



Deploying Your Skill

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The Space Geek Lab steps you through setting up an Alexa Skill. The starter code can be deployed in the same way. The following step-by-step instructions assume you already have completed the steps in [Getting Started](#), and are ready to deploy your starter code.

1. Open both the Amazon Developer portal and the Amazon AWS console
2. On the Developer portal, navigate to Create the new skill with the Alexa Skills Kit in the Amazon Developer portal, and "Add a New Skill":

A screenshot of a web browser window showing the Amazon Developer Console. The URL is <https://developer.amazon.com/edw/home.html#/skills>. The page title is "Building Alexa Skills with the Alexa Skills Kit". At the top right, there is a yellow button labeled "Add a New Skill" which is circled in red. The navigation bar includes tabs for DASHBOARD, APPS & SERVICES, ALEXA (which is selected), REPORTING, SUPPORT, DOCUMENTATION, and SETTINGS.

3. Add a "Name" and "Invocation Name" for the skill and "Save" it. Then click "Next".

A screenshot of the "Create a New Alexa Skill" form in the Amazon Developer Console. The URL is <https://developer.amazon.com/edw/home.html#/skill/create/>. The "ALEXA" tab is selected in the navigation bar. The form has several sections: "Skill Information" (with a checklist), "Interaction Model" (selected), "Configuration" (selected), "SSL Certificate" (selected), "Test" (selected), "Publishing Information" (selected), and "Privacy & Compliance" (selected). In the "Skill Type" section, "Custom Interaction Model" is selected. Under "Language", "English (U.S.)" is chosen. The "Name" field contains "My history skill" and the "Invocation Name" field contains "My History Stuff". Below these, there is a "Global Fields" section and an "Audio Player" section. A red arrow points to the "Save" button at the bottom left of the form.

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English (U.S.) Add a New Language

Skill Information

Interaction Model

Configuration

Test

Publishing Information

Privacy & Compliance

Skills Beta Testing NEW

Status: Not yet eligible ?

Try the skill builder (beta), an intuitive interface for building your interaction model and creating dialog prompts.

Launch Skill Builder BETA

Intent Schema

The schema of user intents in JSON format. For more information, see [Intent Schema](#). Also see [built-in slots](#) and [built-in intents](#).

```

1 {
2   "intents": [
3     {
4       "intent": "GetNewFactIntent"
5     },
6     {
7       "intent": "AMAZON.HelpIntent"
8     },
9     {
10      "intent": "AMAZON.StopIntent"
11    }
12  }

```

Custom Slot Types (Optional)

Custom slot types to be referenced by the Intent Schema and Sample Utterances. For general information about custom slots, see [Custom Slot Types](#).

Enter Type

TYPE

Enter Values

Values must be line-separated

1

Cancel **Add**

Sample Utterances

These are what people say to interact with your skill. Type or paste in all the ways that people can invoke the intents. [Learn more](#)

Up to 3 of these will be used as Example Phrases, which are hints to users.

1 GetNewFactIntent a fact
2 GetNewFactIntent tell me a fact
3 GetNewFactIntent give me a fact
4 GetNewFactIntent give me something

Save **Submit for Certification** **Next**

5. From the src directory of your starter code, zip index.js, facts.js, and the node_modules directory together. This zip file will be uploaded next to AWS Lambda.
6. Navigate to AWS console and choose the AWS Lambda Service. Click “Create a Lambda Function”.

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The screenshot shows the AWS Lambda Functions interface. On the left, there's a sidebar with 'AWS Lambda' and 'Functions' selected. At the top, there's a breadcrumb trail 'Lambda > Functions' and a 'Create a Lambda function' button with a red arrow pointing to it. Below the button is a search bar and a table header with columns for 'Function name', 'Description', 'Runtime', 'Code size', and 'Last Modified'.

