



alex

Workshop - 1st steps

Created by Andreas Grohmann / andreas.grohmann@gmx.de / twitter.com/grohmeo

agenda

- getting started
- useful links
- handle rest call

getting started

visit amazon developer portal

<https://developer.amazon.com/>

The screenshot shows the Amazon Developer Portal homepage. At the top, there's a navigation bar with links for 'Apps und Spiele', 'Alexa', 'Services und APIs', 'Geräte', 'Blog', 'Dokumentation', 'Support', 'Anmelden', 'Deutsch ▾', and a search icon. Below the navigation, a large section titled 'App Success Toolbox' is displayed. It features a sub-section titled 'Nutzen Sie eine Vielzahl an Ressourcen zum Erstellen, Bewerben und Monetarisieren Ihrer Apps.' with a 'Mehr Infos »' link. To the right of this text is a diagram illustrating various app development and distribution components: a circuit board, a smartphone, a cloud, a document, and a speaker. Below this section is a horizontal row of five cards: 'Übermitteln' (with a download icon), 'Testen...' (with an Android icon), 'Dokumentation' (with a brain icon), 'Fire TV' (with a TV icon), and 'Fire Tablets' (with a tablet icon). Further down, there are sections for 'Neuerungen für App- und Spieleentwickler' (with three small icons) and 'Ihre App testen' (with a yellow banner that says 'Apps funktionieren').

amazon Developer

Apps und Spiele Alexa Services und APIs Geräte Blog Dokumentation Support Anmelden Deutsch ▾

App Success Toolbox

Nutzen Sie eine Vielzahl an Ressourcen zum Erstellen, Bewerben und Monetarisieren Ihrer Apps.

Mehr Infos »

Übermitteln

Übermitteln Sie Ihre App an den Amazon Appstore fü...

Testen...

Testen Sie Ihre App hinsichtlich Kompatibilität mit Fire TV, Fire Tablet und Android-Geräten.

Dokumentation

Dokumentation, die Ihnen die Entwicklung von Apps für den Amazon Appstore erleichtert.

Fire TV

Entwickeln Sie Apps für Fire TV.

Fire Tablets

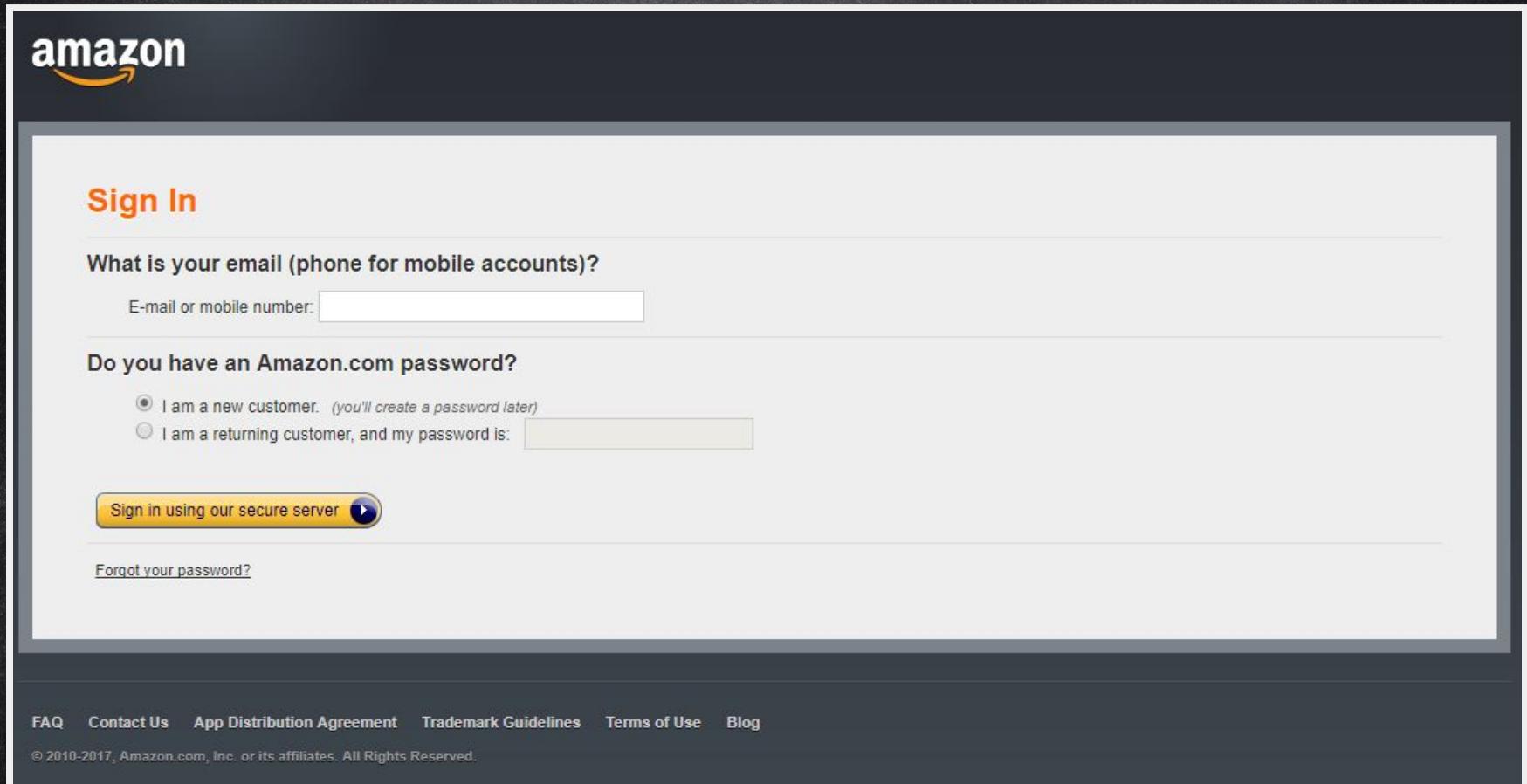
Entwickeln Sie Apps für Fire Tablets.

Neuerungen für App- und Spieleentwickler

Ihre App testen

Apps funktionieren

create amazon developer account



The image shows the Amazon sign-in page. At the top left is the Amazon logo. Below it, the word "Sign In" is displayed in orange. A question "What is your email (phone for mobile accounts)? " is followed by a text input field labeled "E-mail or mobile number:". Below this, a question "Do you have an Amazon.com password? " is followed by two radio button options: "I am a new customer. (you'll create a password later)" and "I am a returning customer, and my password is:" followed by another text input field. At the bottom left is a yellow "Sign in using our secure server" button with a play icon. To its right is a link "Forgot your password?". At the very bottom of the page, there are links for "FAQ", "Contact Us", "App Distribution Agreement", "Trademark Guidelines", "Terms of Use", and "Blog". A copyright notice at the bottom states "© 2010-2017, Amazon.com, Inc. or its affiliates. All Rights Reserved."

amazon

Sign In

What is your email (phone for mobile accounts)?

E-mail or mobile number:

Do you have an Amazon.com password?

I am a new customer. (you'll create a password later)

I am a returning customer, and my password is:

Sign in using our secure server 

[Forgot your password?](#)

[FAQ](#) [Contact Us](#) [App Distribution Agreement](#) [Trademark Guidelines](#) [Terms of Use](#) [Blog](#)

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tab on "Alexa", select "Getting Started"

amazon // DEVELOPER CONSOLE

ANDREAS GROHMANN – GROHMIQ | SIGN OUT | ENGLISH ▾

DASHBOARD APPS & SERVICES ALEXA REPORTING SUPPORT DOCUMENTATION SETTINGS

Get started with Alexa

Add new voice-enabled capabilities using the Alexa Skills Kit, or add voice-powered experiences to your connected devices with the Alexa Voice Service.



