

# ATLAS Site availability for analysis

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5<sup>th</sup> December 2014



# ATLAS Site availability for analysis: Measurement

- ▶ performance of all PanDA resources (PR) containing at least one analysis queue is being monitored using SSB

## PR status metric 10101

- states of PanDA resources according to availability
  - online: **available**
  - offline, brokeroff, test: **unavailable**

▶ ssb

## Switcher2 actions metric 10100

- actions taken on PR in case of CE/SE downtime
- classified whether or not announced in advance
  - **scheduled**
  - **unscheduled**

▶ ssb

# ATLAS Site availability for analysis: Mapping

► combination of two metrics done in order to take into account the necessary system upgrades, central system failures, etc

1) mapping done for every PR

PR status	ON ∨ W	OFF, T, BO	OFF, T, BO
Switcher2	∨	∨SCHED ∨ W	∨UNSCHED ∨ no_action
Mapping	GOOD	GRACE	BAD

2) if ATLAS site has more PRs: logical **OR** between PRs

PR1	GOOD	GRACE	BAD
PR2	BAD/GRACE	BAD	BAD
Site	GOOD	GRACE	BAD

► final calculation

- ALL=GOOD+GRACE+BAD
- ratio=GOOD/(ALL-GRACE)

# What did we have for **Run I?**

## ABCD

- ▶ **OBSOLETE** tool for T2 ATLAS site availability measurement
- ▶ name refers to A/B/C/D rating of the sites
- ▶ Method
  - long measurement: ALL=30 days
  - different ratings for T2 and T2D
    - **A**: T2Ds with ratio > 90%
    - **B**: T2s (non-T2Ds) with ratio > 90%
    - **C**: any T2s with ratio between 80% and 90%
    - **D**: any T2 with ratio < 80%
  - networking concept included is too complicated for now

▶ ssb

# What will be used for Run II?

## ASAP

- ▶ **NEW** tool for T0/T1/T2/T3 ATLAS site availability measurement
  - ▶ name is an acronym for ATLAS Site Availability Performance
  - ▶ Method
    - same logic as for Run I ABCD, only interpretation is different
      - no drastic changes, mainly simplification!
- 1) instantaneous measurement: ALL=2 hours
- **OK**: ratio  $\geq 50\%$
  - **CRITICAL**: ratio  $< 50\%$
  - **WARNING**: ratio = 0% (if site is whole 2 hours in SD)

▶ wlcg

- 2) average over certain period of time provides a clear message and can serve as an additional SAM test
- same information as from ABCD tool but more simple
  - example: first results from the last month

▶ SAM3

# Availability recomputation

- in case of unscheduled downtime due to some misfortune event (earthquake, flood, etc) or central system failures, site status can be **repainted**: **CRITICAL** → **OK**
- the correction can be requested through JIRA ticket [▶ JIRA](#)
- these cases will be evaluated individually

- two tools developed for site availability measurement
- ABCD
  - was used during Run I: now obsolete
- ASAP
  - will be used during Run II
  - showing results for all Tiers T0/T1/T2/T3
  - avoiding networking complications
  - serving as an additional SAM test
  - repainting possible
- more information can be found on twiki [▶ twiki](#)

**In case of any objection or lack of clarity please contact us**

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## Backup slides