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Go on AWS Lambda

What is AWS Lambda?

- A computational service by Amazon.
- Units are event driven & stateless functions.
- Complete abstraction of the underlying infrastructure - scaling ad-hoc.
- *Officially* supports several languages - Javascript(Node), Python(2&3), Java(8th included) and C#(.Net Core 1.0).

Why use AWS Lambda?

- AWS services integration.
- Business logic development focus.
- API focused design.
- Curiosity.

λ support for GO

Enter the shims:

- Simple shim - python 2.7: https://github.com/eawsy/aws-lambda-go-shim
- Sparta - Full AWS Lambda framework for GO: http://gosparta.io

Aws Lambda GO shim overview

- Very straight forward code.
- Packages a .zip for direct deployment.
- Documentation is a solid *B+*.

```
package main

import "github.com/eawsy/aws-lambda-go-core/service/lambda/runtime"

func Handle(evt interface{}, ctx *runtime.Context) (string, error) {
        return "Hello, World!", nil
}
```

Sparta.io overview

- Full fledged framework, develop to Sparta types.
- Able to handle simple provisioning(via AWS SDK for GO).
- Excellent documentation.

```
func helloWorld(event *json.RawMessage,
                context *sparta.LambdaContext,
                w http.ResponseWriter,
                logger *logrus.Logger) {
  fmt.Fprintf(w, "Hello World!")
}
```

What use cases did we solve?

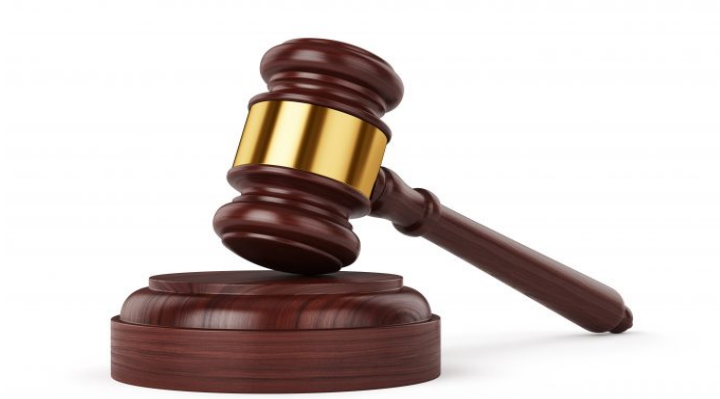
- Multiple jobs on distributed infrastructure (location wise)
- Each job needs to report upon completion/failure
- Upon report, make a decision to store log entry or to reschedule job at different infrastructure.
- As a good to have, trigger the jobs on a schedule.

How did we solve it?

- Pick a library to use.
- Configure IAM role for lambda provisioning with S3 access.
- Write an fn creating entries in an S3 bucket upon invocation.
- Package & deploy.
- Configure API Gateway(argh).
- Write a 2nd fn and configure a Cloudwatch schedule.

Politically correct verdict

- AWS Lambda works.
- The GO Shims *seem* viable.
- The way λ integrates with the AWS offering is great.
- There was absolutely no reason to use it for what was needed.



Thank you!