Alexa Skills Kit
Easily add new skills to Alexa
[Get Started >](#)



Alexa Voice Service
Bring voice capabilities to your connected device
[Get Started >](#)

FAQs Contact Us App Distribution Agreement Trademark Guidelines Terms of Use Job Opportunities

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select "Add a New Skill"

The screenshot shows the Alexa Skills Kit dashboard in the Amazon Developer Console. The top navigation bar includes links for DASHBOARD, APPS & SERVICES, ALEXA (which is highlighted in orange), REPORTING, SUPPORT, DOCUMENTATION, and SETTINGS. The user is signed in as ANDREAS GROHMAN - GROHMIO. A yellow button labeled "Add a New Skill" is visible on the right. Below the navigation, a section titled "Building Alexa Skills with the Alexa Skills Kit" provides links to "Getting Started with the Alexa Skills Kit" and "Creating an AWS Lambda Function for a Custom Skill". It also encourages visiting the "Alexa Developer Forum". The main content area displays a table of existing skills:

Name	Language	Type	Modified	Status	Actions
JenaDevs View Skill ID	German	Custom	7/4/17	Development	Metrics Edit Delete
Minecraft Helper View Skill ID	German	Custom	7/2/17	Development	Metrics Edit Delete
Twitter View Skill ID	German	Custom	7/1/17	Development	Metrics Edit Delete

enter general skill informations

- Language - German
- Name - Meet Up
- Invocation Name - meet up

Create a New Alexa Skill

Skill Information

Interaction Model

Configuration

SSL Certificate

Test

Publishing Information

Privacy & Compliance

Skill Type
Define a custom interaction model or use one of the predefined skill APIs. [Learn more](#)

Custom Interaction Model
 Smart Home Skill API
 Flash Briefing Skill API
 Video Skill API

Language
Language of your skill

Name
Name of the skill that is displayed to customers in the Alexa app. Must be between 2-50 characters.

Invocation Name
The name customers use to activate the skill. For example, "Alexa ask Tide Pooler...".

Global Fields
These fields apply to all languages supported by the skill.

Audio Player
Does this skill use the audio player directives? Yes No
[Learn more](#)

Video App
Does this skill use the video app directives? [Learn more](#) Yes No

Render Template
Does this skill use the Render Template directives? Yes No
[Learn more](#)

Save

select "Save", "Next"

 **Meet Up**
[Custom](#)
ID: amzn1.ask.skill.ffc7468a-7715-47bc-80af-2f149bf2158f

German Add a New Language

Skill Information 	Skill Type Define a custom interaction model or use one of the Custom predefined skill APIs . Learn more
Interaction Model 	
Configuration 	
Test 	
Publishing Information 	
Privacy & Compliance 	

Skills Beta Testing NEW
Status: Not yet eligible 

Global Fields
These fields apply to all languages supported by the skill.

Audio Player
Does this skill use the audio player directives? Yes No
[Learn more](#)

Video App
Does this skill use the video app directives? [Learn more](#) Yes No

Render Template
Does this skill use the Render Template directives? Yes No
[Learn more](#)

[Save](#) [Submit for Certification](#) [Next](#)

add Intent Schema

```
{"intents": [  
    {"intent": "RecipeIntent", "slots": [{"name" : "Item", "type": "LIST_OF_ITEMS"}]},  
    {"intent": "AMAZON.RepeatIntent"},  
    {"intent": "AMAZON.HelpIntent"},  
    {"intent": "AMAZON.StopIntent"},  
    {"intent": "AMAZON.CancelIntent"}  
]
```

German 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 {"intents": [
2     {"intent": "RecipeIntent", "slots": [{"name": "Item", "type": "LIST_OF_ITEMS"}]},
3     {"intent": "AMAZON.RepeatIntent"},
4     {"intent": "AMAZON.HelpIntent"},
5     {"intent": "AMAZON.StopIntent"},
6     {"intent": "AMAZON.CancelIntent"}
7 ]
8 ]
```

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	
---	--

enter "Sample Utterances"

```
RecipeIntent wie kann ich ein {Item} bauen
RecipeIntent wie kann ich e {Item} bauen
RecipeIntent wie kann ich en {Item} bauen
RecipeIntent wie kann ich {Item} bauen
RecipeIntent wie kann ich ein {Item} craften
RecipeIntent wie kann ich e {Item} craften
RecipeIntent wie kann ich en {Item} craften
RecipeIntent wie kann ich {Item} craften
RecipeIntent wie kann ich ein {Item} bekommen
RecipeIntent wie kann ich e {Item} bekommen
RecipeIntent wie kann ich en {Item} bekommen
RecipeIntent wie kann ich {Item} bekommen
RecipeIntent wie kann ich ein {Item} machen
RecipeIntent wie kann ich e {Item} machen
RecipeIntent wie kann ich en {Item} machen
RecipeIntent wie kann ich {Item} machen
RecipeIntent wie kannst du ein {Item} bauen
RecipeIntent wie kannst du e {Item} bauen
RecipeIntent wie kannst du en {Item} bauen
RecipeIntent wie kannst du {Item} bauen
RecipeIntent wie kannst du ein {Item} craften
```

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 RecipeIntent wie kann ich ein {Item} bauen
- 2 RecipeIntent wie kann ich e {Item} bauen
- 3 RecipeIntent wie kann ich en {Item} bauen
- 4 RecipeIntent wie kann ich {Item} bauen
- 5 RecipeIntent wie kann ich ein {Item} craften
- 6 RecipeIntent wie kann ich e {Item} craften
- 7 RecipeIntent wie kann ich en {Item} craften
- 8 RecipeIntent wie kann ich {Item} craften
- 9 RecipeIntent wie kann ich ein {Item} bekommen
- 10 RecipeIntent wie kann ich e {Item} bekommen
- 11 RecipeIntent wie kann ich en {Item} bekommen

Save

Submit for Certification

Next

enter "Custom Slot Type"

Type:

LIST_OF_ITEMS

Values:

Schneegolem
Quarzsäule
Feuerwerksrakete
Kaninchenragout
Kessel
Steinschaufel
Roter Teppich
Buch und Feder
Rahmen
Karte
Klebriger Kolben
Brot
Holzspitzhacke
Schere
Rohes Rindfleisch
Glatter roter Sandstein
Prismarinkristalle
Eichenholzstufe
Holzs Schwert
Treppe
Tropenholzzaun

select "Add"

Status: Not yet eligible 

```
5 {"intent": "AMAZON.StopIntent"},  
6 {"intent": "AMAZON.CancelIntent"}  
7 ]  
8 }
```

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

Enter Values
Values must be line-separated

```
1 Schneegolem  
2 Quarzsäule  
3 Feuerwerksrakete  
4 Kaninchenragout  
5 Kessel  
6 Steinschaufel  
7 Roter Teppich  
8 Buch und Feder  
9 Rahmen  
10 Karte  
11 Klebriger Kolben
```

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 RecipeIntent wie kann ich ein {Item} bauen  
2 RecipeIntent wie kann ich e {Item} bauen  
3 RecipeIntent wie kann ich en {Item} bauen
```

select "Save", "Next"

Skills Beta Testing NEW

Status: Not yet eligible [i](#)

```
2 {"intent": "RecipeIntent", "slots": [{"name": "Item", "type": "LIST_OF_ITEMS"}]},  
3 {"intent": "AMAZON.RepeatIntent"},  
4 {"intent": "AMAZON.HelpIntent"},  
5 {"intent": "AMAZON.StopIntent"},  
6 {"intent": "AMAZON.CancelIntent"}  
7 ]  
8 }
```

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](#).

Type	Values	Delete	Edit
LIST_OF_ITEMS	Schneegolem Quarzsäule Feuerwerksrakete Kaninchenragout Kessel Steinschaufel Roter T...	Delete	Edit

[Add Slot Type](#)

