# Atlas Report 20.01.2015: Rucio

- Rucio
  - ATLAS Rucio Support
    - <a href="mailto:atlas-adc-ddm-support@cern.ch">atlas-adc-ddm-support@cern.ch</a> (instead of dq2-ops)
  - Rucio Releases
  - -0.2.10
    - Wed. 14<sup>th</sup> Jan 2015
    - Bug, improvement, new features
  - -0.2.11
    - In two weeks from now
    - Horizontal (automatic) partitioning
  - Clients & Interfaces
    - DQ2ClientsSoon out of warranty!
    - Few CLIs don't (and won't never) work
      - dq2-usage, dq2-list-dataset-site2
  - Rucio CLIs/APIs & Dumps
    - Applications are encouraged to use them and provide feedbacks
    - Help, support and expertise provided
  - Rucio WebUl
    - https://rucio-ui.cern.ch/

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- Local & Group Disks Support
  - Permission
    - Group manager can delete by themselves
    - Local group disk management (2 weeks)
  - Group quota/usage visualization
    - Quota management in WebUI (2 months)
    - Various visualizations based on dumps from (local) group managers
    - 'How to add a view/report in Rucio webUI'
      - Tutorial foreseen for next software week
- Storage Availability
  - Possibility to reject (or not) requests under certain circumstances
    - Service (un)availability, blacklisting, quota, disk full, etc.
  - Impact on ADC applications
    - PanDA, daTRI, AGIS, ...
    - Policy (options) should be defined
    - For now, we will stay in the DQ2 way

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### Data Popularity

- Simple model
  - Time of last access available for files, datasets and replicas
  - Available though CLIs, APIs & dumps
  - · Enough for the new 'lifetime model'
- Reports
  - Traces on Hadoop@CERN
  - Possibility to generate "complex" reports
  - E.g., access distribution over time for a particular set of data and application
  - Which views

#### Tools for Sites

- Dumps
  - <a href="https://rucio-ui.cern.ch/dumps">https://rucio-ui.cern.ch/dumps</a>
- Lost file recovery
  - Available but few bugs to fix (2 weeks)
  - More visualization needed (2 months)
  - Cleanup of migration leftovers (this week)
- Rucio WebUI <a href="https://rucio-ui.cern.ch/">https://rucio-ui.cern.ch/</a>
  - Overview for shifters, sites admin (2 months)

### Transfer Management

- Rucio internals
  - Better isolation and protection between activities, e.g., user vs. production(now, plus improvements within two weeks)
- FTS3: New features and better integration
  - E.g., shares and priorities of transfers
  - E.g., More efficient polling
  - E.g., Multi-hop
  - · Dedicated meeting this week

### **Atlas Report 20.01.2015: Production**

- The grid is busier
  - Processed ~93 M simulation events since the new year.
    - mc14 (simul): 51M done, 216M submitted\*
    - mc12 (simul): 35M done, 127M submitted
    - Up to 120M slots of running jobs.!
    - Recent upward trend partly due to increase of 100k file limit to 200k which allowed atlas
      to run some higher stats jobs that were on hold. In
    - the pipeline: ~500M events was submitted last week what we need.
- ProdSys2 Issues (mostly resolved)
  - Sample extension
    - · Fix implemented and working
      - still some corner cases to resolve
  - Several datasets in container
    - This is a high priority (few high stats requests waiting)
    - For large (more than 10M simulation chains) we were hitting the limit of the 100k files.
    - Now increased to 200k files has helped to increase no. running jobs.
    - Still need:
      - Confirmation that manually splitting the chains would work as expected
    - Splitting to be done automatically.
  - Dealing with very large numbers of slices e.g. pMSSM request with 1000s of datasets
- There was a problem with atlas pilot factories. /tmp partion was full. uk cloud was affected.