Create your own „Alexa Domoticz Smart Home Skill“

Prerequisites:

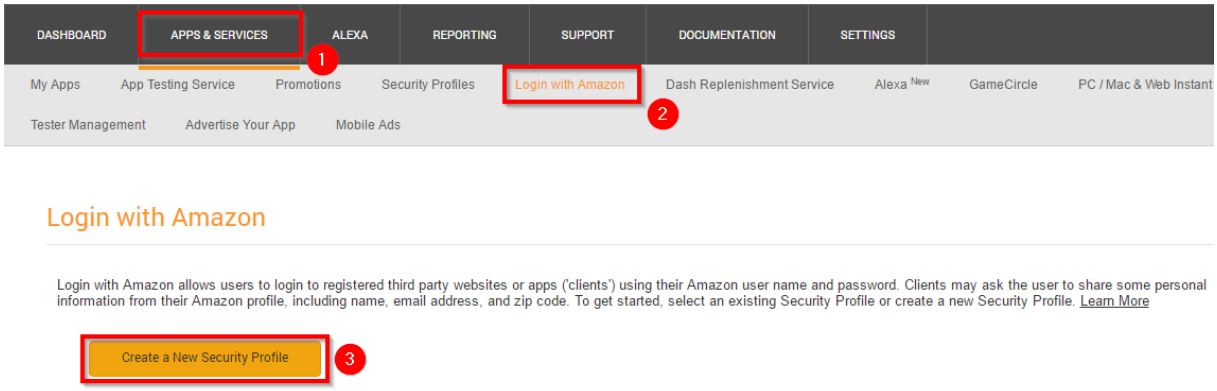
- Register Account: https://developer.amazon.com
- Register Account: https://console.aws.amazon.com
- External connect from the internet to domoticz (port forwarding, dns name)

Create oauth2 authorization provider:

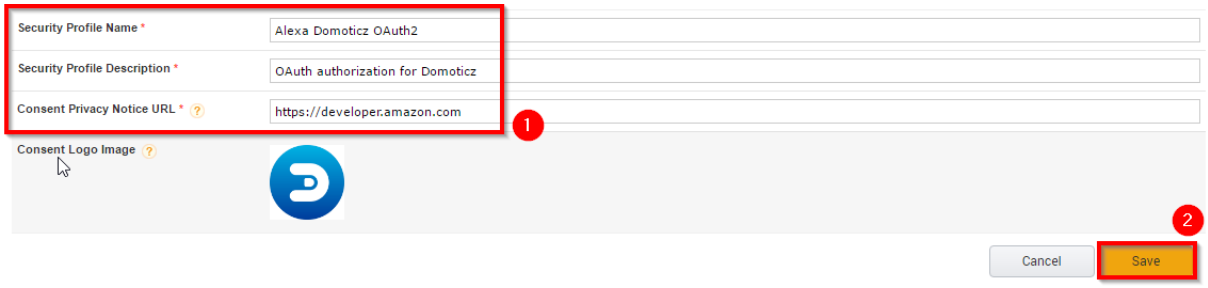
Alexa smart home skill requires an OAuth2 authorization.

1.1 Sign in: https://developer.amazon.com

1.2 Click to APPS & SERVICES (1) → Login with Amazon (2) → Create a New Security Profile (3)



1.3 Type in any Security Profile Name, Description and Privacy URL, (Optional Logo Image)
Click to Save



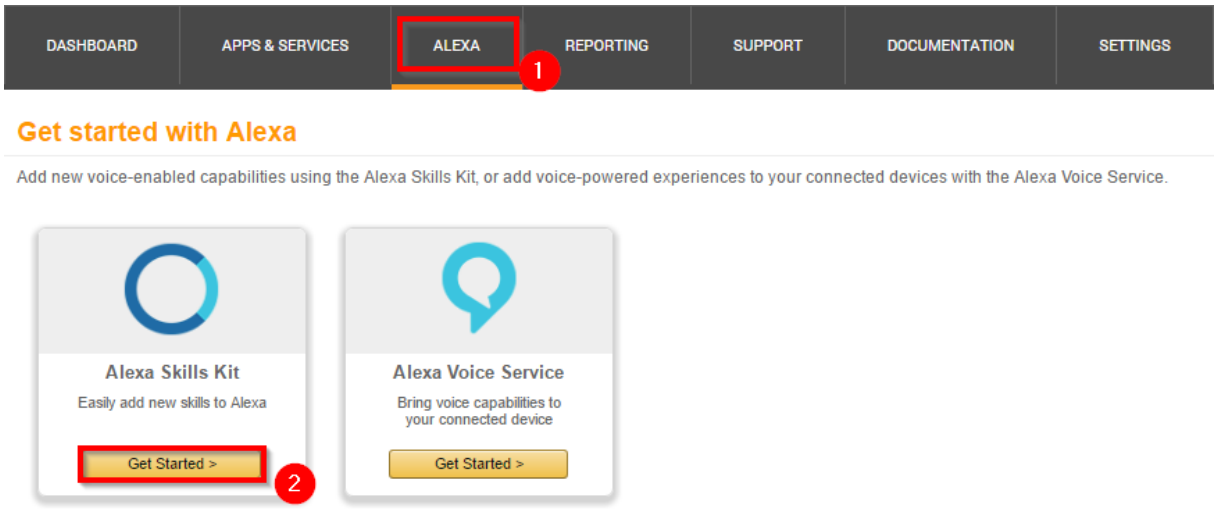
1.4 Click to “Show Client ID and Client Secret” and save Client ID and Client Secret to notepad