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 RecipeIntent wie kann ich ein {Item} bauen  
2 RecipeIntent wie kann ich e {Item} bauen  
3 RecipeIntent wie kann ich en {Item} bauen  
4 RecipeIntent wie kann ich {Item} bauen  
5 RecipeIntent wie kann ich ein {Item} craften  
6 RecipeIntent wie kann ich e {Item} craften  
7 RecipeIntent wie kann ich en {Item} craften  
8 RecipeIntent wie kann ich {Item} craften  
9 RecipeIntent wie kann ich ein {Item} bekommen  
10 RecipeIntent wie kann ich e {Item} bekommen  
11 RecipeIntent wie kann ich en {Item} bekommen
```

[Save](#) [Submit for Certification](#) [Next](#)

visit amazon web services

<https://aws.amazon.com/>

The screenshot shows the German version of the AWS homepage. At the top, there's a navigation bar with 'Menü', the Amazon logo, language 'Deutsch', account 'Mein Konto', and a 'Registrieren' button. The main banner features a blue background with white text: 'Nutzen Sie Amazon EC2, S3 und vieles mehr – Ein ganzes Jahr lang kostenlos'. It includes a call-to-action 'Kostenloses Konto erstellen' and a link 'Details zum kostenlosen Kontingent für AWS anzeigen'. Below the banner are four cards: 'ERSTE SCHRITTE', 'AWS-PREISE', 'KOSTENLOSES KONTINGENT FÜR AWS', and 'DATENVERARBEITUNG: AWS BATCH'. Each card has a small icon and a brief description. At the bottom, there's a section titled 'Entdecken Sie unsere Produkte'.

Nutzen Sie Amazon EC2, S3 und vieles mehr – Ein ganzes Jahr lang kostenlos

Weitere Informationen zum kostenlosen Kontingent von AWS »

Kostenlos bei AWS einsteigen

Kostenloses Konto erstellen

Amazon DynamoDB
25 GB Speicher und bis zu 20 Millionen Anfragen im Monat

Details zum kostenlosen Kontingent für AWS anzeigen »

ERSTE SCHRITTE

Erfahren Sie, wie Sie in wenigen Minuten mit der AWS-Nutzung beginnen können

AWS-PREISE

Optimieren Sie Ihre Ausgaben für variable und feste Verarbeitungslasten

KOSTENLOSES KONTINGENT FÜR AWS

Verschaffen Sie sich 12 Monate kostenlos praktische Erfahrung mit AWS-Produkten

DATENVERARBEITUNG: AWS BATCH

Vollständig verwaltete Batch-Verarbeitung jeder Größenordnung

Entdecken Sie unsere Produkte

create aws account



Anmelden oder ein AWS-Konto erstellen

Wie lautet Ihre E-Mail-Adresse (oder Telefonnummer)?

E-Mail oder Mobiltelefonnummer:

- Ich bin ein neuer Kunde.
- Ich bin bereits Kunde und mein Passwort ist:

Weiter (über den Sicherheitsserver)

[Haben Sie Ihr Passwort vergessen?](#)

Machen Sie sich mit den Funktionen [AWS Identity and Access Management](#) und [AWS Multi-Factor Authentication](#) vertraut, die zur Erhöhung der Sicherheit Ihres AWS-Kontos dienen. Sehen Sie sich die vollständigen Angebotsbedingungen des [kostenlosen Nutzungskontingents für AWS](#) an.



The advertisement features a blue background with a network of white dots and lines. In the center, there's a large circular gauge with a needle pointing towards the right. To the left of the gauge is a smaller circle containing a shield icon. To the right is a circle with a crossed-out dollar sign and a minus sign. On the far left, there's a circle with a circular arrow icon. On the right side, there's a quote: "10-mal schneller als unsere MySQL-Umgebung. Es funktioniert einfach!" followed by "-Alfresco". At the bottom right, there's a button labeled "Weitere Informationen".

Amazon Aurora | Datenbank der Unternehmensklasse zu einem Zehntel der Kosten.

„10-mal schneller als unsere MySQL-Umgebung. Es funktioniert einfach!“

-Alfresco

Weitere Informationen

Informationen zur Anmeldung bei Amazon.com

Amazon Web Services nutzt Informationen Ihres Amazon.com-Kontos, um Sie zu identifizieren und den Zugriff auf Amazon Web Services zuzulassen. Die Nutzung dieser Website unterliegt unseren [Nutzungsbedingungen](#) und [Datenschutzrichtlinien](#) (siehe die folgenden Links). Die

make sure "EU (Ireland)" is selected

The screenshot shows the AWS Management Console homepage. At the top right, there is a dropdown menu for 'Region' with 'Ireland' highlighted in orange. A tooltip for 'Helpful tips' is visible, listing various AWS regions. Below the region dropdown, there are sections for 'AWS services', 'Build a solution', and 'Learn to build'. The 'AWS services' section includes links for Lambda, CloudWatch, IAM, EC2, and Billing. The 'Build a solution' section features wizards for launching a virtual machine, building a web app, hosting a static website, connecting an IoT device, starting a development project, and registering a domain. The 'Learn to build' section provides step-by-step guides and labs.

Services | Resource Groups | [Andreas Grohmann](#) | **Ireland** | Support

AWS services

Find a service by name or feature (for example, EC2, S3 or VM, storage).

Recently visited services

Lambda CloudWatch IAM
EC2 Billing

All services

Build a solution

Get started with simple wizards and automated workflows.

Launch a virtual machine With EC2 or Lightsail ~1-2 minutes

Build a web app With Elastic Beanstalk ~6 minutes

Host a static website With S3, CloudFront, Route 53 ~5 minutes

Connect an IoT device With AWS IoT ~5 minutes

Start a development project With CodeStar ~5 minutes

Register a domain With Route 53 ~3 minutes

See more

Learn to build

See all [guides](#)

Helpful tips

US East (N. Virginia)
US East (Ohio)
US West (N. California)
US West (Oregon)
Canada (Central)

EU (Ireland)

EU (Frankfurt)
EU (London)
Asia Pacific (Singapore)
Asia Pacific (Sydney)
Asia Pacific (Seoul)
Asia Pacific (Tokyo)
Asia Pacific (Mumbai)
South America (São Paulo)

Migrate from Oracle to Amazon Aurora

Easily process real-time, streaming data with Amazon Kinesis Analytics. [Learn more](#)

select "Lambda" (Search/icon)

Services ▾ Resource Groups ▾ ⚙

Andreas Grohmann ▾ Ireland ▾ Support ▾

AWS services

Lambda

Lambda
Run Code without Thinking about Servers

CodeBuild
Build and Test Code

Lex
Build Voice and Text Chatbots

Build a solution

Get started with simple wizards and automated workflows.

 Launch a virtual machine With EC2 or Lightsail ~1-2 minutes	 Build a web app With Elastic Beanstalk ~6 minutes	 Host a static website With S3, CloudFront, Route 53 ~5 minutes
 Connect an IoT device With AWS IoT ~5 minutes	 Start a development project With CodeStar ~5 minutes	 Register a domain With Route 53 ~3 minutes

See more

Learn to build

Learn to deploy your solutions through step-by-step guides, labs, and videos.

See all ↗

Helpful tips

 Manage your costs
Get real-time billing alerts based on your cost and usage budgets. [Start now](#)

 Create an organization
Use AWS Organizations for policy-based management of multiple AWS accounts. [Start now](#)

Explore AWS

New Product Announcements

View the latest announcements from the AWS Summit - San Francisco. [Learn more](#) ↗

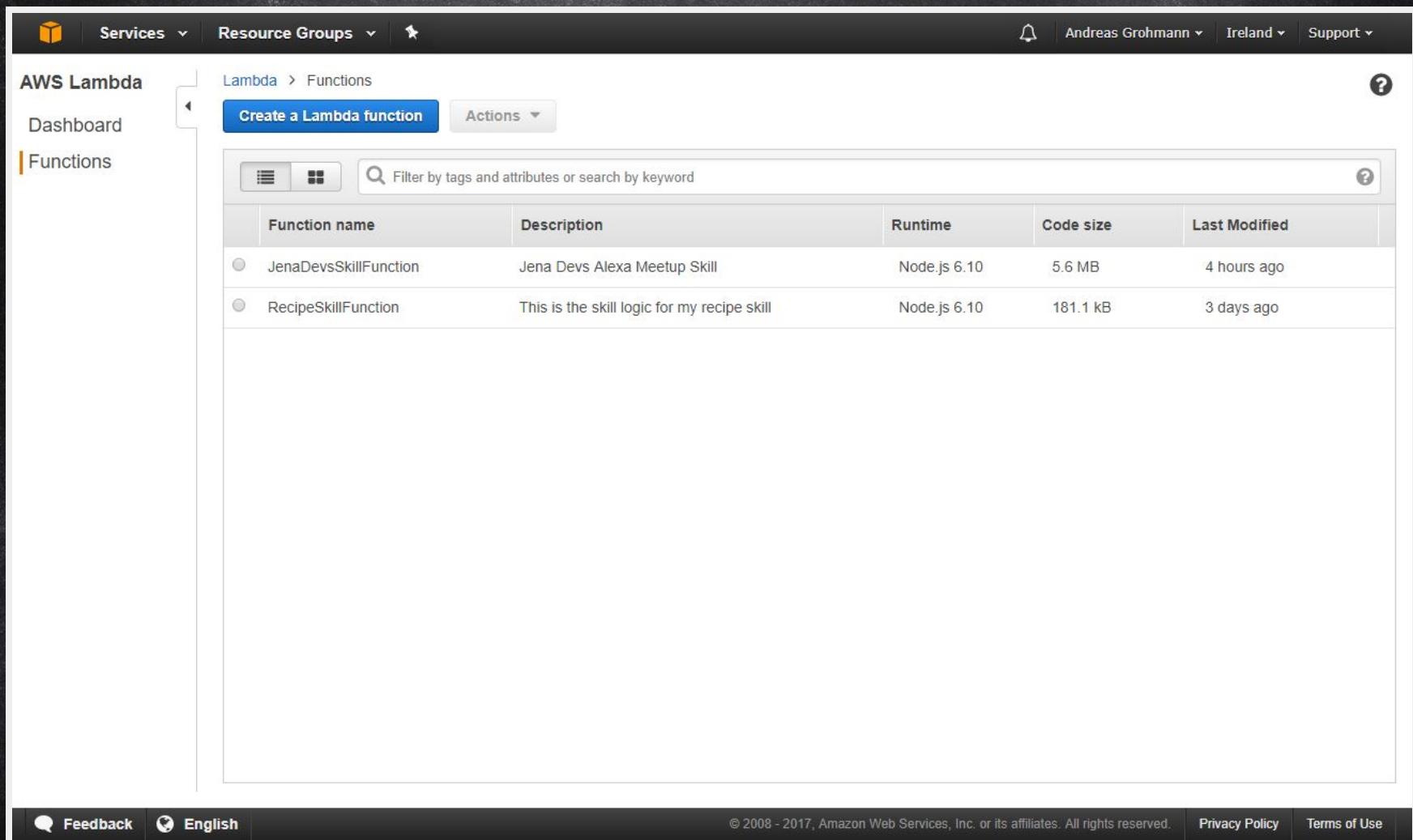
Migrate from Oracle to Amazon Aurora

Learn how to migrate from Oracle to Amazon Aurora with minimal downtime. [View project](#) ↗

Introducing Amazon Kinesis Analytics

Easily process real-time, streaming data with Amazon Kinesis Analytics. [Learn more](#) ↗

select "Create a Lambda function"



The screenshot shows the AWS Lambda Functions page. The left sidebar has 'AWS Lambda' selected under 'Functions'. The main area shows a table of existing functions:

Function name	Description	Runtime	Code size	Last Modified
JenaDevsSkillFunction	Jena Devs Alexa Meetup Skill	Node.js 6.10	5.6 MB	4 hours ago
RecipeSkillFunction	This is the skill logic for my recipe skill	Node.js 6.10	181.1 kB	3 days ago

At the top, there is a 'Create a Lambda function' button. The top navigation bar includes 'Services', 'Resource Groups', a user dropdown for 'Andreas Grohmann', and links for 'Ireland' and 'Support'.

select blueprint

- runtime - Node.js 6.10
- filter - Alexa
- blueprint - alexa-skill-kit-sdk-howtoskill

The screenshot shows the AWS Lambda 'New function' wizard. The 'Select blueprint' step is active, indicated by an orange bar. On the left, a sidebar lists steps: 'Select blueprint' (highlighted), 'Configure triggers', 'Configure function', and 'Review'. The main area is titled 'Select blueprint' and contains a search bar with 'Node.js 6.10' and 'Alexa' selected. Below the search are five blueprint cards:

- Blank Function**: Configure your function from scratch. Define the trigger and deploy your code by stepping through our wizard. (nodejs6.10 · alexa)
- alexa-skill-kit-sdk-factskill**: Demonstrate a basic fact skill built with the ASK NodeJS SDK. (nodejs6.10 · alexa)
- alexa-skill-kit-sdk-triviaskill**: Demonstrate a basic trivia skill built with the ASK NodeJS SDK. (nodejs6.10 · alexa)
- alexa-skills-kit-color-expert**: Demonstrates a basic skill built with the Amazon Alexa Skills Kit. (nodejs6.10 · alexa)
- alexa-skill-kit-sdk-howtoskill**: Demonstrate a basic How-to skill built with the ASK NodeJS SDK. (nodejs6.10 · alexa)

At the bottom right of the main area is a 'Cancel' button. The footer includes links for Feedback, English, Copyright (2008-2017), Privacy Policy, and Terms of Use.

select Trigger "Alexa Skill Kit"

Screenshot of the AWS Lambda "Configure triggers" step for a new function.

The page title is "Lambda > New function using blueprint alexa-skill-kit-sdk-howtoskill".

The left sidebar shows steps: "Select blueprint", "Configure triggers" (highlighted), "Configure function", and "Review".

The main content area is titled "Configure triggers" with the sub-instruction: "You can choose to add a trigger that will invoke your function."

A message box states: "This function contains external libraries. Uploading a new file will override these libraries." with a close button "X".

The "Lambda" icon is shown above a list of integration options:

- API Gateway
- AWS IoT
- Alexa Skills Kit (selected)
- Alexa Smart Home
- CloudFront
- CloudWatch Events
- CloudWatch Logs
- CodeCommit

Buttons at the bottom right include "Remove", "Cancel", "Previous", and "Next".

Page footer includes links: "Feedback", "English", "© 2008 - 2017, Amazon Web Services, Inc. or its affiliates. All rights reserved.", "Privacy Policy", and "Terms of Use".

select "Next"

Servicess Resource Groups

Lambda > New function using blueprint alexa-skill-kit-sdk-howtoskill

Select blueprint

Configure triggers

Configure function

Review

Configure triggers

You can choose to add a trigger that will invoke your function.

This function contains external libraries. Uploading a new file will override these libraries.

Alexa Skills Kit → Lambda

Lambda will add the necessary permissions for Amazon Alexa to invoke your Lambda function from this trigger. Learn more about the Lambda permissions model.

Cancel Previous Next

Feedback English

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configure lambda function

- Name - MeetUpSkillFunction
- Description - skill logic for our meetup skill
- Runtime - Node.js 6.10

The screenshot shows the AWS Lambda 'Configure function' page for a new function named 'MeetUpSkillFunction'. The configuration details include:

- Name***: MeetUpSkillFunction
- Description**: Demoskill logic for our meetup skill
- Runtime***: Node.js 6.10

The 'Lambda function code' section displays the following code snippet:

