

GO ON AWS



You want to learn
using GO on AWS

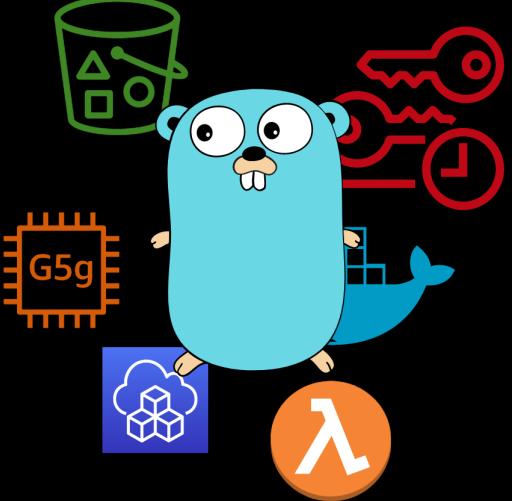


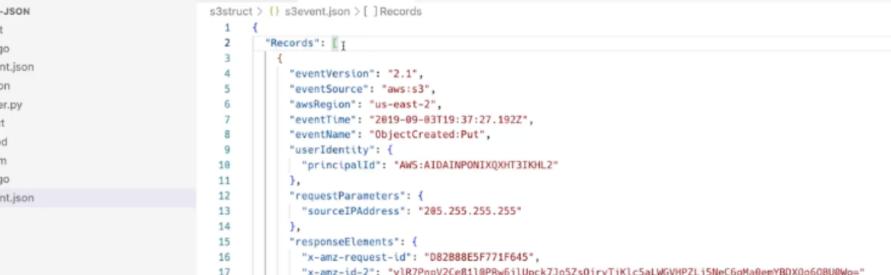


Code



CodeDoc



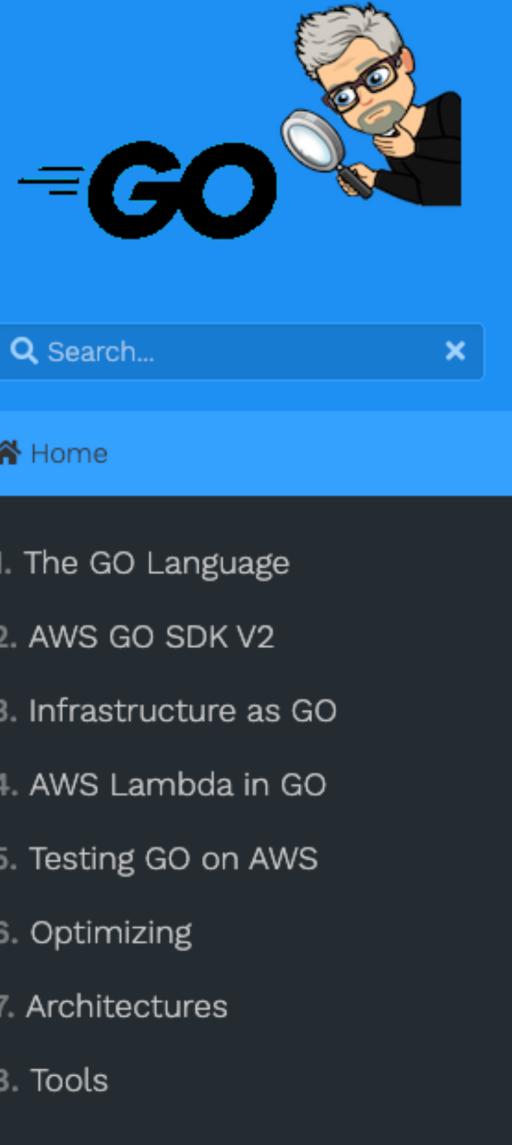


The screenshot shows a code editor with a sidebar and a main workspace. The sidebar on the left contains a tree view of files and folders:

- S3-EVENT-JSON
- s3event
- main.go
- s3event.json
- s3python
- handler.py
- s3struct
- go.mod
- go.sum
- main.go
- s3event.json

