

ServiceNow Integration with Alexa

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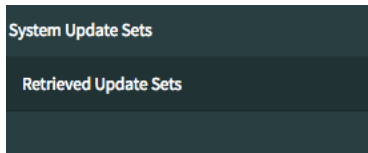
Overview

To Integrate your ServiceNow Instance with Alexa you will need to set up the following.

1. ServiceNow Instance
 - a. Retrieved Update Set
 - b. Create OAuth application registry
 - c. Create Intents
 - d. Create Phases
2. Amazon Set Up
 - a. Create Alexa Skill
 - b. Create Alexa Intent
 - c. Set Up Endpoint
 - d. Account Linking

Retrieve Update Set

1. In the ServiceNow application navigator, search Retrieved Update Sets. Click on "Retrieve Update Sets" module under "System Update Sets".

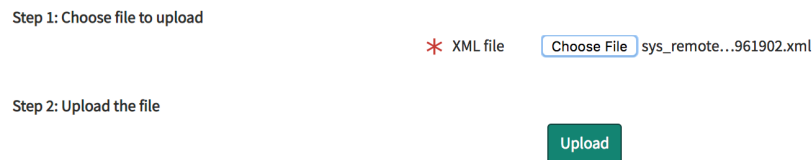


2. In the Related Links sections, click "Import Update Set from XML".

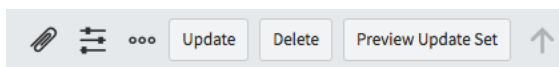
Related Links

Import Update Set from XML

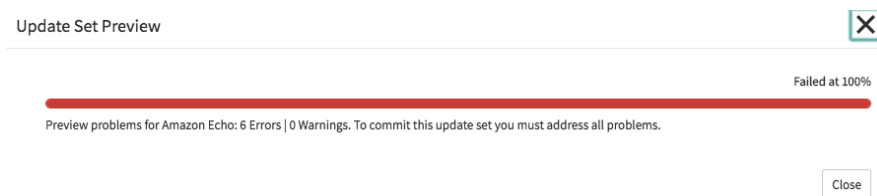
3. Click the "Choose File" button under "Step 1: Choose file to upload" section. Select the XML file. When done, click the "Upload" button under "Step 2: Upload the file".



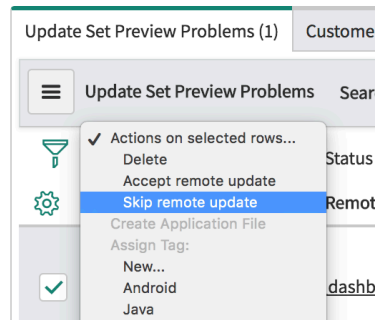
4. Open the "Amazon Echo" Update Set
5. Click on "Preview Update Set" button



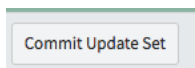
The update set will now load. When done, click the "Close" button.



- a. Under the "Update Set Preview Problems", select all the Update Set with type "Error". When done, click on the "Actions on selected row..." drop-down list and select "Skip remote update".



- b. Click on the “Commit Update Set” button. After the update set has been successfully committed 100%, close the dialog box.

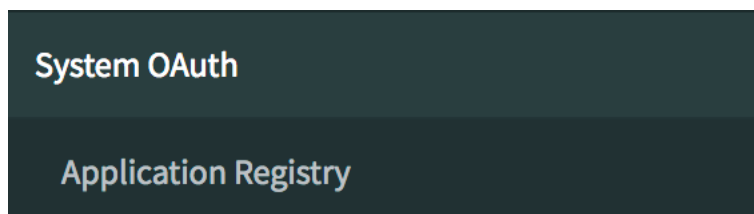


Create OAuth Application Registry

OAuth

Steps

1. Log into you ServiceNow instance, for example, <https://<yourinstancename>.service-now.com/>
2. Make sure you are in the global scope and not in an application scope
3. Go to **System OAuth > Application Registry**



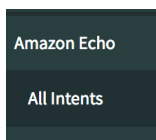
4. Click **New** button
5. Select the Create an OAuth API endpoint for external client's option.
6. Enter the following Values for the fields below:
 - a. Name = Amazon Alexa
 - b. Client Secret = alexa
 - c. Redirect URL = Skip this section until you complete “Account Linking” section in this tutorial.

