

Setting Up and Enabling Alexa for Ayla Devices

Alexa integration with the Ayla IoT Platform



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1 Introduction

The Ayla implementation of the Amazon Alexa adapter provides a back-end service so that end-users can control their Ayla devices with simple voice commands. This is accomplished using the Alexa Smart Home Skills API. The Alexa Smart Home Skills API makes it possible for OEMs to develop a functional Alexa voice-controlled product that requires little effort and no coding at all. Amazon defined specific device types and interactions that map to a substantial set of current Ayla customers. This includes definitions for how those products work and test plans for certification. Ayla's integration of Alexa therefore only supports Ayla devices that have Smart Home Skills defined and comply with Amazon's definition for these devices.

Before you can test and develop Alexa Smart Home Skills for your Ayla devices, you have to complete the configuration process outlined in this document.

NOTE Ayla's initial implementation of Alexa supports Ayla devices with On/Off capabilities, and variable speed options for fans. There currently isn't any support for gateways and nodes.

1.1 About this Document

This document provides the information and steps necessary to set up and enable Alexa for your Ayla devices. The guide is organized in the same order as the configuration process, which consists of three main steps:

1. Complete Ayla Template Association
2. Create a New Alexa Home Skill.
3. Enable Alexa.

1.2 Intended Audience

This document is for Ayla OEM developers who plan to test and develop Alexa Smart Home Skills for their Ayla devices. The document was written with the assumption that users have a basic understanding of OAuth 2.0 and knowledge of Java, Node.js, or Python (as Lambda functions can be in any of these languages).

1.3 Related Documentation

Refer to the following documents available on support.aylanetworks.com for additional information on the Ayla Developer Portal and OEM Dashboard.

- *Ayla Developer Portal User's Guide* (AY006UDP3-2)
- *Ayla OEM Dashboard User's Guide* (AY006UDB3-4)

1.4 Prerequisites to the Configuration

To ensure your configuration process is efficient, make sure you have done the following before getting started on the first procedure:

- Make sure you have registered for an Ayla Developer Account at <https://developer.aylanetworks.com/>.

NOTE Once you sign up for an account on the Ayla Developer Portal, you use the same credentials to sign in to the Ayla OEM Dashboard. You create a new OAuth application for Alexa in the dashboard; see Section 2.2.

- Sign up for an Amazon Developer Account at <https://developer.amazon.com>.
- Make sure that the Ayla device you choose to enable for Alexa can be configured with the following properties (which are then mapped to the Alexa Smart Home API):
 - For devices like smart plugs, at least one physical property that has an ON/OFF setting in the direction of the device and an integer base type.
 - For fans with a variable speed feature, at least two physical properties:
 1. With an ON/OFF setting in the direction of the device and an integer base type.
 2. With a Variable Percentage setting in the direction of the device and an integer base type.

1.5 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.

- Each menu option, tabs, etc. clicked in the user interface to navigate to the next is separated by the vertical bar, "|." For example: In Templates | Properties,

1.6 Abbreviations and Acronyms

Abbreviations and acronyms used in this document are as follows:

ARN	Amazon Resource Names
AWS	Amazon Web Services
JSON	JavaScript Object Notation

1.7 Glossary

Access Token (also called Auth Token)	This token is used to authenticate the user's communication with the Ayla Cloud Services. The user is authenticated based on a combination of the user's login, password, and APP ID/APP Secret. This user information is provided to the Ayla User API Authentication service upon the original request for an access token. Once assigned, this same access token is used for subsequent interactions with various Ayla APIs, such as AFS. However, the access token expires after 24 hours; at which time, the user may obtain a refresh token to continue communications with the Ayla Cloud Services.
AWS Lambda	A compute service offered by Amazon Web Services (AWS) that hosts the smart home skill code, which is called a <i>skill adapter</i> .
OAuth 2.0	OAuth 2.0 is the industry-standard protocol for authorization.
Smart Home Skill API	A service that understands the voice commands and converts them to <i>directives</i> (JSON messages) that are sent to smart home skills.
App ID / App Secret	After creating an OEM admin account in the Ayla OEM Dashboard, the OEM can create App IDs for the applications they set up in the dashboard for their Ayla devices. When the App ID is created, the system generates an App Secret for that App ID.
OEM ID / OEM Secret	The OEM ID is the unique identifier of the OEM in the Ayla platform. The OEM Secret is the key that is used to authenticate the OEM when communicating and transmitting information with the Ayla Cloud. The OEM Secret is based on Public Key Infrastructure (PKI). Both the OEM ID and OEM secret is set up by the Ayla system, and the OEM cannot change either.

2 Complete Ayla Template Association

To begin, OEMs have to associate the template for the Ayla device being configured with Alexa functionality. A template is a group of properties that are applied to a device in the Ayla cloud. Template properties define the functionality of the device and consequently how the end-user experiences the product features. OEMs can create schedules and triggers with notifications for template properties, and enable LAN mode in the template for a device. Template association is the process of applying all of the settings in the template to the Ayla device. To complete the configuration of Alexa for your Ayla device, you must make the appropriate Alexa settings in the Ayla template and then re-associate the template for your Ayla device.

NOTE For more information on Ayla Templates and template association, refer to the *Ayla Developer Portal User's Guide* on support.aylanetworks.com.

2.1 Re-associating an Ayla Template for Alexa

OEMs complete this first configuration step in the Ayla Developer Portal.

NOTE You should have already registered for an account on the Ayla Developer Portal. Refer to the *Ayla Developer Portal User's Guide* on support.aylanetworks.com.

1. Navigate to the Ayla Developer Portal via <https://developer.aylanetworks.com>, and sign in.
2. Click **View My Devices** from the home page called the Ayla Networks Developer Site.
3. From the DEVICES page, click the **Templates** tab to open the TEMPLATES page, as shown in Figure 1.

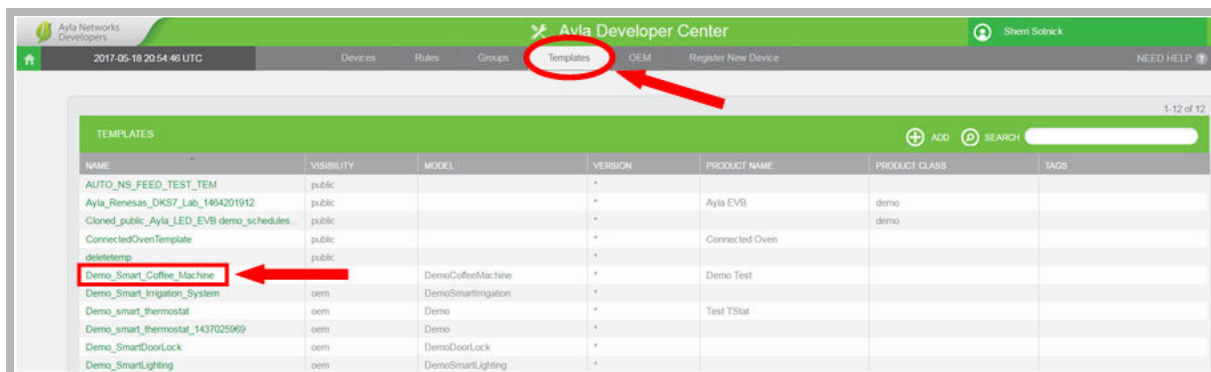


Figure 1: Templates Tab in the Ayla Developer's Portal

4. Click the template of the device for which you are configuring Alexa functionality. Refer again to Figure 1.

NOTES

- You can only configure Alexa in the general templates available for the devices under the Templates tab in the Ayla Developer Portal, not specific device templates.
- The template must also have OEM visibility, not public or private. You can clone a public or private template to change the visibility to OEM.

Refer to the [Ayla Developer Portal User's Guide](#) for more information.

- Click **Properties** for the template selected in the Templates tab. This displays the PROPERTIES page, as shown in Figure 2.

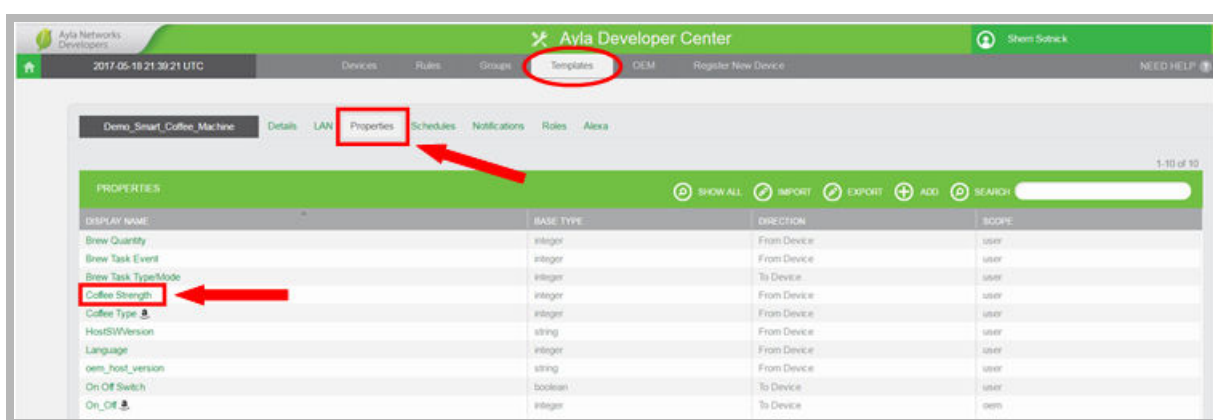


Figure 2: Templates Tab in the Ayla Developer's Portal

- Click an individual property to enable Alexa functionality, as shown in Figure 2 (above).

IMPORTANT!

If your Alexa device is a fan, you must enable Alexa functionality on two different properties in the device template in order to be able to select *fan* as the device type (see [Step 14](#)). You would, therefore, complete steps 6-10 for two properties, enabling in Step 9 *On/Off* for one and *Variable Percentage* for the other. Then, proceed to [Step 11](#).

- Select **integer** in the Base Type field.

**CAUTION**

The base type of the individual property must be integer; otherwise, you cannot successfully configure Alexa. This is defined by Amazon to support variations on the same voice command.

- In Templates | Properties, click the drop list for Alexa Intents, as shown in Figure 3.