1.5 Do not close this page, one last step is needed at the end

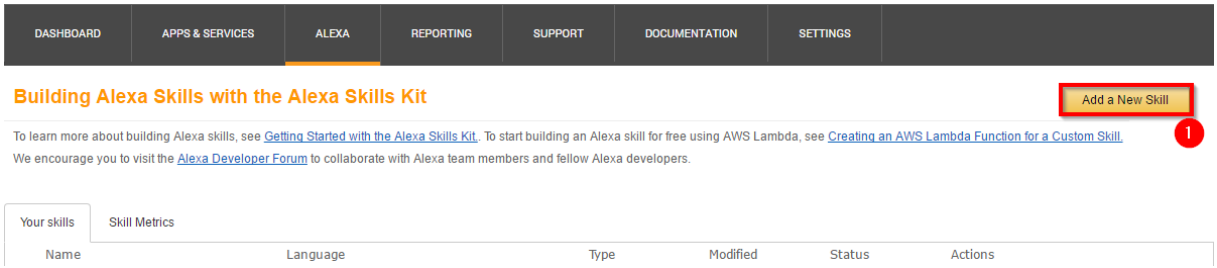
Create alexa skill:

2.1 Sign in: https://developer.amazon.com

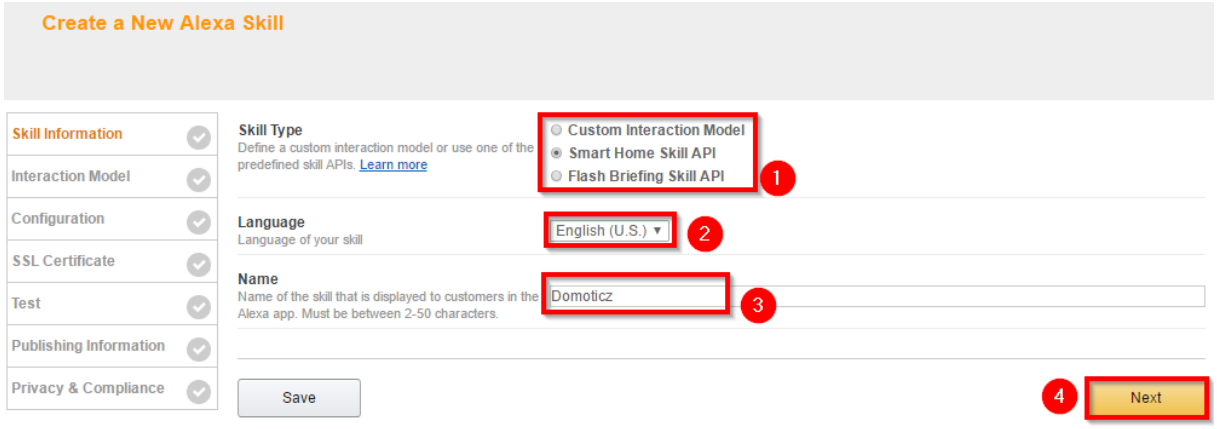
2.2 Click to ALEXA (1) → Get Started (2, Alexa Skills Kit)