```
50 RECIPES: recipes.RECIPE_DE_DE,
51 SKILL_NAME: 'Assistent für Minecraft in Deutsch',
52 WELCOME_MESSAGE: 'Willkommen bei %. Du kannst beispielsweise die Frage stellen: Welche Rezepte',
53 WELCOME_REPROMT: 'Wenn du wissen möchtest, was du sagen kannst, sag einfach „Hilf mir“.',
54 DISPLAY_CARD_TITLE: '%s - Rezept für %s.',
55 HELP_MESSAGE: 'Du kannst beispielsweise Fragen stellen wie „Wie geht das Rezept für“ oder du kan',
56 HELP_REPROMT: 'Du kannst beispielsweise Sachen sagen wie „Wie geht das Rezept für“ oder du kann',
57 STOP_MESSAGE: 'Auf Wiedersehen!',
58 RECIPE_REPEAT_MESSAGE: 'Sage einfach „Wiederholen“.',
59 RECIPE_NOT_FOUND_MESSAGE: 'Tut mir leid, ich kenne derzeit ',
60 RECIPE_NOT_FOUND_WITH_ITEM_NAME: 'das Rezept für %s nicht. ',
61 RECIPE_NOT_FOUND_WITHOUT_ITEM_NAME: 'dieses Rezept nicht. '
```

configure lambda function

- Handler - MeetUpSkillFunction
- Role - Create a custom role

The screenshot shows the AWS Lambda function configuration interface. At the top, there is a code editor window displaying a portion of a JavaScript file:

```
103     } this.emit(':ask', speechOutput, repromptSpeech);
104   }
105 },
106 'AMAZON.HelpIntent': function () {
107 }
```

Below the code editor, a note about environment variables is displayed:

You can define Environment Variables as key-value pairs that are accessible from your function code. These are useful to store configuration settings without the need to change function code. [Learn more](#). For storing sensitive information, we recommend encrypting values using KMS and the console's encryption helpers.

Below the note, there is a checkbox labeled "Enable encryption helpers".

The main configuration area is titled "Lambda function handler and role". It includes fields for "Handler" (set to "index.handler") and "Role". The "Role" field has a dropdown menu open, showing options: "Create a custom role" (highlighted with a blue border), "Choose an existing role", "Create new role from template(s)", and "Create a custom role".

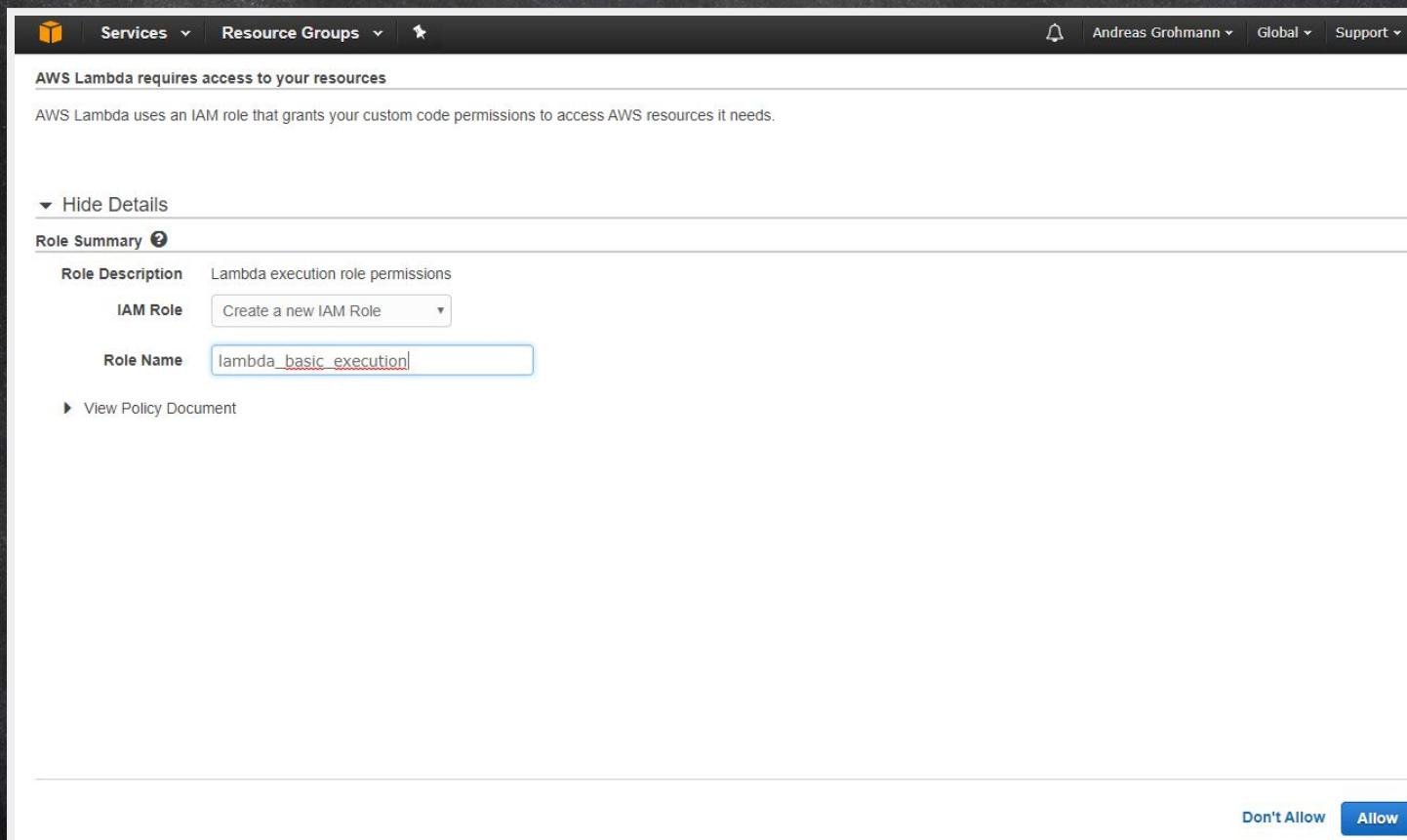
Below the configuration area, there are sections for "Tags" and "Advanced settings". A note at the bottom states: "* These fields are required.".

At the bottom right, there are "Cancel", "Previous", and "Next" buttons. The "Next" button is highlighted in blue.

At the very bottom of the screen, there is a footer bar with links: "Feedback", "English", "© 2008 - 2017, Amazon Web Services, Inc. or its affiliates. All rights reserved.", "Privacy Policy", and "Terms of Use".

role settings

- IAM Role - Create a new IAM Role
- Role Name - lambda_basic_execution
- press "Allow"



review configuration, then "Create Function"

Lambda > New function using blueprint alexa-skill-kit-sdk-howtoskill

Select blueprint
Configure triggers
Configure function
Review

Review

Please review your Lambda function details. You can go back to edit changes for each section. When you are ready, click **Create function** to complete the setup process.

Triggers

 Alexa Skills Kit

Lambda function

Name MeetUpSkillFunction

Description Demoskill logic for our meetup skillInstrate a basic How-to skill built with the ASK NodeJS SDK

Runtime Node.js 6.10

Environment variables

Handler index.handler

Existing role* lambda_basic_execution

Tags

DLQ Resource

copy "ARN" code, up right

The screenshot shows the AWS Lambda console interface. At the top, there's a navigation bar with 'Services' (selected), 'Resource Groups', a search bar, and user information for 'Andreas Grohmann' (Ireland, Support). Below the navigation is the 'AWS Lambda' sidebar with 'Dashboard' and 'Functions' options. The main content area shows the path 'Lambda > Functions > MeetUpSkillFunction'. A blue header bar displays the ARN: 'arn:aws:lambda:...'. Below this, a green message box says: 'Congratulations! Your Lambda function "MeetUpSkillFunction" has been successfully created and configured with as a trigger in a disabled state. We recommend testing the function behavior before enabling the trigger.' A yellow warning box below it states: 'This function contains external libraries. Uploading a new file will override these libraries.' The main panel has tabs for 'Code', 'Configuration', 'Triggers' (which is selected and highlighted in orange), 'Tags', and 'Monitoring'. Under the 'Triggers' tab, there's a section for 'Alexa Skills Kit' with a 'Delete' button. It includes a note: 'To configure the Alexa service to work with your Lambda function, go to the Alexa Developer portal.' Below this are buttons for '+ Add trigger' and '⟳ Refresh triggers', and a link to 'View function policy'.

back to Alexa Skill Configuration

- Service Endpoint Type - AWS Lambda ARN
- Europe - X
- Europe - arn:aws:lambda:eu-west-X:XXXXXXXXXXXXXX:function:MeetUpSkillFunction
- press "Save", "Next"

The screenshot shows the 'Meet Up' skill configuration page in the Amazon Developer Console. The skill is identified by its ID: amzn1.ask.skill.ffc7488a-7715-47bc-80af-2f1149bf2158f. The 'Global Fields' section is set to 'German'. The 'Endpoint' section specifies the 'Service Endpoint Type' as 'AWS Lambda ARN (Amazon Resource Name)' (Recommended), which is highlighted in blue. The 'Region' is set to 'Europe'. The 'Endpoint' field contains the value 'arn:aws:lambda:eu-west-1:XXXXXXXXXXXXXX:function:MeetUpSkillFunction'. Below this, there's a note about AWS Lambda being a server-less compute service. The 'Account Linking' section shows that account linking is disabled ('No'). The 'Permissions' section indicates that users can access resources and device addresses.

Skills Beta Testing NEW
Status: Not yet eligible i

Global Fields
These fields apply to all languages supported by the skill.

Endpoint

Service Endpoint Type:

AWS Lambda ARN (Amazon Resource Name) i
Recommended
AWS Lambda is a server-less compute service that runs your code in response to events and automatically manages the underlying compute resources for you.
[More info about AWS Lambda](#)
[How to integrate AWS Lambda with Alexa](#)

HTTPS

Pick a geographical region that is closest to your target customers: i

North America Europe

Europe
arn:aws:lambda:eu-west-1:XXXXXXXXXXXXXX:function:MeetUpSkillFunction

Account Linking

Do you allow users to create an account or link to an existing account with you? Yes No
[Learn more](#)

Permissions

Request users to access resources and Device Address

test or speak directly to Alexa

- Enter Utterance - Wie baue ich ein Schneegolem

Enter Utterance

Wie baue ich ein Schneegolem

Ask Meet Up Reset

Service Request

```

1 {
2   "session": {
3     "sessionId": "SessionId.7c4086f8-788d-4779-ac
4     "application": {
5       "applicationId": "amzn1.ask.skill.ffc7468a-
6     },
7     "attributes": {},
8     "user": {
9       "userId": "amzn1.ask.account.AHUhJ6UIQ3K655
10    },
11    "new": true
12  },
13  "request": {
14    "type": "IntentRequest",
15    "requestId": "EdwRequestId.bdd1596b-0b49-4a65
16    "timestamp": "2017-09-19T12:55:25Z"

```

Service Response

```

12  },
13  "reprompt": {
14    "outputSpeech": {
15      "type": "SSML",
16      "ssml": "<speak> Sage einfach „Wiederhol
17    }
18  },
19  "speechletResponse": {
20    "outputSpeech": {
21      "ssml": "<speak> Ein Schneegolem kann e
22    },
23    "card": {
24      "title": "Assistent für Minecraft in Deut
25

```

Listen

Echo Show Render Response (beta)

Assistent für Minecraft in Deutsch - Rezept für schneegolem.

Ein Schneegolem kann
erschaffen werden, indem ein
Kürbis auf zwei auf dem

back to Lambda Configuration, play around

- select "Code" tab

The screenshot shows the AWS Lambda console interface. At the top, there are navigation links for 'Services', 'Resource Groups', and a user profile for 'Andreas Grohmann'. Below the header, there are tabs for 'Qualifiers', 'Test', and 'Actions'. On the left sidebar, there are links for 'Dashboard' and 'Functions'. A success message box states: 'Congratulations! Your Lambda function "MeetUpSkillFunction" has been successfully created and configured with as a trigger in a disabled state. We recommend testing the function behavior before enabling the trigger.' Below this, a note says: 'This function contains external libraries. Uploading a new file will override these libraries.' The main area is titled 'Code' and contains a code editor with the following content:

```
43      translation: {
44        RECIPES: recipes.RECIPE_EN_GB,
45        SKILL_NAME: 'British Minecraft Helper',
46      },
47    },
48  },
49  'de': {
50    translation: {
51      RECIPES: recipes.RECIPE_DE_DE,
52      SKILL_NAME: 'Assistent für Minecraft in Deutsch',
53      WELCOME_MESSAGE: 'Willkommen bei %. Du kannst beispielsweise die Frage stellen: Welche Rezepte gibt es für eine T',
54      WELCOME_REPROMPT: 'Wenn du wissen möchtest, was du sagen kannst, sag einfach „Hilf mir“.',
55      DISPLAY_CARD_TITLE: '%s - Rezept für %.',
56      HELP_MESSAGE: 'Du kannst beispielsweise Fragen stellen wie „Wie geht das Rezept für“ oder du kannst „Beenden“ sage',
57      HELP_REPROMPT: 'Du kannst beispielsweise Sachen sagen wie „Wie geht das Rezept für“ oder du kannst „Beenden“ sagen',
58      STOP_MESSAGE: 'Auf Wiedersehen!',
59      RECIPE_REPEAT_MESSAGE: 'Sage einfach „Wiederholen“.',
60      RECIPE_NOT_FOUND_MESSAGE: 'Tut mir leid, ich kenne derzeit ',
61      RECIPE_NOT_FOUND_WITH_ITEM_NAME: 'das Rezept für %s nicht. ',
62      RECIPE_NOT_FOUND_WITHOUT_ITEM_NAME: 'dieses Rezept nicht. ',
63    },
64  },
```

customize some code

from

```
// ...
'de': {
    translation: {
        RECIPES: recipes.RECIPE_DE_DE,
        SKILL_NAME: 'Assistent für Minecraft in Deutsch',
    }
// ...
```

to

```
// ...
'de': {
    translation: {
        RECIPES: recipes.RECIPE_DE_DE,
        SKILL_NAME: 'Softwerkskammer Meetup Skill in Deutsch',
    }
// ...
```

back to Lambda Configuration, play around

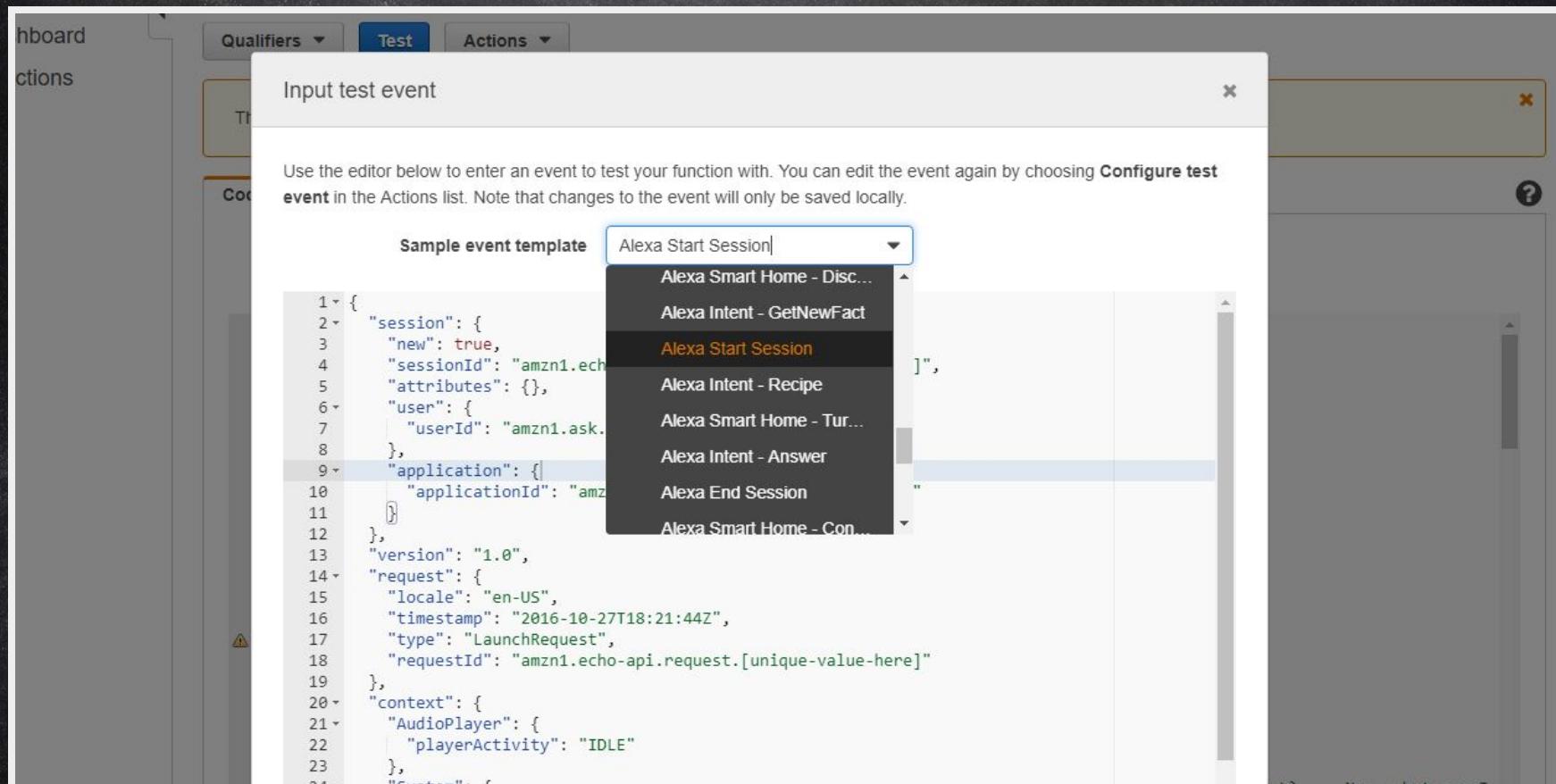
- press "Save and test"

The screenshot shows the AWS Lambda function configuration interface. At the top, there are tabs for Services, Resource Groups, and Actions. Below that, a message box says: "Congratulations! Your Lambda function "MeetUpSkillFunction" has been successfully created and configured with as a trigger in a disabled state. We recommend testing the function behavior before enabling the trigger." Another message box below it states: "This function contains external libraries. Uploading a new file will override these libraries." The main area shows the "Code" tab selected, with a code editor containing the following JavaScript code:

```
47 },
48 'de': {
49   translation: {
50     RECIPES: recipes.RECIPE_DE_DE,
51     SKILL_NAME: 'Softwerkskammer Meetup Skill in Deutsch',
52     WELCOME_MESSAGE: 'Willkommen bei %. Du kannst beispielsweise die Frage stellen: Welche Rezepte gibt es für eine T',
53     WELCOME_REPROMPT: 'Wenn du wissen möchtest, was du sagen kannst, sag einfach „Hilf mir.“',
54     DISPLAY_CARD_TITLE: '%s - Rezept für %s.',
55     HELP_MESSAGE: 'Du kannst beispielsweise Fragen stellen wie „Wie geht das Rezept für“ oder du kannst „Beenden“ sage',
56     HELP_REPROMPT: 'Du kannst beispielsweise Sachen sagen wie „Wie geht das Rezept für“ oder du kannst „Beenden“ sagen',
57     STOP_MESSAGE: 'Auf Wiedersehen!',
58     RECIPE_REPEAT_MESSAGE: 'Sage einfach „Wiederholen“.',
59     RECIPE_NOT_FOUND_MESSAGE: 'Tut mir leid, ich kenne derzeit ',
60     RECIPE_NOT_FOUND_WITH_ITEM_NAME: 'das Rezept für %s nicht. ',
61     RECIPE_NOT_FOUND_WITHOUT_ITEM_NAME: 'dieses Rezept nicht. ',
62     RECIPE_NOT_FOUND_REPROMPT: 'Womit kann ich dir sonst helfen?';
63   },
64 },
65 };
```

select your initial test request

- Sample event template - Alexa Start Session



how to change initial test request

- Actions - Configure test event

The screenshot shows the AWS Lambda console interface. On the left, there's a sidebar with 'Dashboard' and 'Functions'. The main area has tabs for 'Qualifiers', 'Test' (which is selected), and 'Actions'. Under 'Actions', there are four sub-tabs: 'Code', 'Configuration' (which is selected), 'Monitoring', and a question mark icon. A dropdown menu is open over the 'Actions' tab, with 'Configure test event' highlighted in orange. Other options in the dropdown include 'Publish new version', 'Create alias', 'Delete function', and 'Export function'. Below the dropdown, there's a code editor window containing sample Alexa skill code. At the bottom of the screen, there's a message indicating a successful execution result.

Execution result: succeeded (logs)

The area below shows the result returned by your function execution. Learn more about returning results from your function.