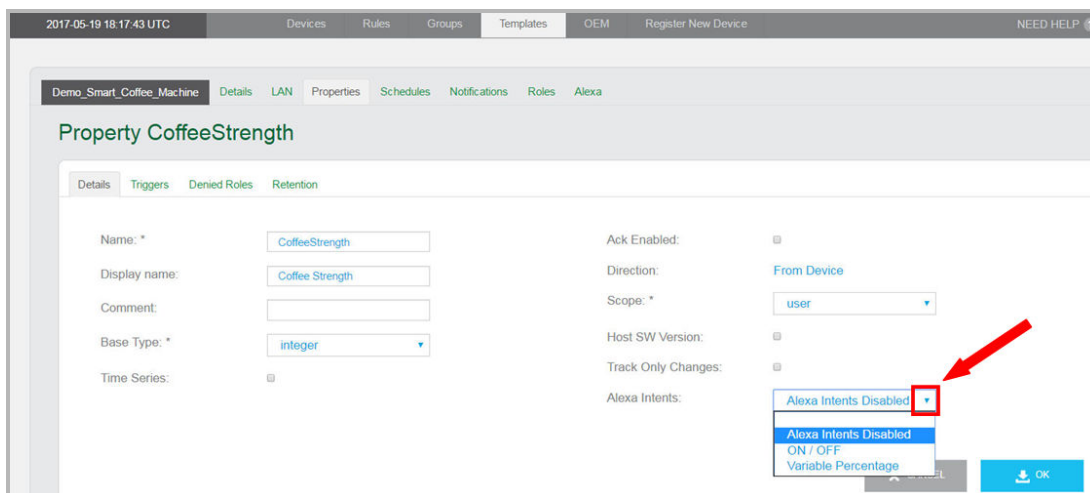


Figure 3: Alexa Configuration Options for Ayla Devices

9. Click the Alexa option in Alexa Intents. There are currently two Alexa options supported:
 - ON/OFF, which is used for all Ayla devices that have on and off options.
 - Variable Percentage, which supports the control of different fan speeds.

NOTE If you are configuring the Variable Percentage property, you must enable the ON/OFF property first.

10. Click **OK**. The Amazon symbol displays next to the property name to indicate that the property is configured for Alexa. Refer to Figure 4.

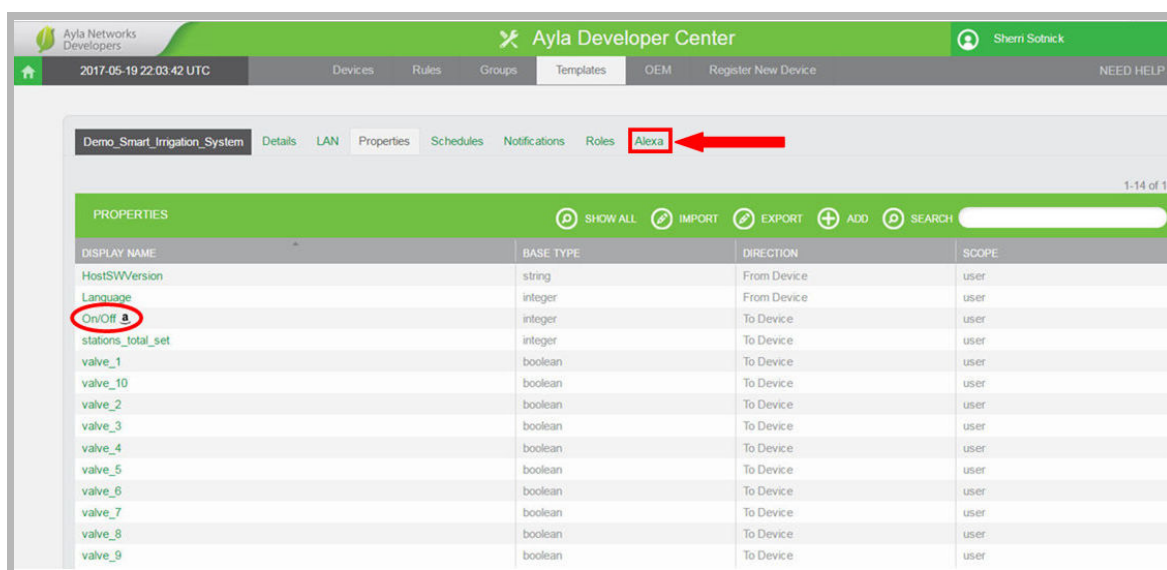
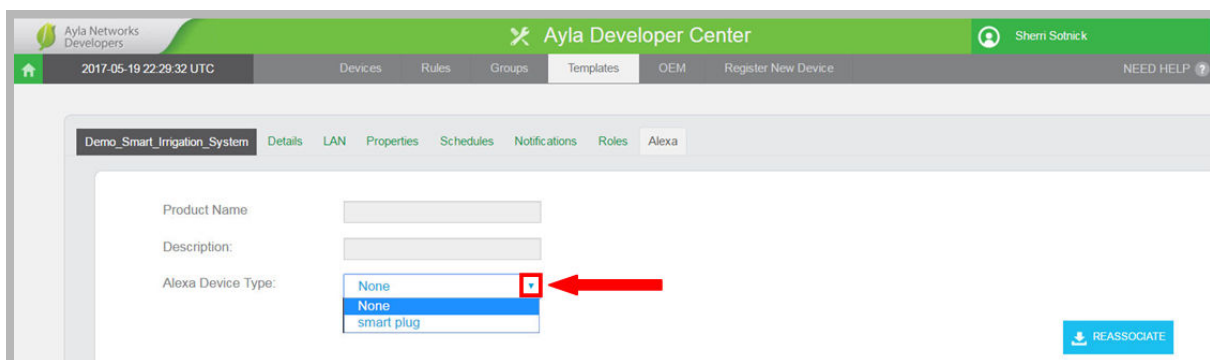


Figure 4: Device Property Configured for Alexa

11. Click the Alexa option on the Templates tab, as shown above in Figure 4.

12. Enter the name of the product in the Product Name field.
13. In Templates | Alexa, click the drop list for Alexa Device Type, as shown in Figure 5.

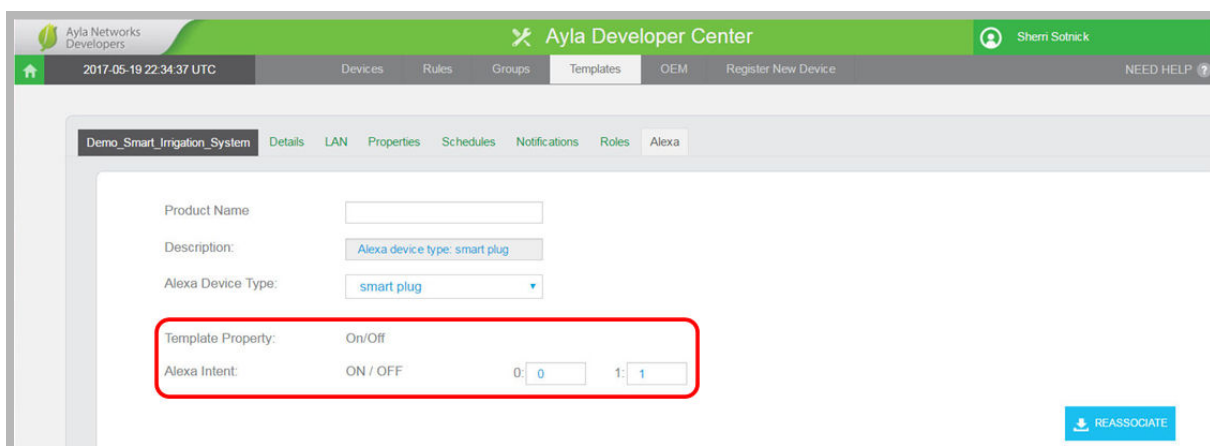


The screenshot shows the Ayla Developer Center interface. The top navigation bar includes 'Ayla Networks Developers', 'Ayla Developer Center', and a user profile 'Sherril Solnick'. The main navigation bar has tabs: 'Devices', 'Rules', 'Groups', 'Templates', 'OEM', and 'Register New Device'. The 'Templates' tab is active, and the 'Alexa' sub-tab is selected. The main content area shows a form for 'Demo_Smart_Irrigation_System'. The 'Alexa Device Type' dropdown menu is open, displaying three options: 'None', 'None', and 'smart plug'. A red arrow points to the 'smart plug' option. A 'REASSOCIATE' button is visible at the bottom right.

Figure 5: Device Types Supported for Alexa

14. Click the device type. If you select smart plug, the Template Property and Alexa Intent fields display, as shown in Figure 6. Notice that you can edit the values for the ON/OFF Alexa Intent. In most cases, you leave these values 0 and 1. Occasionally, an OEM may reverse the order of these values, for example, "0" for On and "1" for Off. In that case, the OEM edits the values in those fields.

NOTE You can configure Alexa for any Ayla device that has On/Off capabilities. To do this, just choose *smart plug* for the Alexa Device Type shown in Figure 5.



The screenshot shows the Ayla Developer Center interface. The top navigation bar includes 'Ayla Networks Developers', 'Ayla Developer Center', and a user profile 'Sherril Solnick'. The main navigation bar has tabs: 'Devices', 'Rules', 'Groups', 'Templates', 'OEM', and 'Register New Device'. The 'Templates' tab is active, and the 'Alexa' sub-tab is selected. The main content area shows a form for 'Demo_Smart_Irrigation_System'. The 'Alexa Device Type' dropdown menu is set to 'smart plug'. The 'Template Property' field is set to 'On/Off'. The 'Alexa Intent' field is set to 'ON / OFF' with input fields for '0' and '1'. A red box highlights the 'Template Property' and 'Alexa Intent' fields. A 'REASSOCIATE' button is visible at the bottom right.

Figure 6: Additional Fields Displayed for On/Off Alexa Option

If **fan** is the Alexa Device Type, additional fields display for the Variable Percentage Alexa option, as shown in Figure 7. Notice that you can edit the values for Variable Percentage.

IMPORTANT!

As noted in Step 6, if your Alexa device is a fan, you must enable Alexa functionality on two different properties in the device template in order to be able to select **fan** as the device type. You would, therefore, complete steps 6-10 for two properties, enabling in Step 9 **On/Off** for one and **Variable Percentage** for the other property. Then, proceed to [Step 11](#).

The screenshot shows the Ayla Developer Center interface. The top navigation bar includes 'Ayla Networks Developers', 'Ayla Developer Center', and a user profile 'Calvin Sellwood'. The main content area is titled 'Demo_Smart_Coffee_Machine' and has tabs for 'Details', 'LAN', 'Properties', 'Schedules', 'Notifications', 'Roles', and 'Alexa'. The 'Alexa' tab is active. The configuration form includes fields for 'Product Name' (Demo Test), 'Description' (Alexa device type: variable rotatic), 'Alexa Device Type' (variable rotation speed fan), 'Template Property' (On_Off), and 'Alexa Intent' (ON / OFF). Below these, there is a section for 'Template Property' (CoffeeType) and 'Alexa Intent' (Variable Percentage). This section is highlighted with a red box and contains five input fields for percentages: 0% (0), 25% (1), 50% (2), 75% (3), and 100% (4). A 'REASSOCIATE' button is located at the bottom right of the form.

