



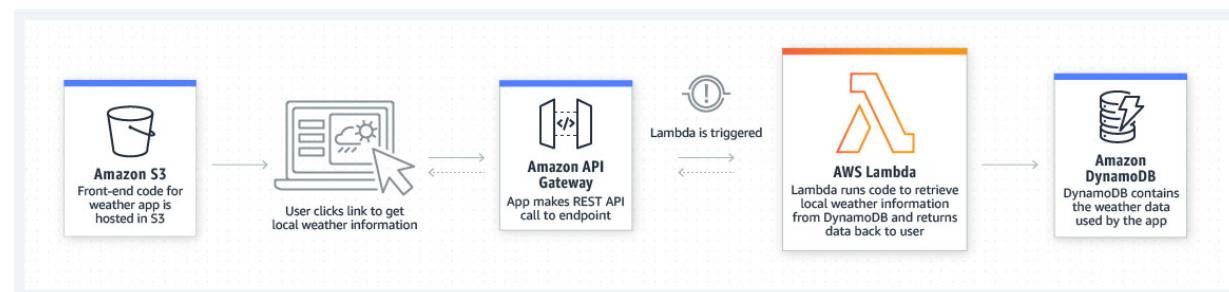
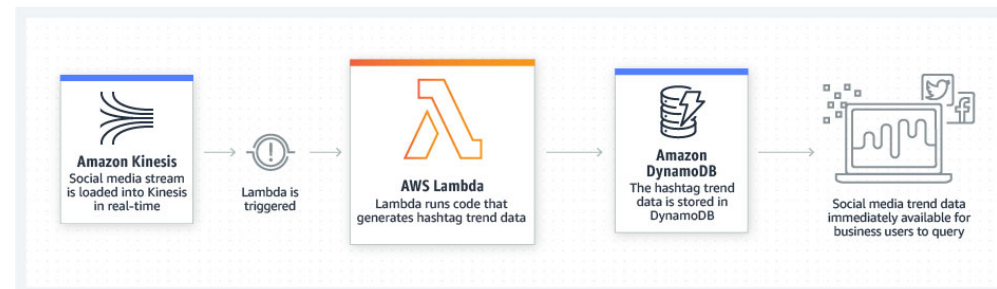
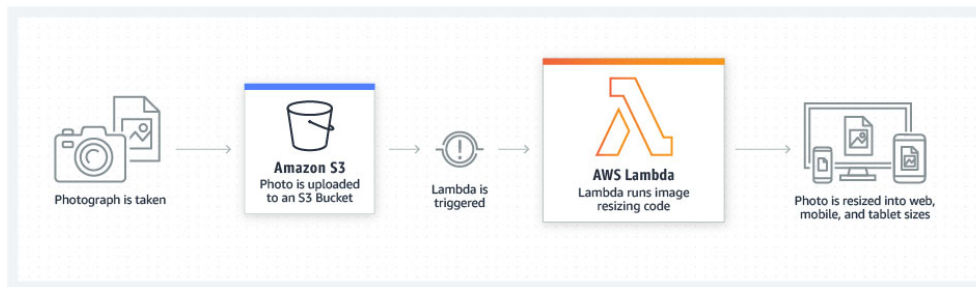
Serverless Performance Experiment

A simple latency and performance comparison between Lambda from AWS and Fission, a opensource Kube-native framework



Introduction

Official Use Cases of AWS Lambda



Fission: Kube-native Serverless framework



Cold Start Overhead



Hardware Specification



I/O Overhead



kubernetes

```
fission-function replicaset.apps/poolmgr-go-default-29630060-6fd8d96974
fission-function replicaset.apps/poolmgr-nodejs-default-29457156-656dffdf55
fission-function replicaset.apps/poolmgr-python-default-31726217-7999d6cf4f
```

