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9. Februar 2021

# News @GSI

- Finalized new FAIR-ROOT RSE
- Now two XRootD-Dataservers with VOMS-AuthN/Z and Tokens
- FAIR-ROOT providing 20TB of storage on Lustre shared filesystem
  - Quota of one million Inodes
- and GSI-ROOT providing 1TB on a single internal disk
- GSI-ROOT kept around for testing

# GSI-ROOT

- Frequent service failures as observed during dress rehearsal
- Can observe how a small RSE running at its limit runs in the data lake
- Useful for observing special behaviour
  - During reaper failures, RSE was full at 0% successful transfers
  - Waiting for recovery of reaper service
  - GSI-ROOT recovered without manual intervention

# FAIR-ROOT

- Observed only one major failure when Lustre had issues
- Lustre metadata server was failing
- Service didn't recover without manual intervention
- Ready to use token auth
- Will automatically start supporting OIDC as soon as it is ready on rucio's side



# FAIR-ROOT performance over last 7 days

| Src/Dst         | PIC-DCACHE | LAPP-WEBDAV | LAPP-DCACHE | INFN-NA-DPM-FED | INFN-NA-DPM | IN2P3-CC-DCACHE | GSI-ROOT | FAIR-ROOT + |
|-----------------|------------|-------------|-------------|-----------------|-------------|-----------------|----------|-------------|
| INFN-NA-DPM-FED | 90%        | 63%         | 100%        | NO DATA         | NO DATA     | 81%             | 36%      | 100%        |
| INFN-NA-DPM     | 90%        | 64%         | 100%        | NO DATA         | NO DATA     | 78%             | 37%      | 100%        |
| PIC-DCACHE      | NO DATA    | 64%         | 100%        | 94%             | 100%        | 82%             | 37%      | 100%        |
| SARA-DCACHE     | 91%        | 64%         | 100%        | 94%             | 100%        | 81%             | 37%      | 100%        |
| LAPP-WEBDAV     | 100%       | NO DATA     | 100%        | 94%             | 100%        | 100%            | 50%      | 99%         |
| IN2P3-CC-DCACHE | 90%        | 64%         | 100%        | 93%             | 100%        | NO DATA         | 37%      | 99%         |
| LAPP-DCACHE     | 100%       | 64%         | NO DATA     | 95%             | 100%        | 100%            | 37%      | 99%         |
| GSI-ROOT        | 100%       | 100%        | 100%        | 92%             | 100%        | 100%            | NO DATA  | 99%         |
| DESY-DCACHE     | 89%        | 64%         | 100%        | 93%             | 100%        | 78%             | 37%      | 99%         |
| ALPAMED-DPM     | 89%        | 64%         | 100%        | 93%             | 100%        | 78%             | 37%      | 99%         |
| CNAF-STORM      | 100%       | 64%         | 100%        | 97%             | 100%        | 100%            | 39%      | 99%         |
| EULAKE-1        | 90%        | 65%         | 100%        | 94%             | 100%        | 81%             | 38%      | 99%         |
| FAIR-ROOT       | 100%       | 63%         | 100%        | 94%             | 100%        | 100%            | 37%      | NO DATA     |
| PIC-INJECT      | 89%        | NO DATA     | NO DATA     | NO DATA         | NO DATA     | NO DATA         | NO DATA  | NO DATA     |

# Future Plans

- Cooperation with RUG on JupyterHub multi-user platform
- Expanding FAIR data lake to resources provided by RUG
- Increase work on FAIR data lake
- Upgrade RSEs to XRootD 5 soon (with native XRootD-SciTokens support)