* Name	<input type="text" value="Amazon Alexa"/>	Application	<input type="text" value="Global"/>	
* Client ID	<input type="text" value="bb3a48ff0d1fe700b74a80158ebcbaf0"/>	Accessible from	<input type="text" value="All application scopes"/>	
Client Secret	<input type="password" value="....."/>	Active	<input checked="" type="checkbox"/>	
Redirect URL	https://layla.amazon.com/api/skill/link/MBERWS00P6L3L , https://pitangui.amazon.com/api/skill/link/MBERWS00P6L3L , https://alexa.amazon.co.jp/api/skill/link/MBERWS00P6L3L	* Refresh Token Lifespan	<input type="text" value="8,640,000"/>	
Logo URL		* Access Token Lifespan	<input type="text" value="1,800"/>	
PKCE required	<input type="checkbox"/>			
Comments	<input type="text"/>			

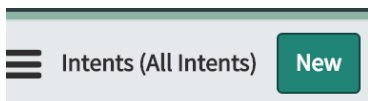
7. Take note of the fields just entered as they are custom to your implementation and will be needed during the Amazon setup phase:
 - a. Client ID
 - b. Client Secret
8. You will need to come back and enter the redirect URL once you have completed the Amazon setup. Enter the following values for the field below:
 - a. Redirect URL = Skip this section until you complete "Account Linking" section in this tutorial. Paste URL's provided in the "Account Linking" step 4 section.

Create Intents

1. In the ServiceNow application navigator, search "All Intents". Click "All Intents" module under the Amazon Echo section.



2. Click the "New" button.



3. Enter the following values for the fields below:
 - a. Name = List Active Incidents

- b. Intent keyword = ListIncidents
- c. Script (Copy the script in the screenshot below)

Name: Active: ☒

Category: Intent keyword:

Script

```

1 (function(current, content, attributes, erb, IntentUtils){
2   var msg='';
3   var introMessage = "Here is a list of active incidents: ";
4   var outroMessage = '';
5   var i = 1;
6   var gr = new GlideRecord('incident');
7   gr.setLimit(3); //display the first 3 incidents
8   gr.query();
9   while(gr.next()){
10    introMessage += '<say-as interpret-as="cardinal">' + i++ + '</say-as> ';
11    introMessage += gr.getValue("short_description") + ", ";
12  }
13  msg = "<speak>" + introMessage + "</speak>";
14  erb.setOutputSpeech("SSML", "", msg);
15  erb.setEnd(false);
16  result = erb.getResponse();
17 }}(current, content, attributes, new EchoResponseBuilder(), new IntentUtils());
  
```

4. Under the "Response attributes" section, select the "None" dropdown list option next to "Output speech format" and select "SSML". When done, click on the "submit" button.

Create Phrases

1. After submitting, open the "List Incidents" Intent.
2. Scroll down to the Phrases section and click on the "New" button.

Phrases

3. Enter the following values for the fields below:
 - a. Phrase = List Incidents
 - b. Intent = List Incidents

Phrases New record

Active: ☒

Intent:

Phrase:

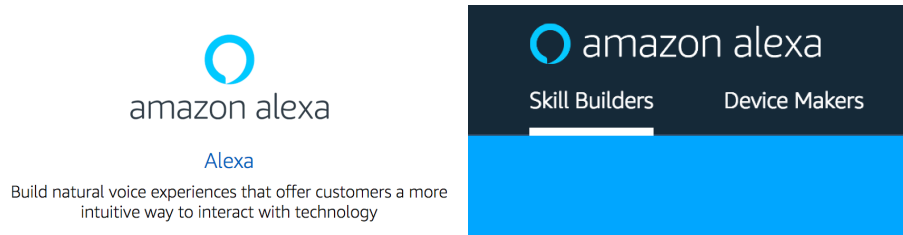
Primary: ☐


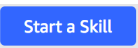
4. Click on the "Submit" button.

Amazon Setup

Create new Skill

1. Login to Amazon [Alexa Developer Console](#)
2. Click the Alexa icon and select the Skill Builders tab



3. Click the  button
4. Click the  button
5. Enter the following values:
 - a. Skill name = ServiceNow Integration

Create a new skill

Skill name

ServiceNow Integration

22/50 characters

Default language


English (US) ▼

More languages can be added to your skill after creation

6. Click on the “Create Skill” button.
7. Select the Start from scratch option and click the choose button.
8. Click the Invocation name button.

Skill builder checklist

Complete these steps to be able to test your skill using the simulator in the test tab, or with your echo device.

REQUIRED	<p>1. Invocation Name ></p> <p>Enter an invocation name for your skill</p> <div style="text-align: right;"></div>
----------	--

9. Enter the following values for the field below:
 - a. Skill Invocation Name = now

Invocation

Users say a skill's invocation name to begin an interaction with a particular custom skill. For example, if the invocation name is "daily horoscopes", users can say:

User: Alexa, ask daily horoscopes for the horoscope for Gemini


Skill Invocation Name ?

now

10. Click on the "Save Modal" button.


 Save Model

Create new Intent

1. Click the  Add next to the Intents dropdown.
2. Enter the following value for the field below:
 - a. Create custom intent = ListIncidents

Add Intent

An intent represents an action that fulfills a user's spoken request. [Learn more](#) about intents.

 Create custom intent ?

