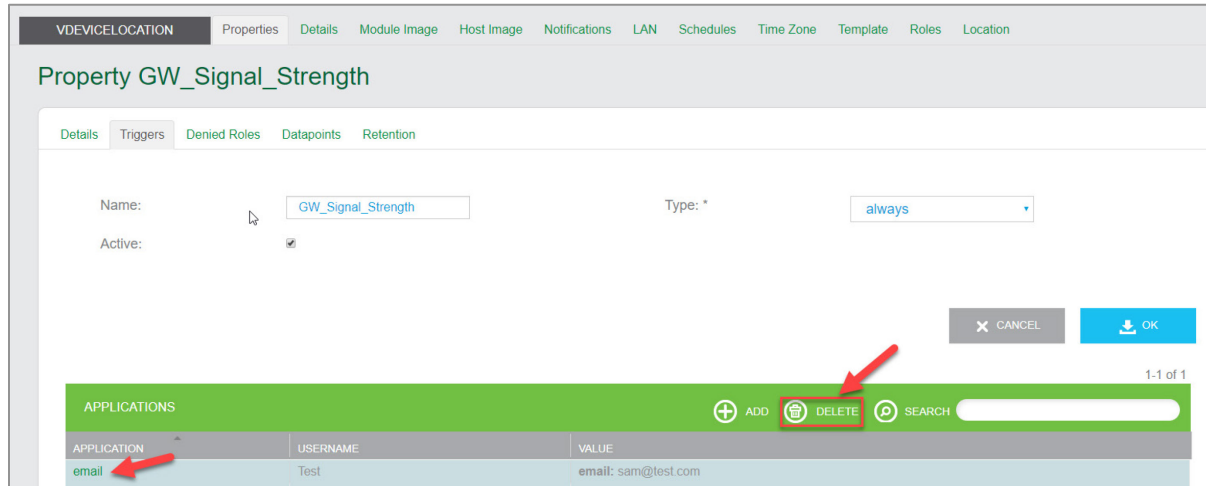
Edit these fields as needed:

- **Nickname** - This should be a user-friendly name.
- **Message** - This message is sent to the recipient – allows a maximum of 4000 characters.
- On **Application Id** drop-down (select item)
- **Channel Id**
- **Title** - This is the title of the notification sent to user.

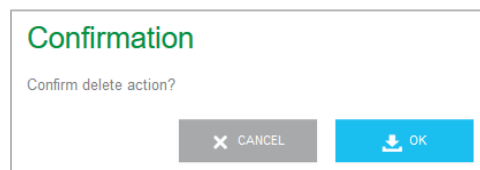
Click **OK** to save changes.

5.2.5 Properties > Triggers sub-tab (Delete Applications)

1. In the Application table listing of the selected trigger's page, select the application to delete, and then click **DELETE**. (Refer to the following example.)



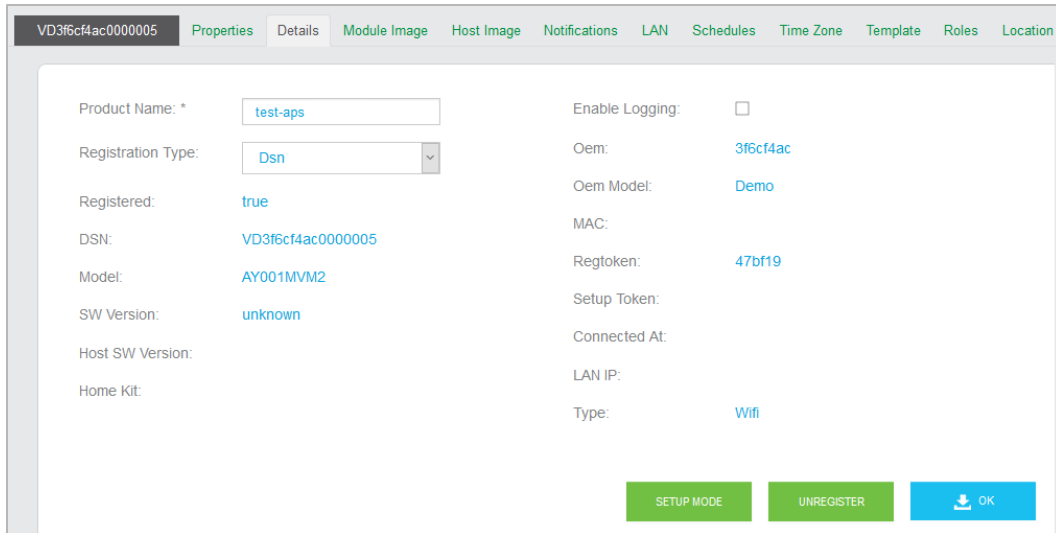
2. On the Confirmation dialog box, click **OK**.



5.3 Details tab

The Details page displays information associated with the device.

1. To get to the Details page, click the device in the table listing on the DEVICES page.
2. Click the **Details** tab.



VD3f6cf4ac0000005	
Properties	
Details	
Module Image	
Host Image	
Notifications	
LAN	
Schedules	
Time Zone	
Template	
Roles	
Location	
Product Name: *	<input type="text" value="test-aps"/>
Registration Type:	<input type="text" value="Dsn"/>
Registered:	true
DSN:	VD3f6cf4ac0000005
Model:	AY001MVM2
SW Version:	unknown
Host SW Version:	
Home Kit:	
Enable Logging:	<input type="checkbox"/>
Oem:	3f6cf4ac
Oem Model:	Demo
MAC:	
Regtoken:	47bf19
Setup Token:	
Connected At:	
LAN IP:	
Type:	Wifi

SETUP MODE UNREGISTER OK

On the Details tab, the following fields can be edited:

- **Product Name** (user-friendly name)
- **Registration Type** drop-down:
 - **Same-LAN**
 - **Button-Push**
 - **AP-Mode**
 - **Display**
 - **DSN**
 - **None** (no registration needed for this device)
- **Enable Logging** checkbox (select to log details, unselect to not log details)

3. If any changes, click **OK**.

For **SETUP MODE** button, see [Setup Mode](#).

For **UNREGISTER** button, see [Unregister](#).

5.4 Module Image tab

Module images are actual firmware on the Ayla modules. To open the Module Image page, , click the device in the table listing on the DEVICES page, and then click the Module Image tab.

AC000W000069495	Properties	Details	Module Image	Host Image	Notifications	LAN	Schedules	Time Zone	Template	Roles	Location
Current Module Version: bc 1.15 09/17/15 15:32:37 ID a11190c											
1-20 of 64											
AVAILABLE IMAGES SEARCH											
DESCRIPTION	VERSION	SIZE	CHECKSUM								
1.0.3 from 1.0	1.0.3	87732	0d86b86234bf8242ce940be4bd4e51f								
1.1.2 from 1.1	1.1.2	83112	1d92b23290879ecb59ef145668a12443								
1.1.2 from 1.1.1	1.1.2	58532	70547b4a963490d189893e338bc48671								
1.11-beta from 1.12	1.11-beta	115676	c7eeca4a7bb67a8a5a28ebb2808b926								
1.11-beta from 1.12-rc2	1.11-beta	110396	f272d84c75757bee8383a5a1babffid73								
1.12 from 1.11-beta	1.12	121820	4f253cedaa673487d98180fa5f2b44a9e								

NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text.

This screen displays the images that available.

5.5 Host Image

Host images are deployed and communicate directly with Ayla-enabled Wi-Fi modules. To open the Host Image page, click the device in the table listing on the DEVICES page, and then click the Host Image tab.

AC000W000069495	Properties	Details	Module Image	Host Image	Notifications	LAN	Schedules	Time Zone	Template	Roles	Location
Current Host SW Version: demo_dp 0.10											
Oem Model: ledevb											
1-20 of 29											
AVAILABLE IMAGES ADD SEARCH											
DESCRIPTION	SW VERSION	MIN SW VERSION	SIZE	CHECKSUM							
1.8	1.8	1.0	31060	869663ebda60d516a25073f5589be31a							
ABCToBCD	abc	bcd	51784	96103574b01c5b1fd46a7008c230aad8							
Add Red LED feature	demo_red 1.2	demo_dp 1.2	30972	56e210057e04cbe08ef4ead5d39c22cd							
added red led property	devkit_modified_shubha	dev_kit_2	24768	51b85943243b811d1bfd1a7ddccf3749							
added red LED	1.3.1	1.3.1	31568	7cb61f010f617775c2b268a5decbb0b							
demo-reg-button-test	1.0	1.0	51528	ea263454f6e9f3e44c8e56f9a5b89085							
demo_led 1.2 jre uart	1.2-jre	1.0	47988	881b45929e3dfff89f7b81e38a78cafc							
f0 use_uart	1.2	0	59192	8083a2b874accc06a3ef4c054647ebfd							

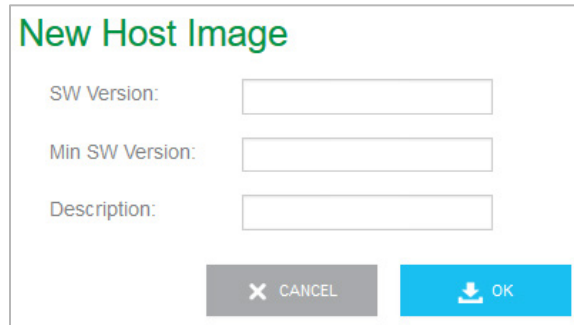
NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text.

5.5.1 Add a Host Image

1. Click **ADD**  on the Host Image tab.

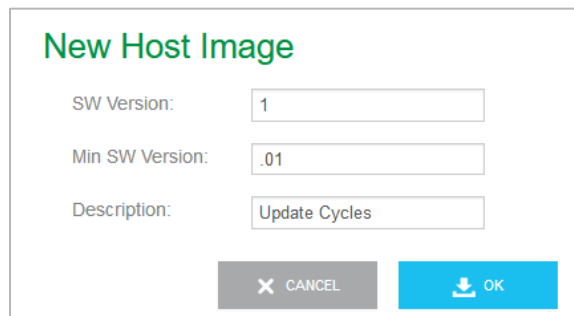


The dialog box titled "New Host Image" contains three input fields: "SW Version:", "Min SW Version:", and "Description:". At the bottom, there are two buttons: a grey "CANCEL" button with a close icon and a blue "OK" button with a download icon.

2. In the New Host Image dialog box, enter the details:
 - **SW Version** (this is the software version of the image)
 - **Min SW Version** (the minimum software version to be able to upgrade a host image)
 - **Description** (details on the host image)
3. Click **OK**.

5.5.2 Edit Host Image

1. In the Available Images table listing, click the module. This shows the New Host Image dialog box. (Notice that the fields are filled in.)



The dialog box titled "New Host Image" shows the same fields as before, but they are now pre-filled with values: "SW Version:" is "1", "Min SW Version:" is ".01", and "Description:" is "Update Cycles". The "CANCEL" and "OK" buttons are at the bottom.

2. Edit the fields with any new information.
3. Click **OK**.

5.6 Notifications

The Notifications tab is a table listing of all notification types and their details. Ayla allows proactive Ayla customer- and user-defined alerts (i.e. email, SMS, push) with dynamic data in the notifications. To view this tab (shown below), on the Device table listing, click the device in the table listing on the DEVICES page, and then click the **Notifications** tab.


TYPE	THRESHOLD	URL	USERNAME
ip_change	--	http://www.example.com	aps
on_connect	--	http://www.example.com	aps
on_connection_lost	600	--	--
on_connection_lost	300	--	--
on_connection_restore	300	--	--

NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text.

5.6.1 Add Notifications

- Click **ADD**  on the Notifications tab.
- In the New Notification dialog box, select the type of notification in the **Type** drop-down:

New Notification

Type: * on_connect

Service URL: *

Username:

Password:

- Depending on the notification type, enter the remaining information required:
 - on_connect** (the notification is sent when device is connected)
 - Enter **Service URL** (URL to which notification should be sent)
 - Enter **Username** (login credentials to service URL – if needed)
 - Enter **Password** (login credentials to service URL – if needed)
 - Click **OK**.

- **ip_change** (notification when IP address changes)
 - Enter **Service URL** (URL to which notification should be sent)
 - Enter **Username** (login credentials to service URL – if needed)
 - Enter **Password** (login credentials to service URL – if needed)
 - Click **OK**.
- **on_connection_lost**
 - Enter **Threshold (in seconds)** (length of time required for the condition before the notification is activated, must be ≥ 300)
 - Click **OK**.
- **on_connection_restore** (notification when device recovers connection)
 - Enter **Threshold (in seconds)** (length of time required for the condition before the notification is activated, must be ≥ 300)
 - Click **OK**.

The new notification is listed on the Notifications table.

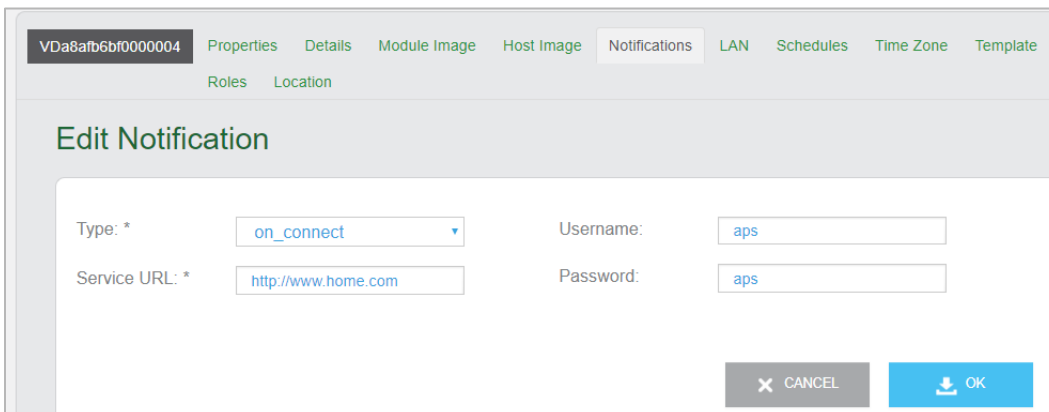
5.6.2 Review/Edit Notifications

1. On the Notifications table listing, click the notification type.



TYPE	THRESHOLD	URL	USERNAME
ip_change	--	http://www.example.com	aps
on_connect	--	http://www.example.com	aps
on_connect	--	http://www.examle.com	aps
on_connection_lost	600	--	--
on_connection_lost	300	--	--
on_connection_restore	300	--	--

2. On the Edit Notification page, change the parameters as needed.



VDa8afb6bf0000004
 Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template

Roles Location

Edit Notification

Type: *

on_connect

Username:

aps

Service URL: *

http://www.home.com

Password:

aps


CANCEL

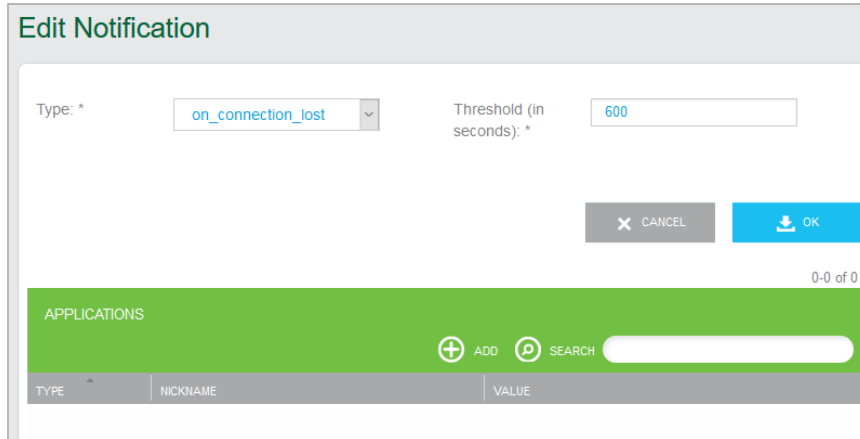
OK

3. If changed, click **OK**.

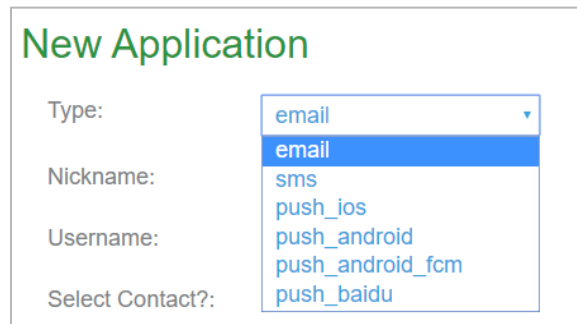
5.6.3 Add an Application to Notification

Applications are used to inform you of changes to a notification. One or more applications can be added to a notification:

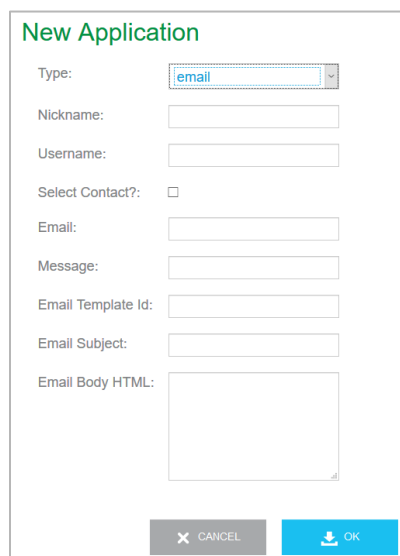
1. On the Edit Notifications page, Applications table, click **ADD**  **ADD**.



2. On the New Application dialog box, **Type** drop-down, select the application.



3. Enter the details for each type of Application as described below:

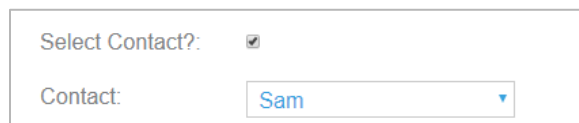
Type drop-down = email

The 'New Application' form contains the following fields and controls:

- Type:** A drop-down menu with 'email' selected.
- Nickname:** A text input field.
- Username:** A text input field.
- Select Contact?:** An unchecked checkbox.
- Email:** A text input field.
- Message:** A text input field.
- Email Template Id:** A text input field.
- Email Subject:** A text input field.
- Email Body HTML:** A larger text area for HTML code.
- Buttons:** 'CANCEL' (grey) and 'OK' (blue) buttons at the bottom right.

1. Enter **Nickname** (user-friendly name)
2. Enter **Username** (greeting in the notification message)
3. For **Select Contact?** Checkbox:

If the **Select Contact?** checkbox is selected, the name of the contact from the **Contact** drop-down list, which provides all available contacts from your [Contact List](#).



This form snippet shows the 'Select Contact?' checkbox checked. Below it, the 'Contact' drop-down menu is open, displaying 'Sam' as the selected contact.

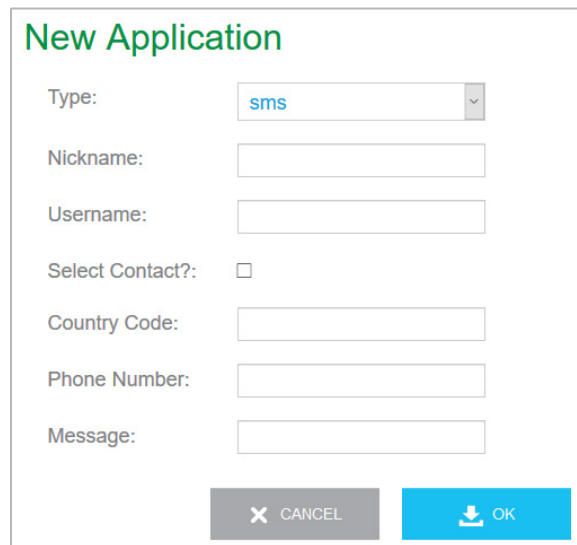
If the **Select Contact?** checkbox is not selected, in **Email**, enter the email address to which this information should be sent.



This form snippet shows the 'Select Contact?' checkbox unchecked. The 'Email' text input field is present and empty.

4. Enter **Message** (message to be sent to the recipient)
5. Enter **Email Template Id** (if a template is available)
6. Enter **Email Subject** (subject line of email)
7. Enter **Email Body HTML** (use HTML code as needed)
8. Click **OK**.

Type drop-down = sms



New Application

Type:

Nickname:

Username:

Select Contact?: ☐

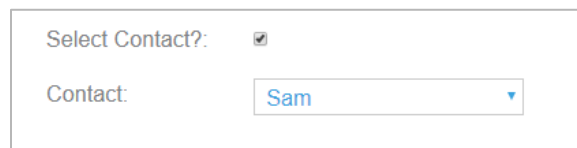
Country Code:

Phone Number:

Message:

1. Enter **Nickname** (user-friendly name for the application).
2. Enter **Username** (greeting in the notification message)
3. On **Select Contact** checkbox

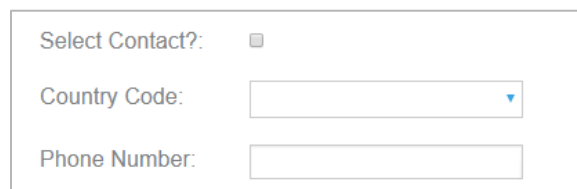
If the **Select Contact?** checkbox is selected, the name of the contact from the **Contact** drop-down list, which provides all available contacts from your [Contact List](#).