2.3 Click to "Add a New Skill"

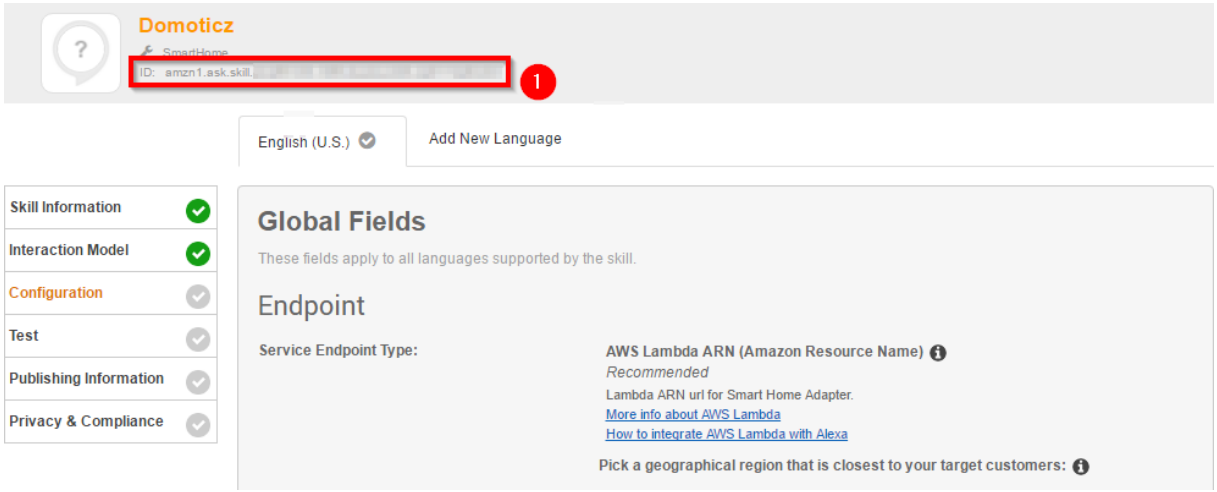


2.4 Select Skill Type → "Smart Home Skill API" (1)
Choose your skill language (2)
Input the name of your skill → For example "Domoticz" (3)
Click to Next (4)



2.5 In section "Interaction Model" click to Next

2.6 Copy Application ID to notepad



2.7 Now you have to create the lambda service to continue
Do not close this website

Create lambda service:

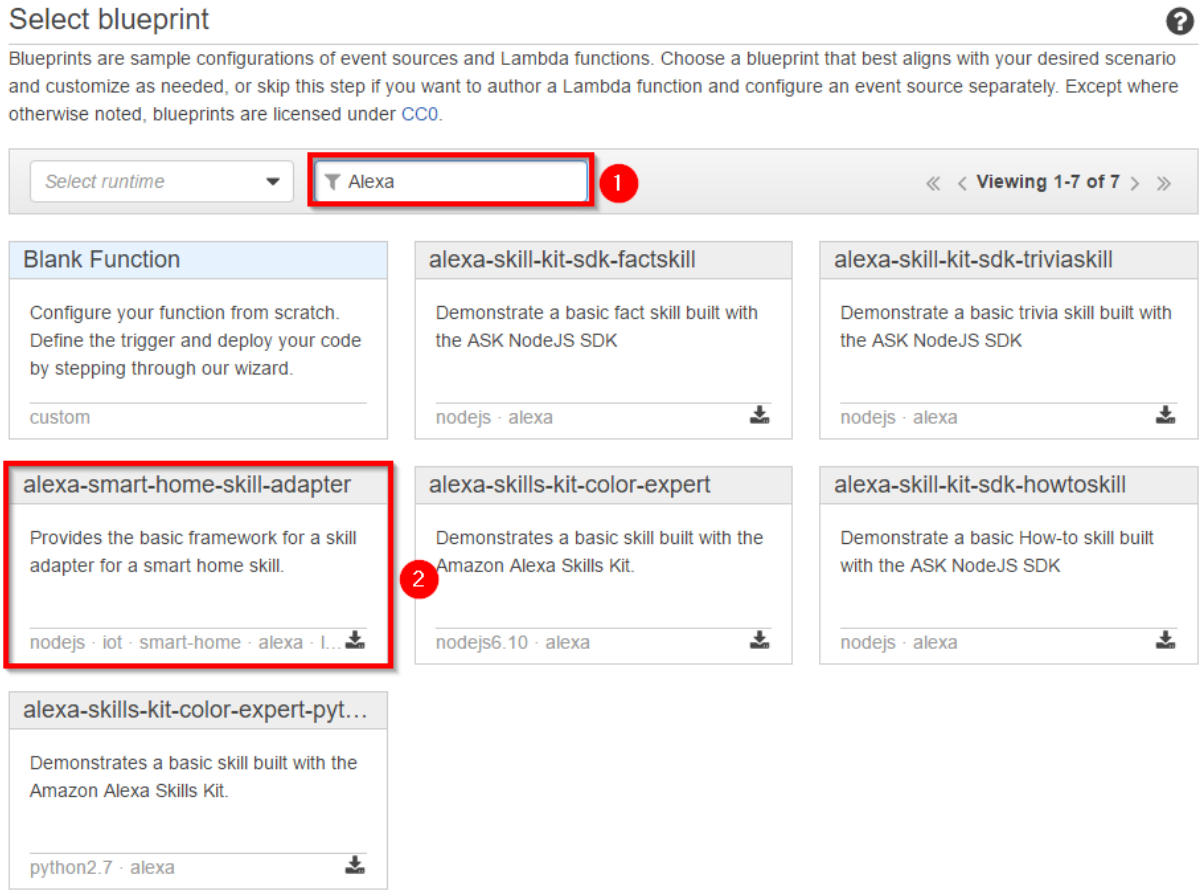
Alexa smart home skill requires an OAuth2 authorization.