ListIncidents

Create custom Intent

3. Click on the "Create custom intent" button.

[Intents](#) / ListIncidents

Sample Utterances (0) ?

 Bulk Edit  Export

What might a user say to invoke this intent?

+

4. Enter a Sample Utterances under the “Sample Utterances” section. Enter the following value for the field below:
 - a. Sample Utterances = List Incidents
5. Press enter or click the ‘+’ symbol.

Intents / ListIncidents

Sample Utterances (1) ?

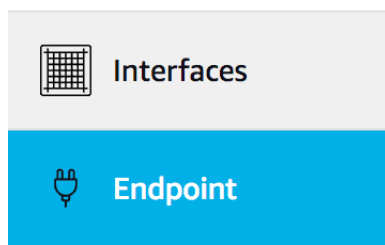
What might a user say to invoke this intent?

List Incidents

6. Click on the “Save Model” button.
7. Click on the “Build Model” button.

Endpoint

1. On the left sidebar navigation, select the “Endpoint” option.



2. Select the HTTP radio button.
3. Enter the following value in the field below replacing <yourinstancename> with your actual instance:
 - a. Default Region: https://<yourinstancename>.service-now.com/api/x_snc_amazon_echo/alex
4. Select the “My development endpoint is a sub-domain of a domain that has a wildcard certificate from a certificate authority” option from the dropdown.

Service Endpoint Type

Select how you will host your skill's service endpoint.

☐ AWS Lambda ARN [?]
(Recommended)

☒ HTTPS [?]

Default Region [?]
(Required)

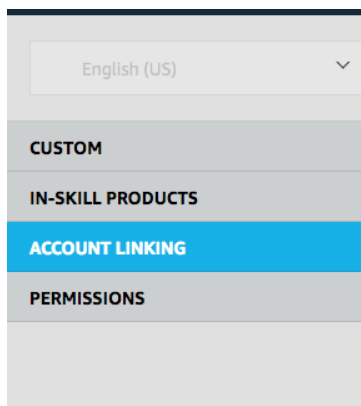
https://empdhanany.service-now.com/api/x_snc_amazon_echo/alexa

My development endpoint is a sub-domain of a domain that has a wildcard certifica...[?]

- Click on the "Save Endpoints" button.

Account Linking

- On the left sidebar navigation, select the "Account Linking" option.



- Enable "Do you allow users to create an account or link to an existing account with you?" option.

Do you allow users to create an account or link to an existing account with you?

[Learn more](#)



- Under the "Security Provider Information" section, select the "Auth Code Grant" radio button and enter the following values for the fields below:
 - Authorization URI = https://<yourinstancename>.service-now.com/oauth_auth.do
 - Access Token URI = https://<yourinstancename>.service-now.com/oauth_token.do
 - Client ID = <Client ID>

- i. To get the Client ID, in the ServiceNow application navigator, you will need to search and click “Application Registry” and open “Amazon Alexa”.

System OAuth > Application Registry > Amazon Alexa > Client ID

Application Registries
Amazon Alexa

With client application details.

Name: A unique name.

Client ID: Client ID automatically generated by ServiceNow OAuth server.

Client Secret: Client secret for the OAuth application. Leave it empty for auto-generation.

Refresh Token Lifespan: Time in seconds the Refresh Token will be valid.

Access Token Lifespan: Time in seconds the Access Token will be valid.

Redirect URL: The redirect URLs authorization server redirect to. They must be absolute URLs and

[More Info](#)

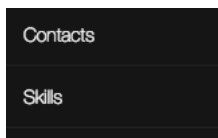
* Name

* Client ID

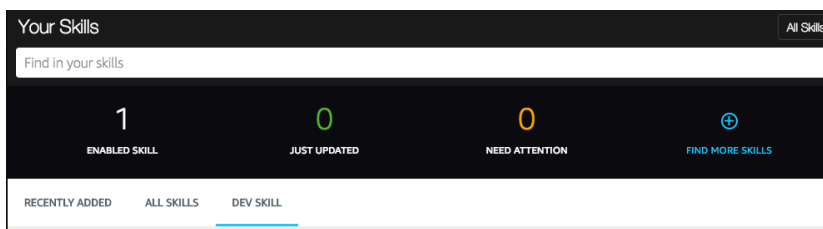
- d. Client Secret = alexa
 - e. Client Authentication Scheme = HTTP Basic (Recommended)
4. Under the “Security Provider Information” section, scroll down and find “Redirect URLs”. Copy URL’s and go back to “ServiceNow Setup OAuth” section step 8 in this tutorial.
 5. Click on the “Save” button.