Figure 7: Additional Fields Displayed for Variable Percentage Alexa Option

15. Click **REASSOCIATE** to complete the Alexa configuration for the Ayla device.

3 Create a New Alexa Smart Home Skill

The second major step in configuring your Ayla devices for Alexa is to create an Alexa Smart Home Skill on the Amazon Developer Console. This requires information from your settings in the Ayla OEM Dashboard. The second configuration step therefore entails:

1. Creating a new skill for Alexa on the Amazon Developer Console.

NOTE As stated in [step 7](#) of this procedure (Section 3.1), Ayla DevOps needs to enable your Alexa Skill ID before you can complete the configuration process on the Amazon Developer Console.

2. Creating a new Oauth Application in the Ayla OEM Dashboard.
3. Completing the skill configuration by entering all required specifications, such as the service endpoint type, Amazon Web Services (AWS) Lambda Amazon Resource Name (ARN), access token, etc.

3.1 Create a New Skill

To start, you need to enter basic information on the new Alexa skill in the Amazon Developer Console. You should also inform your Ayla PSE that you are creating a new Alexa skill to ensure a timely turnaround to enable your skill (refer to step 7 below).

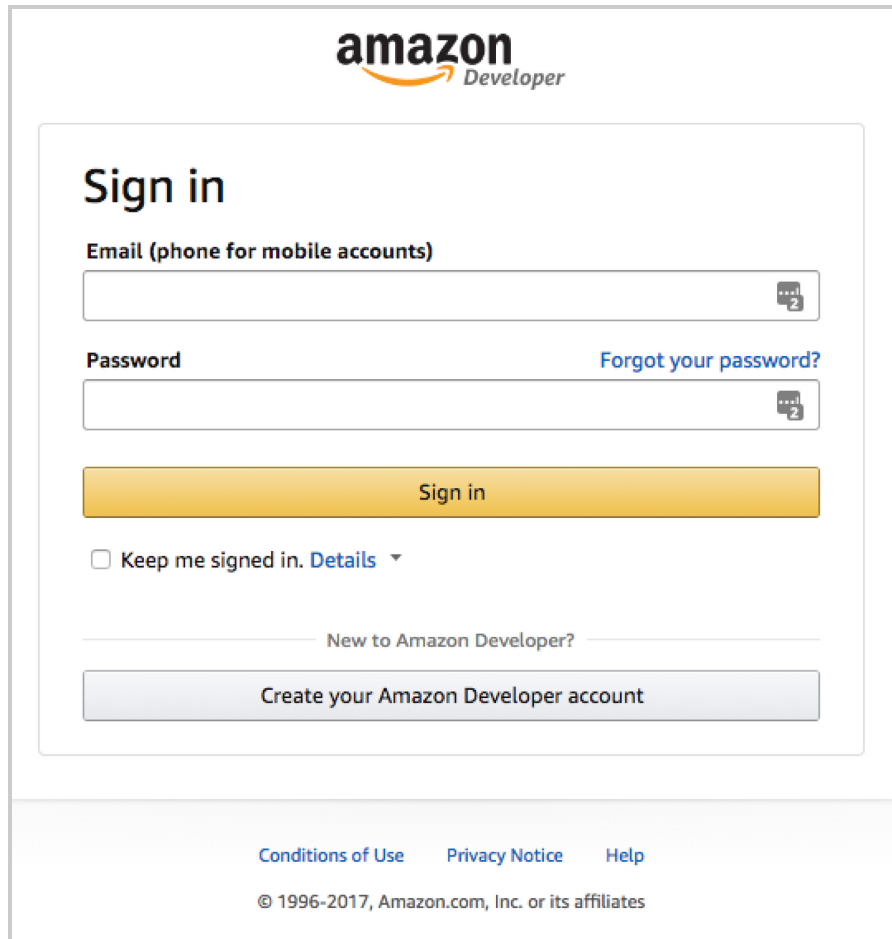
NOTE As stated in the [Prerequisites section](#) of this document, you must sign up for an Amazon Developer Account at <https://developer.amazon.com> before you can use an Ayla supported Alexa skill.

1. Click <https://developer.amazon.com> to navigate to the Amazon Developer Console.
2. Click **Sign In** on the right of the navigation menu at the top of the page, as shown in Figure 8.



Figure 8: Navigate to Sign In on Amazon Developer Console

3. On the Sign In page, enter your credentials for your [Amazon Developer Account](#) in the appropriate fields, and then click **Sign in using our secure server**, as shown in Figure 9.



The image shows the Amazon Developer Sign In page. At the top is the Amazon Developer logo. Below it is a 'Sign in' heading. There are two input fields: 'Email (phone for mobile accounts)' and 'Password'. To the right of the password field is a link 'Forgot your password?'. Below the input fields is a yellow 'Sign in' button. Underneath the button is a checkbox labeled 'Keep me signed in.' followed by a 'Details' link. At the bottom of the sign-in section is a link 'New to Amazon Developer?' and a button 'Create your Amazon Developer account'. At the very bottom of the page are links for 'Conditions of Use', 'Privacy Notice', and 'Help', followed by a copyright notice: '© 1996-2017, Amazon.com, Inc. or its affiliates'.

Figure 9: Enter Credentials to Sign In

NOTE If you do not have an Amazon account, click **I am a new customer** on the Sign In page, and follow the steps to create your new account.

4. Click **Developer Console** in the upper right corner of the screen, as shown in Figure 10.

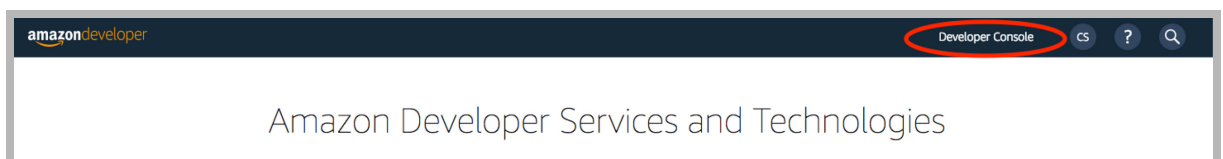


Figure 10: Navigate to the Developer Console

- Click the **ALEXA** tab, and then the **Get Started** button in the Alexa Skills Kit option; see Figure 11.

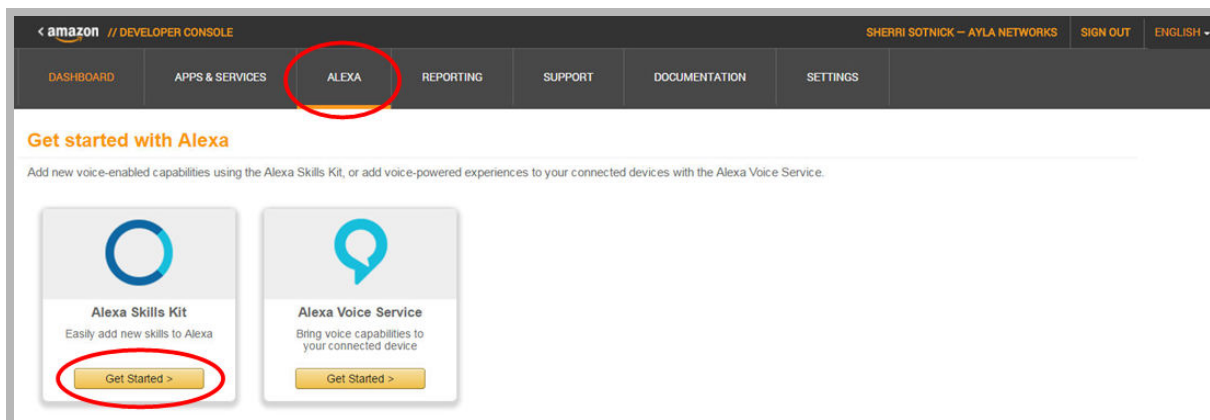


Figure 11: Get Started with Alexa Skills Kit

- Enter the Skill Information as follows: (Refer to Figure 12 as an example.)
 - Click **Smart Home Skill API** for Skill Type.
 - Type a name for the Alexa Skill in the Name field.
 - Click **Save**. Notice that the ID for your skill is automatically generated (see Figure 12).

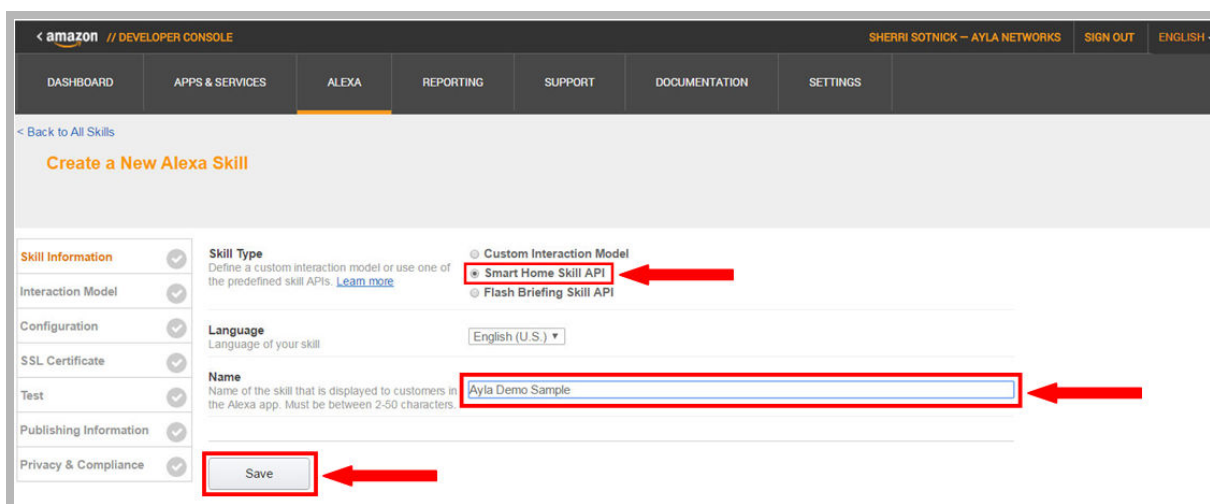
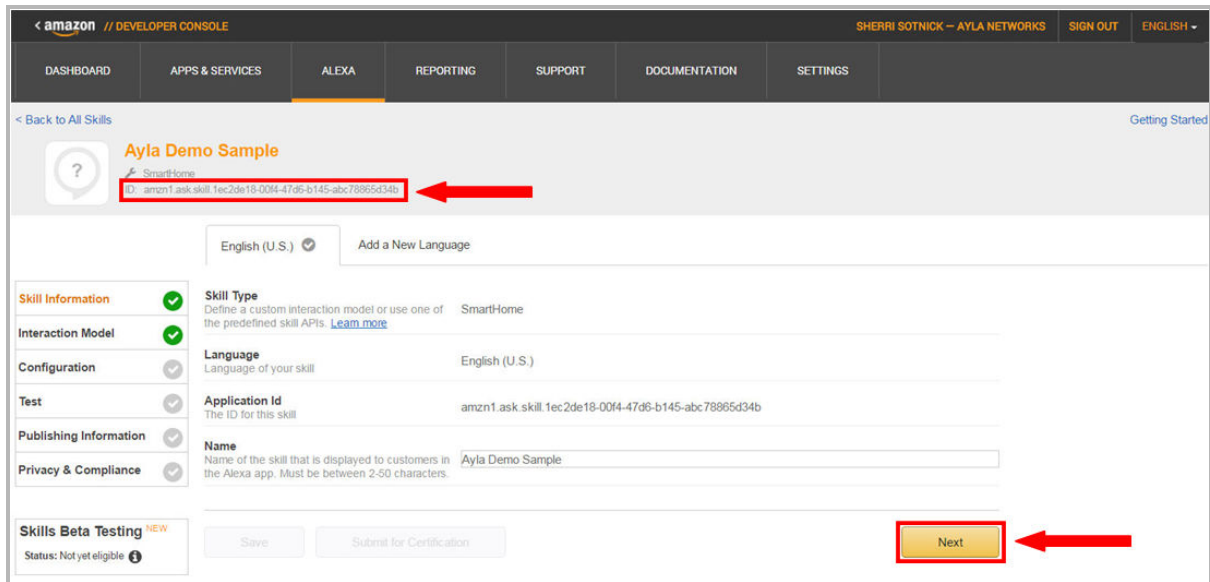


