



Project Presentation - Group 1

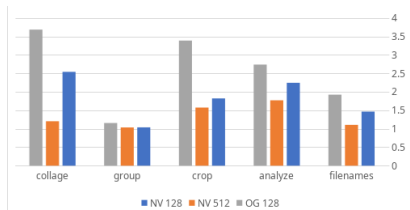
Distributed Systems

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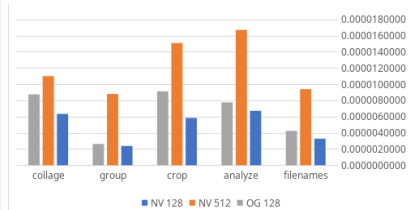
Overview

Makespan and cost comparison by region and memory

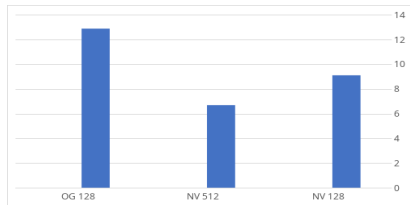
Function makespans in s



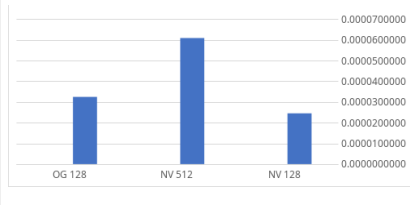
Function costs in \$



Average runtime in s



Average cost in \$



Comparison of S3 and ElastiCache

- Scenario: 30 users per day (each 5x1.2MB images, 5 collages), for 1 month.
- The usage of Lambda for the given scenario were under the free tier limits.
- The only relevant cost for S3 was Replication. Replication is done hourly.
- The only relevant cost for ElastiCache were for the nodes.

Cost comparison

S3

The total cost for S3 came up to 19.7945\$.

ElastiCache

The cost for ElastiCache was much higher at 110.16\$.

Fault Tolerance comparison

S3

S3 has a higher resilience against unintended user actions and application failures with e.g. Versioning and Object Lock.

ElastiCache

ElastiCache can handle network outages and node failures very well due to Multi-AZ and node redundancy.

Main challenges faced