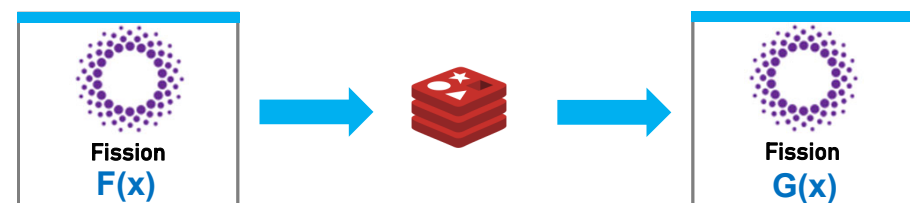
■ Experiment

Experiment Design



$F(x) = \text{event.a} + \text{event.b}$

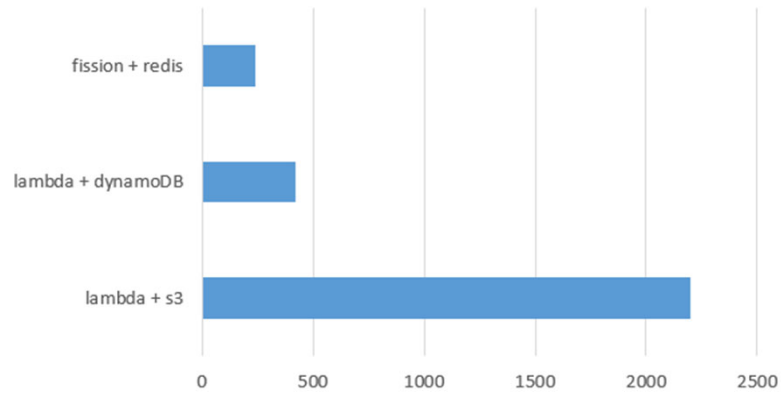
$G(x) = 2 * \text{event.input}$



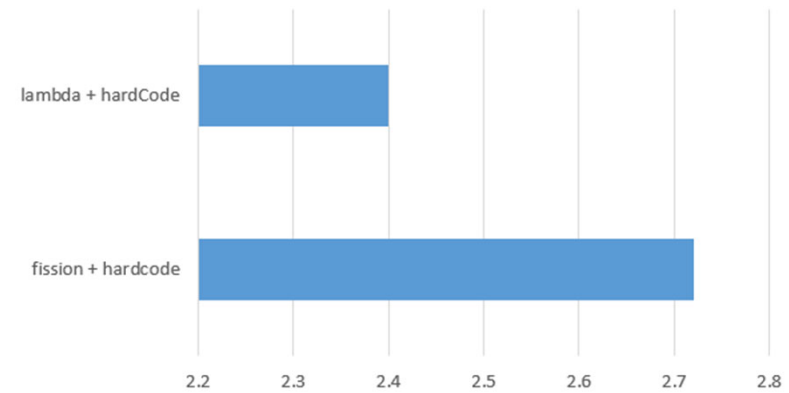
■ Performance

Performance: Cold Start and Hard Code

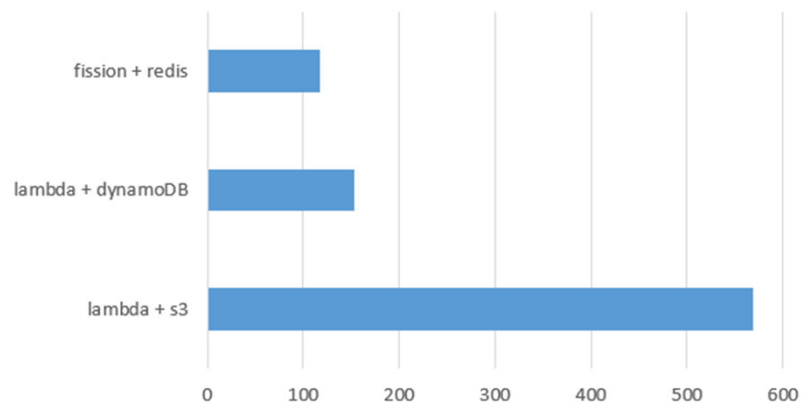
Cold Start witout hardcode



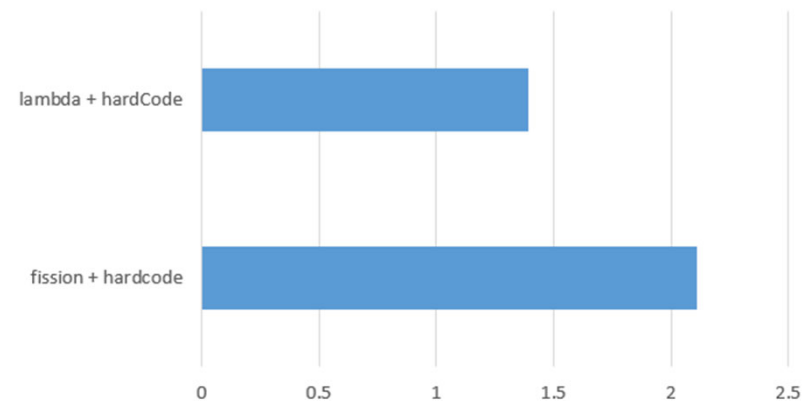
Cold Start with hardcode



neither Cold Start nor hardcode



no Cold Start but with hardcode



Thank You

Q & A