Select Contact?: ☒

Contact:

If the **Select Contact?** checkbox is not selected, enter phone country code associated with this application in **Country Code** and then in **Phone Number**, enter a phone number of whom to contact with regard to this application.



Select Contact?: ☐

Country Code:

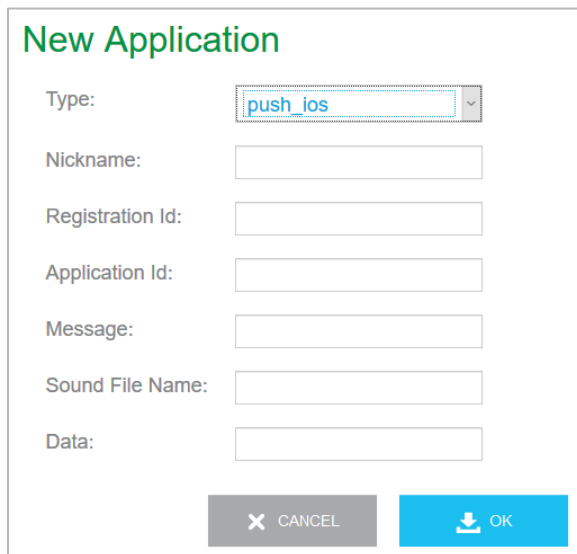
Phone Number:

4. Enter **Phone Number** (phone number to contact)
5. Enter **Message** (message to be sent to the recipient)

NOTE The length of the message should be maximum of 120 characters to allow for overhead (i.e, notification object name length is 20, etc.). SMS messages longer than 160 are split into two messages.

6. Click **OK**.

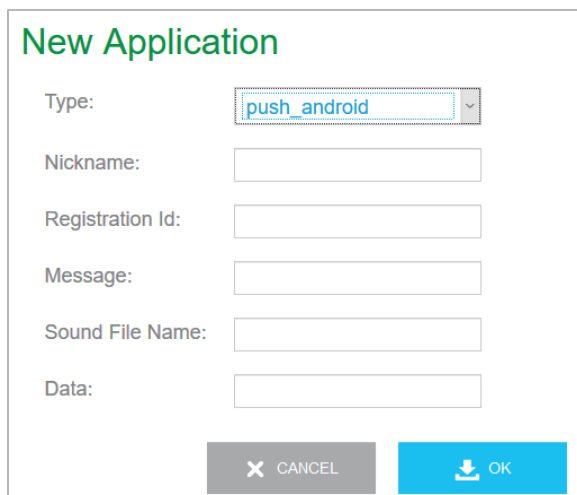
Type drop-down = push_ios



The form is titled "New Application" in green. It contains the following fields: "Type:" with a dropdown menu showing "push_ios", "Nickname:", "Registration Id:", "Application Id:", "Message:", "Sound File Name:", and "Data:". At the bottom, there are two buttons: a grey "CANCEL" button with a close icon and a blue "OK" button with a download icon.

1. Enter **Nickname** (user-friendly name)
2. Enter **Registration Id**
3. Enter **Application Id**
4. Enter **Message** (message to be sent to the recipient – up to 4K characters)
5. Enter **Sound File Name** (sound to be played when message is received)
6. Enter **Data** (contextual information)
7. Click **OK**

Type drop-down = push_android

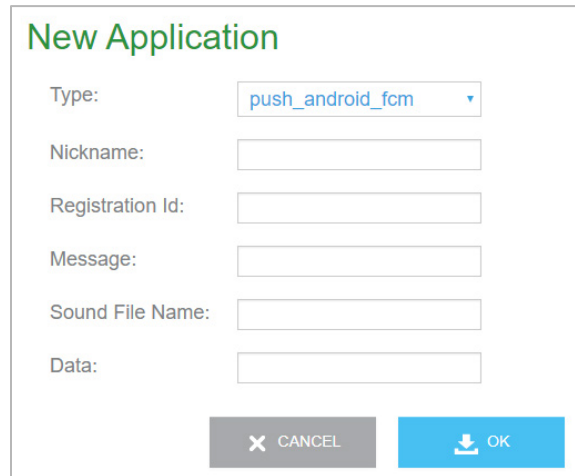


The form is titled "New Application" in green. It contains the following fields: "Type:" with a dropdown menu showing "push_android", "Nickname:", "Registration Id:", "Message:", "Sound File Name:", and "Data:". At the bottom, there are two buttons: a grey "CANCEL" button with a close icon and a blue "OK" button with a download icon.

1. Enter **Nickname** (user-friendly name)

2. Enter **Registration Id**
3. Enter **Message** (message to be sent to the recipient – up to 4K characters)
4. Enter **Sound File Name**. (sound to be played when message is received)
5. Enter **Data** (contextual information)
6. Click **OK**

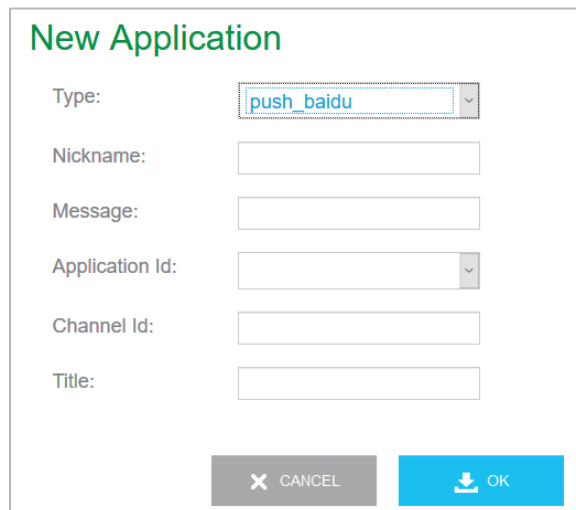
Type drop-down = push_android_fcm (Firebase Cloud Messaging)



The image shows a 'New Application' dialog box. It has a title bar with the text 'New Application' in green. Below the title bar, there are several input fields: 'Type:' with a dropdown menu showing 'push_android_fcm', 'Nickname:', 'Registration Id:', 'Message:', 'Sound File Name:', and 'Data:'. At the bottom of the dialog, there are two buttons: a grey 'CANCEL' button with a close icon and a blue 'OK' button with a download icon.

1. Enter **Nickname** (user-friendly name)
2. Enter **Registration Id**
3. Enter **Message** (message to be sent to the recipient – up to 4K characters)
4. Enter **Sound File Name**. (sound to be played when message is received)
5. Enter **Data** (contextual information)
6. Click **OK**

Type drop-down = push_baidu



The image shows a 'New Application' form with the following fields and controls:

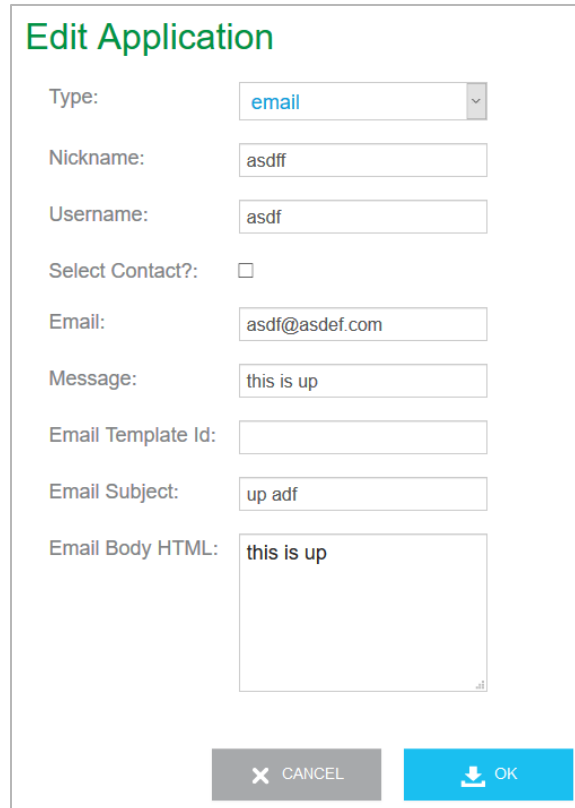
- Type:** A dropdown menu with 'push_baidu' selected.
- Nickname:** A text input field.
- Message:** A text input field.
- Application Id:** A dropdown menu.
- Channel Id:** A text input field.
- Title:** A text input field.
- Buttons:** A grey 'CANCEL' button with an 'X' icon and a blue 'OK' button with a download icon.

1. Enter **Nickname** (user-friendly name)
2. Enter **Message** (message to be sent to the recipient, which can be a maximum of 4000 characters)
3. On **Application Id** drop-down (select item)
4. Enter **Channel Id**
5. Enter **Title** (title of the notification sent to user)
6. Click **OK**.

5.6.4 Review/Edit Notification Application

Type drop-down – email

- On the Type drop-down, select **email**.



The screenshot shows a form titled "Edit Application" with the following fields and controls:

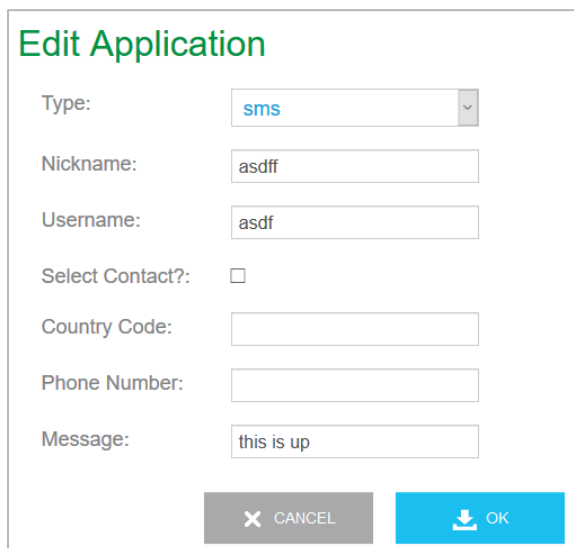
- Type:** A dropdown menu with "email" selected.
- Nickname:** A text input field containing "asdff".
- Username:** A text input field containing "asdf".
- Select Contact?:** An unchecked checkbox.
- Email:** A text input field containing "asdf@asdef.com".
- Message:** A text input field containing "this is up".
- Email Template Id:** An empty text input field.
- Email Subject:** A text input field containing "up adf".
- Email Body HTML:** A text area containing "this is up".
- Buttons:** At the bottom right, there are two buttons: "CANCEL" (with a close icon) and "OK" (with a download icon).

Editable fields are:

- **Username** (greeting in the notification message)
 - **Nickname**
 - **Select Contact** checkbox (if selected, Email field replaced with Contacts drop-down)
 - **Email** (if Select Contact checkbox selected, this is replaced with Contact drop-down)
 - **Message** (message to be sent)
 - **Email Template Id**
 - **Email Subject**
 - **Email Body HTML**
- If any changes, click **OK**.

Type drop-down – sms

1. On the Type drop-down, select **sms**.

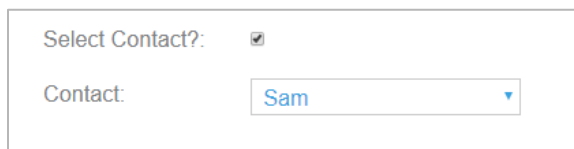


The screenshot shows the 'Edit Application' form. The 'Type' dropdown is set to 'sms'. Other fields include 'Nickname' (asdff), 'Username' (asdf), 'Select Contact?' (unchecked), 'Country Code' (empty), 'Phone Number' (empty), and 'Message' (this is up). At the bottom are 'CANCEL' and 'OK' buttons.

Editable fields are:

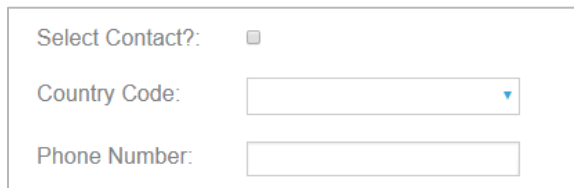
- **Nickname**
- **Username** (greeting in the notification message)

If the **Select Contact?** checkbox is selected, the name of the contact from the **Contact** drop-down list, which provides all available contacts from your [Contact List](#).



This section shows the 'Select Contact?' checkbox checked and the 'Contact' dropdown menu set to 'Sam'.

If the **Select Contact?** checkbox is not selected, enter phone country code associated with this application in **Country Code** and then in **Phone Number**, enter a phone number of whom to contact with regard to this application.



This section shows the 'Select Contact?' checkbox unchecked, with empty dropdown menus for 'Country Code' and 'Phone Number'.

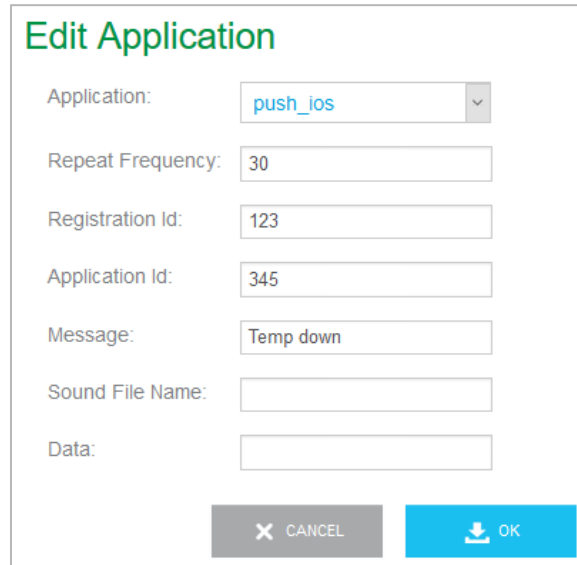
- **Message** (message to be sent to the recipient – sms messages longer than 160 is split into two messages)

NOTE Message length should be maximum of 120 characters to allow for overhead (i.e, notification object name length is 20, etc.).

2. If any changes, click **OK**.

Type drop-down – push_ios

1. On the Type drop-down, select **push_ios**.

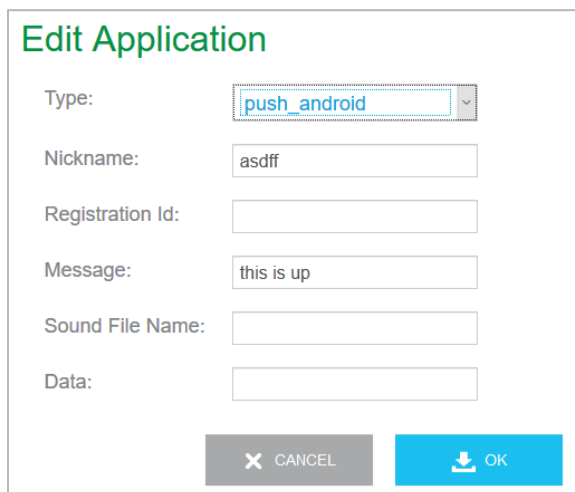


Editable fields are:

- **Nickname**
 - **Registration Id**
 - **Application Id**
 - **Message** (up to 4K characters)
 - **Sound File Name**
 - **Data** (contextual information)
2. If any changes, click **OK**.

Type drop-down – push_android

1. In the **Type** drop-down list, select **push_android**.



The 'Edit Application' dialog box for the 'push_android' type contains the following fields:

- Type:** A drop-down menu with 'push_android' selected.
- Nickname:** A text input field containing 'asdff'.
- Registration Id:** An empty text input field.
- Message:** A text input field containing 'this is up'.
- Sound File Name:** An empty text input field.
- Data:** An empty text input field.

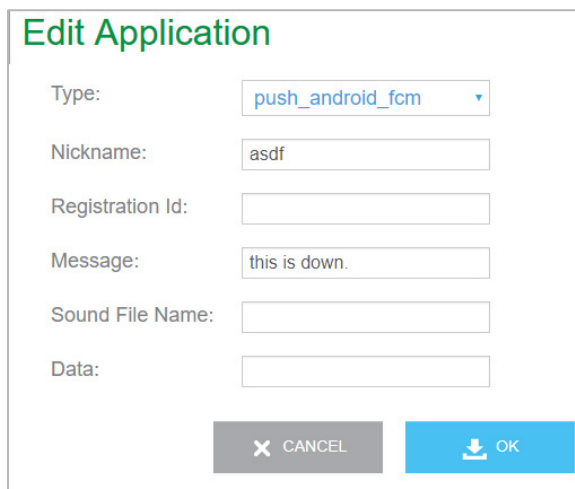
At the bottom right, there are two buttons: a grey 'CANCEL' button with a close icon and a blue 'OK' button with a download icon.

Editable fields are:

- **Nickname**
 - **Registration Id**
 - **Message** (up to 4K characters)
 - **Sound File Name**
 - **Data** (contextual information)
2. If any changes, click **OK**.

Type drop-down – push_android_fcm (Firebase Cloud Messaging)

1. On the Type drop-down, select **push_android_fcm**.



The 'Edit Application' dialog box for the 'push_android_fcm' type contains the following fields:

- Type:** A drop-down menu with 'push_android_fcm' selected.
- Nickname:** A text input field containing 'asdf'.
- Registration Id:** An empty text input field.
- Message:** A text input field containing 'this is down.'.
- Sound File Name:** An empty text input field.
- Data:** An empty text input field.

At the bottom right, there are two buttons: a grey 'CANCEL' button with a close icon and a blue 'OK' button with a download icon.

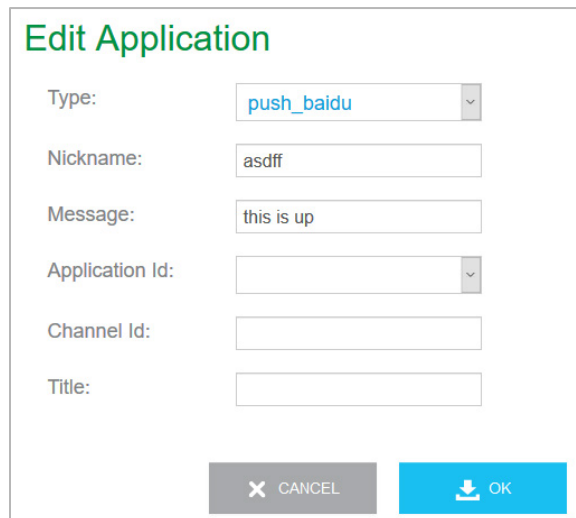
Editable fields are:

- **Nickname**
- **Registration Id**
- **Message** (up to 4K characters)
- **Sound File Name**
- **Data** (contextual information)

2. If any changes, click **OK**.

Type drop-down – push_baidu

1. On the Type drop-down, select **push_baidu**.



Edit the fields in this dialog box as follows:


- **Nickname**
- **Message** (up to 4K characters)
- **Application Id** drop-down
- **Channel Id**
- **Title**

2. If any changes, click **OK**.

5.6.5 Delete Notification



1. On the Notifications table listing, select the notification to delete.

NOTIFICATIONS			
 ADD  DELETE  SEARCH <input type="text"/>			
TYPE	THRESHOLD	URL	USERNAME
ip_change	--	http://www.example.com	aps
on_connect	--	http://www.example.com	aps
on_connect	--	http://www.examle.com	aps
on_connection_lost	600	--	--
on_connection_lost	300	--	--
on_connection_restore	300	--	--

2. Click **DELETE**  **DELETE**.
3. On the Confirmation dialog box, click **OK**.

Confirmation

Confirm delete action?

 CANCEL
  OK

5.7 LAN

LAN (Local Area Network) provides local communications between applications and devices when they are both on the same Wi-Fi network. To open the LAN page, click the device in the table listing on the DEVICES page, and then click the LAN tab.

VD3f6cf4ac0000005

Properties Details Module Image Host Image Notifications **LAN** Schedules Time Zone


Template Roles Location

Enabled ☒

Auto-sync ☒

Keep Alive: seconds

Lifetime: seconds

 OK

1. Edit the details for LAN as follows:
 - **Enabled** checkbox:
Selected (LAN is enabled for the device)

Unselected (LAN not enabled)

- **Auto-sync** checkbox:

Selected (automatically sync variables on reconnect)

Unselected (no syncing)

- Enter **Keep Alive** value (how often the mobile app sends a heartbeat to the module and keeps the session alive when the connection is idle)
- Enter **Lifetime** value (the number of seconds the unique LAN-pairing keys are valid)
The default is 15552000 (180 days).

2. Click **OK**.

5.8 Schedules

Schedules are used to manage device activity. To configure schedules, click the device in the table listing on the Devices page, and then click the **Schedules** tab.