```
{  
  "version": "1.0",  
  "response": {  
    "outputSpeech": {  
      "type": "SSML",  
      "ssml": "<speak> Welcome to American Minecraft Helper. You can ask a question like, what's the recipe for a chest? ... Now, what can I help you with? </speak>"  
    },  
    "shouldEndSession": false,  
    "reprompt": {  
      "text": "You can ask a question like, what's the recipe for a chest? ... Now, what can I help you with?"  
    }  
  }  
}
```

change initial test request

- change ""locale": "en-US"
- change ""locale": "de-DE"
- select "Save and test"

The screenshot shows the AWS Lambda Test Editor interface. On the left, there's a sidebar with 'Dashboard' and 'Functions'. The main area has tabs for 'Quicksight' and 'Code'. A modal window is open, prompting the user to enter a test event. The modal includes a 'Sample event template' dropdown set to 'Alexa Start Session', a code editor with line numbers, and a preview pane on the right.

Use the editor below to enter an event to test your function with. You can edit the event again by choosing [Configure test event](#) in the Actions list. Note that changes to the event will only be saved locally.

Sample event template: Alexa Start Session

```
10     "application": {
11       "applicationId": "amzn1.ask.skill.[unique-value-here]"
12     },
13     "version": "1.0",
14     "request": {
15       "locale": "de-DE",
16       "timestamp": "2016-10-27T18:21:44Z",
17       "type": "LaunchRequest",
18       "requestId": "amzn1.echo-api.request.[unique-value-here]"
19     },
20     "context": {
21       "AudioPlayer": {
22         "playerActivity": "IDLE"
23       },
24       "System": {
25         "device": {
26           "supportedInterfaces": {
27             "AudioPlayer": {}
28           }
29         },
30         "application": {
31           "applicationId": "amzn1.ask.skill.[unique-value-here]"
32         },
33         "user": {
34           "userId": "amzn1.ask.account.[unique-value-here]"
35         }
36       }
37     }
38 }
```

what can I help you with? </sp>

Cancel Save Save and test

check result or speak to alexa

The screenshot shows the AWS Lambda Test interface. At the top, there are tabs for Qualifiers, Test (which is selected), and Actions. Below that is a navigation bar with Code, Configuration, Triggers, Tags, and Monitoring. The main area displays the function code and its execution results.

Code entry type: Edit code inline

```
1  /* eslint-disable func-names */
2  /* eslint quote-props: ["error", "consistent"]*/
3  /**
4   * This sample demonstrates a sample skill built with Amazon Alexa Skills nodejs
5   * skill development kit.
6   * This sample supports multiple languages (en-US, en-GB, de-GB).
7   * The Intent Schema, Custom Slot and Sample Utterances for this skill, as well
8   * as testing instructions are located at https://github.com/alexa/skill-sample-nodejs-howto
9  */
10 
```

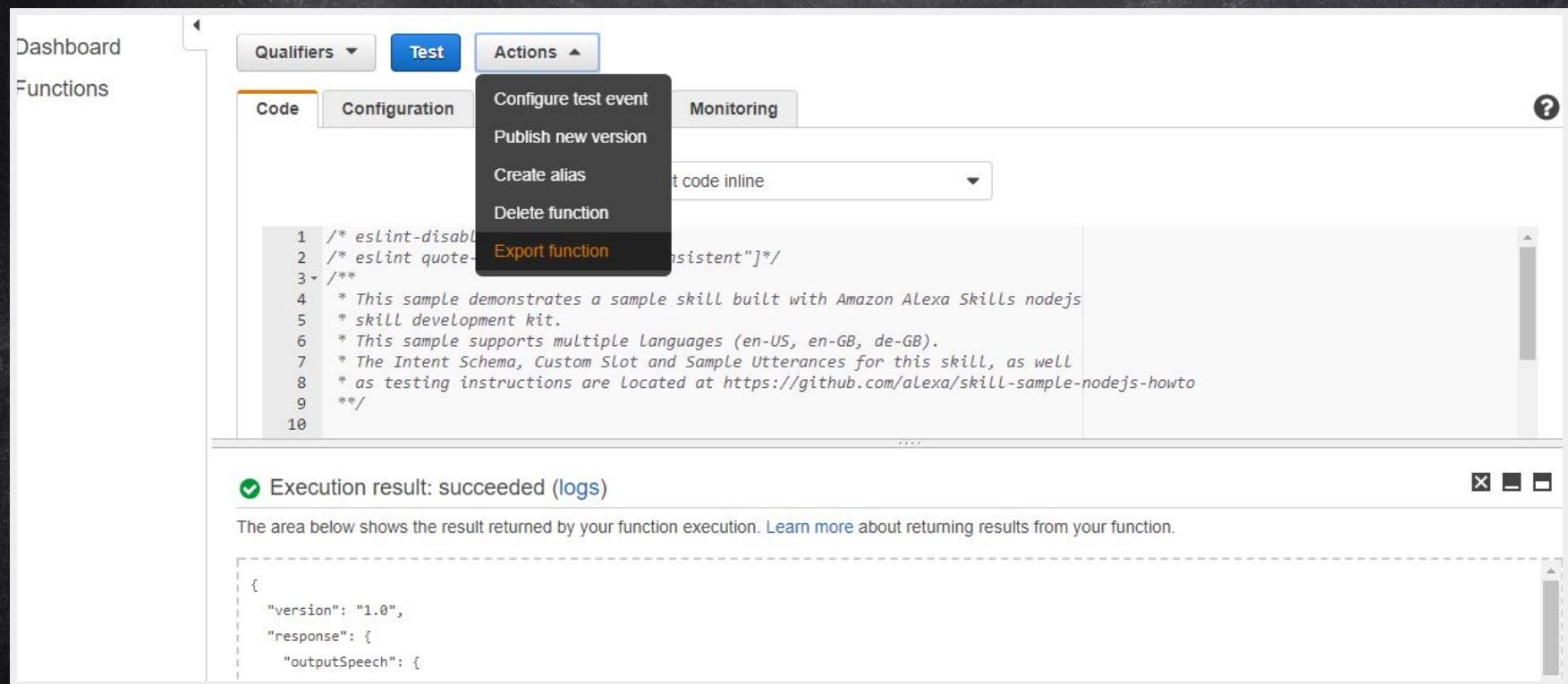
Execution result: succeeded (logs)

The area below shows the result returned by your function execution. Learn more about returning results from your function.

```
{  
  "version": "1.0",  
  "response": {  
    "outputSpeech": {  
      "type": "SSML",  
      "ssml": "<speak> Willkommen bei Softwerkskammer Meetup Skill in Deutsch. Du kannst beispielsweise die Frage stellen: Welche Rezepte gibt es für eine Truhe  
</speak>"  
    },  
    "shouldEndSession": false,  
    "reprompt": {  
      "text": "Willkommen bei Softwerkskammer Meetup Skill in Deutsch. Du kannst beispielsweise die Frage stellen: Welche Rezepte gibt es für eine Truhe"  
    }  
  }  
}
```

get the whole source code

- Actions - Export function
- press "Download deployment package"
- extract "*.zip"



The screenshot shows the AWS Lambda Functions console. In the top navigation bar, the 'Actions' tab is selected. A dropdown menu is open under the 'Actions' tab, with the 'Export function' option highlighted. Below the dropdown, the function's code is displayed in a code editor. At the bottom of the screen, there is a success message and a JSON execution result.

Execution result: succeeded (logs)