Figure 12: Enter Skill Information

7. Email the ID for your skill to your Product Support Engineer (PSE) in Ayla Customer Success. The PSE will have Ayla DevOps enable the Alexa skill for use.

NOTE It takes approximately one day to enable your Alexa skill.



The screenshot shows the Amazon Developer Console interface for configuring an Alexa skill. The top navigation bar includes 'amazon // DEVELOPER CONSOLE', 'SHERRI SOTNICK - AYLA NETWORKS', 'SIGN OUT', and 'ENGLISH'. The main navigation bar has tabs for 'DASHBOARD', 'APPS & SERVICES', 'ALEXA', 'REPORTING', 'SUPPORT', 'DOCUMENTATION', and 'SETTINGS'. The 'ALEXA' tab is selected. The page title is 'Ayla Demo Sample'. Below the title, there's a 'SmartHome' skill type selection. The 'Application Id' field is highlighted with a red box and a red arrow pointing to it. The 'Name' field is 'Ayla Demo Sample'. The 'Next' button is highlighted with a red box and a red arrow pointing to it. The page also shows a 'Skills Beta Testing' section with a 'Status: Not yet eligible' message.

Figure 13: Interaction Model Configured

8. Click **Next** to configure the Interaction Model page (shown above in Figure 13), which displays a message (shown below), informing you that the interaction model is built into the Smart Home Skill API.

i Your skill uses Smart Home Skill API

The interaction model is already built into the Smart Home Skill API and you can find the supported utterances [here](#). You just have to handle the directives sent by Alexa in your Smart Home adapter (Lambda function)

9. Click **Next** again to open the Configuration page.

10. On the Configuration page, copy the second Redirect URL (shown in Figure 14).

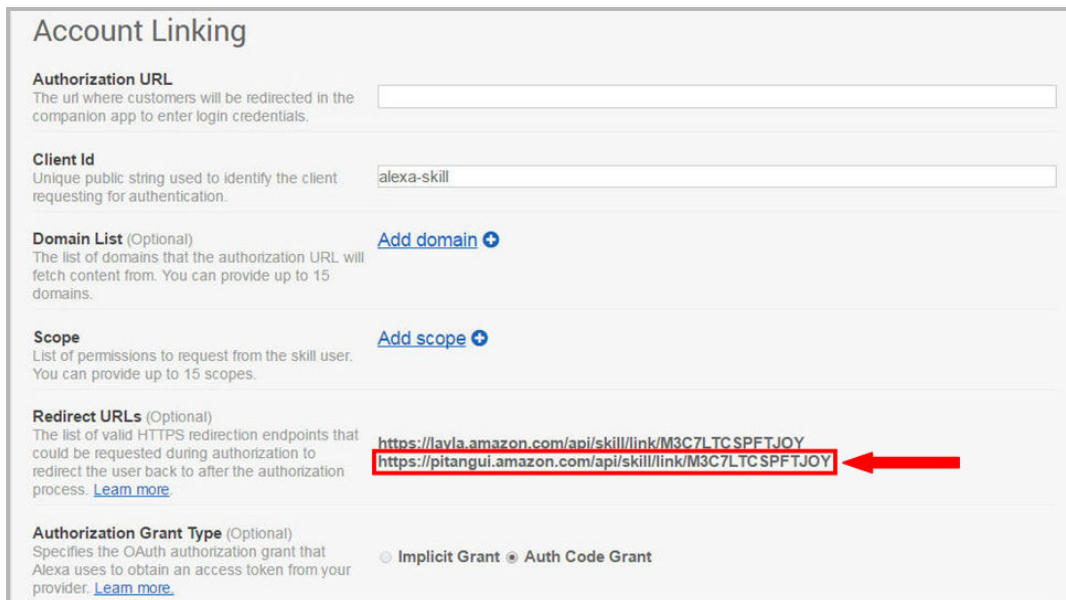


Figure 14: Configuration Page – Copying Second Redirect URL



Make sure that you copy the second Redirect URL; otherwise, you cannot successfully complete the configuration.

11. Keep the Configuration page open in the Amazon Developer Console when you proceed to the next procedure (covered in Section 3.2).

3.2 Create a New OAuth Application for Alexa

The next part of configuring your new Alexa skill involves creating a new OAuth Application for Alexa in the Ayla OEM Dashboard.

1. In a new tab on your web browser, navigate to the Ayla OEM Dashboard via <https://dashboard-dev.aylanetworks.com/>, and log in with your Ayla Developer account credentials.
2. Click **OEM Profile** in the navigation menu on the left side, then click the **OAuth Applications** tab, as shown in Figure 15.

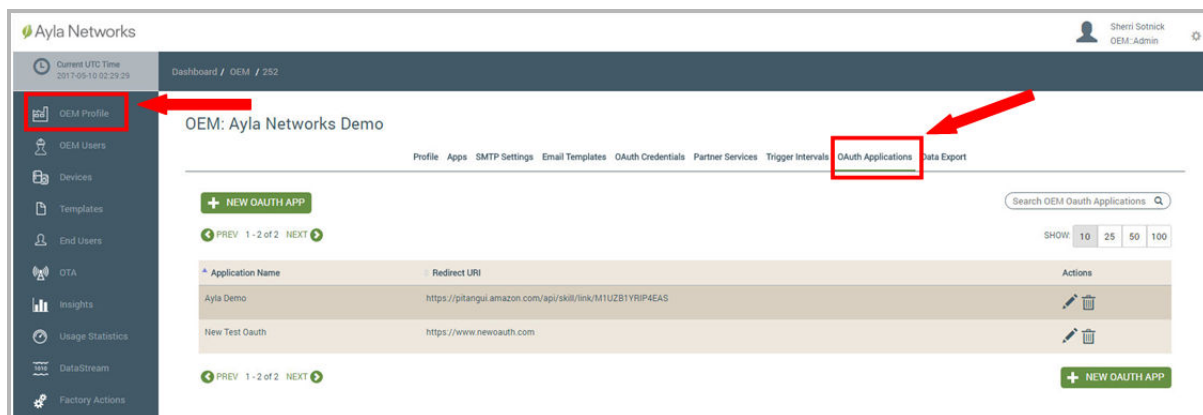


Figure 15: Ayla OEM Dashboard – OAuth Applications

3. Click the **+NEW OAUTH APP** button to create a new OAuth Application for Alexa.
4. In the Create New App dialog box, enter all of the details in the appropriate fields, and for Redirect URI, paste the **Amazon** Redirect URL (from [Step 10](#) in Section 3.1), then click **CREATE**.

Refer to Figure 16 as an example.

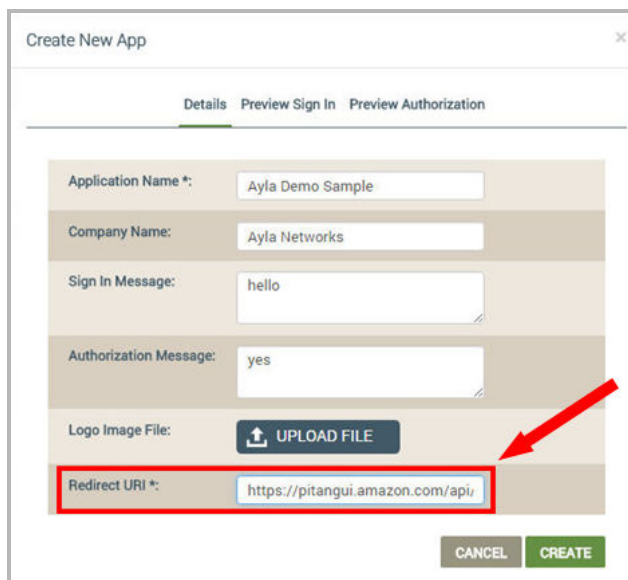


Figure 16: Paste Redirect URL from Amazon Developer Console

5. Click the new Alexa OAuth application on the OAuth Applications page of the OEM Dashboard to open in OAuth App dialog box.

Notice that an *Application ID* and *Application Secret* are automatically generated and added to the details; see Figure 17.