The screenshot shows the Ayla Developer Portal interface for configuring schedules. The top navigation bar includes tabs for Devices, Rules, Groups, Templates, and OEM. The main content area is titled 'VDEVICELOCATION' and includes sub-tabs for Properties, Details, Module Image, Host Image, Notifications, LAN, Schedules, and Time Zone. The Schedules tab is active, displaying a table with the following data:

NAME	START DATE	END DATE	START TIME EACH...	END TIME EACH DAY	ACTIONS	ACTIVE
RWB_TEST			00h : 00m : 00s	04h : 00m : 00s	1 actions	true
RWB_TEST2			00h : 00m : 00s	02h : 00m : 00s	1 actions	true

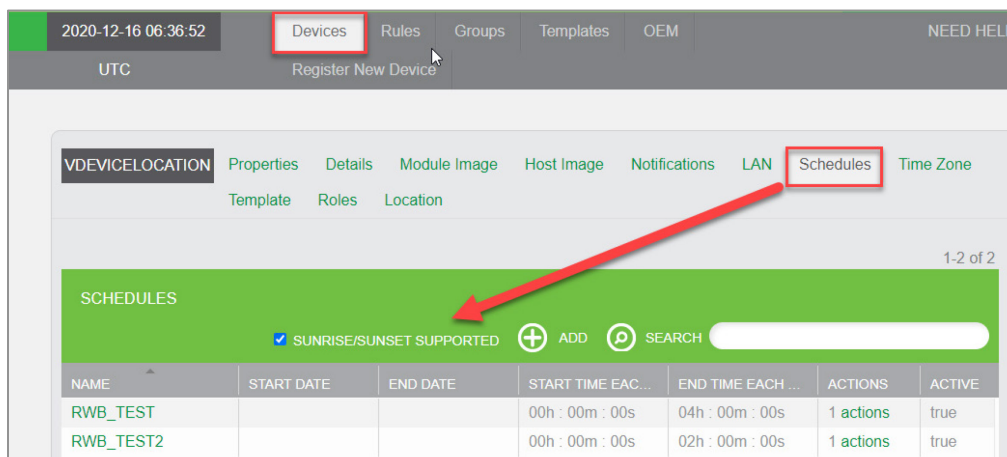
NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.


To restore the full list, delete any text in the Search field.

If your device and its firmware version support the ability to execute schedules based on sunrise and sunset settings, you can configure local sunrise and sunset times in Ayla schedules. This is only available, however, when creating schedules for templates with private visibility. The visibility setting is configured when you create or clone an Ayla template, as explained in [Section 8.0](#). For the devices that support sunrise and sunset settings, you need to enable the Sunrise/Sunset option (shown in the example below):

- When you are creating a new template, refer to [Section 8.1.2 for information on how to enable this option](#). Once you enable the option, you can configure local sunrise and sunset times in every schedule you create for that template.
- When you are adding a new schedule (as described in the next section (5.8.1), you must first edit the template to enable the Sunrise/Sunset option; refer to [Section 8.2.4 to do this](#).



5.8.1 Add New Schedule

1. On the device Schedules tab, click **ADD**  **ADD** to open the New Schedule dialog box.
2. Enter the details on the **Settings** tab as described below. In the following example, notice the drop-down for **Start Time Each Day** and **End Time Each Day**, which is where you configure the local sunrise or sunset setting. If you did not enable the Sunrise/Sunset option for the template associated with this device, these drop-down are not available; refer to [Section 8.2.4 to enable this option](#).


New Schedule


Settings
Advanced

Name: *

Display Name:

Direction: *

Start Time Each Day:


End Time Each Day:


Start Date:

End Date:

Duration (in seconds):

Interval (in seconds):

UTC:
☐

Fixed Actions:
☐

Active:
☒

Days of Week:
Every Day

Months of Year:
Every Month

Days of Month:
Every Day

Occurrence in Month:
None

X
CANCEL

OK

- **Name** - name of the schedule, which must match the schedule name on the host application of the device.
- **Display Name** - user-friendly name for the schedule.
- **Direction** – can be either:
 - **To Device** – if the schedule is sent to the device.
 - **From Device** – if the schedule is sent from the device.
- **Start Date** - the date that the schedule should be executed.
- **End Date** - the date that the schedule should be stopped.
- **Start Time Each Day** - the time that a scheduled event is started each day that the schedule is active. For private templates, you can edit this field as follows:
 - Click in the field to select the desired start time; refer to the following:

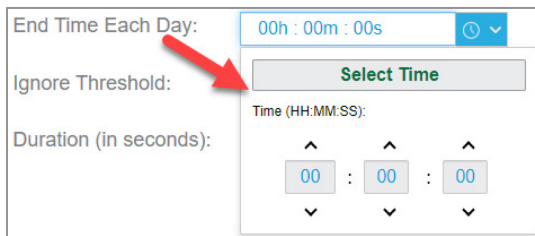
- Click the drop-down at the end of the field to select the sunrise or sunset option, as shown below:

- If you selected Sunrise or Sunset, click in the Start Time Each Day field to open the settings for an offset time to run the schedule a specific number of hours/minutes before or after sunrise or sunset. Refer to the example below:

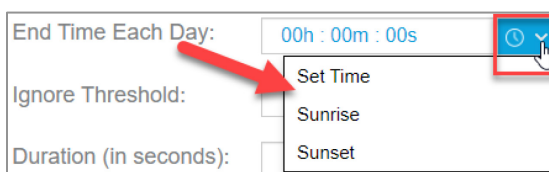
1. Select **Before** or **After** to specify before or after sunrise or sunset.
2. Select the up or down arrows to enter the time in hours/minutes to start the schedule before or after sunrise or sunset.

- **End Time Each Day** - the time to stop the scheduled event for each day that the schedule is active.

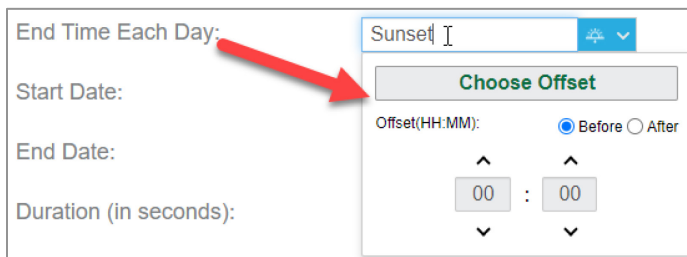
- Click in the field to select the desired end time; refer to the following:



- Click the drop-down at the end of the field to select the sunrise or sunset option, as shown below:



- If you selected **Sunrise** or **Sunset**, click in the field to configure an offset time to run the schedule a specific number of hours/minutes before or after sunrise or sunset. Refer to the example below:



1. Select **Before** or **After** to specify before or after sunrise or sunset.
 2. Select the up or down arrows to enter the time in hours/minutes to start the schedule before or after sunrise or sunset.
- **Ignore Threshold** – the amount of time (in seconds) that can pass before the scheduled action is ignored if the schedule did not execute this action at the specified time.
 - **Duration (in seconds)** – the length of time that the schedule should be active.
 - **Interval (in seconds)** – the time between consecutive scheduled events.
 - **UTC** checkbox
 - If selected, UTC (Coordinated Universal Time) is used.
 - If unselected, local time is used.

- **Fixed Actions** checkbox
 - If selected, you cannot add new actions to the schedule. This means that the `updateSchedule` call from the mobile application has reduced functionality when the Fixed Actions checkbox is selected. We recommend selecting this checkbox for schedules that are not intended to support significant customization by the end user.
 - If unselected, you can add new actions to the schedule.
 - **Active** checkbox
 - If selected, the schedule is active.
 - If unselected, the schedule is inactive.
 - **Days of Week:** - specific days that the schedule is active.
 - **Months of Year:** - specific months that the schedule is active.
 - **Occurrence in Month:** - how many times the schedule occurs each month. This applies to the day of the week that the schedule is executed, e.g. the first and second Monday.
3. Click the **Advanced** tab:

New Schedule

Settings
Advanced

Days of Week:
☒ Sun
☒ Mon
☒ Tues
☒ Wed
☒ Thurs
☒ Fri
☒ Sat

Months of Year:
☒ Jan
☒ Feb
☒ Mar
☒ Apr
☒ May
☒ Jun
☒ Jul
☒ Aug
☒ Sept
☒ Oct
☒ Nov
☒ Dec

Days of Month:
☒ 1
☒ 2
☒ 3
☒ 4
☒ 5
☒ 6
☒ 7
☒ 8
☒ 9
☒ 10
☒ 11
☒ 12
☒ 13
☒ 14
☒ 15
☒ 16
☒ 17
☒ 18
☒ 19
☒ 20
☒ 21
☒ 22
☒ 23
☒ 24
☒ 25
☒ 26
☒ 27
☒ 28
☒ 29
☒ 30
☒ 31
☐ Last day of the month

Occurrence in Month:
☐ First
☐ Second
☐ Third
☐ Fourth
☐ Fifth
☐ Last

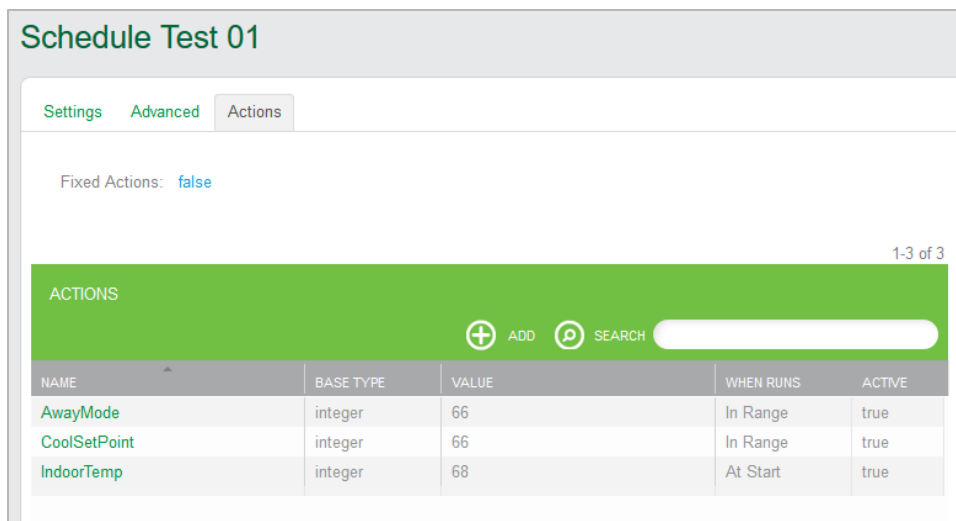
- **Days of Week** - select/unselect days as needed (described in step 2).
 - **Months of Year** - select/unselect months as needed (described in step 2).
 - **Days of Month** - select/unselect days as needed (described in step 2).
 - **Occurrence in Month** - select/unselect as needed (described in step 2).
4. Click the **Settings** tab, and then click **OK** to add this new schedule to table listing on the Schedules tab.

5.8.2 Add Actions to a Schedule

After a schedule is created, actions taken on device properties (datapoints) can be created.

1. In the Schedule table listing, click a schedule.

- On the Schedule page, click the **Actions** tab.



Schedule Test 01

Settings Advanced **Actions**

Fixed Actions: false

1-3 of 3

ACTIONS

+ ADD 🔍 SEARCH

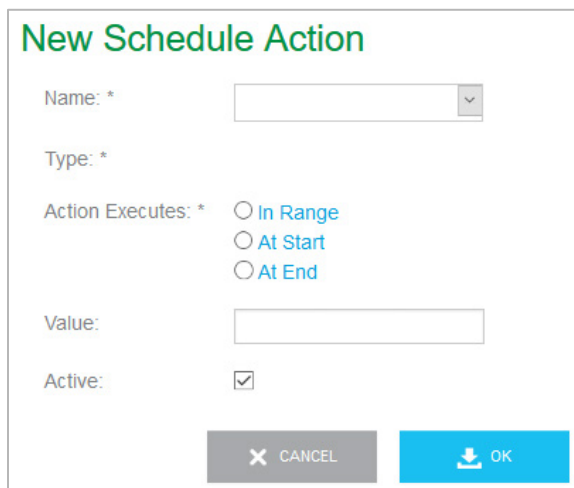
NAME	BASE TYPE	VALUE	WHEN RUNS	ACTIVE
AwayMode	integer	66	In Range	true
CoolSetPoint	integer	66	In Range	true
IndoorTemp	integer	68	At Start	true

NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.

To restore the full list, delete any text in the Search field.

- Click **ADD**  to open the New Schedule Action dialog box:



New Schedule Action

Name: *

Type: *

Action Executes: * ☐ In Range ☐ At Start ☐ At End

Value:

Active: ☒

- On **Name** drop-down, select the property (datapoint) to specify the scheduled action. (**Type** is automatically populated based on the property selected in the Name field.)
- For **Action Executes**, select one of the following options to specify when to execute the scheduled action:
 - In Range** – the action executes on property within the defined range between Start Time Each Day and End Time Each Day settings. This selection provides the highest confidence level that the action will execute regardless of external

- factors causing a schedule to start at time other than that specified for Start Time Each Day.
- **At Start** – the action executes on the property based on Start Time Each Day setting.
 - **At End** - the action executes on the property based on End Time Each Day setting.
6. For **Value**, enter a value for the property (selected in the Name field), which is used when the schedule executes the action.
 7. **Active** checkbox:
 - **Select** to set the intended scheduled action to execute.
 - **Unselect** when the scheduled action is inactive.
 8. Click **OK** to create a new scheduled action.

5.8.3 Edit Schedule and Actions

A schedule has associated Actions that control various datapoints.

1. On the table listing, click the schedule you wish to edit.
2. Edit the information on the Details tab (described below):

Schedule sched-2017-04-25-16:33:42

Details

Advanced

Actions

Name: *

Direction: *

To Device

Start Date:

End Date:

Start Time Each Day: *

End Time Each Day:

Ignore Threshold:

Duration (in seconds):

Interval (in seconds):

UTC: ☒

Fixed Actions: ☐

Active: ☒

Days of Week: Every Day

Months of Year: Every Month

Days of Month: Every Day

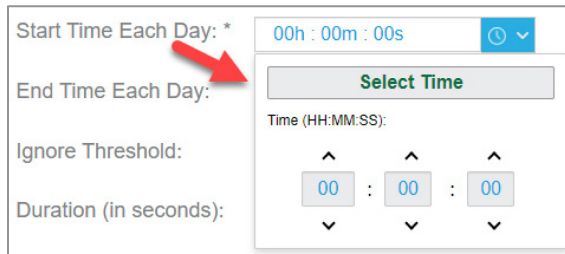
Occurrence in Month: None

✕ CANCEL

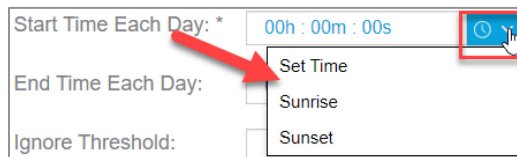
📄 OK

- **Name** – the name of the schedule, which must match the schedule name on the host application of the device.
- **Direction** drop-down:
 - **To Device** – if the schedule is sent to the device.

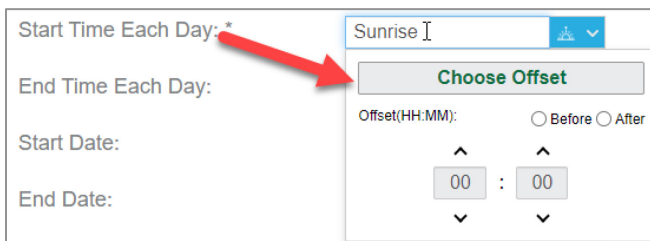
- **From Device** – if the schedule is sent from the device.
- **Start Time Each Day** - the time that a scheduled event is started each day that the schedule is active. For private templates, you can edit this field as follows:
 - Click in the field to select the desired start time; refer to the following:



- Click the drop-down at the end of the field to select the sunrise or sunset option, as shown below:



- If you selected **Sunrise** or **Sunset**, click in the Start Time Each Day field to open the settings for an offset time to run the schedule a specific number of hours/minutes before or after sunrise or sunset. Refer to the example below:



1. Select **Before** or **After** to specify before or after sunrise or sunset.
 2. Select the up or down arrows to enter the time in hours/minutes to start the schedule before or after sunrise or sunset.
- **End Time Each Day** - the time to stop the scheduled event for each day that the schedule is active.
 - Click in the field to select the desired end time; refer to the following:

- Click the drop-down at the end of the field to select the sunrise or sunset option, as shown below:

- If you selected **Sunrise** or **Sunset**, click in the field to configure an offset time to run the schedule a specific number of hours/minutes before or after sunrise or sunset. Refer to the example below:

- Select **Before** or **After** to specify before or after sunrise or sunset.
 - Select the up or down arrows to enter the time in hours/minutes to start the schedule before or after sunrise or sunset.
- Ignore Threshold** - the amount of time (in seconds) that can pass before the scheduled action is ignored if the schedule did not execute this action at the specified time.
 - Duration (in seconds)** - the length of time that the schedule should be active.
 - Interval (in seconds)** - the time between consecutive scheduled events.
 - UTC** checkbox
 - If selected, UTC (Coordinated Universal Time) is used.
 - If unselected, local time is used.
 - Fixed Actions** checkbox
 - If selected, you cannot add new actions to the schedule. This means that the `updateSchedule` call from the mobile application has reduced functionality when the Fixed Actions checkbox is selected. We recommend

selecting this checkbox for schedules that are not intended to support significant customization by the end user.

- If unselected, you can add new actions to the schedule.
 - **Active** checkbox
 - If selected, the schedule is active.
 - If unselected, the schedule is inactive.
 - **Days of Week:** - specific days that the schedule is active.
 - **Months of Year:** - specific months that the schedule is active.
 - **Occurrence in Month:** - how many times the schedule occurs each month. This applies to the day of the week that the schedule is executed, e.g. the first and second Monday.
3. Click the **Advanced** tab and select or unselect any of the checkboxes (as needed).

Schedule sched-2017-04-25-16:33:42

Details **Advanced** Actions

Days of Week: ☒ Sun ☒ Mon ☒ Tues ☒ Wed ☒ Thurs ☒ Fri ☒ Sat

Months of Year: ☒ Jan ☒ Feb ☒ Mar ☒ Apr ☒ May ☒ Jun ☒ Jul ☒ Aug ☒ Sept ☒ Oct ☒ Nov ☒ Dec

Days of Month: ☒ 1 ☒ 2 ☒ 3 ☒ 4 ☒ 5 ☒ 6 ☒ 7 ☒ 8 ☒ 9 ☒ 10 ☒ 11 ☒ 12 ☒ 13 ☒ 14 ☒ 15 ☒ 16 ☒ 17 ☒ 18 ☒ 19 ☒ 20 ☒ 21 ☒ 22 ☒ 23 ☒ 24 ☒ 25 ☒ 26 ☒ 27 ☒ 28 ☒ 29 ☒ 30 ☒ 31 ☐ Last day of the month

Occurrence in Month: ☐ First ☐ Second ☐ Third ☐ Fourth ☐ Fifth ☐ Last

4. Click the **Actions** tab, and then click the action that requires changes.

Schedule sched-2017-04-25-16:33:42

Details **Advanced** Actions

Fixed Actions: false

1-1 of 1

ACTIONS

ADD SEARCH

NAME	BASE TYPE	VALUE	WHEN RUNS	ACTIVE
Test	integer	11	In Range	true

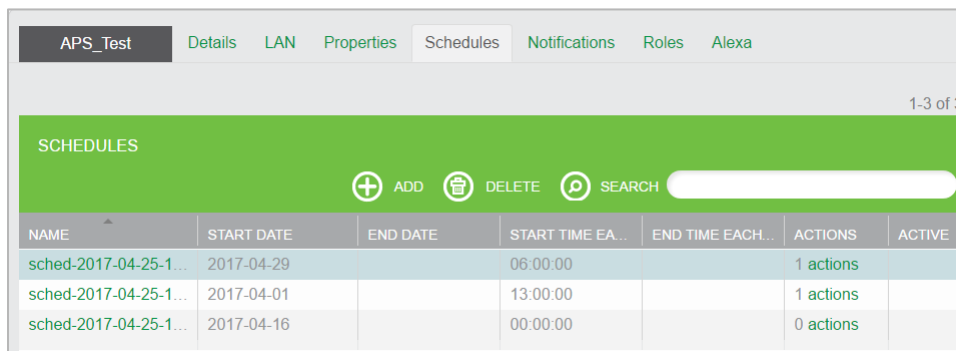
- NOTE** The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.
- If there are no matches, the table listing is blank.
- To restore the full list, delete any text in the Search field.

5. On the Edit Schedule Action dialog box, change the fields as desired:


- **Name** - the property (datapoint) to specify the scheduled action. (The **Type** field is automatically populated based on the property selected in the Name field.)
 - **Action Executes** - options that specify when to execute the scheduled action:
 - **In Range** – the action executes on property within the defined range between Start Time Each Day and End Time Each Day settings. This selection provides the highest confidence level that the action will execute regardless of external factors causing a schedule to start at time other than that specified for Start Time Each Day
 - **At Start** – the action executes on the property based on Start Time Each Day setting.
 - **At End** - the action executes on the property based on End Time Each Day setting.
 - **Value** - for the selected property, which is used when the schedule executes the action.
 - **Active** checkbox
 - **Select** to set the intended scheduled action to execute.
 - **Unselect** when the scheduled action is inactive.
6. When done, click **OK**.
7. To save changes, click **OK** on the Settings tab.

