

Serverless - Is it Worth It?

Nick Shook
@shicholas

First off, there are a lot of
serverless talks today
which is **awesome**.

Second off,
this talk is
AWS Centric.

Third off - the thesis,
Go Serverless until it
becomes unaffordable.

Starting a New Company

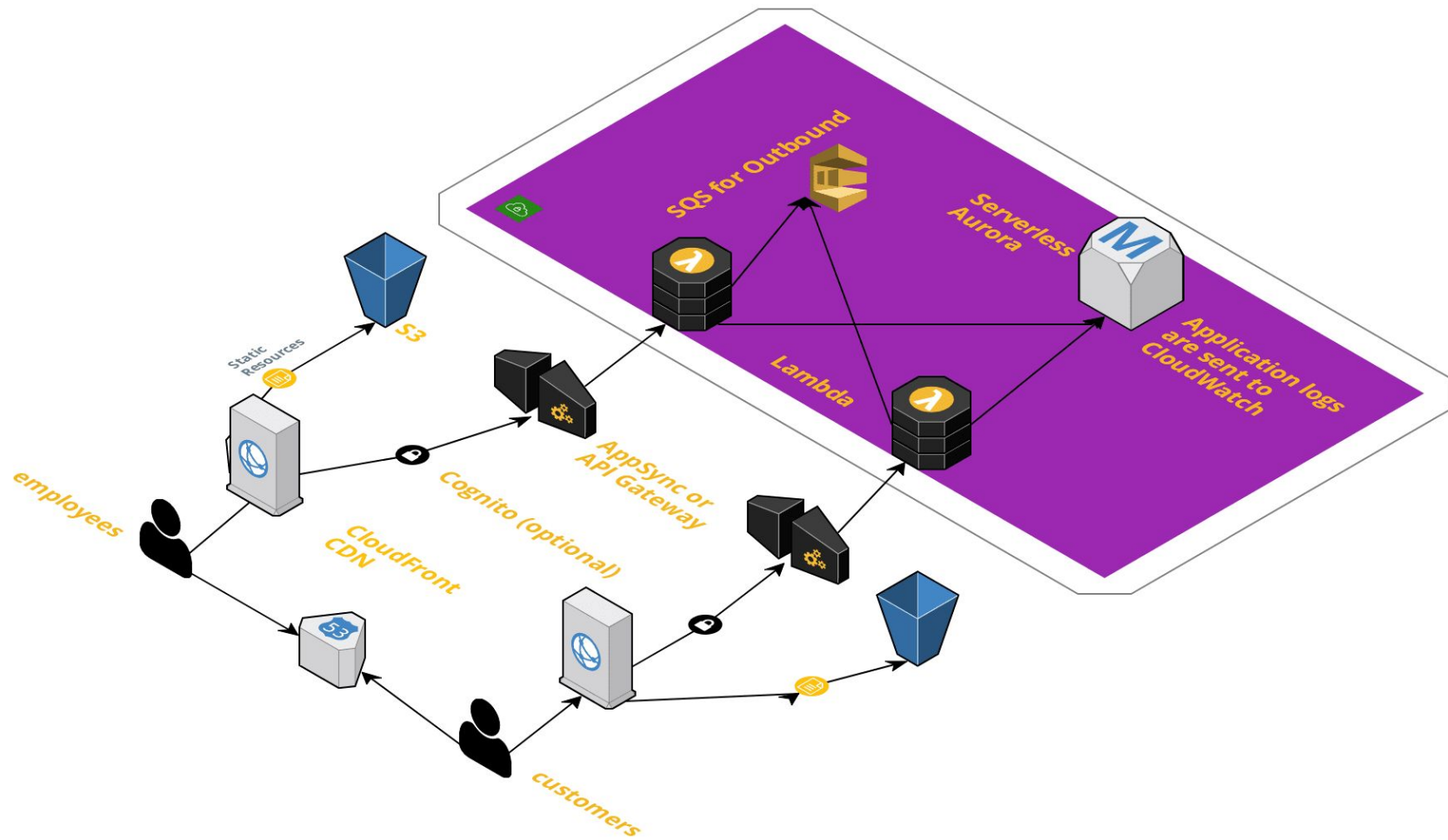
Go Serverless

Why?

- You have no paying customers
- You have no incoming revenue
- You want to do things on the cheap
- You want to only focus on writing business code (idempotent functions)

Case Study

User-Centric Application





Billing Statement: 2019-09-01 to 2019-09-30

Date Printed: 2019-09-25

Name: 1337 Lawyers

Account Number: 914674215050

Estimated Total

\$28.01

Your invoiced total will be displayed once an invoice is issued.