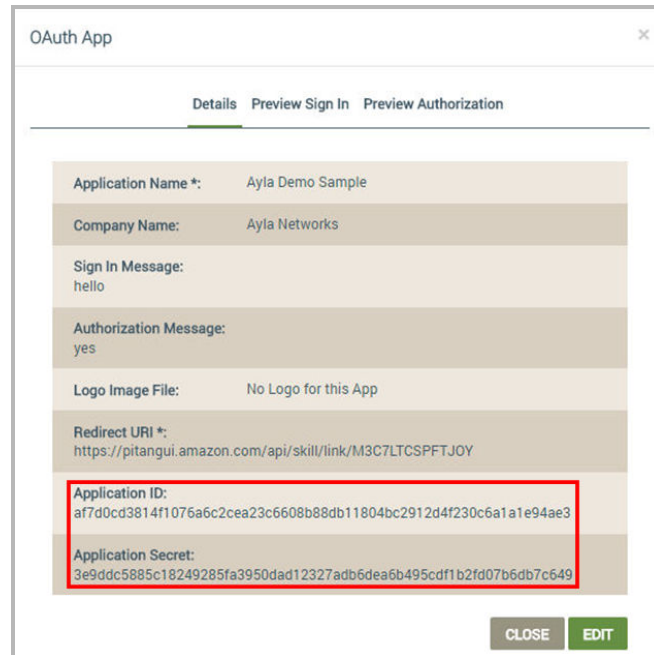


Figure 17: Application ID and Secret Generated

NOTE The Application ID and Secret are required to complete the OEM Skills configuration in the Amazon Developer Console.

6. Keep the OAuth App dialog box in the OEM Dashboard open. You need to return to the dashboard to copy the following information when completing the skills configuration in the Amazon Developer Console:
 - Application ID
 - Application Secret
 - OEM Secret

NOTE If you mistakenly closed the web browser tab, you can simply log in to the OEM Dashboard again. The new Alexa OAuth application remains configured.

3.3 Complete the Skill Configuration

At this point, you have all of the information required to complete the skill configuration in the Amazon Developer Console.

1. Click the tab on your web browser for the Amazon Developer Console.
2. In the Endpoint section of the Configuration page, click the checkbox for **North America**, which then displays a text field, as shown in Figure 18.

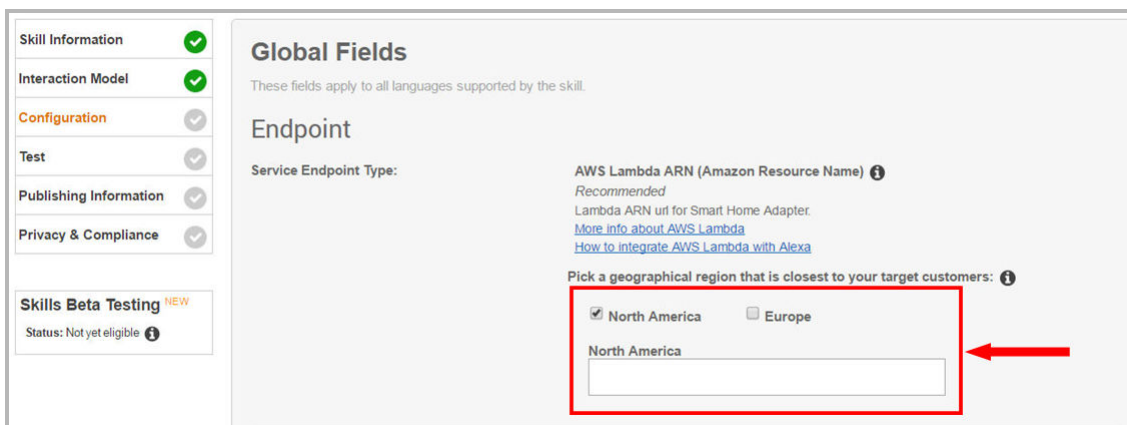


Figure 18: Text Field for Specified Geographic Region

3. In the North America field, enter either of the following Amazon Web Services (AWS) Lambda Amazon Resource Name (ARN), depending on whether your device is in development or the field:

For the development environment:

`arn:aws:lambda:us-east-1:371220682477:function:alexaadapter-lambda-prod`

For the field environment:

`arn:aws:lambda:us-east-1:371220682477:function:alexaadapter-lambda-field`

NOTE All OEMs use the ARNs provided above for development or field environments.

4. Click the tab in your web browser for the Ayla OEM Dashboard, click the **Profile** tab, and then copy the OEM Secret.
5. Click the tab in your web browser to return to the Configuration page in the Amazon Developer console.
6. For the Authorization URL in the Account Linking section, enter the following URL, and then paste the OEM Secret (from Step 4) at the end of the URL:

`https://user.aylanetworks.com/oauth/authorize?response_type=codeOEMSecret.`

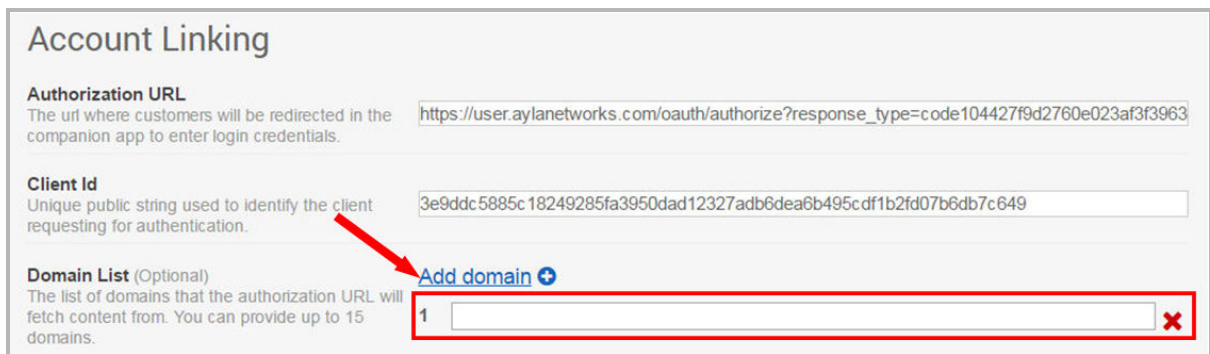
NOTE Make sure that there are *not* any spaces between this URL and the OEM Secret that you pasted.

IMPORTANT!

If you are planning to use and test your Alexa skill in the development environment, enter this URL instead. You still add OEM Secret to the end of the URL:

https://user-dev.aylanetworks.com/oauth/authorize?response_type=codeOEMSecret

7. Click the tab in your web browser for the OEM Dashboard, and complete the following actions:
 - Click the OAuth Applications tab.
 - Click the new OAuth application you created in Section 3.2.
 - Copy the Application ID.
8. Click the tab in your web browser to return to the Configuration page in the Amazon Developer console.
9. For Client ID, paste the OAuth Application ID copied from the OEM Dashboard (in Step 7).
10. For Domain List, click **Add domain**, which then displays a text field, shown in Figure 19.



Account Linking

Authorization URL
The url where customers will be redirected in the companion app to enter login credentials.

Client Id
Unique public string used to identify the client requesting for authentication.

Domain List (Optional)
The list of domains that the authorization URL will fetch content from. You can provide up to 15 domains.

[Add domain +](#)

1 ✖

Figure 19: Domains from which the Authorization URL Obtains Content

11. In the text field for Domain List, type **aylanetworks.com**
12. For Scope, click **Add scope**, which then displays a text field.
13. In the text box for Scope, type **device**.
14. For Authorization Grant Type, click **Auth Code Grant**.
15. For Access Token URI, enter the following:
`https://user.aylanetworks.com/oauth/token`
16. Click the web browser tab for the OEM Dashboard, and complete the following actions:
 - Click the OAuth Applications tab.
 - Click the new OAuth application you created in Section 3.2.
 - Copy the Application Secret.
17. Click the tab in your web browser for the Amazon Developer Console, and for Client Secret, paste the OAuth Application Secret from the OEM Dashboard.
18. For Client Authentication Scheme, select **Credentials in request body**.

19. For Privacy Policy URL, enter the following:
- `https://user.aylanetworks.com/oauth/token`

Figure 20 shows the Account Linking section of the Configuration page completed.

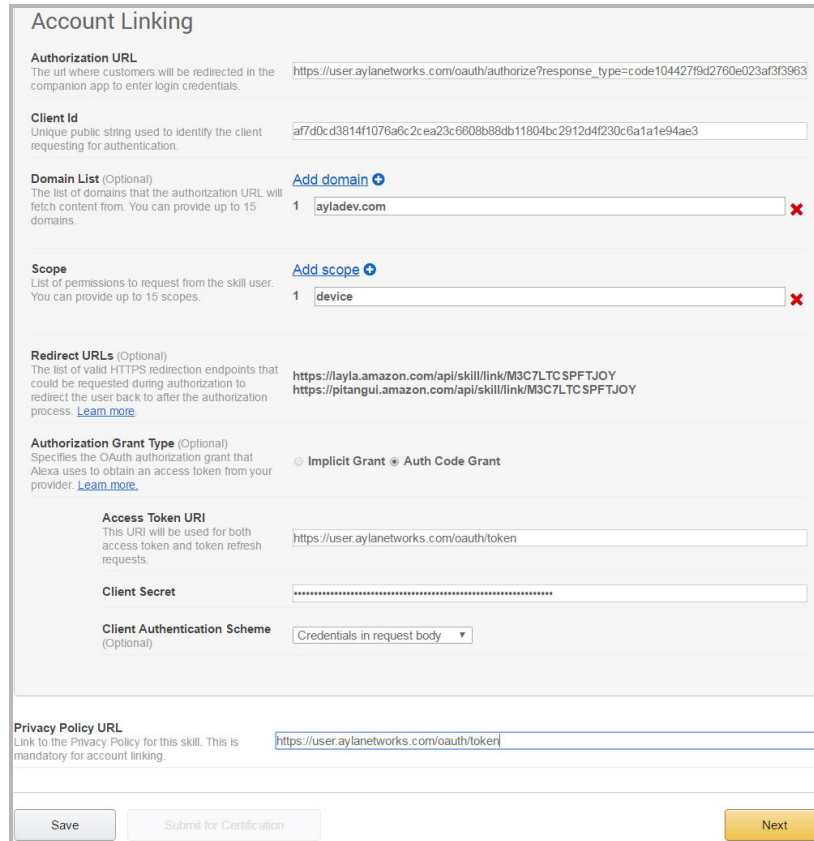


Figure 20: Account Linking Section of the Configuration Page Completed

NOTE As a best practice, click **Save** at the bottom of the Configuration page (see Figure 21). The Amazon system should save all of your settings regardless.