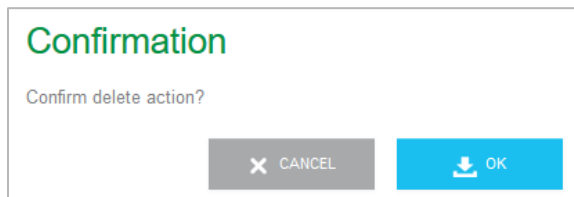
5.8.4 Delete Schedule

1. On the device Schedules table listing, click the schedule to delete.



NAME	START DATE	END DATE	START TIME EA...	END TIME EACH...	ACTIONS	ACTIVE
sched-2017-04-25-1...	2017-04-29		06:00:00		1 actions	
sched-2017-04-25-1...	2017-04-01		13:00:00		1 actions	
sched-2017-04-25-1...	2017-04-16		00:00:00		0 actions	

2. Click **DELETE** .
3. In the Confirmation dialog box, click **OK**.

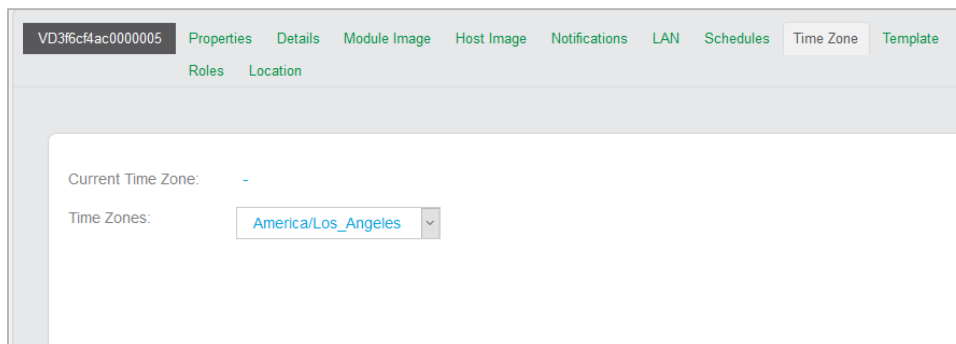


Confirmation

Confirm delete action?

5.9 Time Zone

You can see and change the time zone assigned to the device on the Time Zone page. To open this page, click the device in the table listing on the DEVICES page, and then click the **Time Zone** tab.



VD3f6c4ac0000005 Properties Details Module Image Host Image Notifications LAN Schedules Time Zone Template

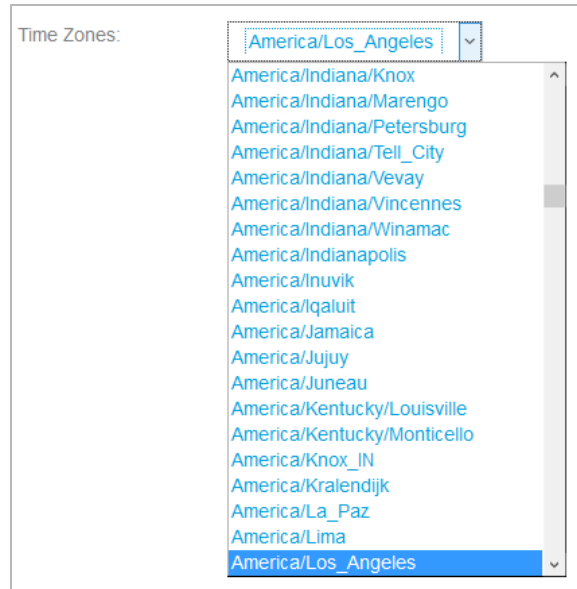
Roles Location

Current Time Zone: -

Time Zones:

To change the time zone:

1. Click the **Time Zone** drop-down.

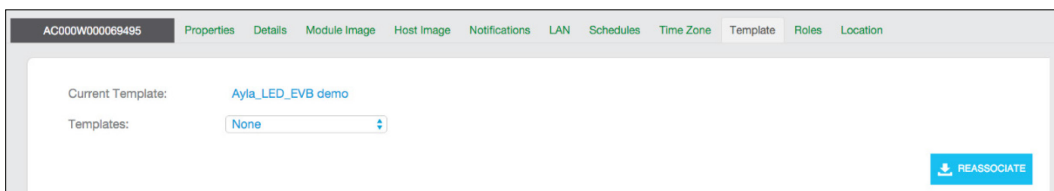


2. Click the correct time zone for the device location.

5.10 Template

A template is a group of properties (i.e. module name, OEM ID, Ayla registration type, etc.) applied to the device in the Ayla Cloud. Templates are associated with the device by the Ayla Device Service during the Wi-Fi Set-up process for onboarding devices. The Template page gives you the name of the template currently associated with this device. On the Template page, you can re-associate a new template with the device.

To open the Template page, click the device in the table listing of the DEVICES page, and then click the Template tab.



To associate a different template with the device:

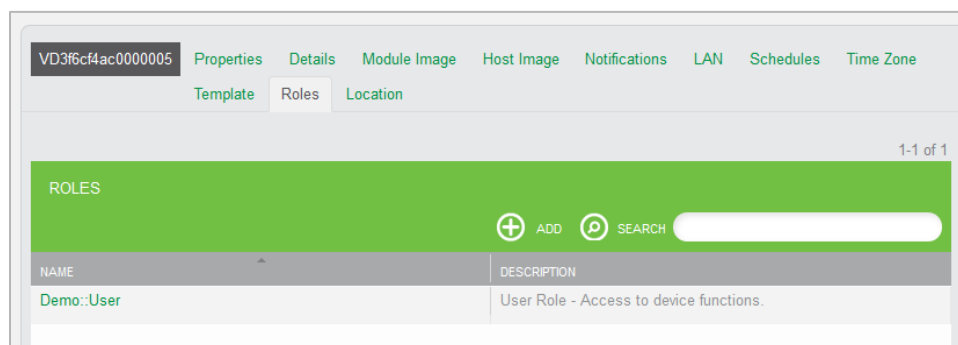
1. Select a new template from the Templates drop-down list.
2. Click **REASSOCIATE**.

5.11 Roles

Roles specify the access levels a user has to the views and functions in the Ayla Developer Portal and the Ayla Customer Dashboard. All users have access to devices registered to their account. The roles and tasks users can perform are dependent on the assigned role.

NOTE For more information on Roles, refer to Ayla Dashboard Help on [Ayla Connection](#).

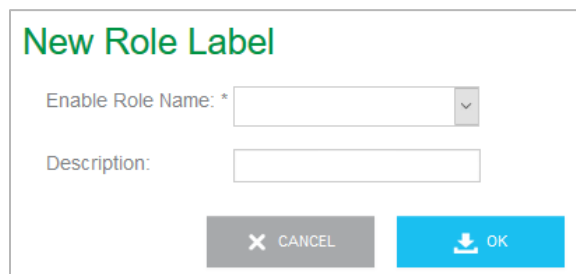
You can add roles from the Roles tab. On the DEVICES page, click the device for which you wish to add a role:



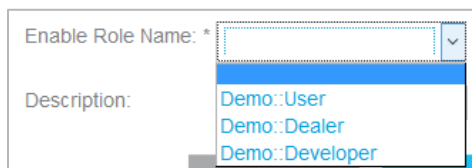
NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters. If there are no matches, the table listing is blank. To restore the full list, remove/delete the search field text.

5.11.1 Add Roles

1. On the ROLES page, click **ADD**  to open the New Role Label dialog box.



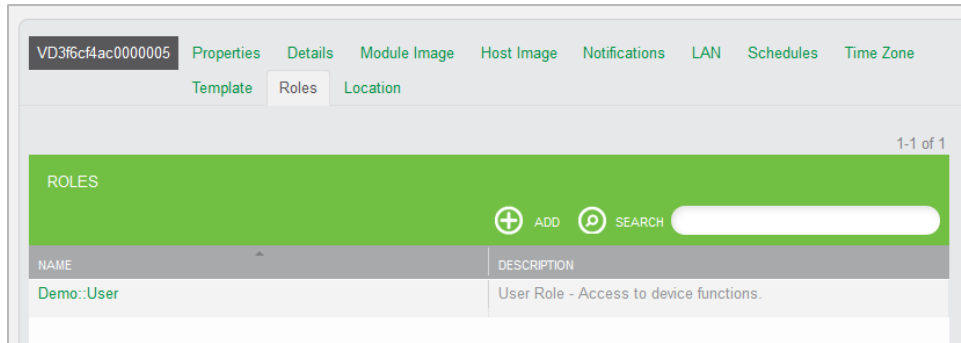
2. Click the **Enable Role Name** drop-down list, and select the role.



4. In Description, enter a short description of the role, which is displayed near the role name in the table listing on the ROLES page.
5. Click **OK**.

5.11.2 Review/Edit Role

1. On the ROLES page, click the role in the table listing.



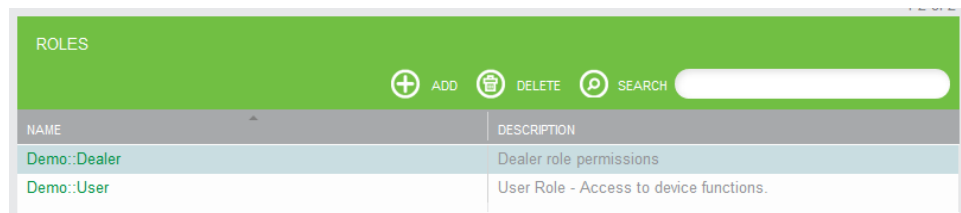
2. In the Edit Role Label dialog box, make changes (as needed) to **Description**.


The screenshot shows the 'Edit Role Label' dialog box. It has a title bar 'Edit Role Label'. Inside, there are two input fields: 'Enable Role Name: *' with a dropdown menu showing 'Demo::User', and 'Description:' with a text box containing 'User Role - Access to device functions'. At the bottom, there are two buttons: 'CANCEL' and 'OK'.

3. When done, click **OK**.

5.11.3 Delete Roles

1. On the ROLES page, click the name of the role in the table listing.

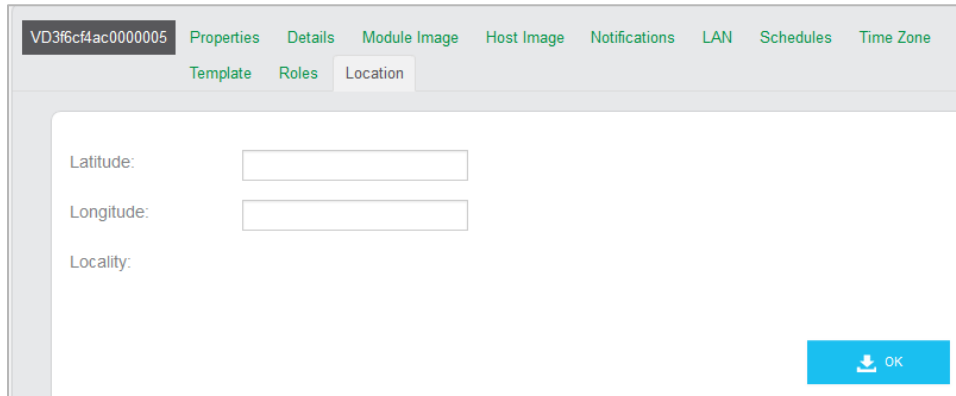


2. Click **DELETE**  **DELETE**.
3. In the Confirmation dialog box, click **OK**.

The screenshot shows the 'Confirmation' dialog box. It has a title bar 'Confirmation'. Inside, there is a text box asking 'Confirm delete action?'. At the bottom, there are two buttons: 'CANCEL' and 'OK'.

5.12 Location

The Location tab is where you enter specific information to track the geographic location of your device. The device is located based on latitude and longitude, which is derived from the IP address of the device. To open the Location page, on the DEVICES page, click the device that you wish to locate, and then click the **Location** tab.




VD3f6cf4ac0000005 Properties Details Module Image Host Image Notifications LAN Schedules Time Zone
Template Roles Location

Latitude:

Longitude:

Locality:

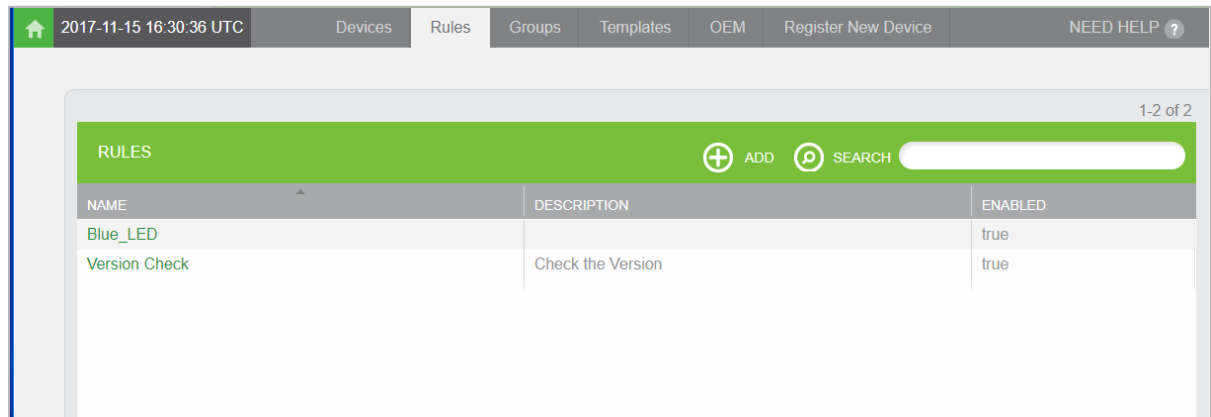
 OK

To set the device location:

1. Enter Latitude value.
2. Enter Longitude value.
3. Click **OK**.

6 Rules

The Ayla Developer Portal provides tools to create and apply rules and decision logic to devices for development and testing purposes. Rules can be configured for devices using the RULES page. To access this page, click the **Rules** tab on the main page of the portal.



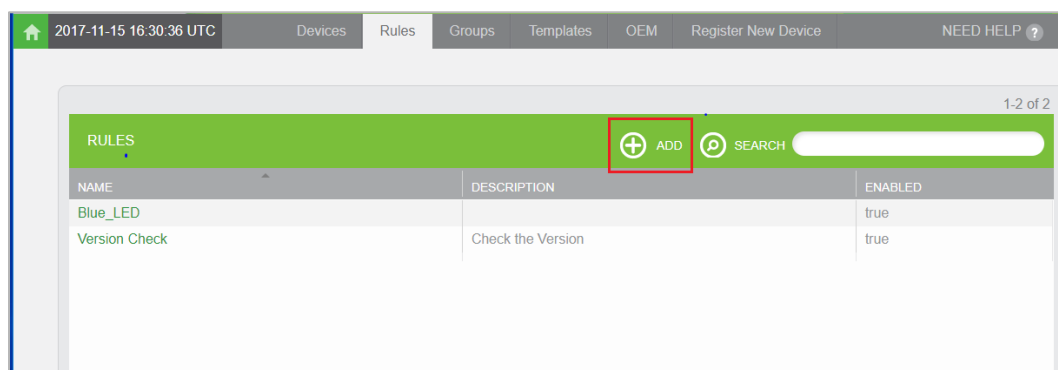
NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text.

6.1 Create a New Rule

1. On the RULES page, click **ADD**, as shown below.



2. In the New Rule dialog box, click the Condition tab and edit the fields as follows:
 - Select the device in the Device drop-down list.

New Rule

Condition Action: Then... Details

Device: *

Condition: * ==

- Select the property from the **Condition** drop-down list.

Device: *

Condition: *

Blue_button [boolean]
Blue_LED [boolean]
cmd [string]
Green_LED [boolean]
input [integer]
log [string]
oem_host_version [string]
output [integer]
schedule_out [string]
stream_down [file]
stream_down_len [integer]
stream_down_match_len [integer]
stream_up [file]
stream_up_len [integer]
test1 [boolean]
version [string]

- Select the comparison operator in the second Condition drop-down list.

Device: *

Condition: *

Set the condition value

==
!=
>
<
>=
<=
always

- Enter the value in the third Condition drop-down list.

Set the condition value

- Click **NEXT**.
- 4. On the **Action Then** tab, enter the following information:
 - In the **Device** drop-down , select the device.
 - In the **Property** drop-down, select the property.
 - In the **Property** value textbox, enter the value.
 - Click **NEXT**.
- 5. On the **Details** tab:
 - Select or unselect Enabled checkbox:
When Enabled, the rule is active on the device.
When Disabled, the rule is not active on the device.
 - In **Name**, enter a name for the rule.
 - In **Description**, enter a brief description of the rule for the Rule table listing)
- 6. Click **OK**.

NOTE When **OK** is clicked, a validation check is made on the rule. If acceptable, the rule is displayed in the Rule table listing. If not, an error dialog displays. See Error Handling below.

6.1.1 Error Handling

An error condition displays if there are any problems with the rule configuration, as shown below.

ARE-488: Action subject property is oem scope or read only, hence cannot be modified.
ARE-491: Action subject property direction is output, hence cannot be modified.

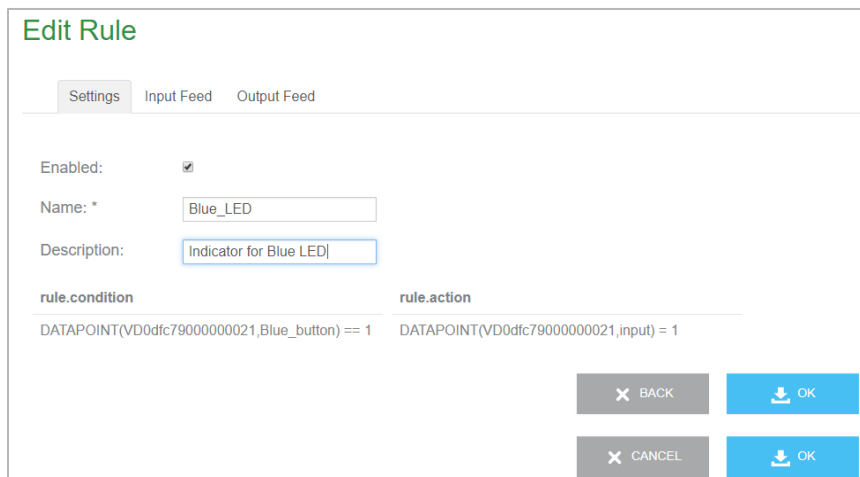
To correct the error:

1. Adjust the information entered on the Condition tab and/or the Action Then tab.
2. When done, on **Details** tab, click **OK**.

If the error conditions are fixed, the rule is accepted. If not, make the necessary adjustments until the rule conditions are acceptable.

6.2 Review/Edit Rule Details

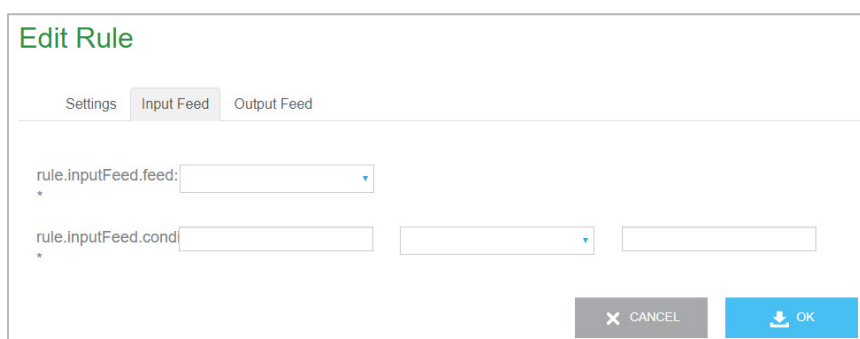
1. In the Rules table listing, click the Name of the rule to be reviewed/edited. This displays the Edit Rule dialog box.



The 'Edit Rule' dialog box is shown with the 'Settings' tab selected. It contains the following fields and controls:

- Enabled:** A checkbox that is checked.
- Name: *** A text input field containing 'Blue_LED'.
- Description:** A text input field containing 'Indicator for Blue LED'.
- rule.condition** and **rule.action** sections, each with a text area containing the rule logic: `DATAPOINT(VD0dfc79000000021_Blue_button) == 1` and `DATAPOINT(VD0dfc79000000021,input) = 1` respectively.
- At the bottom right, there are two pairs of buttons: a grey 'X BACK' button next to a blue 'OK' button with a download icon, and a grey 'X CANCEL' button next to another blue 'OK' button with a download icon.

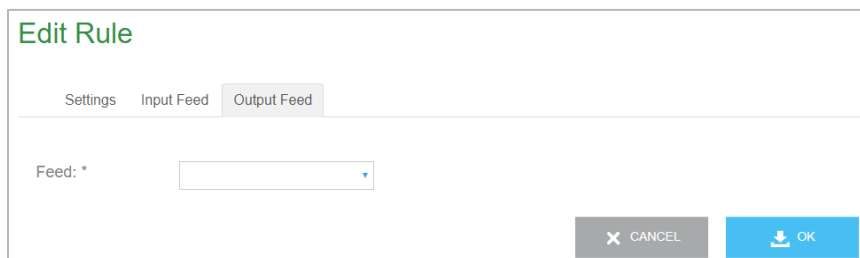
2. On Settings tab, make changes, as needed.
3. On Input Feed tab, make changes, as needed.