The main workspace displays the content of the `s3event.json` file, which is a JSON object representing an AWS Lambda event for an S3 object creation:

```
s3event.json -- s3-event.json
...
main.go
s3event.json X
s3struct > [ s3event.json > [ ]Records
1 {
2   "Records": [
3     {
4       "eventVersion": "2.1",
5       "eventSource": "aws:s3",
6       "awsRegion": "us-east-2",
7       "eventTime": "2019-09-03T19:37:27.192Z",
8       "eventName": "ObjectCreated:Put",
9       "userIdentity": {
10         "principalId": "AWS:ADAINPONIXQXHT3IKHL2"
11       },
12       "requestParameters": {
13         "sourceIPAddress": "285.255.255.255"
14       },
15       "responseElements": {
16         "x-amz-request-id": "D8288BE5F771F645",
17         "x-amz-id-2": "vLR7PnpvCeB1lPRw6jlUpck7j05zsQjryTjKlc5aLg6VHPZLj5NeC6qMa0emYBDX0a6QBU0Wn"
18       },
19       "s3": {
20         "s3SchemaVersion": "1.0",
21         "configurationId": "828aa6fc-f7b5-4305-8584-487c791949c1",
22         "bucket": {
23           "name": "abucketname",
24           "ownerIdentity": {
25             "principalId": "A3ISXTEXAMAIE"
26           },
27           "arn": "arn:aws:s3:::lambda-artifacts-deafc19498e3f2df"
28         },
29         "object": {
30           "key": "unuploadedobject",
31           "size": 1305107,
32           "eTag": "b21b84d653b07b05b1e6b33684dc11b",
33           "sequencer": "0ler0r4e0n0uzayc1"
34         }
35       }
36     }
37   ]
38 }
```



A screenshot of a Go playground interface. On the left, a sidebar contains a search bar, a 'Home' link, a 'Go playground' link (which is highlighted in black), '1.2. Hello World go', '1.3. Variables', 'Primitive types', 'Exercise 1', 'Exercise 2', and 'Scope'. A blue double-headed arrow icon is positioned between the sidebar and the main content area. The main content area has a title 'See also' and a list of links: 'Packages' and 'Functions'. Below this is a large section titled 'Source' with the subtext 'See the full source on github.' and a 'Sources' link.

Use the source

A screenshot of a GitHub repository page. The repository path is 'go-on-aws-source / getting_started / hello_world /'. The 'main' branch is selected. The repository contains two files: 'Taskfile.yml' and 'main.go'. Both files have a 'S3 Listbuckets (something to begin with)' status message next to them.

Starting small

```
package main  
  
import "fmt"  
  
func main() {  
    fmt.Println("go")  
}
```

Learn it all: using GO on AWS

The screenshot shows a web browser window with the URL "go-on-aws.com" in the address bar. The page has a blue header featuring a cartoon character with glasses looking through a magnifying glass over a large "GO" logo. Below the header is a search bar with a magnifying glass icon and the placeholder text "Search...". A navigation menu bar is visible, with "Home" being the active item, indicated by a blue background and white text. To the right of the menu is a vertical list of 8 numbered articles:

1. The GO Language
2. AWS GO SDK V2
3. Infrastructure as GO
4. AWS Lambda in GO
5. Testing GO on AWS
6. Optimizing
7. Architectures
8. Tools