3.1 Sign in: https://console.aws.amazon.com

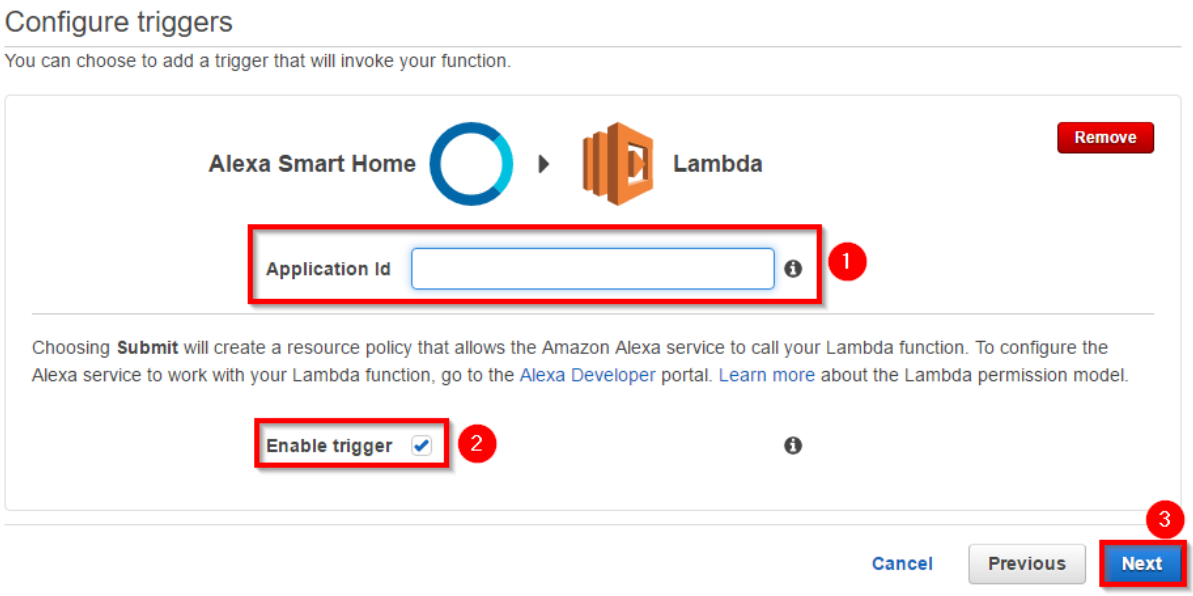
3.2 Click to Lambda in “All services” and then to “Get Started Now”

3.3 On the right top corner select your region
EU Language → Recommended “Ireland”
US Region → Recommended “N.Virginia”
The smart home skill runs from Ireland and N.Virginia. In the future, the other servers should work too.
If your skill is in german, you have to choose “Ireland”.

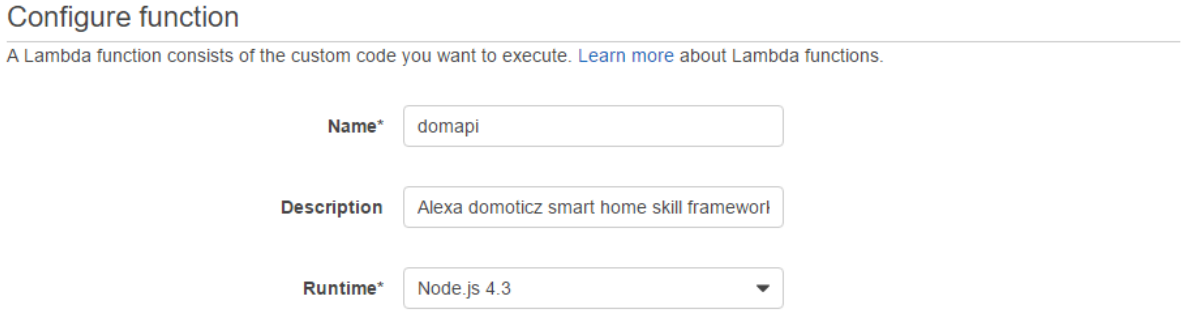
3.4 Type Alexa in the Filter field (1) and select the “alexa-smart-home-skill-adapter” (2)