The 'Edit Rule' dialog box is shown with the 'Input Feed' tab selected. It contains the following fields and controls:

- rule.inputFeed.feed: *** A dropdown menu.
- rule.inputFeed.condi *** A section with three input fields: a text field, a dropdown menu, and another text field.
- At the bottom right, there are two buttons: a grey 'X CANCEL' button and a blue 'OK' button with a download icon.

4. On Output Feed tab, make changes, as needed.



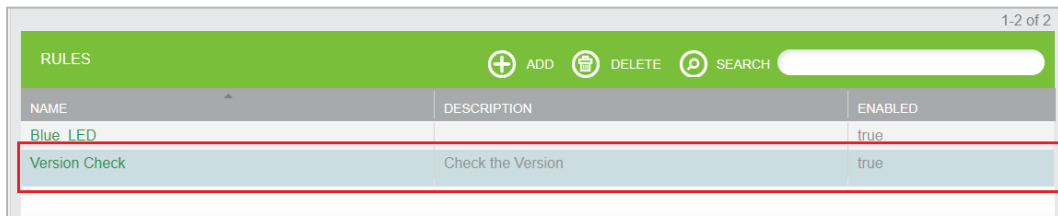
The 'Edit Rule' dialog box is shown with the 'Output Feed' tab selected. It contains the following fields and controls:

- Feed: *** A dropdown menu.
- At the bottom right, there are two buttons: a grey 'X CANCEL' button and a blue 'OK' button with a download icon.

5. Click **OK**.

6.3 Delete Rule

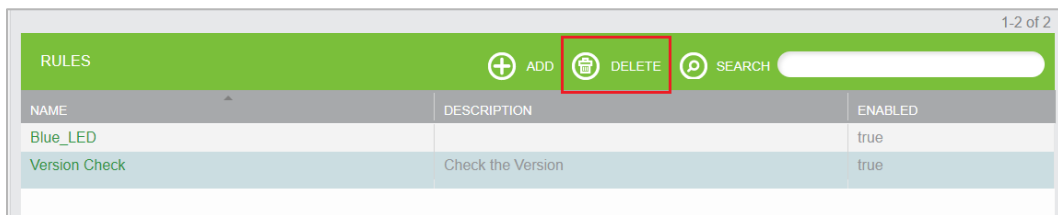
1. In Rules table listing, click on the row to select the rule to delete.



1-2 of 2

RULES		
NAME	DESCRIPTION	ENABLED
Blue_LED		true
Version Check	Check the Version	true

2. Click the DELETE button.



1-2 of 2

RULES		
NAME	DESCRIPTION	ENABLED
Blue_LED		true
Version Check	Check the Version	true

3. On the Confirmation dialog box, click **OK**.

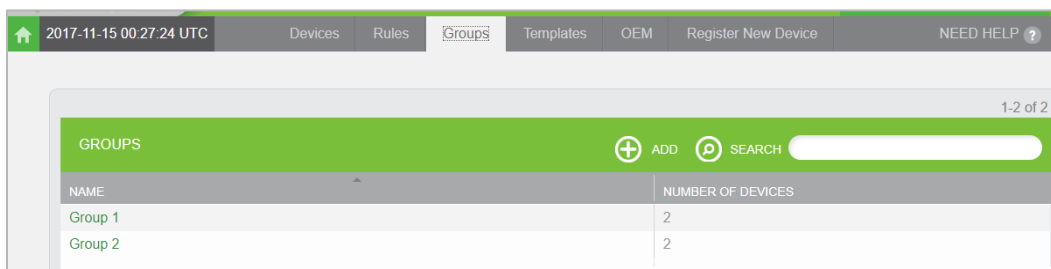
Confirmation

Confirm delete action?

✕ CANCEL
OK

7 Groups

You can create groups of devices for easier control and testing of a number of devices. To do this, click the Groups tab on the main page of the portal.



NAME	NUMBER OF DEVICES
Group 1	2
Group 2	2

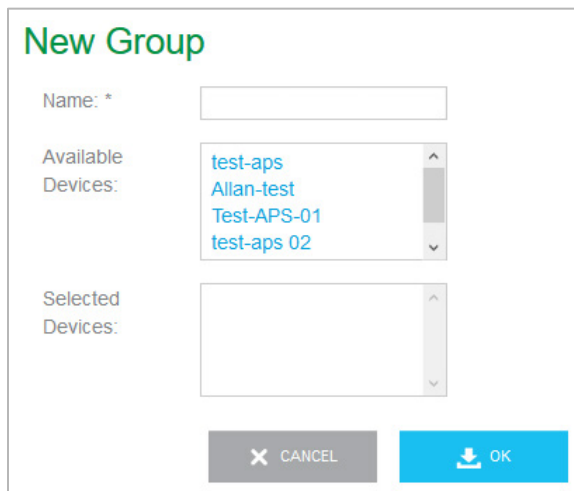
NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text.

7.1 Create a New Group

1. On the Groups page, click **ADD** to open the New Group dialog box.
2. In this dialog box, enter a name for the group in the Name field.



3. In Available Devices list, click each device to add to the Selected Devices list.
4. When done, click **OK**.

The new group is added to the Groups table listing.

7.2 Review/Edit Group Details

You can edit the groups as follows:

1. On the Groups table listing, click the group name.

Test Details Properties

Name: *

Available Devices:

Selected Devices:

1-2 of 2

DEVICES

SEARCH

STA...	NAME	SERIAL NUMBER	MODEL
<input type="radio"/>	test-aps	VD3f6cf4ac0000005	Demo
<input type="radio"/>	Allan-test	VD3f6cf4ac0000006	DemoCoffeeMachine

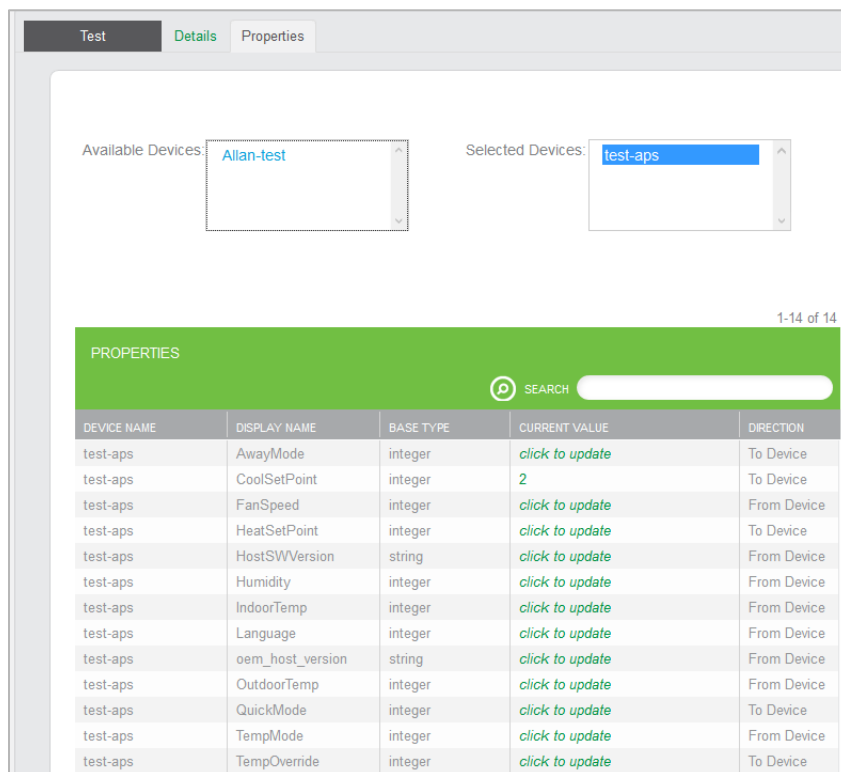
NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text.

2. To adjust the selected devices:
 - To add a device to the **Selected Devices**, click the device in **Available Devices** list.
 - To remove devices, in **Selected Devices**, click the device.
 - When done, click **OK**.

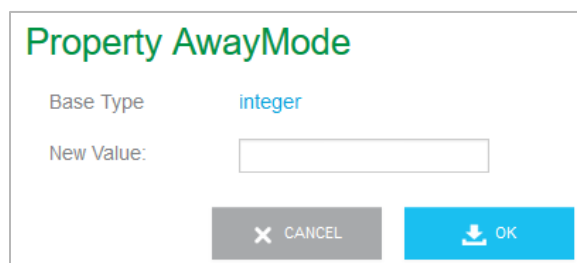
- On the Properties tab, in **Available Devices**, click the device to move to **Selected Devices**. Any properties are shown in the Properties table listing.



1-14 of 14

DEVICE NAME	DISPLAY NAME	BASE TYPE	CURRENT VALUE	DIRECTION
test-aps	AwayMode	integer	click to update	To Device
test-aps	CoolSetPoint	integer	2	To Device
test-aps	FanSpeed	integer	click to update	From Device
test-aps	HeatSetPoint	integer	click to update	To Device
test-aps	HostSWVersion	string	click to update	From Device
test-aps	Humidity	integer	click to update	From Device
test-aps	IndoorTemp	integer	click to update	From Device
test-aps	Language	integer	click to update	From Device
test-aps	oem_host_version	string	click to update	From Device
test-aps	OutdoorTemp	integer	click to update	From Device
test-aps	QuickMode	integer	click to update	To Device
test-aps	TempMode	integer	click to update	From Device
test-aps	TempOverride	integer	click to update	To Device

- In Current Value column, click the **click to update** link to open the Property dialog box.



Property AwayMode

Base Type: integer

New Value:

- Enter **New Value**.
- If changed, click **OK**.

7.3 Delete Group

1. In Groups table listing, select the group to delete.

GROUPS	
<div> + ADD 🗑️ DELETE 🔍 SEARCH <input type="text"/> </div>	
NAME	NUMBER OF DEVICES
Another Group	2
Test	2
testing group	2

2. Click **DELETE** 🗑️ **DELETE**.
3. On the Confirmation dialog box, click **OK**.

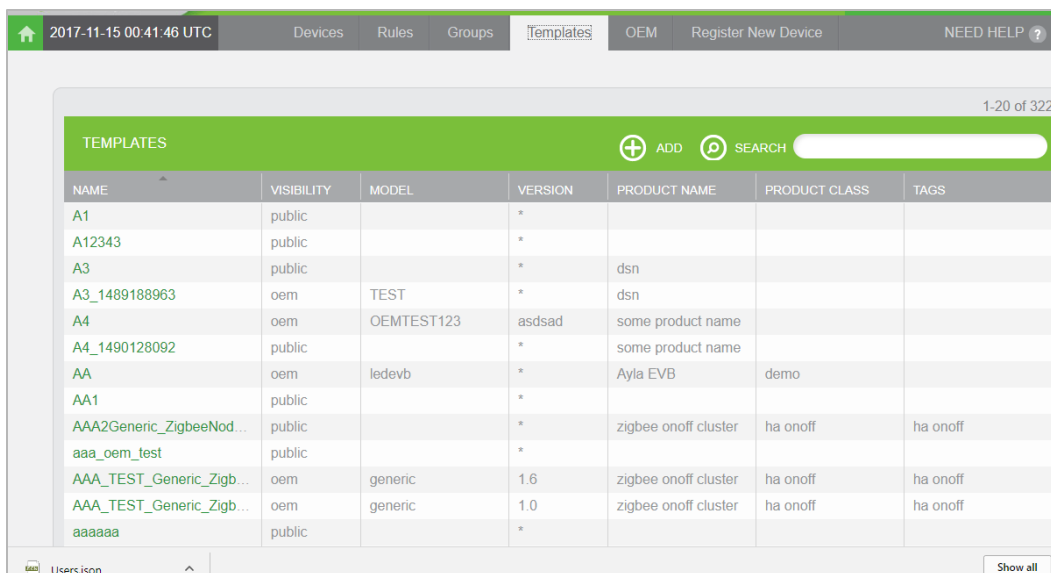
Confirmation

Confirm delete action?

✕ CANCEL
📄 OK

8 Templates

A template is a group of properties applied to a device in the Ayla Cloud. Essentially, the template is an abstraction of a device in the Ayla Cloud. The template properties define the functionality of the device and consequently how the end-user experiences the product features. On the [Ayla Customer Dashboard](#), Ayla customers can create schedules and triggers with notifications for template properties and enable LAN mode in the template for a device. For information on how to do this, search for Templates in Ayla Dashboard Help on [Ayla Connection](#).



NAME	VISIBILITY	MODEL	VERSION	PRODUCT NAME	PRODUCT CLASS	TAGS
A1	public		*			
A12343	public		*			
A3	public		*	dsn		
A3_1489188963	oem	TEST	*	dsn		
A4	oem	OEMTEST123	asdsad	some product name		
A4_1490128092	public		*	some product name		
AA	oem	ledvb	*	Ayla EVB	demo	
AA1	public		*			
AAA2Generic_ZigbeeNod...	public		*	zigbee onoff cluster	ha onoff	ha onoff
aaa_oem_test	public		*			
AAA_TEST_Generic_Zigb...	oem	generic	1.6	zigbee onoff cluster	ha onoff	ha onoff
AAA_TEST_Generic_Zigb...	oem	generic	1.0	zigbee onoff cluster	ha onoff	ha onoff
aaaaaa	public		*			

NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the text entered.

If there are no matches, the table listing is blank.

To restore the full list, remove/delete all text in the Search field.

Because templates contain a pre-configured set of properties and functions, the template saves development time for similar devices. Templates have the following visibility:

- Public, - available to all users.
- Private - can only be viewed by the user who entered the template.
- OEM - can only be viewed by users with an OEM assigned role.

The process of applying template settings to the Ayla device is called template association. A template is specifically defined for each OEM model; therefore, a template can only be associated with one OEM model. The template and device are also associated with the Ayla Cloud, so that the Ayla services know the properties that the device has available. Template versioning is also controlled in the Ayla Cloud. You can re-associate a template; however, this process works across template versions only, not across OEM models.

A template property list can be exported using the [Export function](#). Properties can also be pushed with an app. These properties can be imported into another template using the [Import function](#). The process of cloning a template also keeps the same properties as the original template.

On the [Ayla Customer Dashboard](#), you can modify trigger apps, device notifications, notification apps, and a default product name. For information on how to do this, search for any of these functions in Ayla Dashboard Help on [Ayla Connection](#).

This section provides information on managing (clone, add, delete) and reviewing templates. You can edit templates on the [Ayla Customer Dashboard](#); for information on how to do this, search for “Templates” in Ayla Dashboard Help on [Ayla Connection](#). Following are some important details on template properties and naming conventions.

Template Properties

Templates can contain:

- Module name
- Your OEM ID
- Template version number
- Collection of properties (shared global variables)
- Triggers to enable specific responses to specified events, for example, sending a text message when thermostat reaches a specific temperature.
- Schedules, which define when an action takes place, for example, the specific time to turn on a night light timer.
- Registration type includes Same LAN, Button-Push, AP-Mode, Display, and DSN.

NOTE Refer to *Device Onboarding: Ayla Registration Methods* on [Ayla Connection](#) for more information on the Ayla registration process.

- Option to enable LAN mode, which is an optimization that reduces network latency.

Template Naming Conventions

Naming conventions are ASCII strings (up to 27 characters) with these conditions:

- First character must be alphabetic
- Upper- and lower-case letters
- Numbers
- Hyphens (-)
- Underscores (_)
- No spaces
- No special characters

8.1 Template Management

8.1.1 Clone a Template

You can clone a template to change its visibility to “Private” and thereby enable editing capabilities for the template.

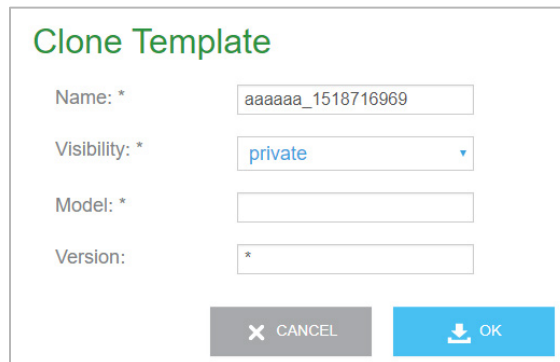
IMPORTANT! When cloned, the OEM model and OEM Host version for the target devices must be updated to trigger a new template association.

To clone an existing template:

1. In the TEMPLATES table listing, click anywhere in the row for the template you wish to clone, except in the Name column (that will open the Details tab for the template).
2. At the lower right corner of the Templates tab, click the **CLONE** button (shown below).



3. In the Clone Template dialog box (shown below), do the following:




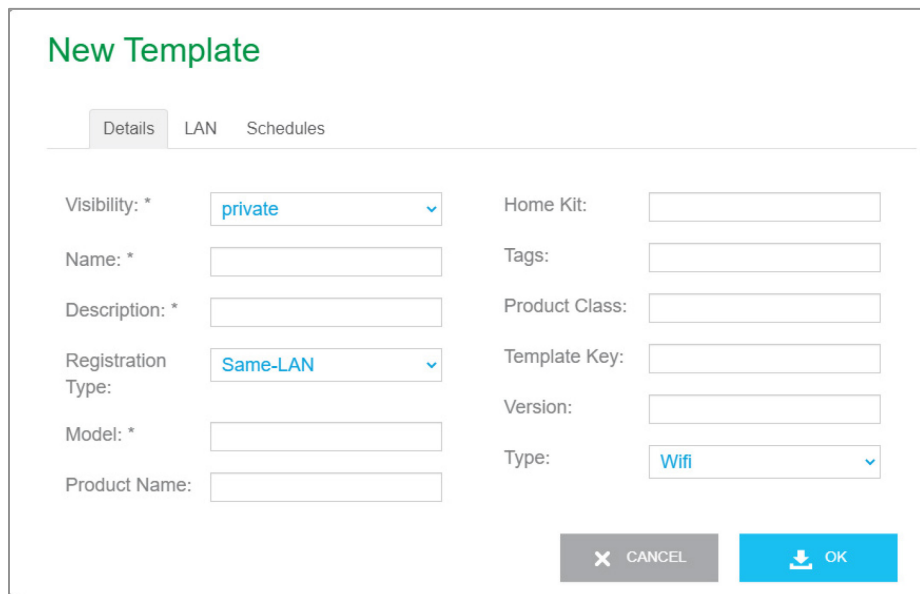
The dialog box is titled "Clone Template" in green. It contains four labeled input fields: "Name: *" with a text box containing "aaaaaa_1518716969", "Visibility: *" with a dropdown menu showing "private", "Model: *" with an empty text box, and "Version: *" with a text box containing an asterisk. At the bottom right, there are two buttons: a grey "CANCEL" button with a close icon and a blue "OK" button with a download icon.

- Enter a **Name**.
 - On the Visibility drop-down, select:
 - **private** if the template should only be visible to the user.
 - **oem** if the template should be visible to all users.
 - In the **Model** field, enter the OEM Model.
 - In the **Version** field, enter the OEM host version. Or, to apply this template to all versions, enter an asterisk (*), as shown in the example above.
4. Click **OK** to add this template to the table listing.

8.1.2 Add Template

When creating a new “private” template, OEM users can configure schedules for local sunrise and sunset times if their device (and its firmware version) supports the ability to execute schedules based on sunrise/sunset settings. This option can be configured when adding a new template (see step 4 below) if the template is configured for private visibility (see step 2 below).

1. On the Templates tab, click **ADD** .
2. In the New Template dialog box, click the **Details** tab, and enter the following information:



The image shows a 'New Template' dialog box with three tabs: 'Details', 'LAN', and 'Schedules'. The 'Details' tab is active. It contains the following fields:

- Visibility:** * (dropdown menu, currently set to 'private')
- Name:** * (text input field)
- Description:** * (text input field)
- Registration Type:** (dropdown menu, currently set to 'Same-LAN')
- Model:** * (text input field)
- Product Name:** (text input field)
- Home Kit:** (text input field)
- Tags:** (text input field)
- Product Class:** (text input field)
- Template Key:** (text input field)
- Version:** (text input field)
- Type:** (dropdown menu, currently set to 'Wifi')

At the bottom right, there are two buttons: 'CANCEL' (with a close icon) and 'OK' (with a checkmark icon).

- In the **Visibility** drop-down, click either:
 - **private** - if the template should only be visible to the user.

NOTE You can only [add new properties](#) and configure sunrise and sunset times for new schedules for private templates. The sunrise/sunset configuration also requires that the device (with which this template is associated) supports the ability to run schedules based on sunrise/sunset settings.