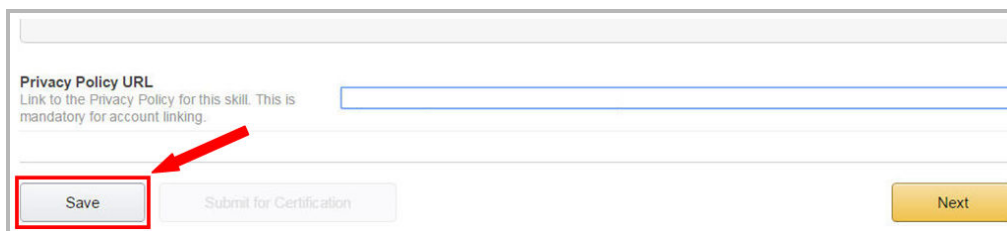
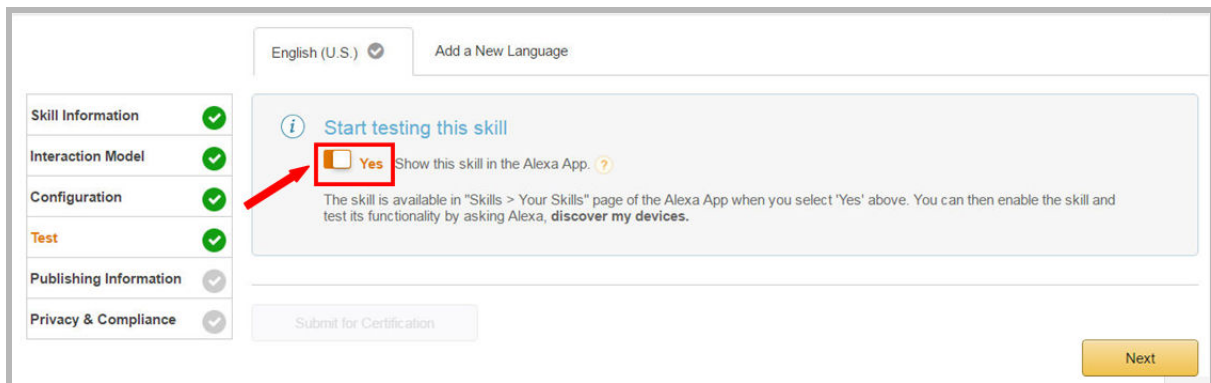


Figure 21: Click Save as a Best Practice

20. Click Next at the bottom of the page to open the Test page.

21. Make sure that Testing is set to Yes, as shown in Figure 22.



The screenshot shows the Alexa skill setup interface. On the left, a sidebar lists sections: Skill Information, Interaction Model, Configuration, Test, Publishing Information, and Privacy & Compliance. The 'Test' section is highlighted with a green checkmark. In the main content area, there is a section titled 'Start testing this skill' with a blue information icon. Below this title, there is a checkbox labeled 'Yes' which is checked, and a red arrow points to it. To the right of the checkbox is the text 'Show this skill in the Alexa App. ?'. Below this, a paragraph states: 'The skill is available in "Skills > Your Skills" page of the Alexa App when you select "Yes" above. You can then enable the skill and test its functionality by asking Alexa, **discover my devices**.' At the bottom of the main content area, there is a 'Submit for Certification' button. In the bottom right corner of the interface, there is a yellow 'Next' button.

Figure 22: Enable Test Skill Functionality

22. Click **Next** to enable testing of the skill functionality.

4 Enable Alexa

The final step entails linking your Alexa skills created in the Amazon Developer Console with your account in the Ayla OEM Dashboard and then enabling those skills. Upon successfully accomplishing both, you then have to configure device discovery. The Alexa Smart Home Skill API must be able to discover your Ayla devices so that you can use them with Alexa.

NOTE Before getting started, make sure that you connect your Alexa adapter. If you have not done this, you cannot proceed to the Alexa Home page where you link your account and enable the Alexa skills.

4.1 Linking and Enabling Alexa Skills

This part of the configuration process is done in the Alexa Console.

1. Navigate to the Alexa Console via <http://alexa.amazon.com/>.
2. Sign in using your same credentials for the Amazon Developer Console.

NOTE If you are logged in to the Amazon Developer Console, you should also be signed in to the Alexa Console.

The Alexa adapter requires an active Wi-Fi connection. If your Alexa adapter is not connected, you are redirected to the Getting Started with Alexa page, shown in Figure 23. Click **Begin Setup**, and follow the prompts to connect your Alexa adapter.

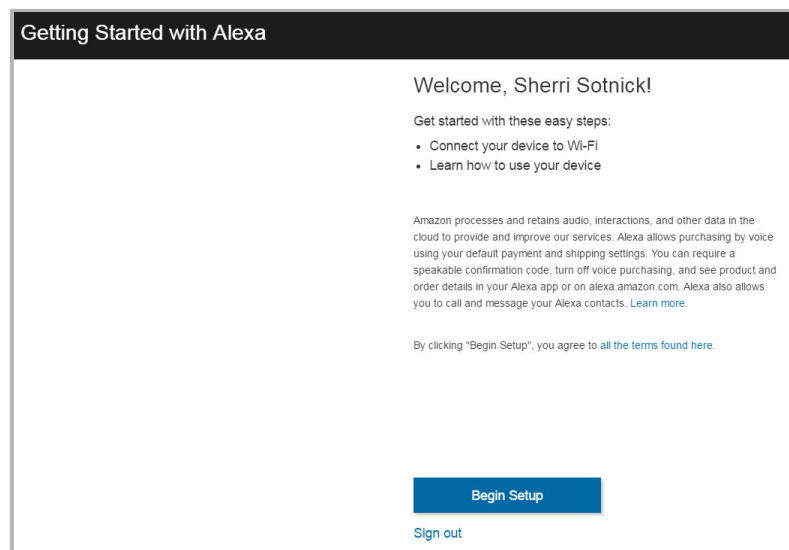


Figure 23: Connect Your Alexa Adapter

Alternatively, you can connect your Alexa adapter to Wi-Fi using your mobile phone. Click the following URL for simple instructions how to do this:

<https://www.amazon.com/gp/help/customer/display.html?nodeId=201549640>

3. On the Home page, click **Skills** in the navigation menu on the left side, as shown in Figure 24.

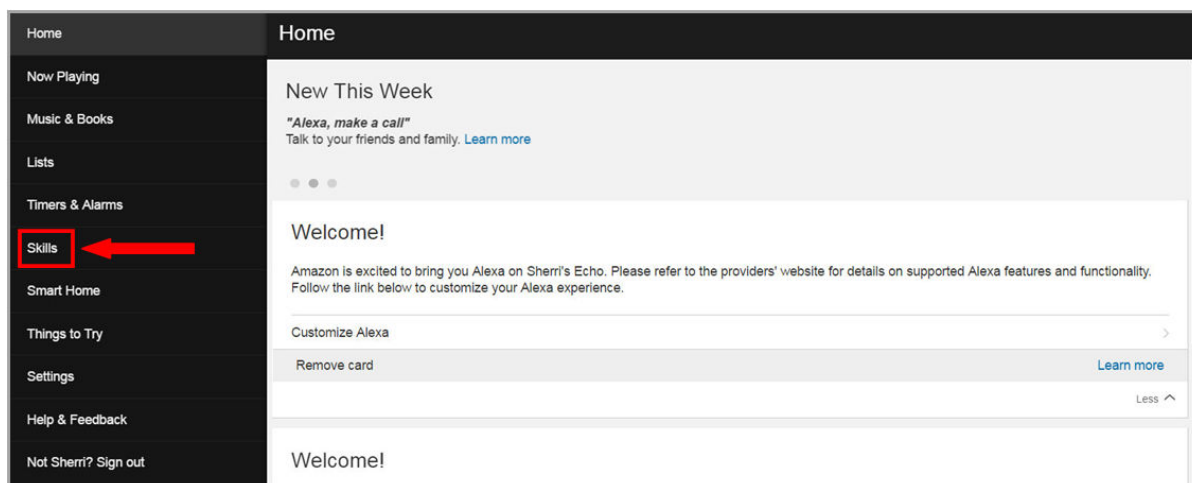


Figure 24: Home Page of the Alexa Console

4. Click **Your Skills** in the upper right corner of the All Skills page, as shown in Figure 25.

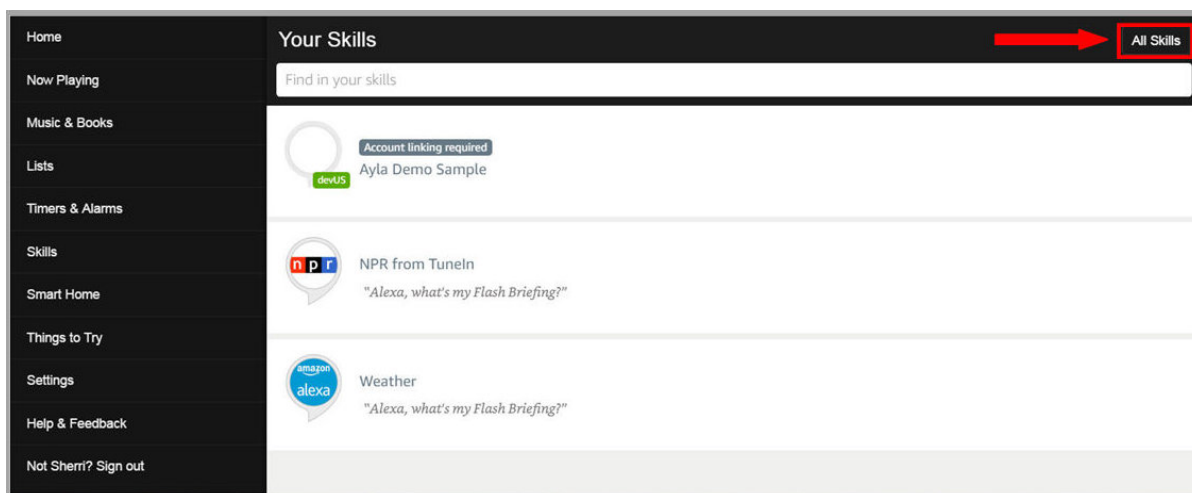


Figure 25: All Skills Page of the Alexa Console

5. On Your Skills page (Figure 25 above), click the Alexa skill you created (per the procedures in Section 3 of this document), which opens a page for the skill (Figure 26).



Figure 26: Your Skills Page of the Alexa Console

6. Click **ENABLE** to link your skill to the Ayla OEM Dashboard. See Figure 27.

NOTE Make sure pop-ups are not blocked in your web browser. If they are blocked, you are not able to complete the process to link your accounts and enable Alexa.