Enable Skills

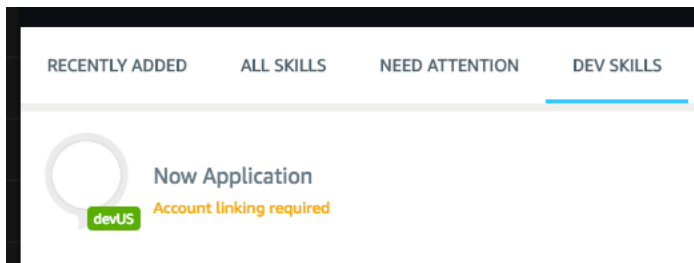
1. Go to <https://alexa.amazon.com>
2. On the left sidebar navigation, select the “Skills” option.



3. On the top right hand corner of your screen, click on “Your Skills” button.
4. Click on “DEV SKILL” option.



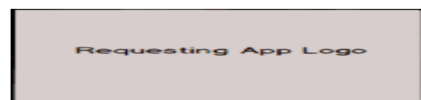
5. Select you <ServiceNow> Application



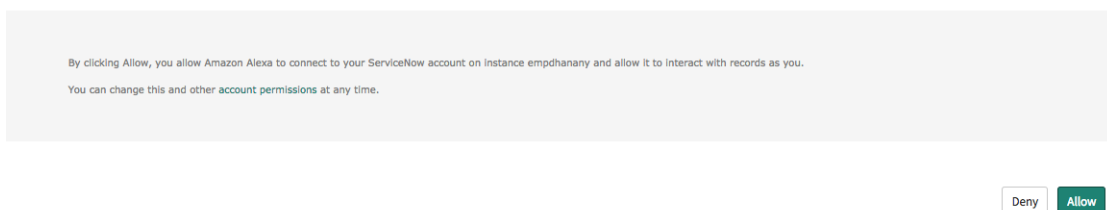
6. Click the Enable button



7. Click the “Allow” button.



Amazon Alexa would like to connect to your ServiceNow account on instance empdhanany.



8. You will receive a message saying, “Now Application has been successfully linked”.

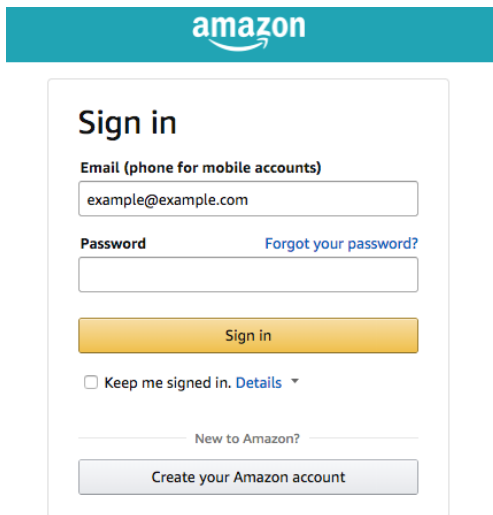
9. Exit windows

Alexa Skill Testing Tool

Testing Alexa Skill

If you do not have a device you can use echoism, a free, community-run project that is an Echo in a webpage, for testing.

1. Log in to <https://echosim.io>
2. Use Amazon credentials
 - a. Email : example@example.com
 - b. Password: xxxxx



The image shows the Amazon sign-in page. At the top is the Amazon logo. Below it is a 'Sign in' section. It includes a text input field for 'Email (phone for mobile accounts)' with the value 'example@example.com'. Below that is a 'Password' input field with a 'Forgot your password?' link. A yellow 'Sign in' button is below the password field. Underneath is a checkbox for 'Keep me signed in.' with a 'Details' link. At the bottom, there is a link for 'New to Amazon?' and a 'Create your Amazon account' button.

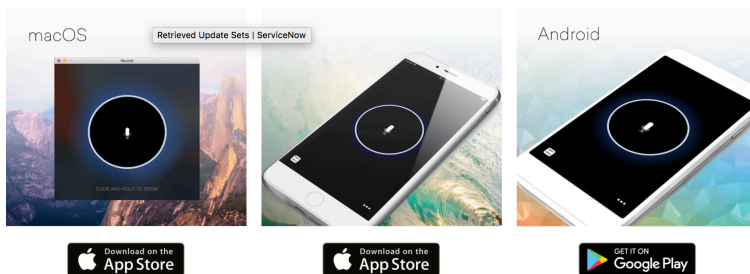
3. Click and hold the microphone button and speak a command as you would on the Echo. For example, say, "Alexa, Open Now". After invoking your skill, say "List Incidents".

Alexa Skill Testing Tool
Click and **hold** the microphone button
 or hold down the space bar on your keyboard to activate the microphone.



Testing Alexa Skill (Mobile)

1. Go to [Reverb Application](#)
2. Download the Reverb App from your App Store



3. Open the Reverb App from mobile
4. Login Using your Amazon credentials
5. Hold the microphone button and speak a command as you would on the Echo. For example, say, "Alexa, Open Now". After invoking your skill, say "List Incidents".