3.5 Input Application ID (1) from notepad and enable Trigger (2)
Click to Next (3)



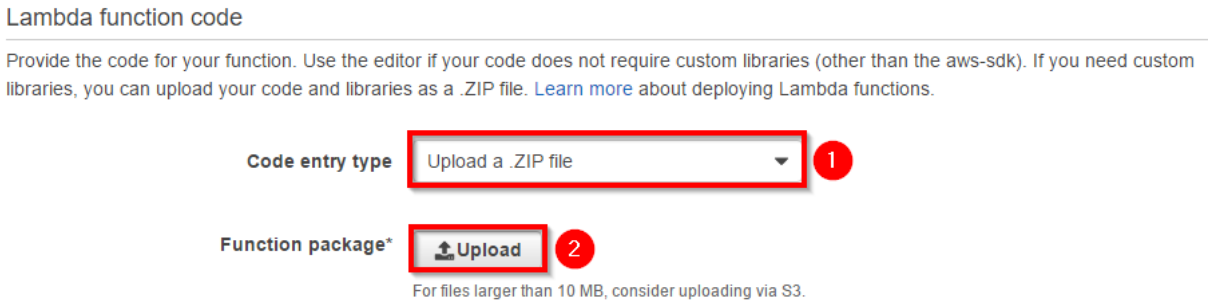
3.6 Set a name and description
Set the Runtime* to “Node.js 4.3”



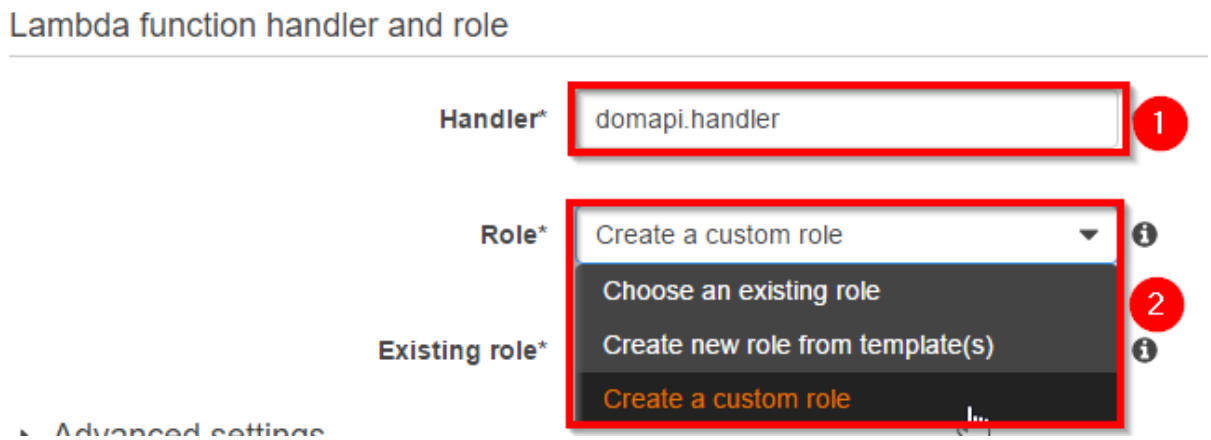
3.7 Download all files from https://github.com/madgeni/alexa_domo and extract zip file
Open example_conf.json and input your values.
Host should be your external address (DNS name or IP address)
Save the changed file with filename conf.json

3.8 Zip files conf.json, domapi.js, package.json and folder node_modules together

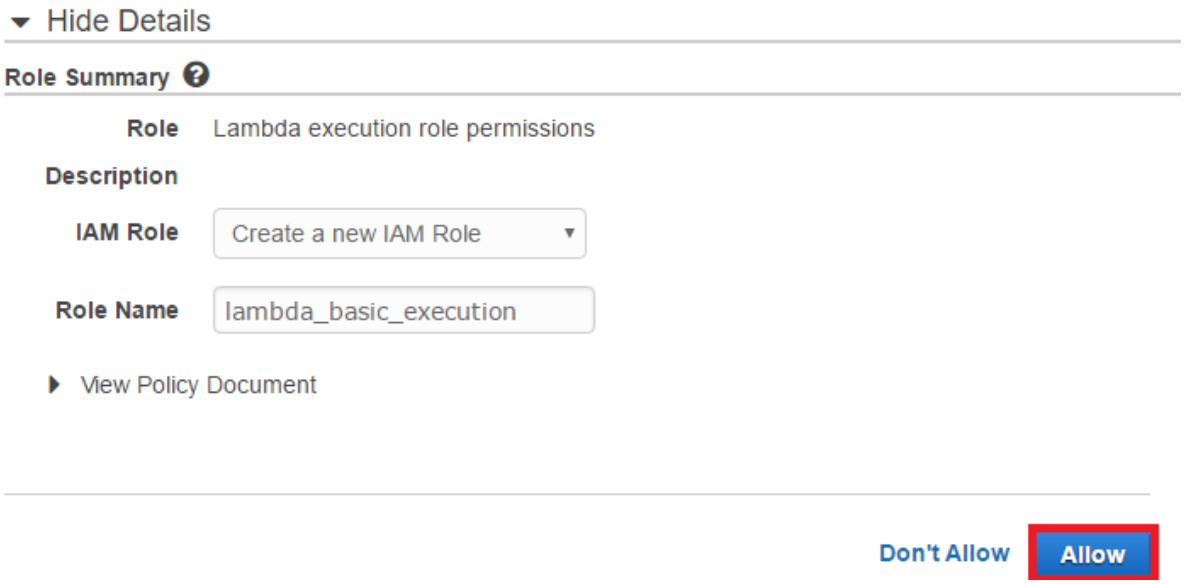
3.9 Select Upload a .ZIP file (1)
Click to Upload and select your ZIP file (2)



