

Serverless with Couchbase

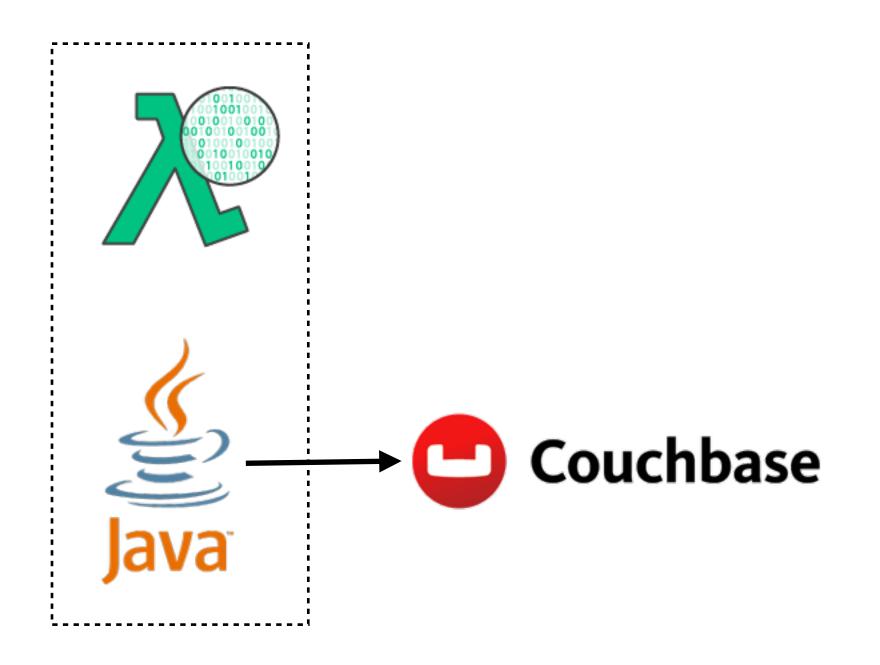
Arun Gupta, @arungupta



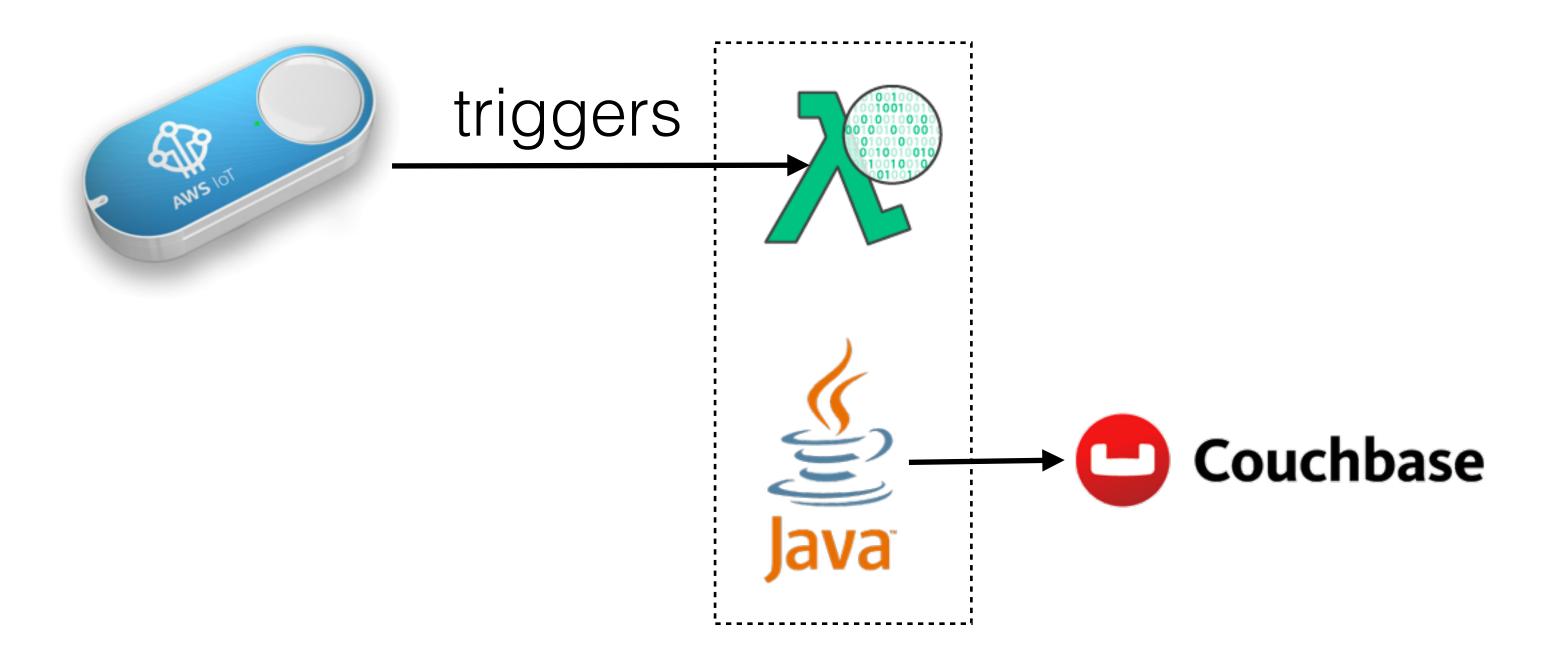
| laaS | CaaS | PaaS | FaaS | |
|--------------------------|------------------|------------------|------------------|-----------------------------------|
| Functions | Functions | Functions | Functions | Customer Managed |
| Application | Application | Application | Application | Customer Managed Unit of Scale |
| Runtime | Runtime | Runtime | Runtime | Abstracted by Vendor |
| Containers (optional) | Containers | Containers | Containers | |
| Operating System | Operating System | Operating System | Operating System | |
| Virtualization | Virtualization | Virtualization | Virtualization | |
| Hardware | Hardware | Hardware | Hardware | |