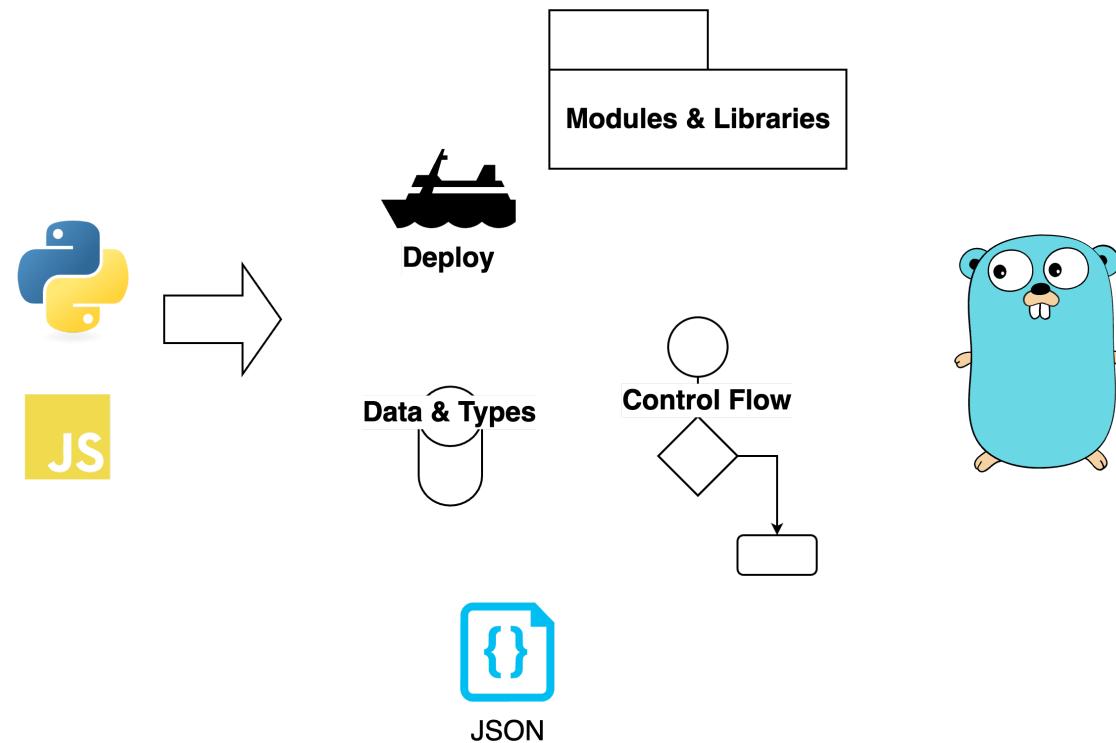
The Modules

- The GO Language
- AWS GO SDK V2
- Infrastructure with CDK
- Serverless
- Testing GO on AWS
- Tools



