Online System
for ITS Commissioning

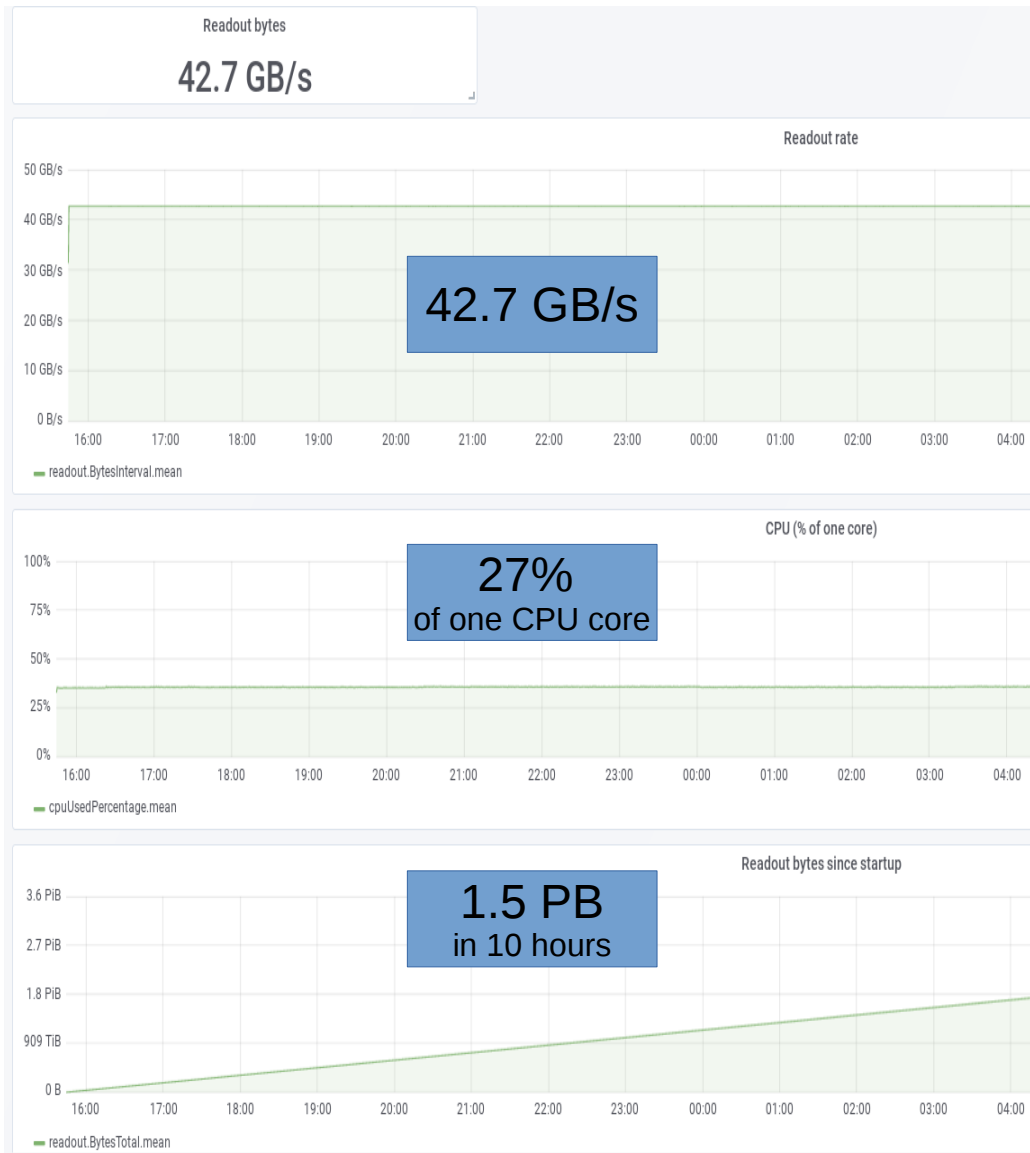## 12th ALICE ITS upgrade, MFT and O2 Asian Workshop
20/11/2018

Sylvain.Chapeland@cern.ch / O2

Hardware

- 2 FLP - readout servers
  - ASUS ESC4000 G2S, from HLT
  - 6 more expected in January
  - Storage: addition of a disk array from DAQ in January

- 4 CRU – PCI readout cards
  - all installed in one node - flpits1
  - 22 more expected by end of March
    - Delivery was initially planned for now
    - Production was postponed, because of a signal integrity issue observed in some conditions
    - New PCB just delivered, test of fix is imminent

System performance
(CRU internal data generator)

Software

- ReadoutCard library
  - Command line utilities
  - Python library
    - O2 packaged with python 2.0 → needs recompile for python 3.0 / ITS tools
  - Good support from the new maintainer

- Readout process
  - Memory management
  - Concurrent readout of multiple CRU
  - Data header consistency checks
  - Saving to disk
  - Integration with logging, monitoring, configuration, QC, O2 transport
  - Short release cycle, based on feature/fix requests

System usage

- Basic readout tests seem fine
  - More serious workloads to be tested

- Feedback of users is important to provide adequate tools
  - Some features discussed and in the release pipeline

- Communication is working well with the members of ITS team