Serverless Architecture

2017-01-25

Agenda

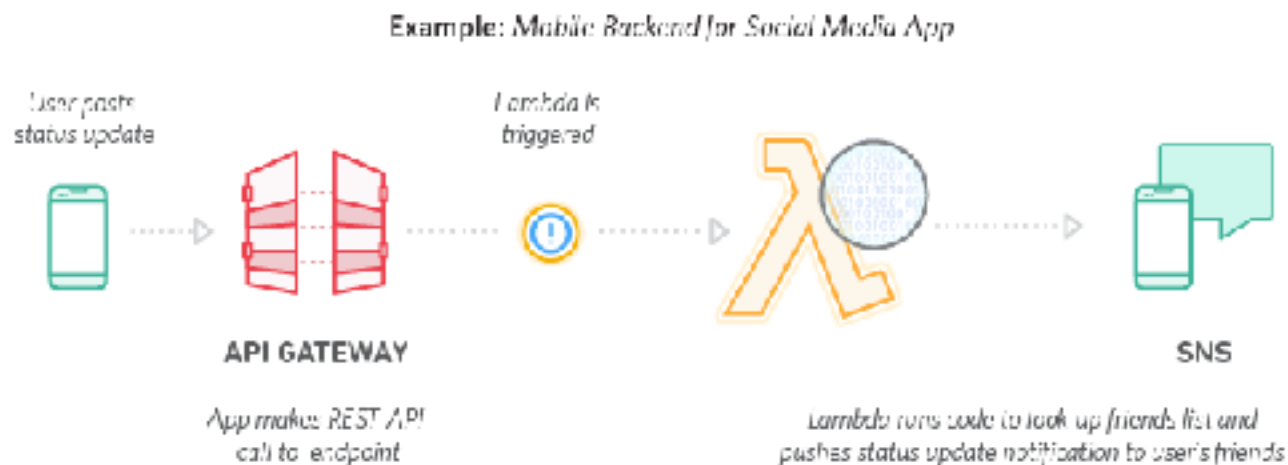- What is Serverless
- Samples
- Usage
- Reference

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What's Serverless

- Means Dev & Ops no longer need to think about server "that much"

- FaaS
- BaaS

- Server —> VMs —> Containers —> Serverless

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Webapp Sample

Example: Weather Application

| S3 | | API GATEWAY | | | DYNAMODB |

Front end code for weather app hosted in S3

User clicks link to get local weather information

App makes REST API call to endpoint

Lambda is triggered

35° C

Lambda runs code to retrieve local weather information and returns data back to user

BaaS Sample

Example: Mobile Backend for Social Media App

User posts status update → API GATEWAY (App makes REST API call to endpoint) → Lambda is triggered → λ (Lambda runs code to look up friends list and pushes status update notification to user's friends) → SNS

File Processing Sample

Example: *Image Thumbnail Creation*

Photograph is taken

S3

Photo is uploaded to S3 Bucket

Lambda is triggered

Lambda runs image resizing code to generate web, mobile, and tablet sizes

Usage

- Stateless

- Ephemeral: limited period of time

- Idempotent: same result for the same task

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分享

- https://www.martinfowler.com/articles/serverless.html
- https://github.com/anaibol/awesome-serverless
- https://aws.amazon.com/cn/serverless/

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Q&A