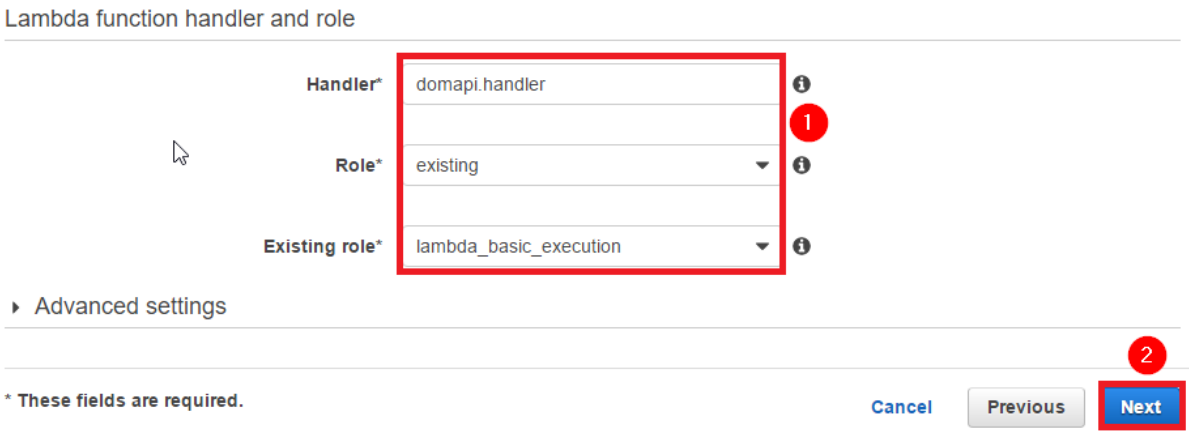
3.10 Change the handler (1) to domapi.handler (or if you change the domapi.js filename, then to whatever you change it to)
Select "Create a custom role" (2)