| | Virtual Machines | Containers | Serverless |
|---------------|-----------------------------------|--|-------------------------------|
| Unit of Scale | Machine | Application | Function |
| Abstraction | Hardware | Operating System | Language Runtime |
| Packaging | AMI | Container File | Code |
| Configure | Machine, storage, networking, O/S | Run Servers, configure applications, scaling | Run code when needed |
| Execution | Multi-threaded, multi-task | Multi-threaded, single task | Single threaded, single task |
| Runtime | Hours to months | Minutes to days | Microseconds to seconds |
| Unit of cost | Per VM per hour | Per VM per hour | Per memory/second per request |
| Amazon | EC2 | ECS | AWS Lambda |

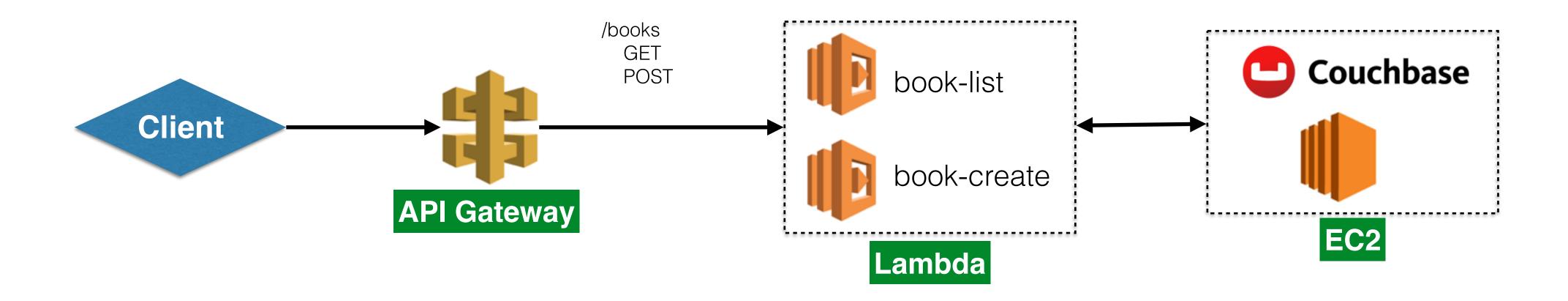
Hello Serverless



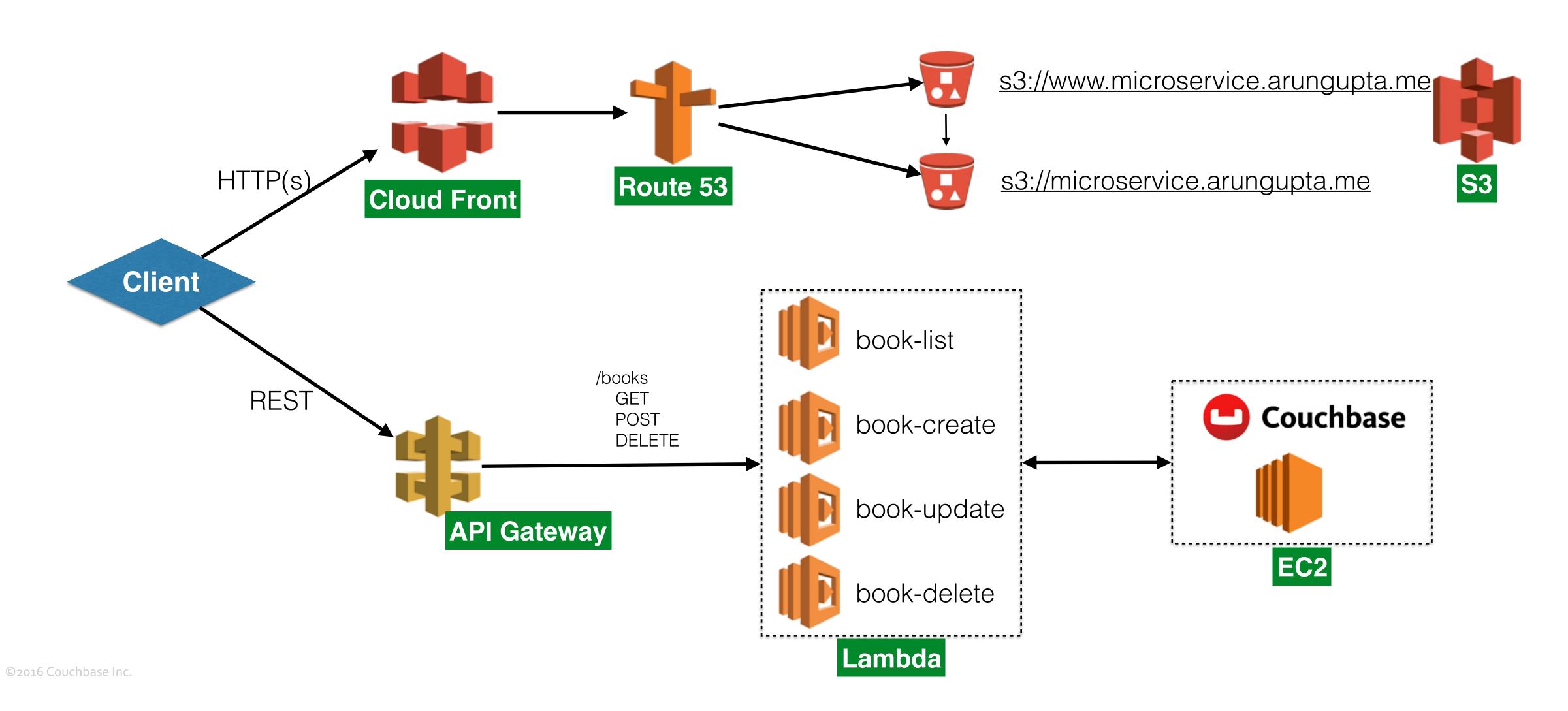
Serverless and IoT



Serverless Microservice



Serverless Application



Serverless Application Model

https://github.com/arun-gupta/serverless/blob/master/aws/microservice/template.yml

Twitter