```
{  
  "version": "1.0",  
  "response": {  
    "outputSpeech": {  
      "text": "Hello from Lambda!"  
    }  
  }  
}
```

useful links

- AWS getting started
- official how to tutorial
- google search skill
- alexa github repos
- Built-In Intents
- alexa sdk nodejs

Workshop REST call

clone our meetup repo

<https://github.com/jenadevs/jenadevs-meetup-010-alexa>

The screenshot shows a GitHub repository page. At the top, there's a navigation bar with links for 'This repository' and 'Search', and tabs for 'Pull requests', 'Issues', 'Marketplace', and 'Gist'. On the right side of the header are icons for user profile, plus sign, and other repository actions.

The main title of the repository is 'jenadevs / jenadevs-meetup-010-alexa'. To the right of the title are buttons for 'Watch' (with 3 notifications), 'Star' (0 stars), 'Fork' (0 forks), and 'Edit'.

Below the title, there are several navigation links: 'Code' (selected), 'Issues 0', 'Pull requests 0', 'Projects 0', 'Wiki', 'Settings', and 'Insights'.

A note below the navigation links states: 'No description, website, or topics provided.' with a link to 'Add topics'.

Key statistics are displayed: '3 commits', '1 branch', '0 releases', and '2 contributors'.

Branch selection dropdown: 'Branch: master ▾'. Buttons for 'New pull request' and file operations ('Create new file', 'Upload files', 'Find file') are also present.

The commit history is listed:

- agrohmann alexa meetup start up - Latest commit 9cd3c50 19 hours ago
- meetup-skill/lambda-src - alexa meetup start up 19 hours ago
- orga - Add flyer. a day ago
- README.md - Initial commit 29 days ago
- README.md

The repository name 'jenadevs-meetup-010-alexa' is displayed prominently at the bottom of the page.

prepare

get sources

```
$ git clone https://github.com/jenadevs/jenadevs-meetup-010-alexa.git  
$ cd jenadevs-meetup-010-alexa/meetup-skill/lambda-src
```

(optional) - install additional modules e.g. 'request', js runtime required

```
$ npm install request
```

```
cmd npm
I:\github\jenadevs-meetup-010-alexa\meetup-skill\lambdaSrc>npm install request
[.....] | extract:request: sill doParallel extract 68
```

```
cmd Node.js command prompt
| `-- mime-db@1.27.0
+-- oauth-sign@0.8.2
+-- performance-now@0.2.0
+-- qs@6.4.0
+-- safe-buffer@5.1.1
+-- stringstream@0.0.5
+-- tough-cookie@2.3.2
| `-- punycode@1.4.1
+-- tunnel-agent@0.6.0
`-- uuid@3.1.0

npm [WARN enoent] ENOENT: no such file or directory, open 'I:\github\jenadevs-meetup-010-alexa\meetup-skill\lambdaSrc\package.json'
npm [WARN] lambda-src No description
npm [WARN] lambda-src No repository field.
npm [WARN] lambda-src No README data
npm [WARN] lambda-src No license field.

I:\github\jenadevs-meetup-010-alexa\meetup-skill\lambdaSrc>
```

**make code changes "index.js", prepare
sources for upload**

Dieser PC > INTENSO (l:) > github > jenadevs-meetup-010-alexa > meetup-skill > lambda-src

	Name	Änderungsdatum	Typ	Größe
riff	node_modules	05.07.2017 14:07	Dateiordner	
nte	index.js	04.07.2017 18:06	JavaSkriptdatei	7 KB

Archive name and parameters

General Advanced Options Files Backup Time Comment

Archive name: lambda-src.zip

Update mode: Add and replace files

Archive format: ZIP RAR RAR5

Compression method: Normal

Dictionary size: 32 KB

Archiving options:

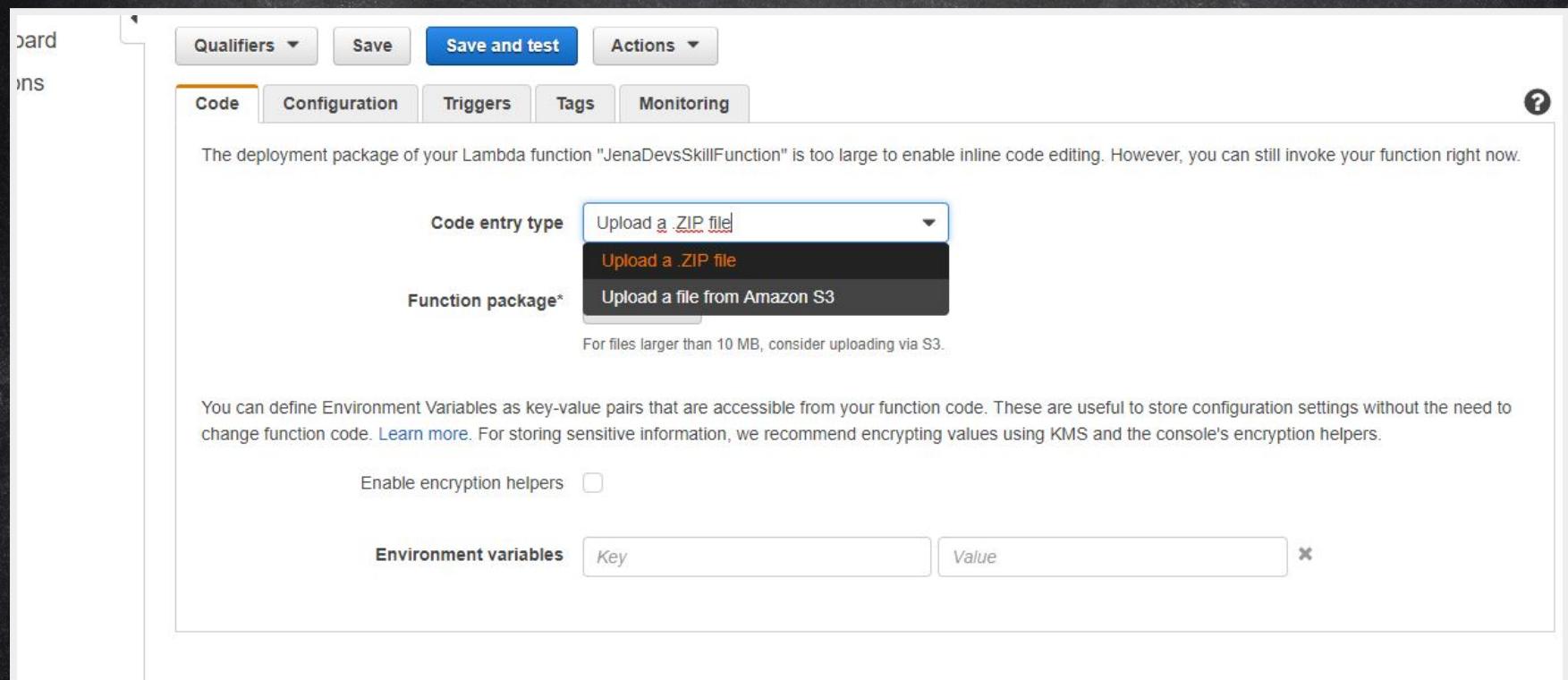
- Delete files after archiving
- Create SFX archive
- Create solid archive
- Add recovery record
- Test archived files
- Lock archive

Split to volumes, size: B

OK Abbrechen Hilfe

back to aws lambda, upload zip file

- Code entry type - Upload a Zip file
- press "Save and test"



where to find the logs

The deployment package of your Lambda function "JenaDevsSkillFunction" is too large to enable inline code editing. However, you can still invoke your function right now.

Code entry type: Upload a .ZIP file

Function package*:

For files larger than 10 MB, consider uploading via S3.

Execution result: succeeded (logs)

The area below shows the result returned by your function execution. [Learn more](#) about returning results from your function.

```
{  
  "version": "1.0",  
  "sessionAttributes": {},  
  "response": {  
    "outputSpeech": {  
      "type": "PlainText",  
      "text": "bruce wayne hat insgesamt: 1229 Einträge in Wikipedia"  
    }  
  }  
}
```

check logs

The screenshot shows the AWS CloudWatch Logs interface. The left sidebar has 'Logs' selected under the 'CloudWatch' section. The main area shows a breadcrumb trail: CloudWatch > Log Groups > Streams for /aws/lambda/JenaDevsSkillFunction. Below this is a search bar with 'Search Log Group' and buttons for 'Create Log Stream' and 'Delete Log Stream'. A filter bar allows filtering by 'Log Stream Name Prefix'. The main table lists 15 log streams, each with a checkbox, the stream name, and the 'Last Event Time'. The streams are sorted by last event time.

Last Event Time
2017-07-05 14:13 UTC+2
2017-07-05 00:36 UTC+2
2017-07-04 18:10 UTC+2
2017-07-04 18:05 UTC+2
2017-07-04 17:58 UTC+2
2017-07-04 17:46 UTC+2
2017-07-04 17:03 UTC+2
2017-07-04 16:52 UTC+2
2017-07-04 16:49 UTC+2
2017-07-04 16:44 UTC+2
2017-07-04 16:35 UTC+2
2017-07-04 16:30 UTC+2
2017-07-04 16:27 UTC+2

happy coding ...

Questions?