7. Select the "alexa-skill-kit-sdk-factskill" blueprint.

The screenshot shows the 'Select blueprint' step in the AWS Lambda wizard. On the left, there's a sidebar with 'Select blueprint' selected. The main area shows a grid of blueprint options. One option, 'alexa-skill-kit-sdk-factskill', is highlighted with a red arrow. It has a description: 'Demonstrate a basic fact skill built with the ASK NodeJS SDK'. Other options include 'Blank Function', 'kinesis-firehose-syslog-to-json', 'batch-get-job-python27', 'kinesis-firehose-apachelog-to-j...', and 'cloudfront-modify-response-he...'. Each option has a 'Select runtime' dropdown and a download icon.

8. Click the gray box to configure the trigger (the skill we defined in the Developer portal) and choose "Alexa Skills Kit" from the drop down menu. Click "Next".

The screenshot shows the 'Configure triggers' step in the AWS Lambda wizard. On the left, there's a sidebar with 'Configure triggers' selected. The main area shows a configuration panel with a heading 'Configure triggers' and a note: 'You can choose to add a trigger that will invoke your function.' A warning message in a box says: 'This function contains external libraries. Uploading a new file will override these libraries.' Below this is a diagram showing 'Alexa Skills Kit' connected to 'Lambda'. A red arrow points to the 'Alexa Skills Kit' icon. At the bottom, there's a note: 'Choosing Submit will create a resource policy that allows the Amazon Alexa service to call your Lambda function. To configure the Alexa service to work with your Lambda function, go to the Alexa Developer portal. Learn more about the Lambda permission model.' At the very bottom right, there are 'Cancel', 'Previous', and 'Next' buttons, with a red arrow pointing to the 'Next' button.

9. On the Configure Function page, give your function a name and description.

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Configure function

A Lambda function consists of the custom code you want to execute. [Learn more about Lambda functions.](#)

Name* myHistoryFunction

Description demonstrate a history fact skill

Runtime* Node.js 4.3

10. Scrolling down to the “Lambda function handler and role”, choose the existing `lambda_basic_execution` role you set up during the lab. Click “Next”. If you did not do that previously, you will need to review the [Amazon instructions](#) to set one up.

Lambda function handler and role

Handler* index.handler

Role* Choose an existing role

Existing role* lambda_basic_execution

11. On the Review page, click “Create function”. You should get a new page that includes a “Congratulations!”.

12. Upload the zip file you created earlier with the starter code files. Do this by selecting the “Code entry type” drop down menu as “Upload a ZIP file”. Click the “Upload” button to find your file and then click “Save”.

Amazon Apps & Services X Lambda Management Co X

Secure https://console.aws.amazon.com/lambda/home?region=us-east-1#/functions/myHistoryFunction?tab=code

Services Resource Groups

AWS Lambda

Dashboard Functions

Lambda > Functions > myHistoryFunction

Qualifiers Test Actions

ARN - arn:aws:lambda:us-east-1:299752466861:function:myHistoryFunction

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The screenshot shows the 'Global Fields' section of the AWS Lambda function configuration. Under 'Service Endpoint Type', the 'AWS Lambda ARN (Amazon Resource Name)' option is selected (indicated by a red arrow). Below it, the 'Region' dropdown is set to 'North America' (also indicated by a red arrow). A specific ARN is entered: `arn:aws:lambda:us-east-1:299752466861:function:`. A red box highlights this ARN input field.

14. The starter code is ready to try. Enter “a fact” in the Text portion of the Service Simulator. If everything is set up correctly, you will see both a Lambda Request and a Lambda Response.

Service Simulator

Use Service Simulator to test your lambda function: `arn:aws:lambda:us-east-1:299752466861:function:myHistoryFunction` ▾
Note: Service Simulator does not currently support testing audio player directives and customer account linking.

The screenshot shows the Service Simulator interface. In the 'Text' tab, the 'Enter Utterance' field contains the text "a fact" (indicated by a red arrow). Below it, the 'Ask My history skill' button is highlighted with a red arrow. The 'Lambda Request' pane displays the JSON payload for the Lambda function, and the 'Lambda Response' pane shows the JSON response, which includes the text "Here's your fact: The term, Artificial Intelligence, refers to the ability of machines to perform tasks that normally require human intelligence, such as visual perception, speech recognition, decision-making, and language translation." A red arrow points from the response text to a 'Listen' button, which has a red arrow pointing to it as well.



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