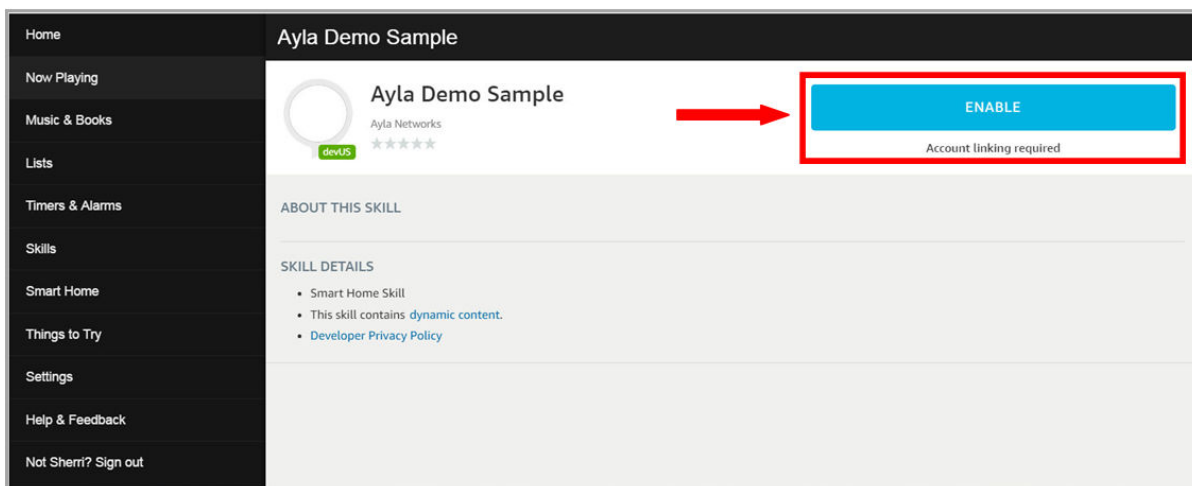


Figure 27: Enabling your Alexa Skill

7. In the pop-up dialog box (shown in Figure 28), enter your credentials for the Ayla Developer Portal. This is the log-in to link your Alexa Home Skill with your OEM account in the Ayla OEM Dashboard.

NOTE If you have not set up an account in the Ayla OEM Dashboard, refer to the [Ayla OEM Dashboard User's Guide](#) for instructions on how to do this.

**CAUTION**

If the web browser is not opening the popup dialog box, you must enter:

https://user.aylanetworks.com/oauth/authorize?response_type=code&oem_secret=<<oem secret from oem dashboard profile page>>

in a separate browser tab to enable Alexa. Otherwise, you cannot authorize the enabling process to complete the configuration of Alexa for your Ayla device. Make sure there are no spaces between this URL and the OEM secret that you add to the end of the URL (as shown).

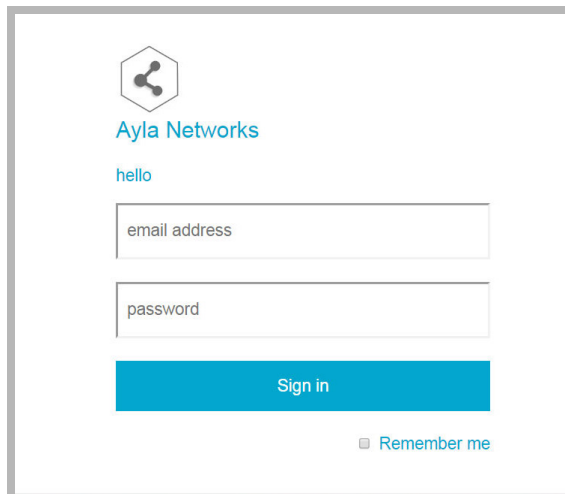
A screenshot of the Ayla Networks login page. At the top is the Ayla Networks logo (a hexagon with three dots) and the text "Ayla Networks". Below that is the word "hello". There are two input fields: "email address" and "password". A blue "Sign in" button is at the bottom. To the right of the button is a checkbox labeled "Remember me".

Figure 28: Enable your Alexa Skill

8. Click **Authorize** to start the enabling process. See Figure 29.

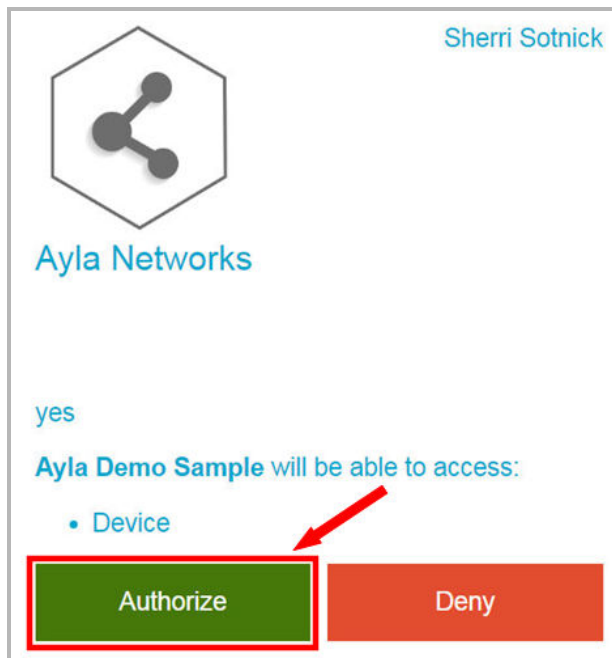
A screenshot of the Ayla Networks authorization screen. At the top right is the name "Sherri Sotnick". Below the Ayla Networks logo (a hexagon with three dots) is the text "yes". Below that is the text "Ayla Demo Sample will be able to access:". Underneath is a bulleted list with one item: "• Device". At the bottom are two buttons: a green "Authorize" button and a red "Deny" button. A red arrow points to the "Authorize" button, which is also highlighted with a red rectangular border.

Figure 29: Authorize the Enabling Process

When the accounts have been successfully linked and the Alexa skill is enabled in the Ayla Developer Portal, the message shown in Figure 30 displays.

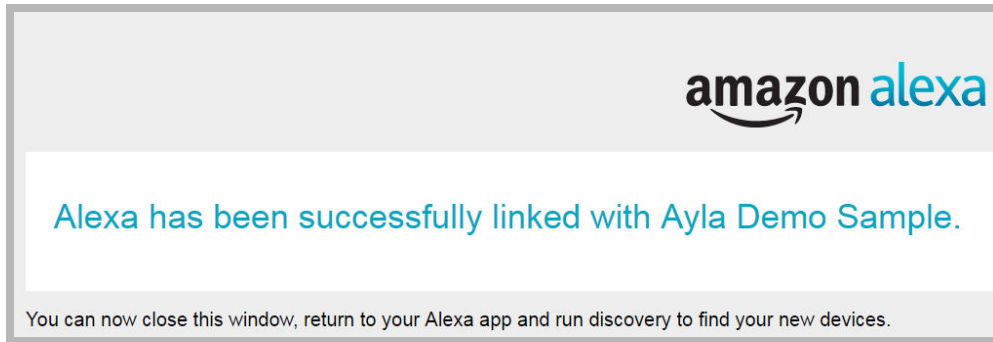


Figure 30: Message Indicating the Accounts Were Successfully Linked

After showing this message, the Discover Devices dialog box opens, as shown in Figure 31.

9. Click **DISCOVER DEVICES**, as shown in Figure 31.

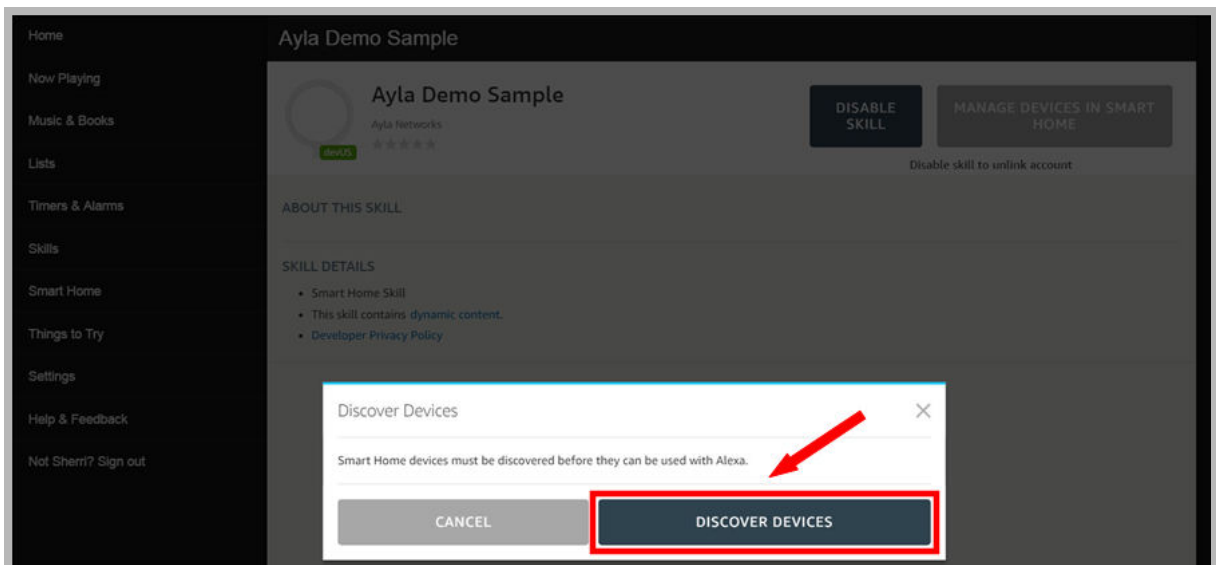


Figure 31: Discover Device

Once you discover the device, you can use the following curl example to make sure your virtual device is online.

```
curl --request POST \
  --url https://ads-dev.aylanetworks.com/apiv1/devices/<<OEM Device ID>>/connection_history.json \
  --header 'authorization: auth_token <<Need Authorization Token>>' \
  --header 'content-type: application/json' \
  --data '{"connection":{"event_time":"2017-05-15 23:11:39.671141","status":"Initializing"}}'
```

NOTE If you need an auth token, you can obtain one in the [Ayla API Browser](#), or use the appropriate Ayla API (like the Provider Auth API) if you are familiar with it.

When the discovery process is complete, a summary page displays, as shown in Figure 32. Also notice that you can discover devices from this page by clicking **Discover Devices**.

