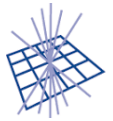
# Multi-VO Rucio Update

28th May 2021

Science and Technology Facilities Council



GridPP
UK Computing for Particle Physics

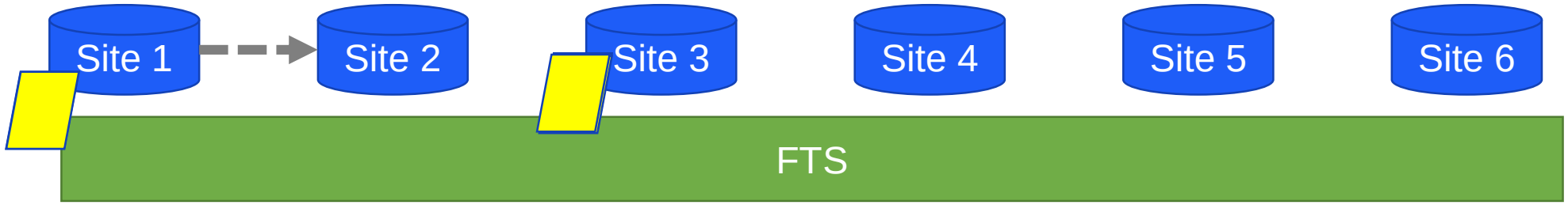
# What have we done?

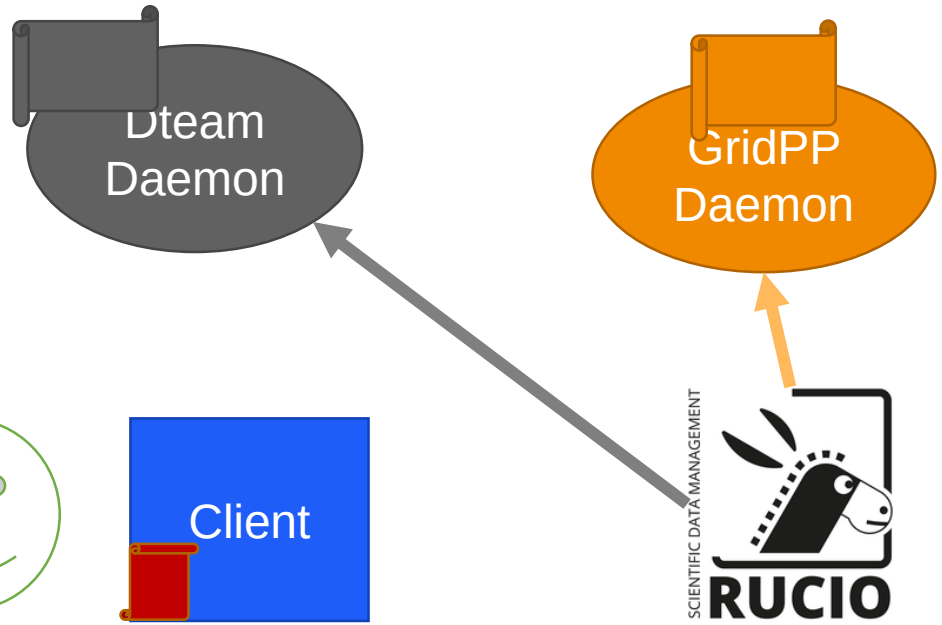
- Configured multiple T2 RSE for dteam VO and running transfer tests
- Set up a conveyor daemon per VO to manage transfers
  - Currently Conveyor Daemon can use only one certificate
- Engaged with new communities and introduced them to Rucio
  - Set up Lattice QCD with Rucio account on dteam VO and ran a tutorial
  - Talking to Duncan Rand about GridPP on m-VO instance
  - Set up GAIA on dteam VO, investigating options
  - Another community wanting an introduction as well
- Set up Dockerised client directed to RAL
  - Looking at adding some functionality

# What are we planning to do?

- Webinar: Distributed Data management with Rucio and FTS 14th June
- Resolving the issues with the m-VO transfers
- Integrate IAM authentication (Aiming for end of September)
- Upgrade the Rucio Instance to 1.25 (newest LTS release)

# Rucio transfers with Conveyor Daemon



Science and Technology Facilities Council

GridPP
UK Computing for Particle Physics

# Conveyor Daemon for m-VO

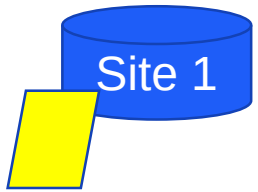
- Running multiple Daemons – not a permanent fix
  - As VO number increase in the m-VO instance failures would also increase
  - Monitoring would not show functional metrics
- Edit the Conveyor Daemon to allow selection of jobs based on VO to match transfers and Robot Certificates

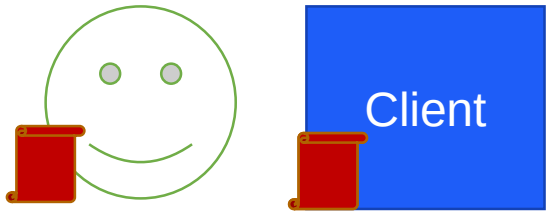
# Robot Certificates for Transfers

- Rucio requires a Robot certificate from each VO to mediate FTS transfers
- We assume DiRAC also needs Robot certificates to allow them to submit jobs and data management
  - Is this correct?
- We should agree a process:
  - Ensures that Robot certificates are installed in the correct place
  - That is Single step for a VO
  - Common security model
    - Use the same robot certificate?
    - Shared access machines by Imperial / RAL?

# Any Questions?

# Rucio Upload or Get of data




Science and Technology Facilities Council

SCIENTIFIC DATA MANAGEMENT RUCIO

SCIENTIFIC DATA MANAGEMENT RUCIO

GridPP UK Computing for Particle Physics