- **oem** - if the template should be visible to all Ayla customers defined as OEMs in the portal.
- For **Name**, enter a name for the template.
- In **Description**, enter information about this template that will be useful to reference when viewing the details of the template in the future.
- In the **Registration Type** drop-down, select your registration method:

- **Same LAN**, which is the default and most secure. This method requires the least modifications of the target hardware, and no displays or buttons are needed. When registering the mobile device, it must be on the same LAN as the device being registered.
- **Button-Push**, which is secure, but requires a button on device to initiate the registration process. Once the button is pushed, the registration process must be completed within 2 minutes.
- **AP-Mode**, which is considered the easiest method, but not as secure as most of the others. The method presents an AP to allow for device registration. The setup token is a key characteristic of this method.
- **Display**, which is a relatively simple and fast process that uses a reg token (must be unique across all devices) to register the device. The only major requirements are that the reg token displays on the device and is entered properly on the mobile application.
- **DSN**, which is the least secure because by simply knowing the DSN of the device, another user can complete the registration.
- **None**, which is for Ayla customer registration only, and user registration is not required.

NOTE Refer to *Device Onboarding: Ayla Registration Methods* on [Ayla Connection](#) for more information on the each method.

- For **Model**, enter the device model.
- For **Product Name**, enter the name of the product.
- For **Home Kit**, enter the home kit serial number, if available.
- For **Tags**, enter comma-separated metadata tags for this template.
- For **Product Class**, enter the Ayla customer metadata or tag.
- For **Template Key**, enter this key for virtual node devices.
- For **Version**, enter the version number of this template.
- In the **Type** drop-down, select one of the following settings:
 - **Wifi** - used for black box solution (Ayla Wi-Fi Production Module) and white box end-point target solution (Ayla Integrated Agent).
 - **Gateway** - enables service to create child nodes. If selected, choose the appropriate network layer option in the new drop-down:
 - Zigbee
 - Generic
 - **Cluster** - defines the template for multiple nodes.
 - **Node**

- When done, click **OK**.
- 3. In the New Template dialog box, click the **LAN** tab (shown below).

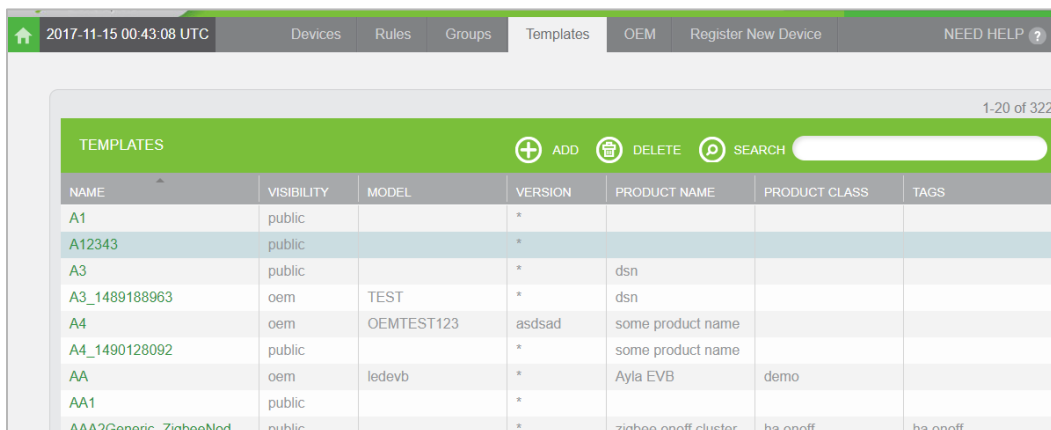
Complete the fields as follows:

- Select the **Enabled** checkbox to enable LAN mode for the associated device.
If selected, the other fields are activated:
 - For **Keep Alive**, enter the value in seconds to specify how long to keep the session alive when the connection is idle.
 - For the **Auto-sync**, select the checkbox to auto-sync variables upon reconnection.
 - For **Lifetime**, enter the seconds for which unique LAN-pairing keys are valid.
- 4. If your device and its firmware version support the ability to execute schedules based on sunrise/sunset settings, and you wish to configure this setting for schedules that you will add to this template, click the **Schedules** tab (shown below).


- Select the **Sunrise/Sunset Supported** checkbox.
- 5. When done, click **OK**, and the new template is added to the table listing.

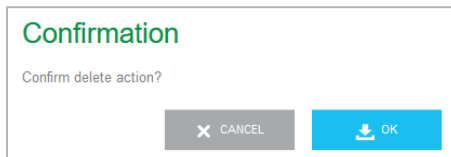
8.1.3 Delete Template

1. In the TEMPLATES table listing, select a template.



NAME	VISIBILITY	MODEL	VERSION	PRODUCT NAME	PRODUCT CLASS	TAGS
A1	public		*			
A12343	public		*			
A3	public		*	dsn		
A3_1489188963	oem	TEST	*	dsn		
A4	oem	OEMTEST123	asdsad	some product name		
A4_1490128092	public		*	some product name		
AA	oem	ledvb	*	Ayla EVB	demo	
AA1	public		*			
AAA2Generic_ZigbeeNod...	public		*	zigbee onoff cluster	ha onoff	ha onoff

2. Click **DELETE**  **DELETE**.
3. On the Confirmation dialog box, click **OK**.



Confirmation

Confirm delete action?

8.2 Review/Edit Template Details

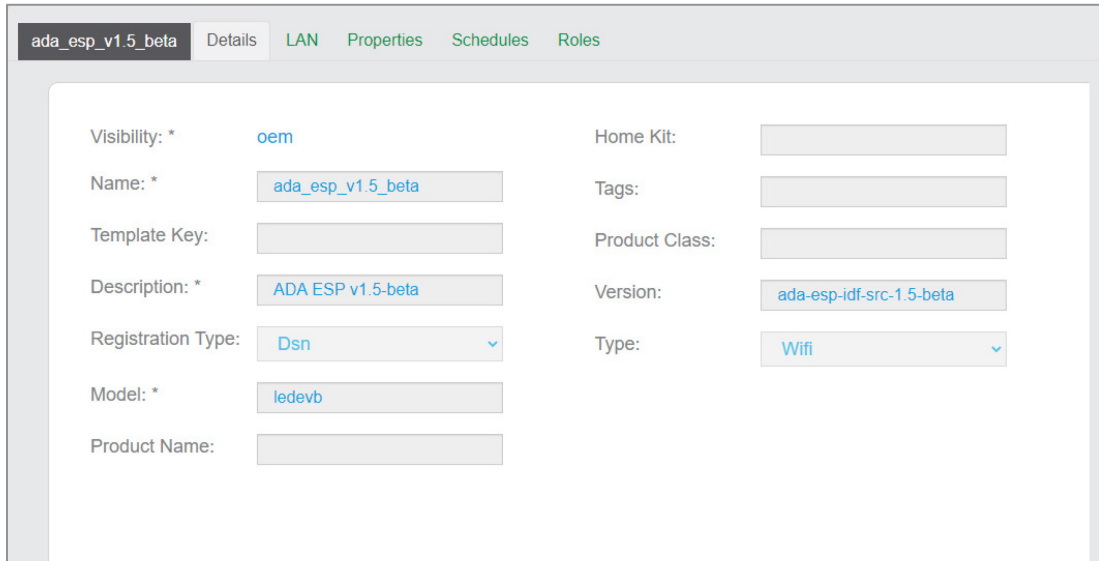
On the Templates tab in the table listing, click the name of the template to review or edit. This opens the Details tab. You can only edit private templates.

NOTE You can edit templates with OEM visibility on the [Ayla Customer Dashboard](#); for information on how to do this, search for “Templates” in Ayla Dashboard Help on [Ayla Connection](#). Templates with Public visibility cannot be edited.

A3	public
A3_1489188963	oem

The remainder of Section 8.2 provides details on the tabs for the template you selected.

8.2.1 Template > Details tab



The screenshot shows the 'Details' tab for a template named 'ada_esp_v1.5_beta'. The interface includes a top navigation bar with tabs: 'ada_esp_v1.5_beta', 'Details', 'LAN', 'Properties', 'Schedules', and 'Roles'. The 'Details' tab is active. The form contains the following fields:

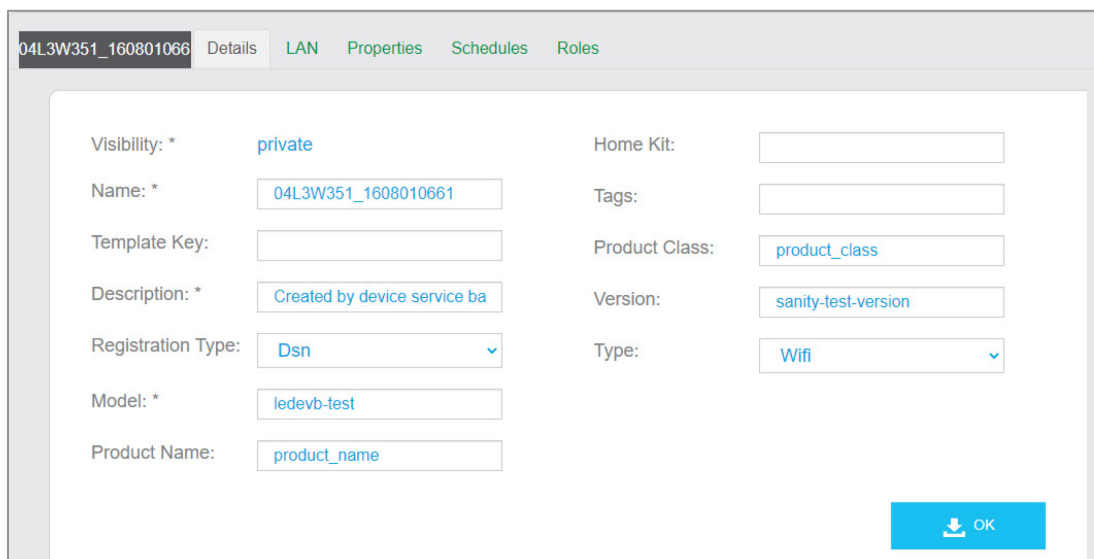
- Visibility:** * oem
- Name:** * ada_esp_v1.5_beta
- Template Key:**
- Description:** * ADA ESP v1.5-beta
- Registration Type:** Dsn (dropdown)
- Model:** * ledevb
- Product Name:**
- Home Kit:**
- Tags:**
- Product Class:**
- Version:** ada-esp-idf-src-1.5-beta
- Type:** Wifi (dropdown)

The information on this tab is as follows; you can only change or enter new information for private templates:

- **Visibility** – the type of user permissions assigned to this template (OEM, Public, Private).
- **Name** - the name given to the template
- **Template Key** - for virtual node devices
- **Description** – useful information about the template
- **Registration Type** – the registration method for all devices associated with this template:
 - **Same-LAN**
 - **Button-Push**
 - **AP-Mode**
 - **Display**
 - **DSN**
 - **None**
- **Model** - OEM model to which this template applies, or Cluster ID for a cluster template
- **Product Name** – user-defined product name
- **Home Kit** – the serial number of the Home Kit
- **Tags** - metadata tags for this template
- **Product Class** - Ayla customer metadata or tag
- **Version** - the version number of this template
- **Type** - supported template types:
 - **Wifi**

- **Gateway** - If selected, a **Gateway Type** drop-down list displays, click the network option:
 - Zigbee
 - Generic
- **Cluster** - If selected, a Cluster ID field displays, enter this information.
- **Node**
- **Sensor**

If you make any changes for a private template, click **OK**. The OK button displays for private templates only, as shown below:



04L3W351_160801066 Details LAN Properties Schedules Roles

Visibility: * private Home Kit:

Name: * 04L3W351_1608010661 Tags:

Template Key: Product Class: product_class

Description: * Created by device service ba Version: sanity-test-version

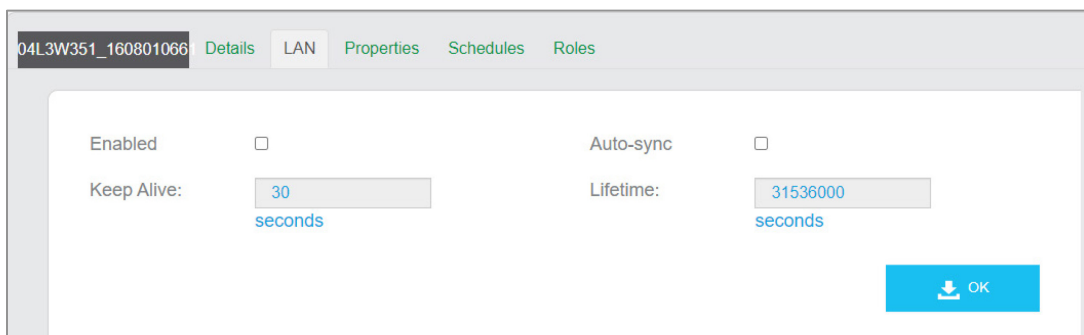
Registration Type: Dsn Type: Wifi

Model: * ledv-b-test

Product Name: product_name

OK

8.2.2 Templates > LAN tab



04L3W351_160801066 Details LAN Properties Schedules Roles

Enabled ☐ Auto-sync ☐

Keep Alive: 30 seconds Lifetime: 31536000 seconds

OK

The information on this tab is as follows:

- **Enabled** checkbox – When selected, LAN mode is enabled for the device associated with the template.
- **Keep Alive** value in seconds – the UDP (User Datagram Protocol) keep alive beacon time is how often the mobile app sends a heartbeat to the module to keep the session active when the connection is idle.

- **Auto-sync** checkbox - This is selected to automatically sync variables on reconnection.
- **Lifetime** value - This is how long in seconds that the unique LAN-pairing keys are valid; on expiration, the device and the mobile app must reconnect to the cloud to obtain new LAN keys.

NOTE For the LAN connection to function, the device and a mobile app must connect to the Ayla Cloud at least one time. The LAN connection requires an initial connection with the cloud to get the required LAN keys to function.

If you make any changes for a private template, click **OK**. The OK button displays for private templates, as shown below:

8.2.3 Templates > Properties Tab

The Properties tab (shown below) enables you to export template properties and review details on each template property, including its triggers, denied roles, and retention setting. From this tab, you can also import and create properties for templates with private visibility.

Air Purifier Demo			
Details	LAN	Properties	Schedules Roles
PROPERTIES			
DISPLAY NAME	BASE TYPE	DIRECTION	SCOPE
Air Filter Remaining Life	integer	To Device	user
Air Filter Replaced	boolean	To Device	user
Change Filter Threshold	integer	To Device	user
CMO Filter	decimal	To Device	user
Indoor Air Quality (set)	integer	To Device	user
Indoor Air Quality Feedback	string	From Device	user
Ionizer	boolean	To Device	user
Outdoor Air Quality PM10	decimal	To Device	user
Outdoor Air Quality PM2.5	decimal	To Device	user
Outdoor Air Temp	decimal	To Device	user
Outdoor Humidity	decimal	To Device	user
Power Switch	boolean	To Device	user
Purify Mode (Feedback)	integer	From Device	user
Purify Mode (User Set)	integer	To Device	user
Storm Alert Trigger	boolean	To Device	user

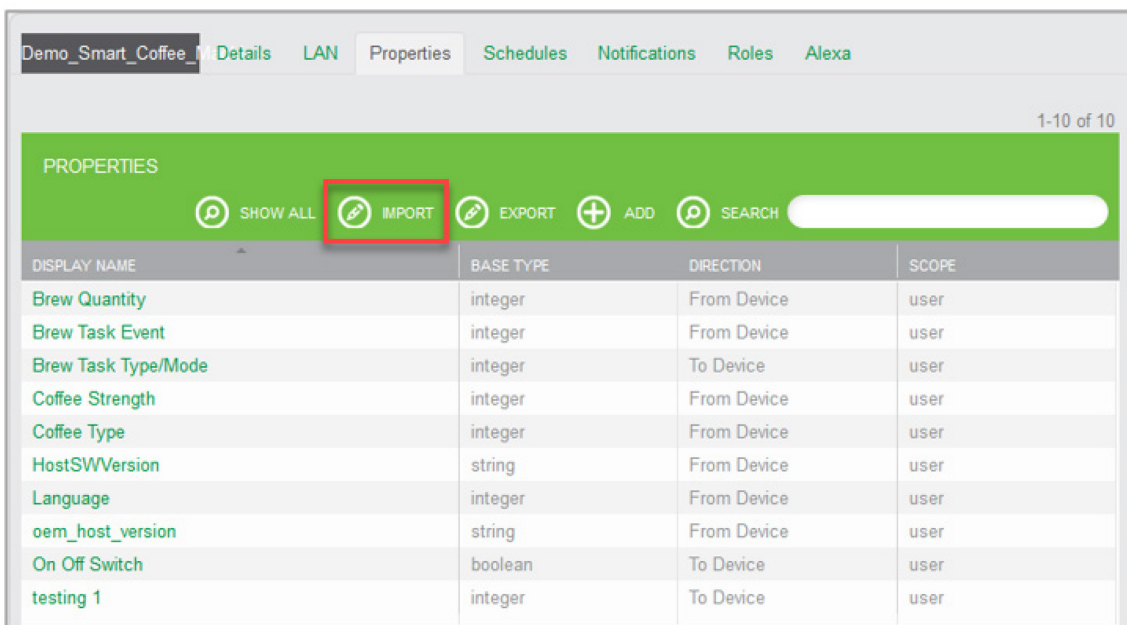
NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.






To restore the full list, remove/delete the search field text.

Import Properties (for Private Templates Only)

You can import properties for templates with Private visibility, as shown in the example below.



1-10 of 10

PROPERTIES			
 SHOW ALL  IMPORT  EXPORT  ADD  SEARCH <input type="text"/>			
DISPLAY NAME	BASE TYPE	DIRECTION	SCOPE
Brew Quantity	integer	From Device	user
Brew Task Event	integer	From Device	user
Brew Task Type/Mode	integer	To Device	user
Coffee Strength	integer	From Device	user
Coffee Type	integer	From Device	user
HostSWVersion	string	From Device	user
Language	integer	From Device	user
oem_host_version	string	From Device	user
On Off Switch	boolean	To Device	user
testing 1	integer	To Device	user

1. In the Properties table listing, click **IMPORT**  to open the Import Properties dialog box.

Import Properties

Enables to import template properties using a CSV file. The first row should be the column names, in any order.

The following columns are allowed:


- name*** - String type (Unique in a particular Template)
- base_type*** - String type ("string", "integer", "boolean", "decimal", "float", "file")
- direction*** - String type ("input", "output")
- read_only** - Boolean type (TRUE/FALSE)
- sampled** - Boolean type (TRUE/FALSE)
- scope*** - String type ("user", "oem")
- unit** - String type
- track_only_changes** - Boolean type (TRUE/FALSE)
- display_name** - String type

Note: If a template property with same '**name**' exists, then it will update the matching record instead of creating a new one.

No file selected.

2. Click **Browse** to locate and select the file to import.
3. Click **IMPORT**.

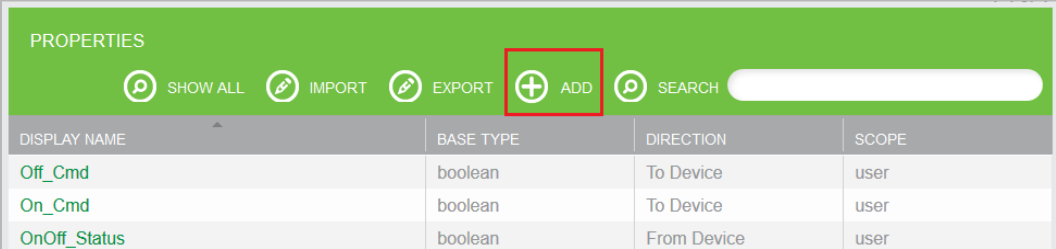
Export Properties

1. In the Properties table listing, click **EXPORT** .
2. The CSV file is saved to the Download folder, i.e., **template-properties-2017-10-23-19-04-46.csv**.

Add Property – Property type (for Private Templates)

You can add properties for templates with Private visibility as follows:

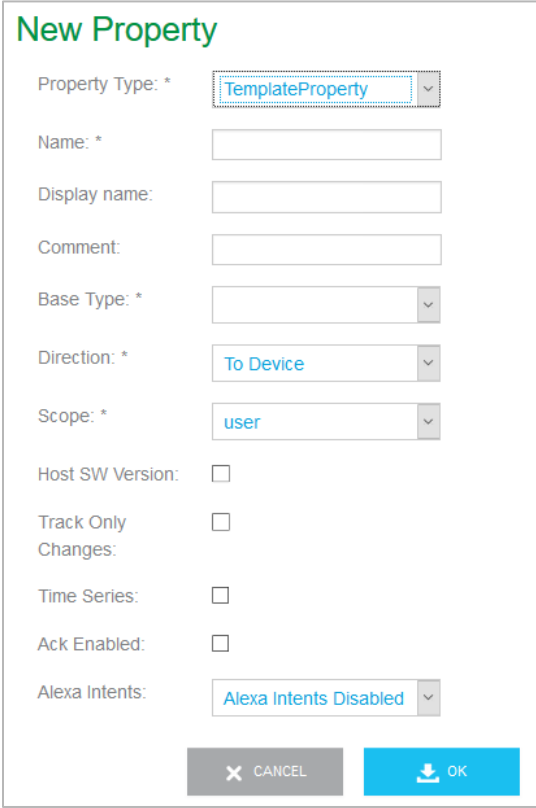
1. In the Properties table listing, click **ADD**.



