## Building Web Applications with the AWS SDK for Go

#### GETTING STARTED WITH THE AWS SDK FOR GO



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#### Overview



Why choose AWS & Go?

**Prerequisites** 

Installing & configuring the SDK

**Demo application** 

**Course outline** 



#### Why Choose AWS & Go



**Amazon Web Services** 



Go



#### Course Prerequisites



Web Application Development
Go Programming Fundamentals
AWS Account

go get -u github.com/aws/aws-sdk-go

Installing the SDK



### AWS Regions





#### Configuring Region & Credentials



Environment variables



Shared config file



Hardcoded



#### AWS Region Configuration



**Environment Variable** 

AWS\_REGION



**Config File** 

~/.aws/config



```
[default]
region = us-east-1
```

~/.aws/config on Linux, macOS, or Unix

C:\Users\USERNAME\.aws\config on Windows



#### AWS Credentials Configuration



**Environment Variable** 

AWS\_ACCESS\_KEY\_ID AWS\_SECRET\_ACCESS\_KEY



**Credentials File** 

~/.aws/credentials



# [default] aws\_access\_key\_id = AKAKIAI44QH8DHBDF47DP3A aws\_secret\_access\_key = je7MtGbClwBFq2Zp9UtkFh3yCo8nvbEdfIY

~/.aws/credentials on Linux, macOS, or Unix C:\Users\*USERNAME*\.aws\credentials on Windows



#### A Tour of the AWS SDK for Go





import "github.com/aws/aws-sdk-go/aws"

#### The AWS Package

SDK core

Common shared types (Config, Logger, API param types)



```
import "github.com/aws/aws-sdk-go/service/cognitoidentity"
import "github.com/aws/aws-sdk-go/service/dynamodb"
import "github.com/aws/aws-sdk-go/service/s3"
etc.
```

#### The Service Packages

Clients for AWS services (Cognito, DynamoDB, S3, etc.)



#### Making Requests

```
import
    "github.com/aws/aws-sdk-go/aws"
    "github.com/aws/aws-sdk-go/service/s3"
func main() {
    client := s3.New(nil) // use AWS_REGION
    result, err := client.PutObject(&s3.PutObjectInput{
        Bucket: aws.String("MyBucketName"),
        Key: aws.String("hello.txt"),
        Body: strings.NewReader("Hello, cloud!"),
```

#### Demo



**Application Walkthrough** 



#### Summary



**Cognito: Authentication** 

S3: Images

**DynamoDB: Data** 

**Lambda: Serverless** 

**SQS: Queues** 

**SNS: Notifications** 

Elastic Beanstalk: Deployment

**Cloudwatch: Logging** 

