CATS Metrics Definition draft-ietf-cats-metric-definition-03

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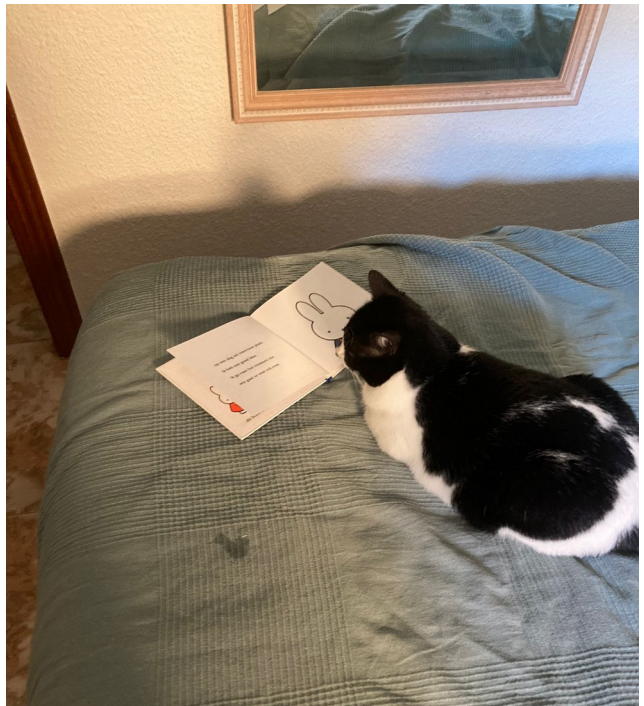
IETF Hackathon @ IETF 123, Madrid



CODECO

Cognitive Decentralised Edge Cloud Orchestration

Joint exposure of compute and network metrics for path selection

- Enhancement to the CODECO framework
- Collects real-time network performance and infrastructure metrics
- Goal:
  - 3 aggregation levels to reach a view adapted to a custom optimization problem
  - Taking decisions with final single scoring.

CODECO
Cognitive Decentralised Edge Cloud Orchestration

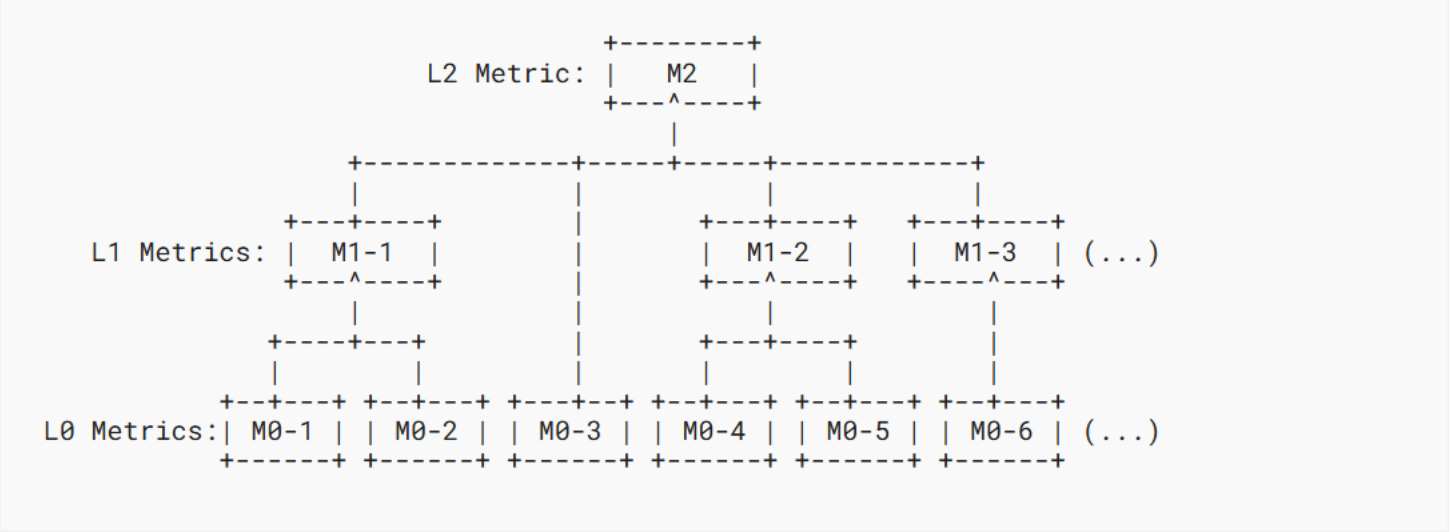


Figure 1: Logic of CATS Metrics in levels

Result L0

Cats experiment - L0 Latency
1000000
900000
800000
700000
600000
500000
400000
10:50
10:55
11:00
11:05
11:10
11:15
11:20
11:25
11:30
11:35
11:40
11:45
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Queries 5
Transformations 0
Alert 0