DISPLAY NAME	BASE TYPE	DIRECTION	SCOPE
Off_Cmd	boolean	To Device	user
On_Cmd	boolean	To Device	user
OnOff_Status	boolean	From Device	user

2. In the New Property dialog box (examples below), select either of the following two options in **Property Type** drop-down list:

If you choose **TemplateProperty** for **Property Type**, the dialog box is as follows:



New Property

Property Type: * TemplateProperty

Name: *

Display name:

Comment:

Base Type: *

Direction: * To Device

Scope: * user

Host SW Version: ☐

Track Only Changes: ☐

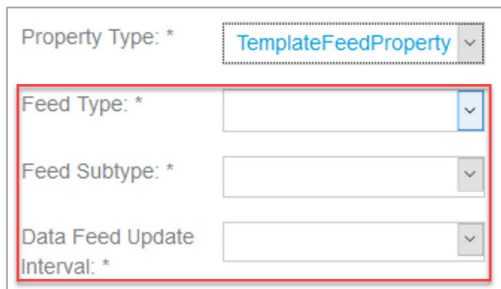
Time Series: ☐

Ack Enabled: ☐

Alexa Intents: Alexa Intents Disabled

Skip to Step 3 for instructions on entering details in these fields.

If you choose **TemplateFeedProperty** for **Property Type**, the following three additional fields display:



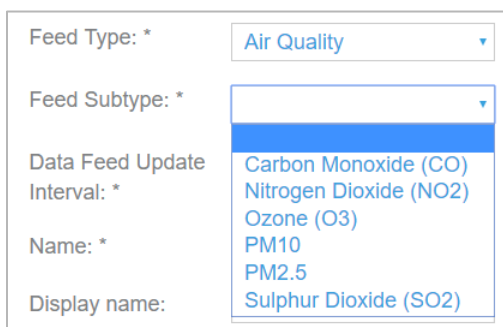
Property Type: * **TemplateFeedProperty**

Feed Type: *

Feed Subtype: *

Data Feed Update Interval: *

- If you select **Air Quality** in the **Feed Type** drop-down, configure the additional fields as described below. This Feed Type connects to the device's air quality feed, enabling you to track, for example, pollution levels (PM2.5) for the device(s) in a particular location.
 - a. Select the air quality parameter you wish to track in **Feed Subtype** drop-down list; refer to the example below:



Feed Type: * **Air Quality**

Feed Subtype: *

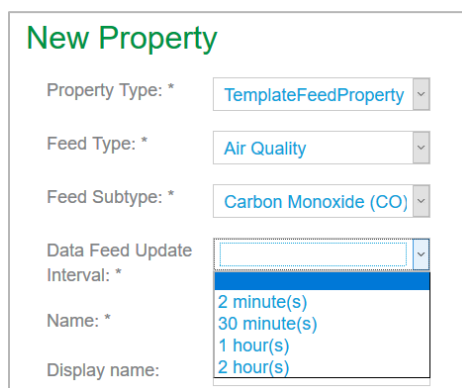
Data Feed Update Interval: *

Name: *

Display name:

Carbon Monoxide (CO)
Nitrogen Dioxide (NO2)
Ozone (O3)
PM10
PM2.5
Sulphur Dioxide (SO2)

- b. Select the time frame for collecting the air quality information in the **Data Feed Update Interval**.



New Property

Property Type: * **TemplateFeedProperty**

Feed Type: * **Air Quality**

Feed Subtype: * **Carbon Monoxide (CO)**

Data Feed Update Interval: *

Name: *

Display name:

2 minute(s)
30 minute(s)
1 hour(s)
2 hour(s)

- c. Skip to Step 3 for instructions on entering details in the remaining property fields.
- If you select **Current weather** in the **Feed Type** drop-down, configure the additional fields (shown in the following example) as described below. This Feed

Type connects to the device's weather feed, enabling you to track specific weather conditions, like humidity, for the device(s) in a particular location.

The 'New Property' form has the following fields:

- Property Type: * TemplateFeedProperty
- Feed Type: * Current weather
- Feed Subtype: *
- Data Feed Update Interval: *

- Select the weather parameter in the **Feed Subtype** drop-down list; refer to the example below:

The 'New Property' form shows the 'Feed Subtype' dropdown menu open with the following options:

- Relative humidity
- Sunrise Time
- Sunset Time
- Temperature in Celsius
- Temperature in Fahrenheit
- Weather Condition

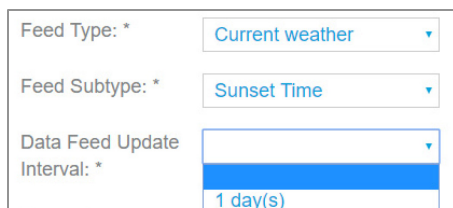
The Sunrise Time and Sunset Time parameters enable you to update this property with the current weather in the location of the device(s) every 24 hours based on either the sunrise or sunset time. The timezone of the sunrise or sunset is consistent with the local timezone of the device(s).

- Select the time frame for collecting the specific weather information in the **Data Feed Update Interval** drop-down list, shown below. Note that for all parameters, except Sunrise Time and Sunset time, the time parameters are 30 minutes, 1 hour, or 2 hours.

The 'New Property' form shows the 'Data Feed Update Interval' dropdown menu open with the following options:

- 30 minute(s)
- 1 hour(s)
- 2 hour(s)

When Sunrise Time or Sunset Time is selected, the only option for the **Data Feed Update Interval** is **1 day**, as shown below:



- For **Name**, enter a name that matches the property name of the host application on the device.

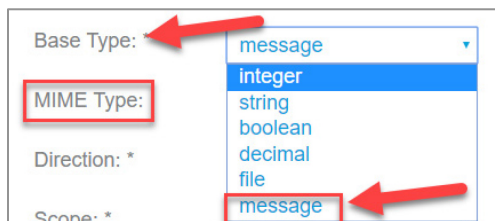
NOTE Property name restrictions: maximum of 27 characters, Upper/lower case letters, numbers, hyphens, underscores. No spaces or special characters allowed. First character must be alphabetic.

- For **Display name**, enter a user-friendly property name to show on the Property table listing.
- For **Comment**, enter information that describes, for example, the use of the properties or the meaning of the datapoints.
- For **Base Type**, select a data type from the drop-down list:
 - integer** (numeric value)
 - string** (set of alphanumeric characters)

NOTE When TemplateFeedProperty is selected for Property Type, you can only select string as the base type.

- boolean** (true or false)
- decimal** (decimal value – if TemplateFeedProperty is selected, this is the only option)
- file** (file to be attached as a property)
- message** (large strings with a maximum size of 512 KB)

NOTE Notice that when you select "message," for the base type, the MIME Type field displays, as shown in the example below. A MIME type is a label used to identify a type of data so that it is handled accordingly.



The data type selected is associated with this property.







- For **MIME Type** (if you selected "message" in step 6), select one of the following standard data interchange formats:


- application/json (lightweight, text-based, language-independent data interchange format)
 - application/octet-stream (binary file)
 - text/plain (plain text file)
8. For **Direction**, select an option from the drop-down list:
 - **To Device** (information flows to the device) If TemplateFeedProperty is selected as the Property Type, *To Device* is the only Direction option.
 - **From Device** (information flows from the device)
 9. For **Scope**, select an option from the drop-down list:
 - **user** (all users can see the property)
 - **oem** (only customers defined as OEM in the portal can see the property)
 10. For the **Host SW Version** checkbox:
 - **Select** (if host software version affects this property)
 - **Unselect** (if host software version does not apply to this property)
 11. For the **Track Only Changes** checkbox:
 - **Select** (log only changes in the property state – if no change in value, no datapoint recorded)
 - **Unselect** (no log is kept of changes in the property state)
 12. For the **Time Series** checkbox:
 - **Select** (the service queues datapoints to the device if the device is disconnected) Upon connection, all datapoints are sent to the device. For From device to the service, the host MCU queues all data items.
 - **Unselect** (service ignores datapoints whether the device is connected or disconnected)
 13. For the **Ack Enabled** checkbox:
 - **Select** (service receives an acknowledgement when the property is updated and then sends an update to the device) The Direction field must be "To Device."
 - **Unselect** (no acknowledgement sent when there are changes to the property)
 14. Click **OK**.

Delete Property

You can only delete properties for [private templates](#).


1. On the device Properties tab table listing, select the property to delete.

PROPERTIES			
 SHOW PAGINATED  IMPORT  EXPORT  ADD  DELETE  SEARCH <input type="text"/>			
DISPLAY NAME	BASE TYPE	DIRECTION	SCOPE
Brew Quantity	integer	From Device	user
Brew Task Event	integer	From Device	user
Brew Task Type/Mode	integer	To Device	user
Coffee Strength	integer	From Device	user
Coffee Type	integer	From Device	user
HostSWVersion	string	From Device	user
Language	integer	From Device	user

- Click **DELETE**  **DELETE**.
- On the Confirmation dialog box, click **OK**.

Confirmation

Confirm delete action?

✕ CANCEL
 OK

Review/Edit the Property – Details sub-tab

Click the property that you wish to edit or review to open the Details sub-tab (shown below). You can only edit a template with private visibility.

Air Purifier Demo

Details
LAN
Properties
Schedules
Roles

Property filter_replaced

Details
Triggers
Denied Roles
Retention

Name: *

Display name:

Comment:

Base Type: *

Time Series:
☐

Ack Enabled:
☐

Direction:

Scope: *

Host SW Version:
☐

Track Only Changes:
☐

Alexa Intents:

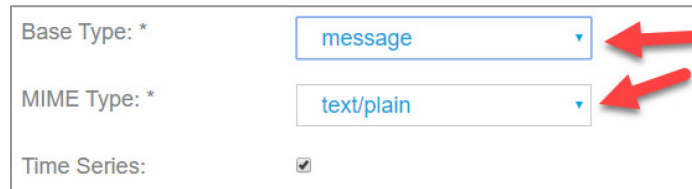
✕ CANCEL

Following are the fields to edit or review:

- **Name** – the name given to the property when it was created.
- **Display name** – a user-friendly name
- **Comment** – free text that would be useful to include.
- **Base Type** - drop-down options when creating include:
 - **integer**
 - **string**
 - **boolean**

- **decimal**
- **file**
- **message**

NOTE Notice that when you select "message," for the base type, the MIME Type field displays, as shown in the example below. You can also edit this field.



The screenshot shows a form with three fields: 'Base Type: *' with a dropdown menu showing 'message', 'MIME Type: *' with a dropdown menu showing 'text/plain', and 'Time Series:' with a checked checkbox. Two red arrows point to the 'message' and 'text/plain' dropdowns.

- **Time Series** checkbox:
 - **Selected** - if the device is disconnected, the service queues data points being sent to the device. On connection, all datapoints are sent to the device. From the device to the service, host MCU queues all data items.
 - **Unselected** - ignores datapoints whether device is connected or disconnected.
- **Ack Enabled** checkbox
 - **Selected** - if Direction is To Device, the service receives an acknowledgment (ack) if property is updated and the update is sent to the device.
 - **Unselected** - no acknowledgment (ack) is sent when a property is changed.
- **Direction** - the setting that defines the direction this data is sent, e.g. To Device or From Device.
- **Scope** - drop-down options when created:
 - **user** – the user can see the property.
 - **oem** – the users defined as OEM in the portal can see the property.
- **Host SW Version** checkbox:
 - **Selected** - users defined as OEM in the portal will track the host software version.
 - **Unselected** - users defined as OEM in the portal do not track the host software version.
- **Track Only Changes** checkbox:
 - **Selected** - logs changes in the state of the property. If the value is the same, no datapoint is recorded.
 - **Unselected** - does not log changes in the state of the property.

If you make any changes for a private template, click **OK**. The OK button displays for private templates, as shown below:

Property BrewQuantity

Details Triggers Denied Roles Retention

Name: * Ack Enabled: ☐

Display name: Direction:

Comment:

Scope: *

Base Type: * Host SW Version: ☐

Time Series: ☐ Track Only: ☐

Changes: ☐

Alexa Intents:

Review the Property – Triggers sub-tab

Click the Triggers sub-tab (shown below). You can [edit triggers](#) from the Device tab.

Ayla_LED_EVB demo_file 2.2 Details LAN Properties Schedules Roles

Property Blue_button

Details Triggers Denied Roles Retention

1-1 of 1

TRIGGERS				
NAME	TYPE	OPERATOR	COMPARE VALUE	APPLICATIONS
Blue_button	on_change			click to add applications

Review/Edit the Property – Denied Roles sub-tab

Click the Denied Roles sub-tab (shown below).

ada_esp_v1.5_beta Details LAN Properties Schedules Roles

Property Blue_button

Details Triggers Denied Roles Retention

1-1 of 1

DENIED ROLES		
ID	ROLE	OPERATION
4863	OEM: Staff	read

NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters. If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text.

The information provided is as follows:

- **ID** - ID number assigned to the role when it was created.
- **Role** - the role with limited access.
- **Operation** - the access that was disabled:

- **read** (read access is disabled)
- **write** (write capabilities are disabled)

To edit a denied role:

1. On the table listing, click the ID for the role you wish to edit. This opens the Denied Roles tab (shown below) with the option to edit both drop-down fields:

The screenshot shows a web interface for editing a denied role. The title is "Property BrewQuantity". Below the title are four tabs: Details, Triggers, Denied Roles (active), and Retention. The main content area has two dropdown menus: "Role:" with "Demo::User" selected, and "Operation: *" with "write" selected. At the bottom right, there are two buttons: "CANCEL" (with a close icon) and "OK" (with a download icon).

2. Make your changes.
3. If any changes, click **OK**.

Review/Edit Property – Retention sub-tab

Click the Retention sub-tab (shown below).

The screenshot shows a web interface for editing a property's retention. The title is "Property Blue_button". Below the title are five tabs: Details, Triggers, Denied Roles, Retention (active), and Roles. The main content area has a single input field: "Days: *" with a value of "30".

If you have a private template, this tab opens in edit mode (shown below).

The screenshot shows a web interface for editing a property's retention in edit mode. The title is "Property BrewQuantity". Below the title are four tabs: Details, Triggers, Denied Roles, and Retention (active). The main content area has a single input field: "Days: *" with a value of "30" and a spinner icon. At the bottom right, there is a blue "OK" button with a download icon.

1. In the Days field, use the spinner to change the number of days that the property details are saved in the system.
2. Click **OK** to save your changes.

8.2.4 Templates > Review/Edit Schedules tab

Click the Schedules tab (shown below) to review details on the template schedule(s). Notice that the **SUNRISE/SUNSET SUPPORTED** checkbox is shown; you can only enable this option for templates with Private visibility (described in this subsection) and if your device (and its firmware version) supports the ability to execute schedules based on sunrise/sunset settings.

04L3W351 Details LAN Properties Schedules Roles						
<div> <div>SCHEDULES</div> <div> <input type="checkbox"/> SUNRISE/SUNSET SUPPORTED <input type="button" value="SEARCH"/> </div> </div>						
NAME	START DATE	END DATE	START TIME EACH DAY	END TIME EACH DAY	ACTIONS	ACTIVE
sched-2018-10-11-00:18:57			00h : 00m : 00s		0 actions	
sched-2020-08-03-18:40:08			00h : 00m : 00s		0 actions	

If the template is configured for Private visibility, you can edit the schedules. For these templates, you will see the Add option, as shown below:

04L3W351_1608010661 Details LAN Properties Schedules Roles						
<div> <div>SCHEDULES</div> <div> <input type="checkbox"/> SUNRISE/SUNSET SUPPORTED <input type="button" value="ADD"/> <input type="button" value="SEARCH"/> </div> </div>						
NAME	START DATE	END DATE	START TIME EACH DAY	END TIME EACH DAY	ACTIONS	ACTIVE
sched-2018-10-11-00:18:57			00h : 00m : 00s		0 actions	
sched-2020-08-03-18:40:08			00h : 00m : 00s		0 actions	

NOTE Throughout the Developer Portal, the Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters. If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text.

Following are the steps to view and edit schedules. If the template has private visibility, the fields can be edited on all of the tabs:

1. If your device and its firmware version support the ability to execute schedules based on sunrise/sunset settings, and you wish to configure this setting for schedules that you will add to this template, select the **SUNRISE/SUNSET SUPPORTED** checkbox, as shown below:

Ayla_LED_EVB_demo_file Details LAN Properties Schedules Roles						
2_2_1608012594						
<div> <div>SCHEDULES</div> <div> <input checked="" type="checkbox"/> SUNRISE/SUNSET SUPPORTED <input type="button" value="ADD"/> <input type="button" value="SEARCH"/> </div> </div>						
NAME	START DATE	END DATE	START TIME EACH DAY	END TIME EACH DAY	ACTIONS	ACTIVE
schedule_in			00h : 00m : 00s	00h : 00m : 00s	1 actions	

- Click **OK** in the Enable Sunrise/Sunset Supported Flag? dialog box (shown below).

Enable Sunrise/Sunset Supported Flag?

CANCEL OK

If the Sunrise/Sunset option is already configured (as shown below), you can disable it.

04L3W351_1608010661
Details LAN Properties Schedules Roles

1-2 of 2

SCHEDULES
☒ SUNRISE/SUNSET SUPPORTED
ADD
SEARCH

NAME	START DATE	END DATE	START TIME EACH DAY	END TIME EACH DAY	ACTIONS	ACTIVE
sched-2018-10-11-00:18:57			00h : 00m : 00s		0 actions	
sched-2020-08-03-18:40:08			00h : 00m : 00s		0 actions	

- Unselect the **SUNRISE/SUNSET SUPPORTED** checkbox.
- Click **OK** in the Disable Sunrise/Sunset Supported Flag? dialog box (shown below).

Disable Sunrise/Sunset Supported Flag?

CANCEL OK

- On the Schedules table listing, click a schedule to open the Details sub-tab (shown below). Notice the drop-down for Start Time Each Day and End Time Each Day, which is where you configure the sunrise or sunset settings.

Ayla_LED_EVB_demo_file
Details LAN Properties Schedules Roles

2.2_1608012594
Schedule schedule_in

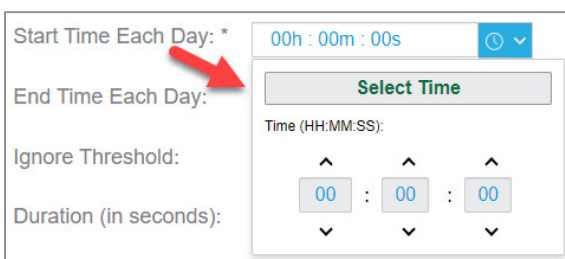
Details Advanced Actions

Name: * schedule_in
Interval (in seconds):
Direction: * To Device
UTC:
Start Date:
Fixed Actions:
End Date:
Active:
Start Time Each Day: * 00h : 00m : 00s
Days of Week: Every Day
End Time Each Day: 00h : 00m : 00s
Months of Year: Every Month
Ignore Threshold:
Days of Month: Every Day
Duration (in seconds):
Occurrence in Month: None

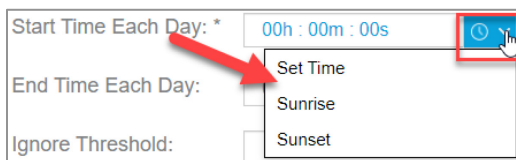
X CANCEL OK

The fields are as follows:

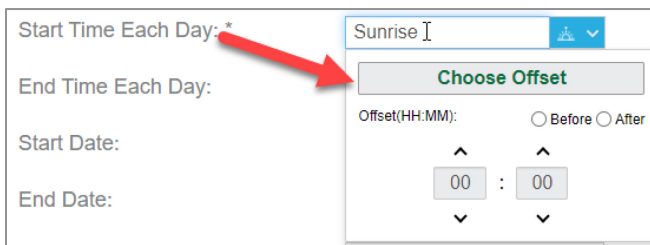
- **Name** – the name of the schedule, which must match the schedule name on the host application on the device.
- **Direction** – can be either:
 - To Device – if the schedule is sent to the device.
 - From Device – if the schedule is sent from the device.
- **Start Date** - the date to start schedule.
- **End Date** - the date schedule ends.
- **Start Time Each Day** - the time to start each day. For private templates, you can edit this field as follows:
 - Click in the field to select the desired start time; refer to the following:



- Click the drop-down at the end of the field to select the sunrise or sunset option, as shown below:



- If you selected Sunrise or Sunset, click in the field to configure an offset time to run the schedule a specific number of hours/minutes before or after sunrise or sunset. Refer to the example below:



1. Select **Before** or **After** to specify before or after sunrise or sunset.
2. Select the up or down arrows to enter the time in hours/minutes to start the schedule before or after sunrise or sunset.

