

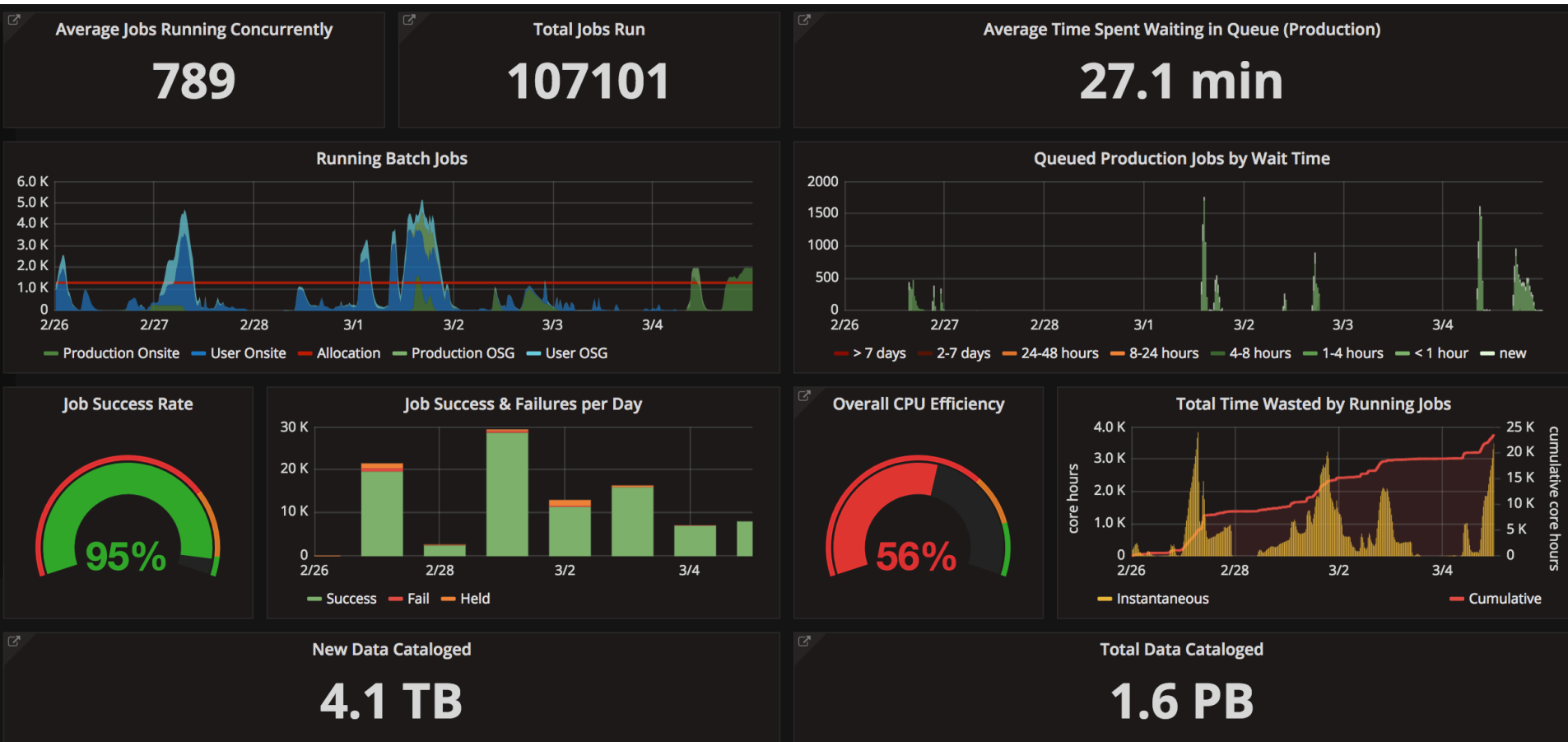
# Muon $g-2$ AEM Update

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# Computing Update

- profiling efforts improved overall CPU efficiency from ~15 % to ~55 %



# Experiment update week of 2/26

- Quad repair (Quads keep muons on proper orbit in ring)
  - cleaned one more time, pumped down
  - conditioning started on Friday, and a couple more days will be needed for stable operation
- Kicker (Injection systems to put muons on proper orbit in ring)
  - re-assembled kicker 3, filled Blumleins with new Castor oil
  - improved safety and reliability of charging and discharging triggers
  - conditioned to nominal set points of 55 kV
- Calorimeter (measure decay positrons from muons)
  - Operating 24 / 24 calorimeters
  - manufactured capacitor boxes to improve gain stability
- Trolley (Maps the magnetic field when the muon beam is off)
- Plunging probe (Absolute calibration of magnetic field )
  - Absolute calibration of Trolley using Plunging probe
- Clock blinded
  - main clock running at “blinded” frequency

# Main focus week of 3/5

- Finish quad conditioning
- Plunging probe and trolley
  - more trolley runs
- Aim to re-establish nominal beam conditions
- More iterations on beam, injection, and detector tuning
  - exercise all systems, collect statistics, measure performance
  - inform final weeks of tweaks
- Switching to production in mid March