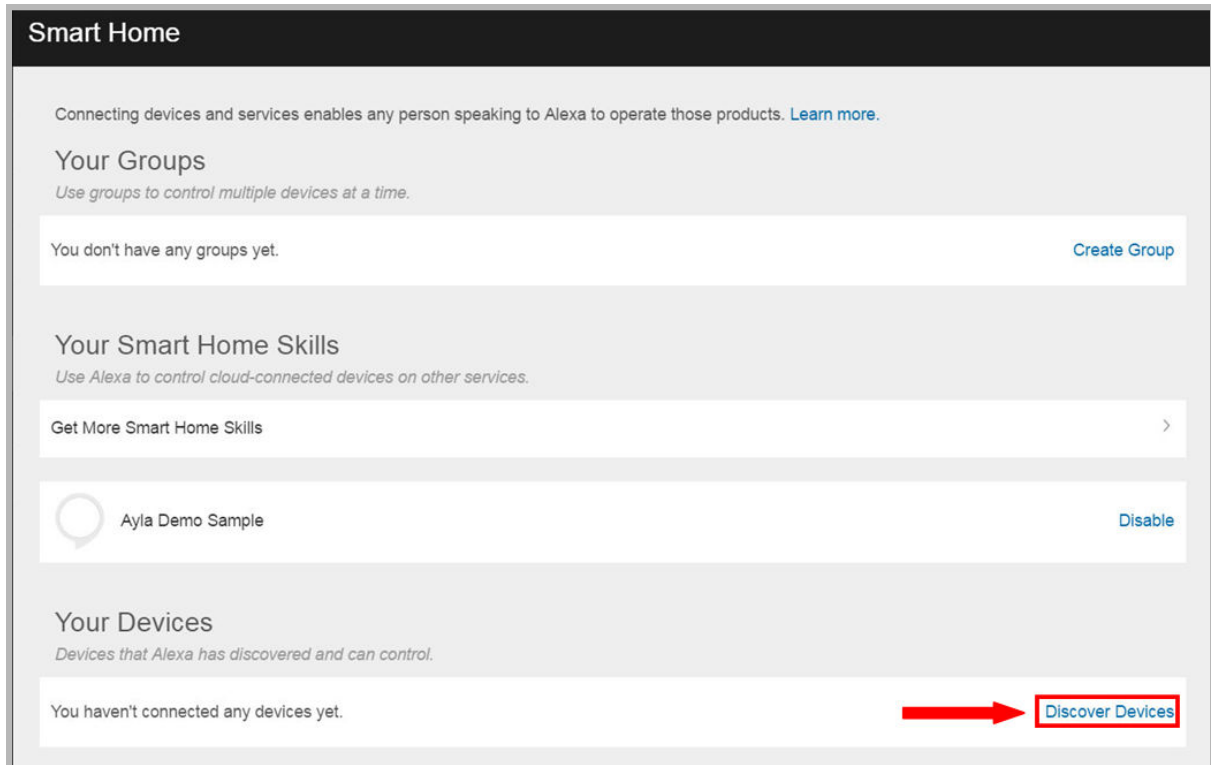


Figure 32: Summary of Your Alexa Configurations

NOTE Notice under *Your Devices* in Figure 32 that the devices are not connected yet. This changes to show connected devices when the Ayla Product Support Engineer enables your new Alexa skill per [Step 7 in Section 3.1](#), and you complete the discovery process for those devices.

After discovering your device(s), you are ready to begin testing and developing the Alexa functionality on your Ayla device(s).

5 Submit Alexa Home Skills for Certification

As a best practice, we recommend that you certify your Alexa Home Skill and have friends and family use it. This provides you with additional use and test cases. They are essentially beta testing your new Alexa Smart Home Skill on their Ayla device(s).

NOTE Contact [Ayla Technical Support](#) for more information.

The certification process consists of:

1. Completing the Submission Checklist.
2. Submitting the Alexa skill for certification.

To complete these two procedures for the Amazon Alexa Skill Certification process, click the following URL for instructions:

<https://developer.amazon.com/public/solutions/alexa/alexa-skills-kit/docs/publishing-an-alexa-skill>

6. Customize an Email Template for OAuth

Another best practice is to create a customized email template so that users can reset their password as needed. This is done in the Ayla OEM Dashboard as follows:

1. Navigate to the Ayla OEM Dashboard via <https://dashboard-dev.aylanetworks.com/>, and log in.
2. Click **OEM Profile** in the navigation menu on the left side, then click the **Email Templates** tab, as shown in Figure 33.

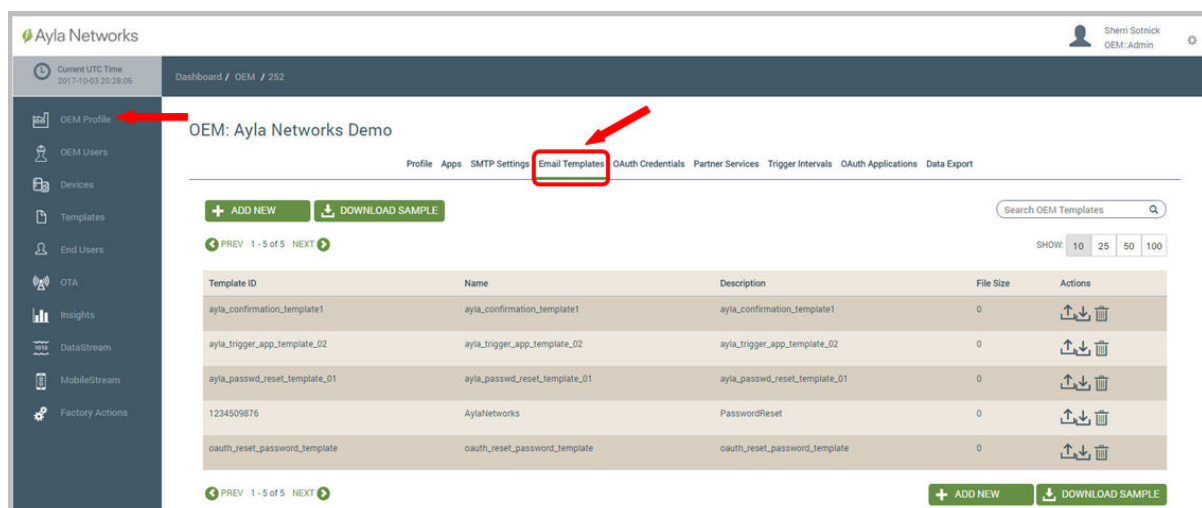


Figure 33: Create Email Template for OAuth

- Click the **ADD NEW** button to open the dialog box for Create New Email Template.
- In the Unique ID field, type **oauth_reset_password_template**, and then click **CREATE**. Refer to Figure 34.

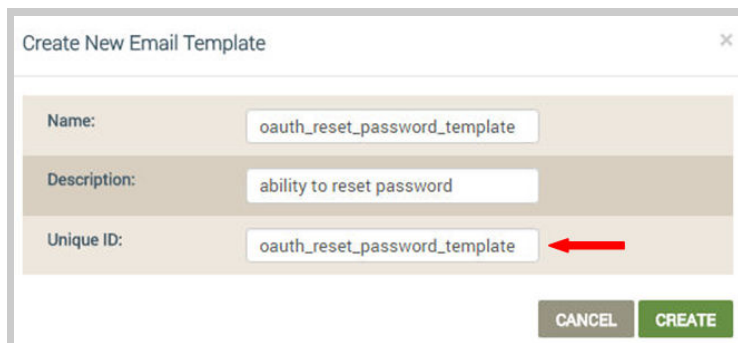


Figure 34 shows a 'Create New Email Template' dialog box. It has three input fields: 'Name' with the value 'oauth_reset_password_template', 'Description' with the value 'ability to reset password', and 'Unique ID' with the value 'oauth_reset_password_template'. A red arrow points to the 'Unique ID' field. At the bottom right are 'CANCEL' and 'CREATE' buttons.

Figure 34: Enter Unique ID for OAuth Reset Password

Each email template has a unique template ID. This ID is used in the web or mobile app as an API parameter. The Ayla Cloud looks up the appropriate template ID. Once you click **CREATE**, the email template is added to Email Templates tab.

- In the Email Templates tab, click **DOWNLOAD SAMPLE** to open a folder with the basic sample emails that you can customize.
- Double-click the password_reset.zip file, and then the template.html file to customize it as you wish.
- Click the **Upload Template** icon (shown in Figure 35) to upload your new zip file of the customized email template.

NOTE Zipped files must have the template.html file, and graphic files must be *.gif/png/jpg].

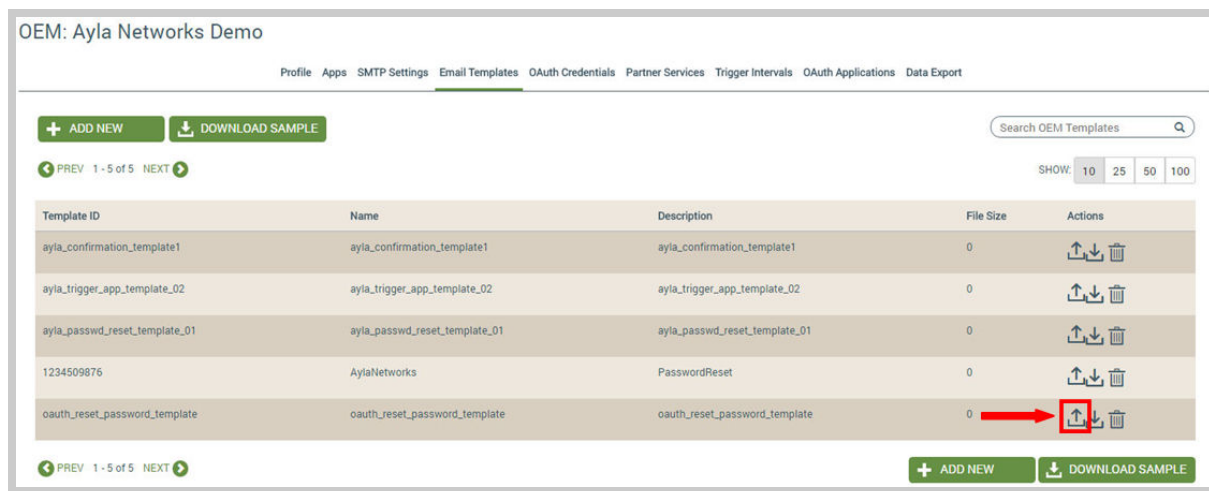


Figure 35 shows the 'OEM: Ayla Networks Demo' interface. The 'Email Templates' tab is selected. At the top, there are buttons for '+ ADD NEW' and 'DOWNLOAD SAMPLE'. Below is a table of email templates. The last row, 'oauth_reset_password_template', is highlighted with a red arrow pointing to the 'Upload Template' icon (a square with an upward arrow) in the 'Actions' column.
















Template ID	Name	Description	File Size	Actions
ayla_confirmation_template1	ayla_confirmation_template1	ayla_confirmation_template1	0	  
ayla_trigger_app_template_02	ayla_trigger_app_template_02	ayla_trigger_app_template_02	0	  
ayla_passwd_reset_template_01	ayla_passwd_reset_template_01	ayla_passwd_reset_template_01	0	  
1234509876	AylaNetworks	PasswordReset	0	  
oauth_reset_password_template	oauth_reset_password_template	oauth_reset_password_template	0	  

Figure 35: Upload Email Template

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