Cats experiment - L0 CPU
0.26
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
11:05
11:10
11:15
11:20
11:25
11:30
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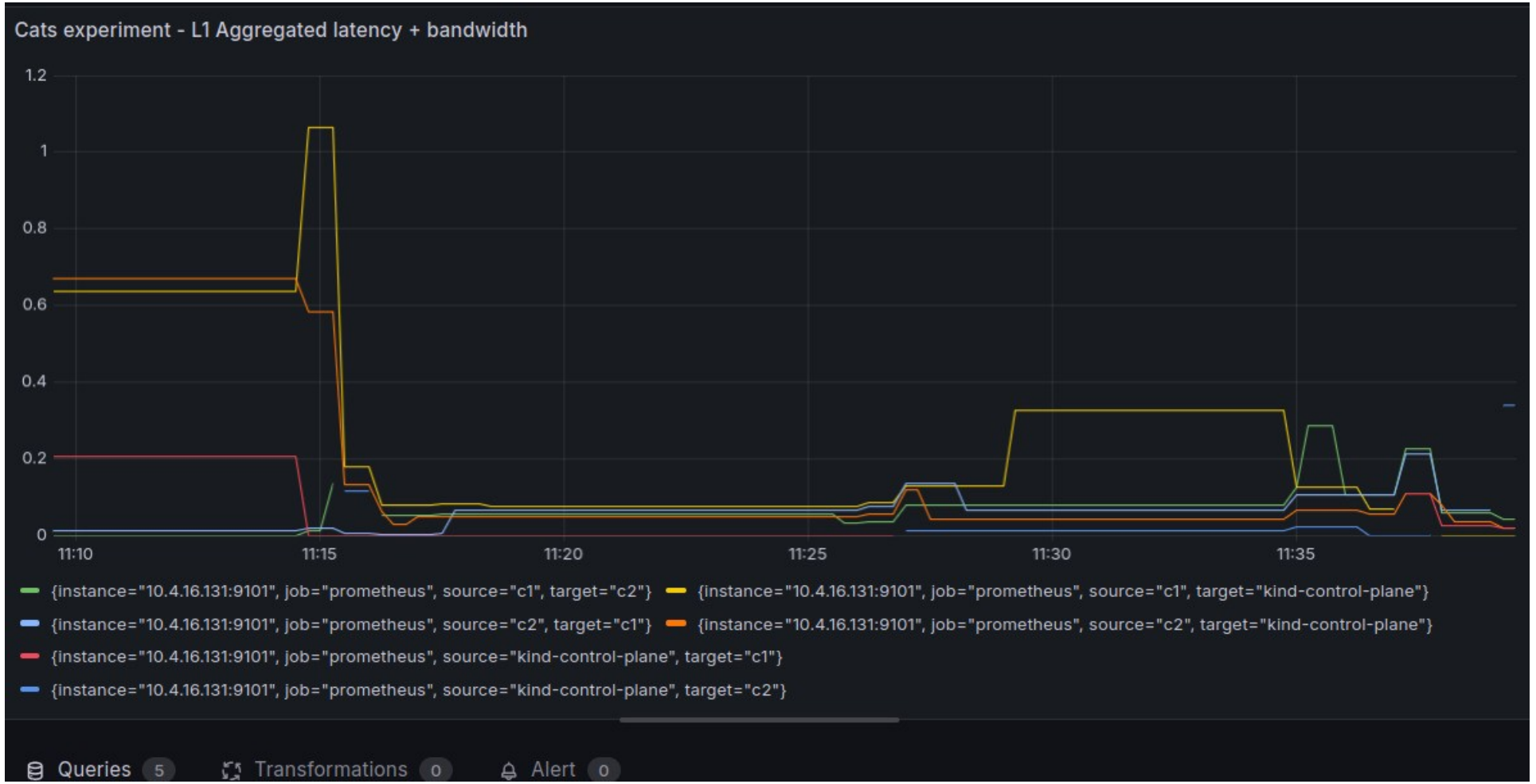
Results L1


Cats experiment - L1 Aggregated latency + bandwidth
1.2
1
0.8
0.6
0.4
0.2
0
11:10
11:15
11:20
11:25
11:30
11:35
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Queries 5
Transformations 0
Alert 0

Results L2

Cats experiment - L2 Final score number
14
12
10
8
6
4
2
0
12:05
12:10
12:15
12:20
12:25
12:30
c1
c2
kind-control-plane

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