Details

AWS Service Charges

\$28.01

AppSync

\$0.00

US East (N. Virginia)

\$0.00

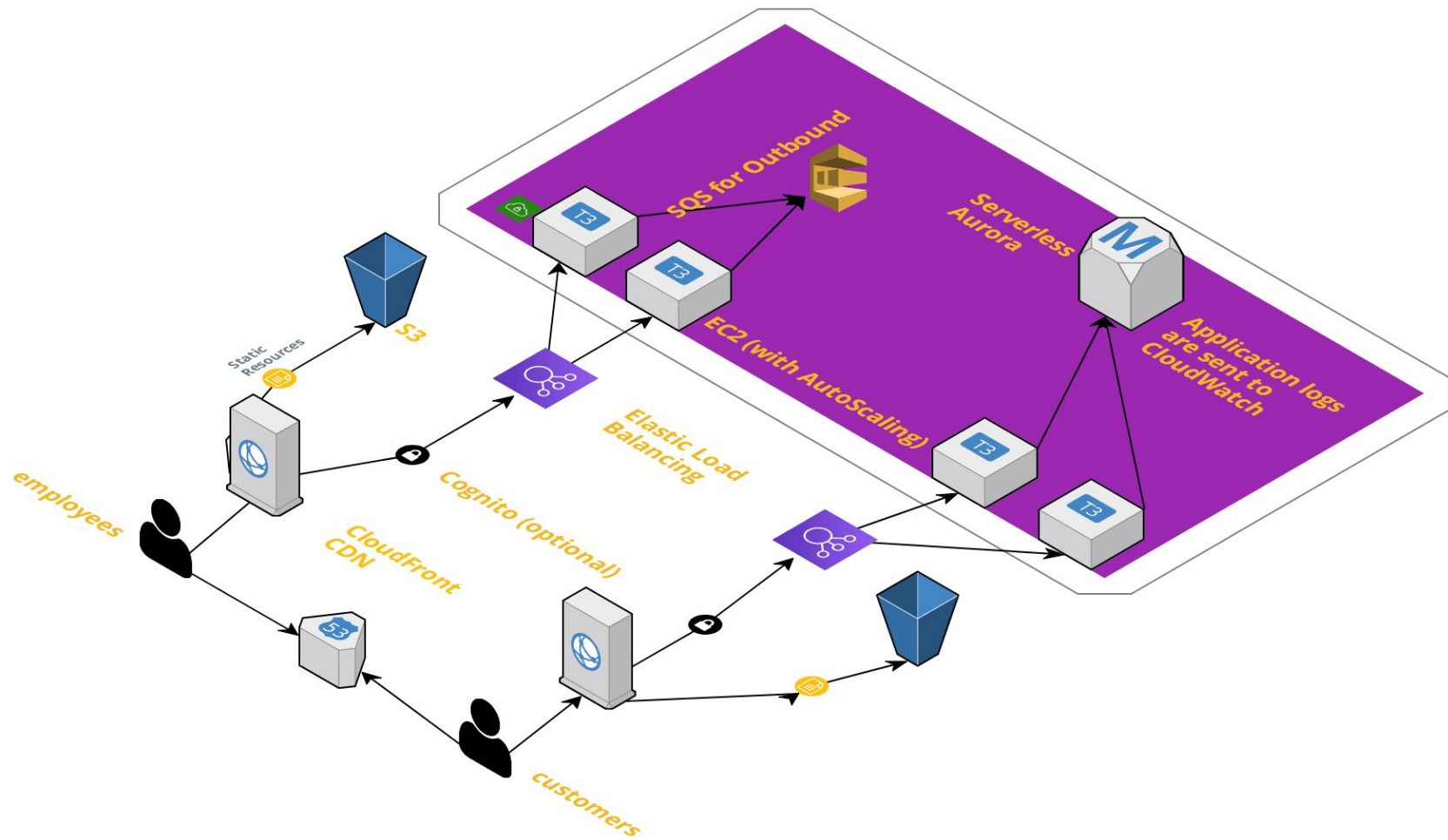
AWS AppSync USE1-GraphQLInvocation

\$0.00

\$4 per million query and data modification operations in
US East (N. Virginia)

26 Requests

\$0.00



But that's not all.

How do you manage?