The GO Language

The GO Language



Section 1: Introduction to GO on AWS

1 / 1 | 8 min

Section 2: GO - the language

3 / 3 | 23 min

Section 3: Basic Data Types

5 / 5 | 35 min

Section 4: Advanced Data Types

3 / 3 | 28 min

Section 5: Complex Data Types

3 / 4 | 29 min

Section 6: Modules

1 / 2 | 20 min

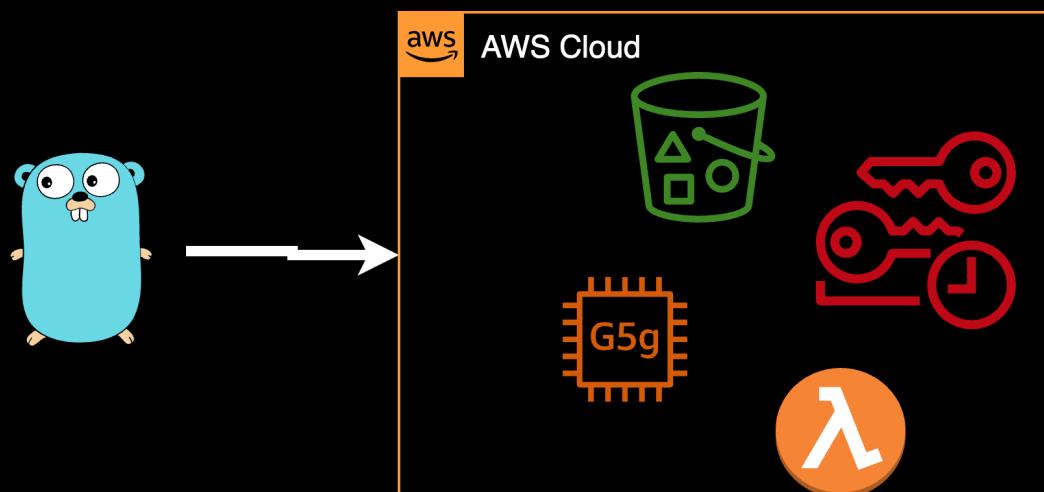
Section 7: Functions

4 / 5 | 59 min

Section 8: Control Flow

3 / 3 | 28 min

AWS GO SDK V2



Section 9: The AWS GO SDK Version 2

4 / 4 | 1hr 24min

Section 10: Simple Service Examples with the GO SDK V2

4 / 4 | 1hr 15min

Section 11: S3 - handling storage with GO

4 / 4 | 41min

Section 12: DynamoDB

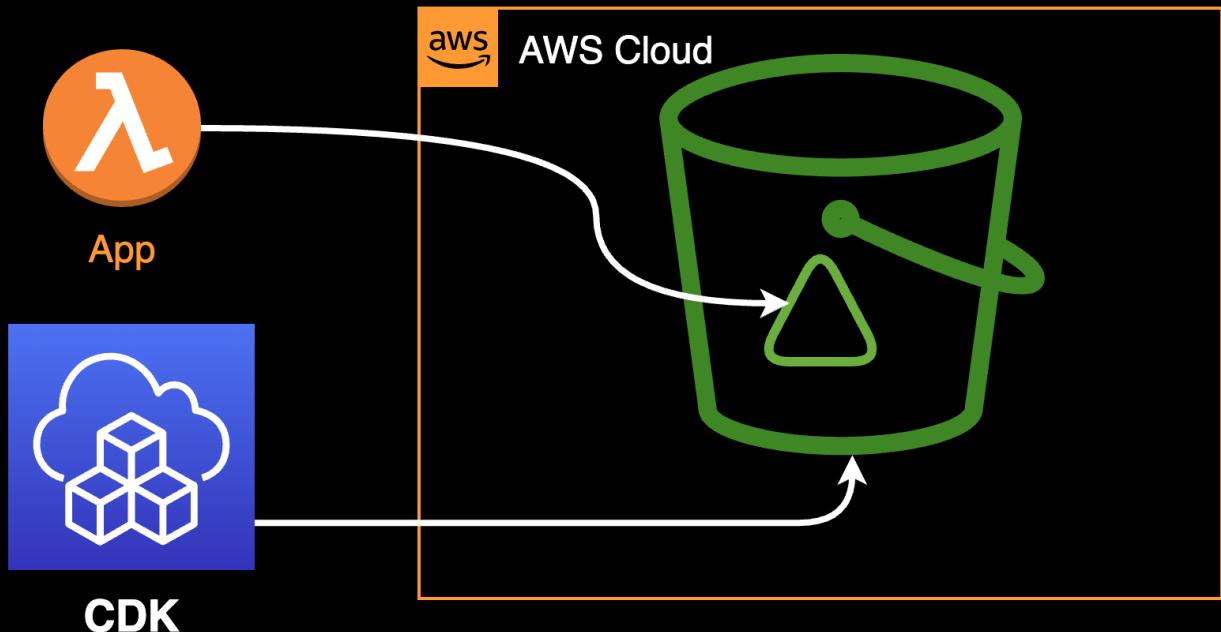
4 / 4 | 47min

Section 13: STS - Secure Token Service

1 / 1 | 14min

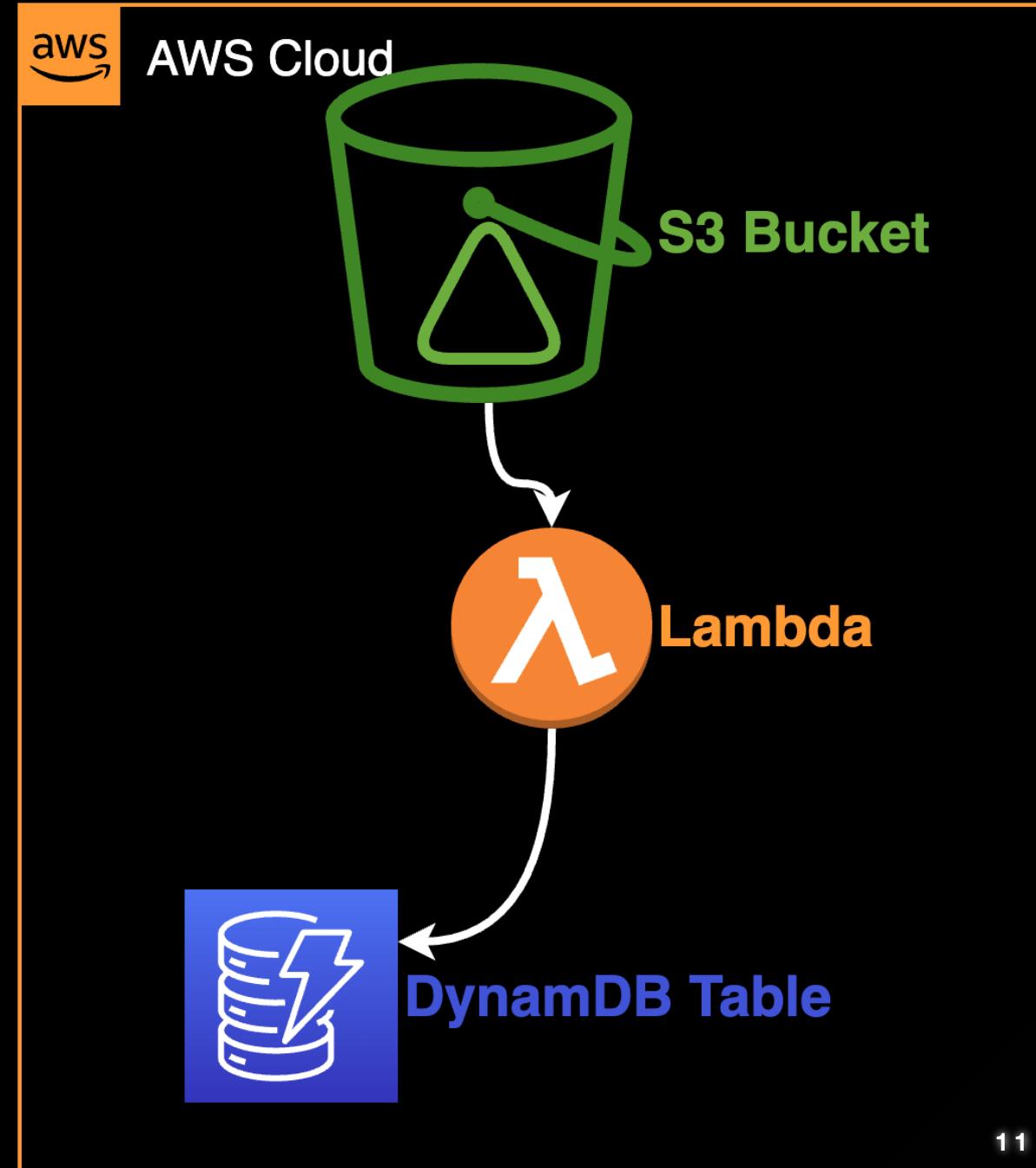
Infrastructure with the CDK

- Applications work with *data*
- Data is stored in *Resources*
- The *Cloud Development Kit*, programmed with GO creates the resources



Serverless

- Developing Lambda Functions
- Deploy Methods
- Event driven development



Testing GO on AWS

- Unit testing: A simple new way for test against AWS SDK
- Integration/Infrastructure: test Application & Resources
- All together: End 2 End testing

Tools & Wrap-Up

A reference for used software tools: task and d2

Using VSCode, the AWS Console, AWS CLI and much more is covered throughout the lectures

Whats comes next?

Wrap-Up Introduction

- Use the Course slides as a reference
- Use the github repository for code
- Do the exercises
- Visit the website go-on-aws.com

Ready, set, go!

Thanks

Photo by Braden Collum on [Unsplash](#)