

The power of **Serverless**

Who I am

Tomas Papez

- 5+ years of DevOps experiences - 1+ year in Kiwi.com - Part of Kiwi.com platform engineering - Adrenaline, startups and work lover

Kiwi.com - virtual interlining

Aeroflot

Frontier

Air Asia

KLM

Jetstar

Ryanair

Kiwi.com in numbers

**Raw flights combined
every 2 hours
Average flight searches
every day**

**Amount of incoming
data every day**

**Amount of incoming
data every day**

Seats sold every day

Seats sold every day

Seats sold every day

Docker & Kubernetes

Bare metal

Lambda

Others (Cloud Run, ...)

Kiwi basic stack

AWS Lambda

→ Since 2014 → Probably the best known in Serverless world → Natively supports Go, Java, PowerShell, Node.js, C#, Python, and Ruby → Many types of triggers (schedule, S3, logs, SQS, etc) → Good relationship with all the other AWS services → Most common databases: DynamoDB, Aurora PostgreSQL /

MySQL Serverless → Serverless framework provides great support

Why serverless framework

How to invoke my function

Our journey with SLS

→ Coffee bot → Slack integrations → Real

apps - ~300 functions

Most common use cases: → Simple APIs
→ S3 operations → Step Functions → Data
Processing → PCI DSS

Deploy Function in 4 steps

**Create APP
repository**

Use

Run Cookie Cutter

Patch

Step Functions?

Serverless - the dark side

→ Costs → Deploy at scale → Cold start →
Best effort approach

Bacchus - demo app

Where are we heading?

Key Takeaways

→ Serverless is good → Can be costly →
Great for Events → Bad for long running
tasks (15+ minutes) → Easy to start, hard
to manage at scale → Increasing memory
usage is sometimes good idea → Stateless
is sometime pain - you need to check Slack
multiple times... > save things to DB ... →
Cold starts - even bigger problem with
shared VPC → IAM - can be hell with least

privilege approach → Use layers for reusable code (datadog,...)

Thank You!

You can find me on [Kiwi.com](https://kiwi.com) booth

PS: we have challenge for 200 Eur voucher

Kudos to my colleagues who developed our solution and help me to prepare:

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