Load Balancing for ALICE

Load Balancing for ALICE Software for Science, CERN

June 1, 2018



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Load Balancing for ALICE

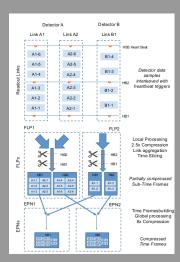
- Load Balancing
- Cluster
- Experiments
 - Experiment 1
 - Experiment 2
 - Experiment 3
 - Experiment 4



Load Balancing

Load Balancing for ALICE

- Setup
- Blacklist Algorithm



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¹Technical Design Report for the Upgrade of the Online Offline Computing System, 2015, p. 34

Cluster

Load Balancing for ALICE

■ Raspberry Pi



Load Balancing for ALICE

- Ratio
- Compare
- Expand

Experiment 1

Load Balancing for ALICE

Definition

Ticktime influence on the Blacklist algorithm with one fail-over



²

²Effects of the EPNs and FLPs on the Information Node for ALICE Information Node Information Node

Experiment 2

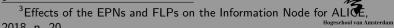
Load Balancing for ALICE

Definition

Ticktime influence on the Blacklist algorithm with all but one fail-over



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Experiment 3

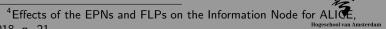
Load Balancing for ALICE

Definition

Ticktime influence on the Blacklist algorithm with all but one fail-over using a random sample size







Experiment 4

Load Balancing for ALICE

Definition

Ticktime influence on the Blacklist algorithm with all but one fail-over at once



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⁵Effects of the EPNs and FLPs on the Information Node for ALICE,

The end

Load Balancing for ALICE

Any questions perhaps?