3.11 Click to Allow

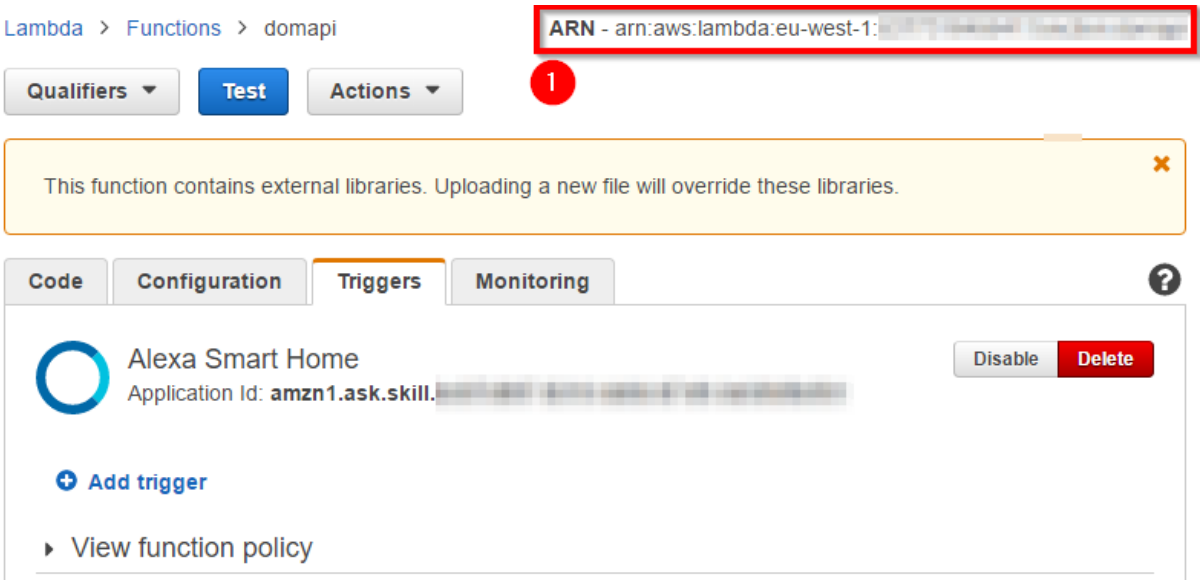


3.12 Now the window should look like this
Click to Next



3.13 Click to Create function

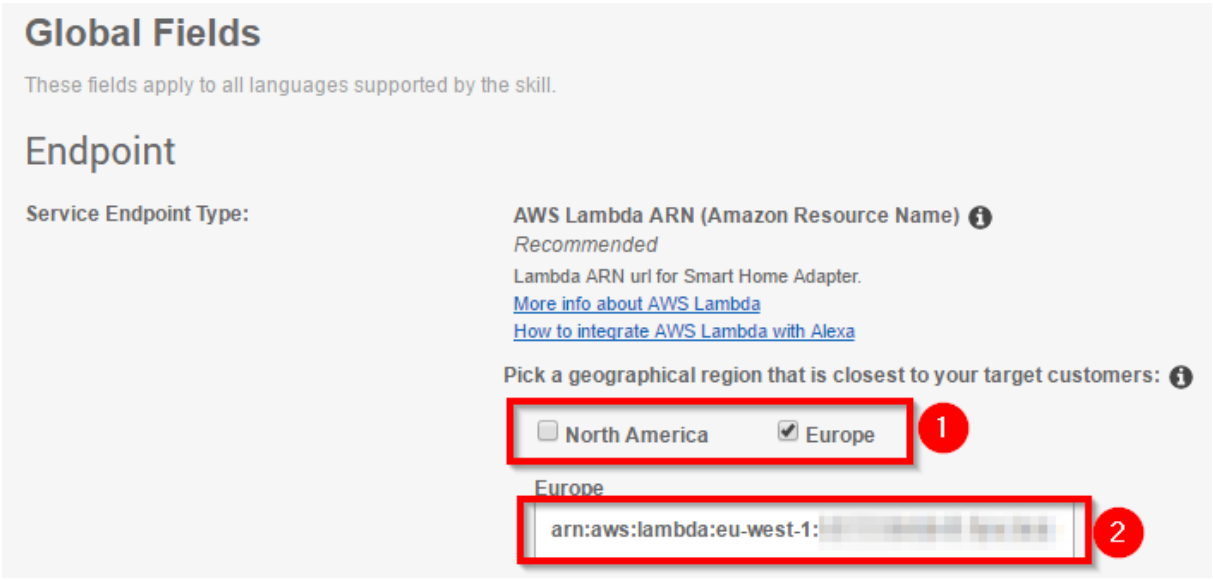
3.14 Copy ARN address to notepad (1)



Continue with Create alexa skill:

4.1 Back to the section “Configuration” from step 2.6

Select your Region (1) and input your ARN address (2) from notepad or lambda website



4.2 Set “Authorization URL“ (1)
https://www.amazon.com/ap/oa/?redirect_url=
and then copy the Redirect URL from further down the page and append it to the end of the Authorization URL
For example:
https://www.amazon.com/ap/oa/?redirect_url=https://layla.amazon.com/api/skill/link/xxxxxx

Set your “Client Id” from notepad or step 1.4. (2)

Set “Scope” (3)
profile:user_id
This will give your Alexa Skill access to a minimal amount of information about you from Amazon, in this case just your user_id