- **End Time Each Day** - the time to end each day.
 - Click in the field to select the desired stop time; refer to the following:

- Click the drop-down at the end of the field to select the sunrise or sunset option, as shown below:

- If you selected Sunrise or Sunset, click in the field to configure an offset time to run the schedule a specific number of hours/minutes before or after sunrise or sunset. Refer to the example below:

1. Select **Before** or **After** to specify before or after sunrise or sunset.
 2. Select the up or down arrows to enter the time in hours/minutes to start the schedule before or after sunrise or sunset.
- **Ignore Threshold** - the amount of time (in seconds) that can pass before the scheduled action is ignored if the schedule did not execute this action at the specified time.
 - **Duration (in seconds)** - the length of time that the schedule should be active.
 - **Interval (in seconds)** - the time between consecutive schedule events.
 - **UTC** checkbox
 - If selected, UTC (Coordinated Universal Time) is used.
 - If unselected, local time is used.
 - **Fixed Actions** checkbox

- If selected, you cannot add new actions to the schedule. This means that the `updateSchedule` call from the mobile application has reduced functionality when the Fixed Actions checkbox is selected. We recommend selecting this checkbox for schedules that are not intended to support significant customization by the end user.
- If unselected, you can add new actions to the schedule.
- **Active** checkbox
 - If selected, the schedule is active.
 - If unselected, the schedule is inactive.
- **Days of Week:** - specific days that the schedule is active.
- **Months of Year:** - specific months that the schedule is active.
- **Occurrence in Month:** - - how many times the schedule occurs each month. This applies to the day of the week that the schedule is executed, e.g. the first and second Monday.

If you make any changes, click **OK**. For private templates, there is an OK button at the bottom of this tab to save your changes (as shown in the example below).



3. Click the **Advanced** sub-tab to view or edit (for private templates only) the time configurations for the schedule (example shown below).

Schedule sched-2017-04-24-21:40:55

Details Advanced Actions

Days of Week: ☒ Sun ☒ Mon ☒ Tues ☒ Wed ☒ Thurs ☒ Fri ☒ Sat

Months of Year: ☒ Jan ☒ Feb ☒ Mar ☒ Apr ☒ May ☒ Jun ☒ Jul ☒ Aug ☒ Sept ☒ Oct ☒ Nov ☒ Dec

Days of Month: ☒ 1 ☒ 2 ☒ 3 ☒ 4 ☒ 5 ☒ 6 ☒ 7 ☒ 8 ☒ 9 ☒ 10 ☒ 11 ☒ 12 ☒ 13 ☒ 14 ☒ 15 ☒ 16 ☒ 17 ☒ 18 ☒ 19 ☒ 20 ☒ 21 ☒ 22 ☒ 23 ☒ 24 ☒ 25 ☒ 26 ☒ 27 ☒ 28 ☒ 29 ☒ 30 ☒ 31 ☐ Last day of the month

Occurrence in Month: ☐ First ☐ Second ☐ Third ☐ Fourth ☐ Fifth ☐ Last

4. Click the **Actions** sub-tab to view specific details on the actions for the selected schedule.

Schedule sched-2017-04-24-21:40:55

Details Advanced Actions

Fixed Actions: false

1-3 of 3

NAME	BASE TYPE	VALUE	WHEN RUNS	ACTIVE
CoffeeStrength	integer	11	At Start	true
CoffeeType	integer	1	At Start	true
oem_host_version	string	122	In Range	true

If the template has private visibility, you may edit actions for the schedule as follows:

- Click the action in the table listing to open the following dialog box:

Edit Schedule Action

Name: * CoffeeStrength

Type: * integer

Action Executes: * ☐ In Range ☒ At Start ☐ At End

Value: 11

Active: ☒

CANCEL OK

- Make your changes to any of the following fields:

Name - the property (datapoint) to specify the scheduled action. The **Type** field automatically populated based on the property selected in the Name field.

Action Executes are options to specify when to execute the scheduled action:

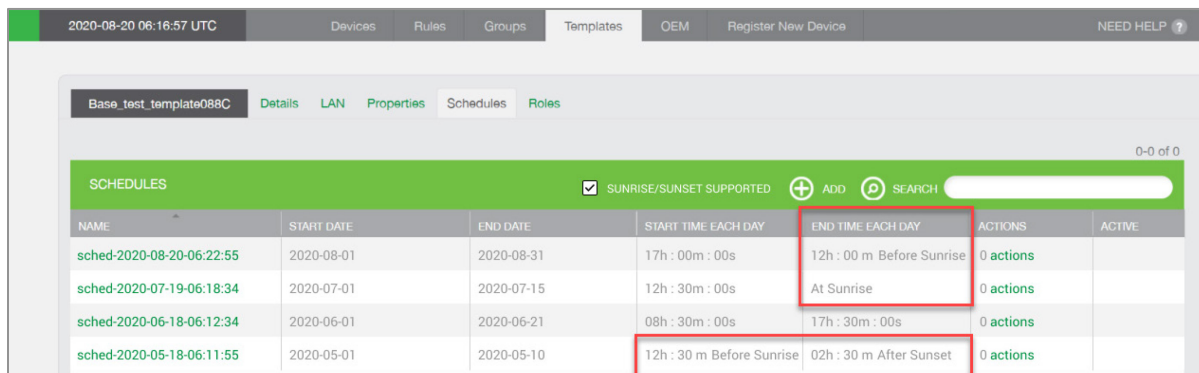
- In Range** – the action executes on property within the defined range between Start Time Each Day and End Time Each Day settings. This selection provides the highest confidence level that the action will execute regardless of external factors causing a schedule to start at time other than that specified for Start Time Each Day.
- At Start** – the action executes on the property based on Start Time Each Day setting.
- At End** - the action executes on the property based on End Time Each Day setting.

Value is a specific value set for the property (selected in the Name field), which is used when the schedule executes the action.

Active checkbox

- Select** to set the intended scheduled action to execute.
- Unselect** if the scheduled action is inactive.

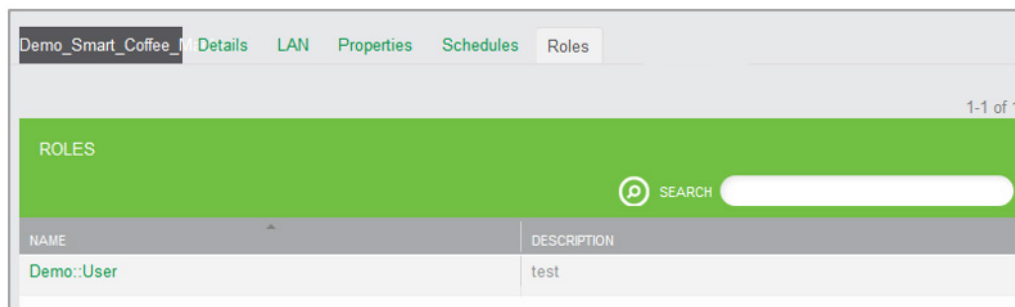
- c. Click **OK** to save your changes. If you configured Sunrise and/or Sunset for the schedules, these settings show in the SCHEDULES table listing; refer to the example below:



NAME	START DATE	END DATE	START TIME EACH DAY	END TIME EACH DAY	ACTIONS	ACTIVE
sched-2020-08-20-06:22:55	2020-08-01	2020-08-31	17h : 00m : 00s	12h : 00 m Before Sunrise	0 actions	
sched-2020-07-19-06:18:34	2020-07-01	2020-07-15	12h : 30m : 00s	At Sunrise	0 actions	
sched-2020-06-18-06:12:34	2020-06-01	2020-06-21	08h : 30m : 00s	17h : 30m : 00s	0 actions	
sched-2020-05-18-06:11:55	2020-05-01	2020-05-10	12h : 30 m Before Sunrise	02h : 30 m After Sunset	0 actions	

8.2.6 Templates > Roles tab (Review, Add, Edit, Delete)

Roles define user permissions and restrictions. You can only add and edit roles for [private templates](#).



NAME	DESCRIPTION
Demo::User	test

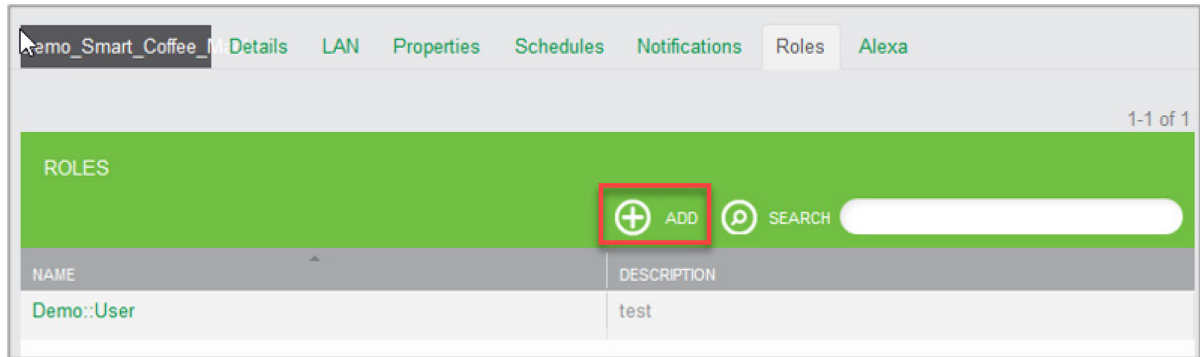
NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.


If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text.

Add Role

If your template has [private](#) visibility, the Add option displays (shown below) enabling you to define new user permission for the selected template.



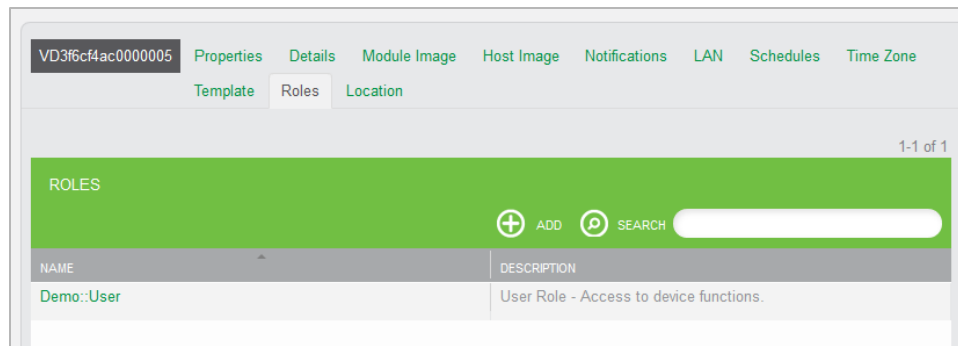
1. On the Roles table, click **ADD**  **ADD**. This displays the New Role Label dialog box:

2. On **Enable Role Name** drop-down, select role.

3. Enter **Description** information.
4. (optional) Enter a **Key** and **Value** (this is the metadata key/value pair for the role)
5. Click **OK**.

Edit Role (Private Templates Only)

1. In the Role table listing, click the name of the role.



2. In the Edit Role Label dialog box, make changes as needed.

Edit Role Label

Enable Role Name:

Description:

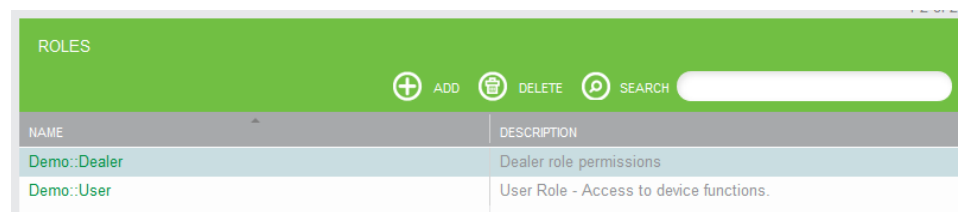
Key:


Value:

3. When done, click **OK**.

Delete Role (Private Templates Only)

1. In the Roles table listing, select the role.



2. Click **DELETE** .
3. On the Confirmation dialog box, click **OK**.

Confirmation

Confirm delete action?

9 OEM

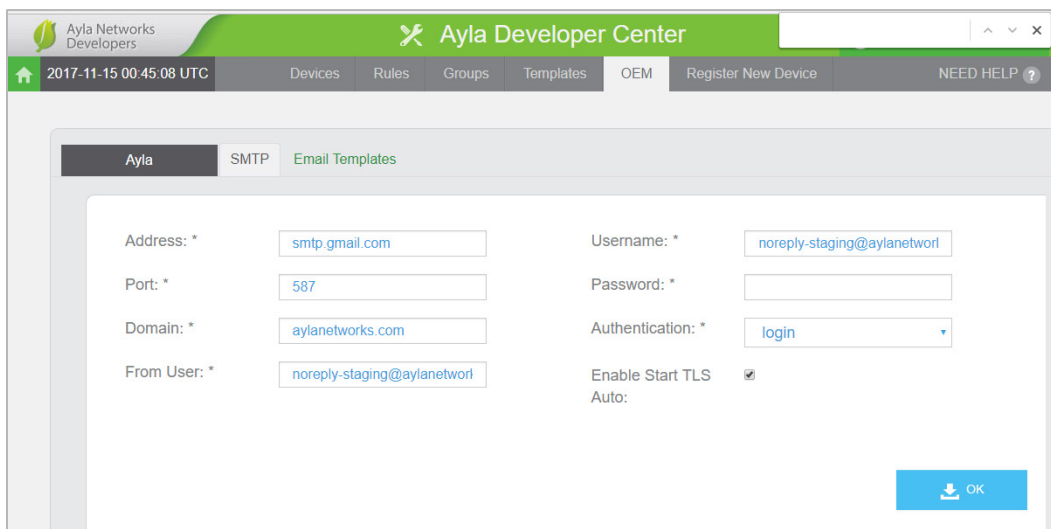
The OEM section of the Ayla Developer Portal allows you to setup and configure your SMTP server and Email Templates.

NOTE Only customers defined as OEMs in the Ayla Developer Portal can setup and edit SMTP settings and Email templates.

9.1 Edit SMTP Settings

To edit your SMTP settings, perform the following steps:

On the OEM tab, you can edit settings on the SMTP tab.



The screenshot shows the Ayla Developer Center interface. The top navigation bar includes 'Ayla Networks Developers', 'Ayla Developer Center', and a date/time display '2017-11-15 00:45:08 UTC'. Below this is a tabbed interface with 'Devices', 'Rules', 'Groups', 'Templates', 'OEM', and 'Register New Device'. The 'OEM' tab is active. Within the 'OEM' section, there are three sub-tabs: 'Ayla', 'SMTP', and 'Email Templates'. The 'SMTP' sub-tab is selected. The main content area displays the SMTP configuration form with the following fields and values:

Field	Value
Address: *	smtp.gmail.com
Port: *	587
Domain: *	aylanetworks.com
From User: *	noreply-staging@aylanetworks.com
Username: *	noreply-staging@aylanetworks.com
Password: *	
Authentication: *	login
Enable Start TLS Auto:	<input checked="" type="checkbox"/>

An 'OK' button with a download icon is located at the bottom right of the form.

Edit the fields as need:

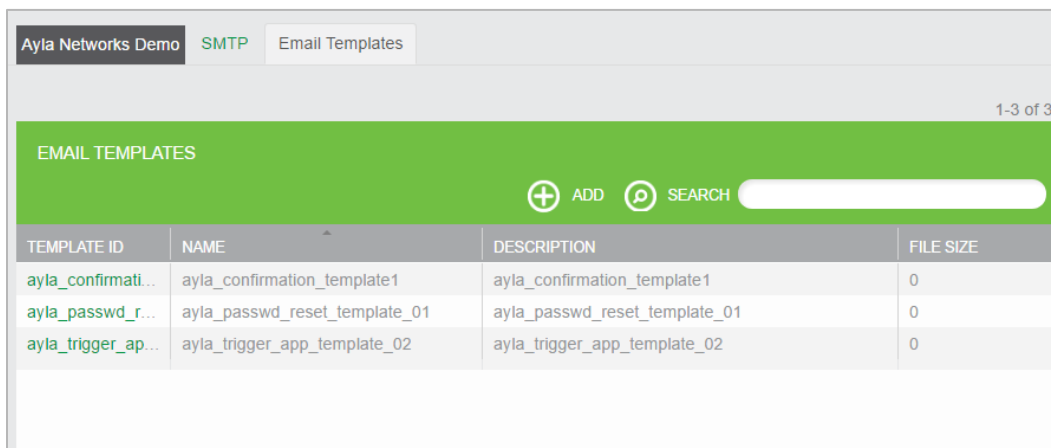
- **Address** (email address).
- **Port** number
- **Domain**
- **From User**
- **Username**
- **Password**
- **Authentication:**
 - **plain**
 - **login** (login required for authentication)
 - **cram_md5**

- **Enable Start TLS Auto** checkbox:
 - **Select** (enable start TLS)
 - **Unselect** (disable start TLS)

After making your changes, click **OK**.

You should receive a message indicating the SMTP setting has been updated.

9.2 Email Templates



TEMPLATE ID	NAME	DESCRIPTION	FILE SIZE
ayla_confirmati...	ayla_confirmation_template1	ayla_confirmation_template1	0
ayla_passwd_r...	ayla_passwd_reset_template_01	ayla_passwd_reset_template_01	0
ayla_trigger_ap...	ayla_trigger_app_template_02	ayla_trigger_app_template_02	0

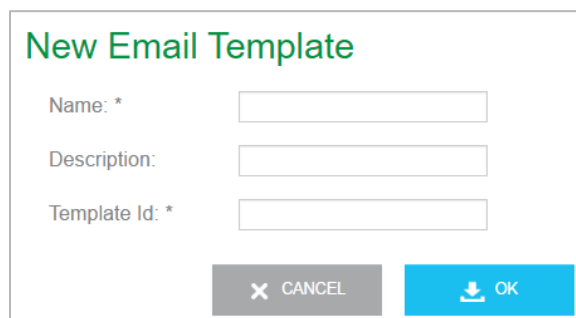
NOTE The Search function is interactive. As text is entered in the Search field, the table listing refreshes to show all matches with the entered characters.

If there are no matches, the table listing is blank.

To restore the full list, remove/delete the search field text.

9.2.1 Create Email Template

On the Email Template table listing, click **ADD** .



New Email Template

Name: *

Description:

Template Id: *

1. Enter the following information:
 - **Name** (name of the template)
 - **Description** (information about this template)
 - **Template Id** (ID to refer to this template – used to specify this template)

- When done, click **OK**.

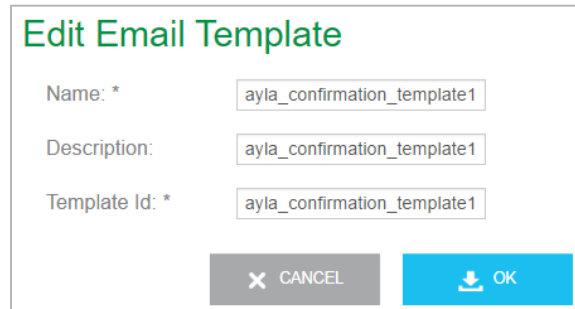
The new email template is added under your OEM email templates.

You should receive a message indicating the Email settings have been created.

9.2.2 Review/edit Role

In the table listing, click the **Template ID**.

On the Edit Email Template dialog box:



Edit Email Template

Name: *

Description:

Template Id: *

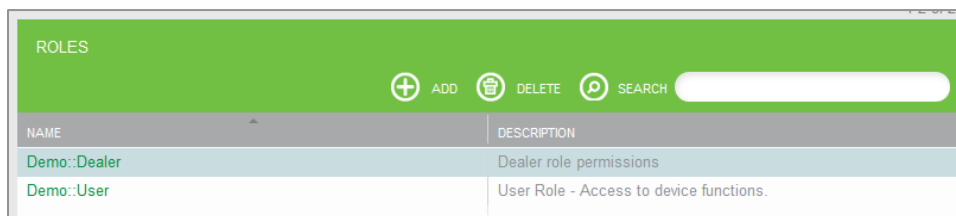
Editable fields are:

- o **Name**
- o **Description**
- o **Template Id**

If any changes, click **OK**.

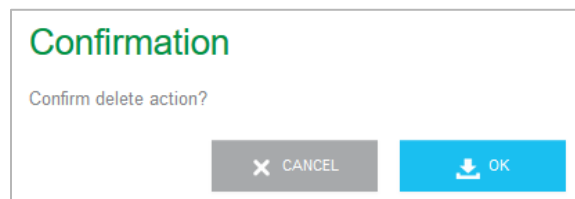
9.2.3 Delete Role

- On the Roles table listing, select the role.



ROLES	
<input type="button" value="+ ADD"/> <input type="button" value="DELETE"/> <input type="button" value="SEARCH"/> <input type="text"/>	
NAME	DESCRIPTION
Demo::Dealer	Dealer role permissions
Demo::User	User Role - Access to device functions.

- Click **DELETE** .
- On the Confirmation dialog box, click **OK**.



Confirmation

Confirm delete action?

10 Glossary

Cloud templates	Ayla Networks' predefined cloud templates that are designed to reduce the work requirement for a customer to create a product.
RBAC	The MCU of the device that communicates directly with Ayla enabled Wi-Fi module.
Wi-Fi Module	A hardware component that has an MCU containing the Ayla agent and Wi-Fi component used to allow connectivity to Ayla's Cloud Services

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