- Process Monitoring
- Application Performance
- OS Level Patches
- Finding the right computer size

Examining Costs

Price it by $\Lambda + \text{Trigger}$

Let's take 1 Million Requests

1 Million AppSync Requests

Each request takes 200 MS

4,000,000 seconds of Lambda

0.00000417 per second

\$4.83

EC2 Instances

2 - T2 Medium

\$67.94

Application Load Balancer \$16.74

\$84.68

Bump it Up to 20 Million Requests

20 Million AppSync Requests

Each request takes 200 MS

4,000,000 seconds of Lambda

0.00000417 per second

\$96.68

EC2 Instances

3 - C4 Large

\$219.60

Application Load Balancer \$16.74

\$236.34

Bump it Up to 200 Million Requests

200 Million AppSync Requests

Each request takes 200 MS

40,000,000 seconds of Lambda

0.00000417 per second

\$966.80

EC2 Instances

4 - C4 Large

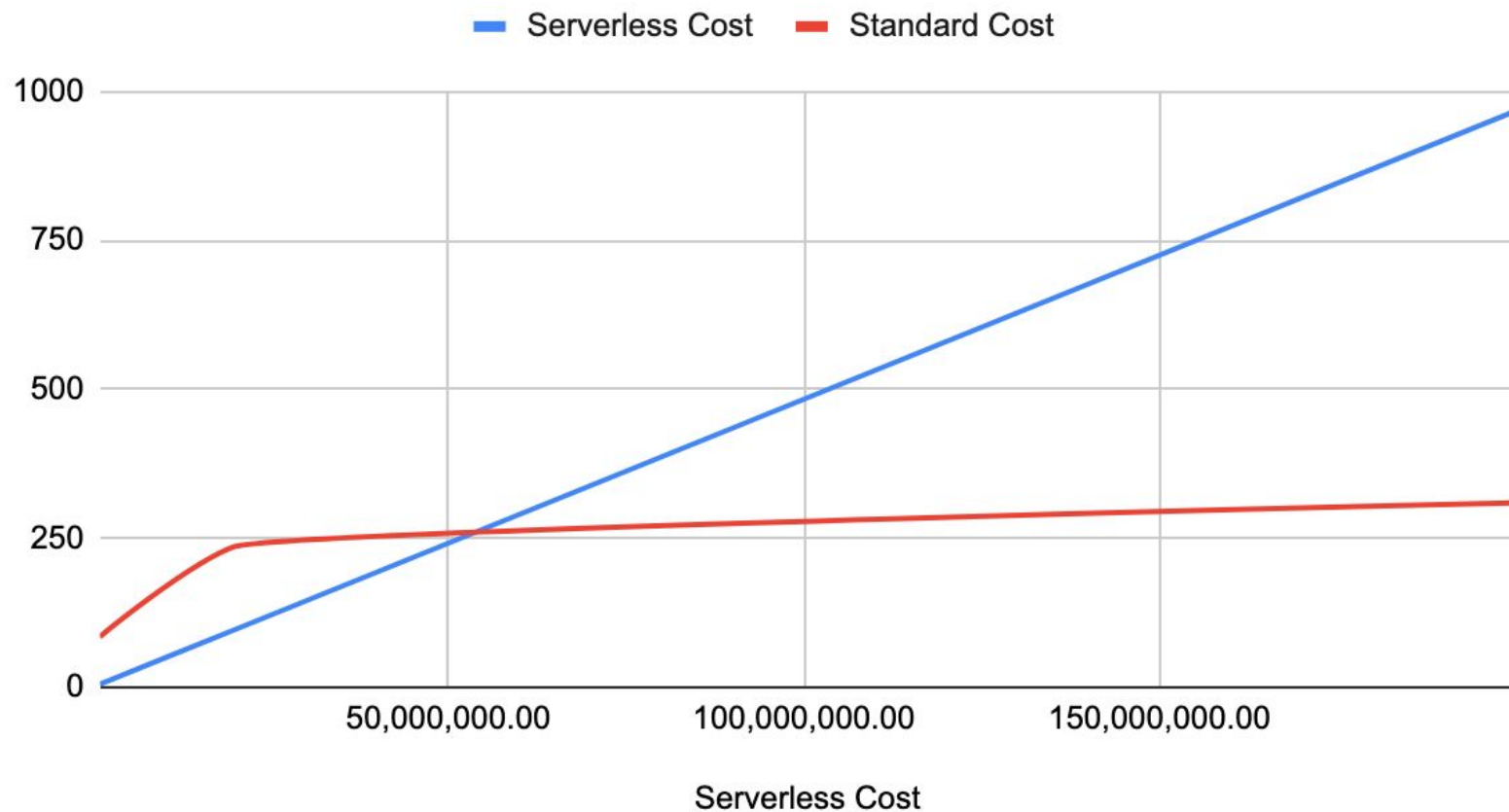
\$292.80

Application Load Balancer \$16.74

\$309.54

Serverless Scales Geometrically
Standard Apps Scale Logarithmically

Standard Cost and Requests



But there's a catch

You should have a GTM
by the time you
reach that intersection

In Sum

Go Serverless until it
becomes unaffordable

Open Source CloudFormation
templates at
<https://github.com/neonlaw/aws>