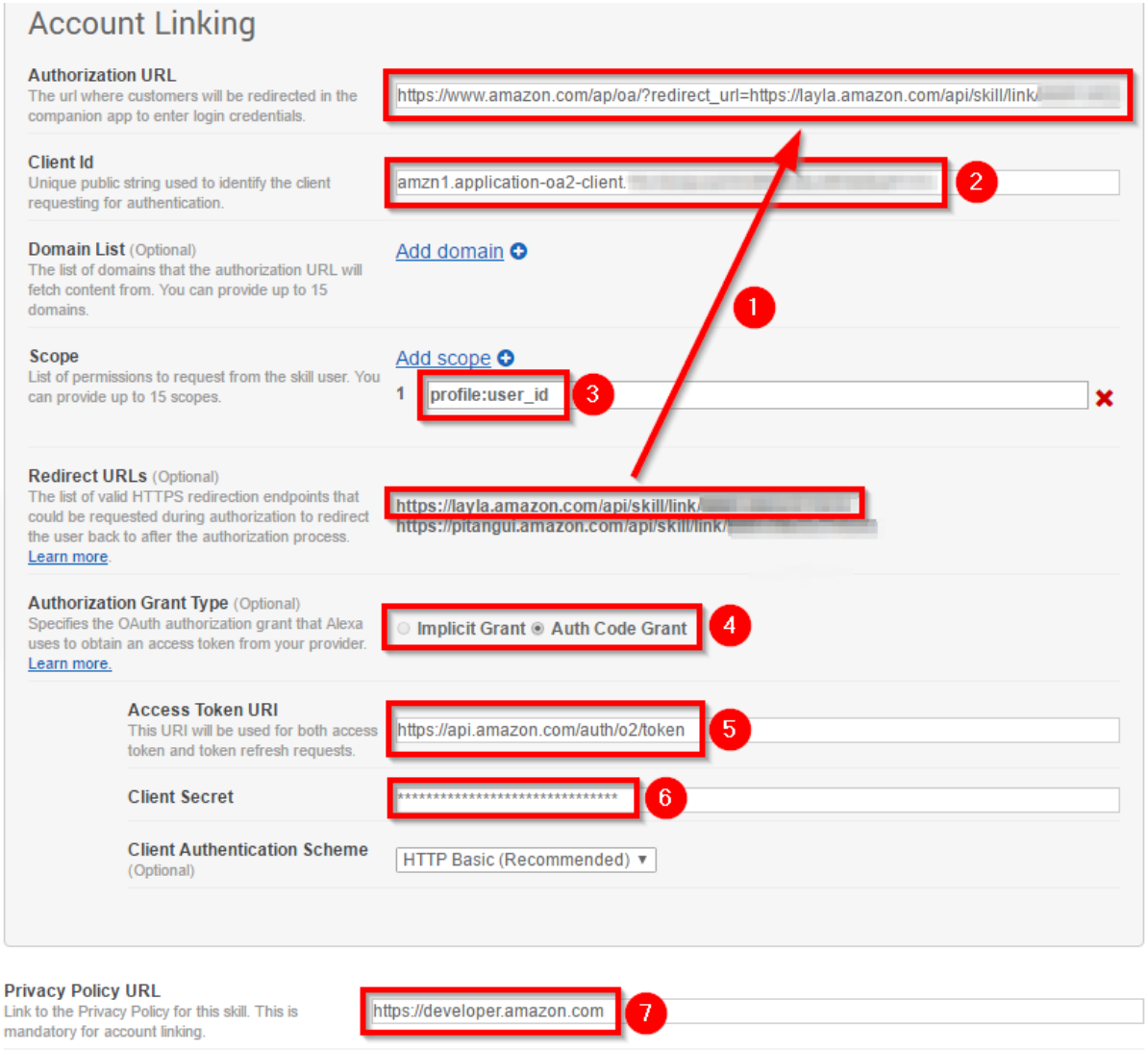
Select “Auth Code Grant” (4)

Set “Access Token URI” (5)
https://api.amazon.com/auth/o2/token

Set “Client Secret” from notepad or step 1.4 (6)

Set any “Privacy Policy URL” (7)

Click to Next



4.3 Select Yes in “Start testing this skill” and click to Next
4.4 (Optional) Type in some informations and select images
Click to Save

Link account back to your skill:

5.1 Sign in: https://developer.amazon.com or back to the first step website (OAuth2)
5.2 Click to APPS & SERVICES → Login with Amazon
5.3 Click to Manage → Web Settings
5.4 Add the two ReDirect URLs from Step 4.2
Example: https://layla.amazon.com/api/skill/link/xxxxxxxxxx
https://pitangui.amazon.com/api/skill/link/xxxxxxxxxx

Activate smart home skill in alexa:

6.1 Open alexa app or alexa website (https://alexa.amazon.com)
6.2 Click to skills and then to Your skills
6.3 Select domoticz skill and click to activate
6.4 Login with your amazon credentials
6.5 Search devices in smart home

Appendix – TESTING via Lambda:

Under the Actions dropdown:

Configure test event allows you to send requests to your domoticz and interact with it, without having to install the smart skill on your alexa.

Here are a 3 – 1 discovery, 1 for lights, 1 for scenes:

Just copy one in, change the applicationId to a Domoticz IDX and test it.

```
{
  "header": {
    "messageId": "01ebf625-0b89-4c4d-b3aa-32340e894688",
    "name": "TurnOffRequest",
    "namespace": "Alexa.ConnectedHome.Control",
    "payloadVersion": "2"
  },
  "payload": {
    "accessToken": "123",
    "appliance": {
      "additionalApplianceDetails": {
        "switchis": "On/Off",
        "WhatAmI": "light"
      },
      "applianceId": CHANGETHISTOANIDXINYOURDOMOTICZ
    }
  }
}
```

```
{
  "header": {
    "messageId": "01ebf625-0b89-4c4d-b3aa-32340e894688",
    "name": "TurnOffRequest",
    "namespace": "Alexa.ConnectedHome.Control",
```

```
    "payloadVersion": "2"
  },
  "payload": {
    "accessToken": "123",
    "appliance": {
      "additionalApplianceDetails": {
        "WhatAmI": "scene"
      },
      "applianceId": CHANGETHISTOANIDXINYOURDOMOTICZ
    }
  }
}

{
    "header": {
        "messageId": "6d6d6e14-8aee-473e-8c24-0d31ff9c17a2",
        "name": "DiscoverAppliancesRequest",
        "namespace": "Alexa.ConnectedHome.Discovery",
        "payloadVersion": "2"
    },
    "payload": {
        "accessToken": "123"
    }
}
```