

Tape stuff

NeIC NT1 Manager
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Overview

- Issues
- Solutions
- Discussion



Issues

- Low on space
- Low on speed
- Future



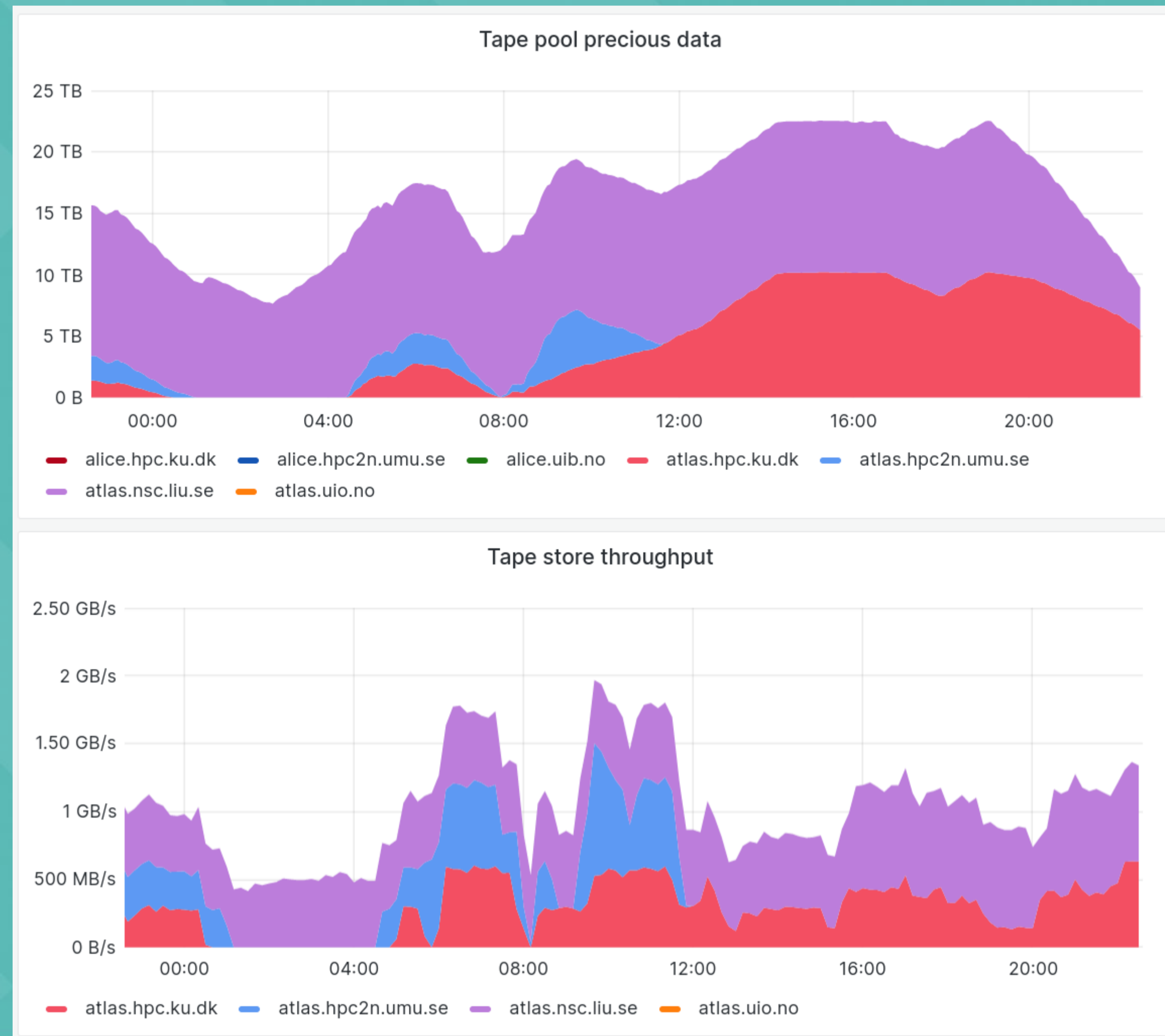
Issues: Low on space

- We have less installed capacity for ATLAS than we pledged
- Main cause: The two jaguar tape sites really want to get onto next tape generation
 - IBM is late with next tape generation



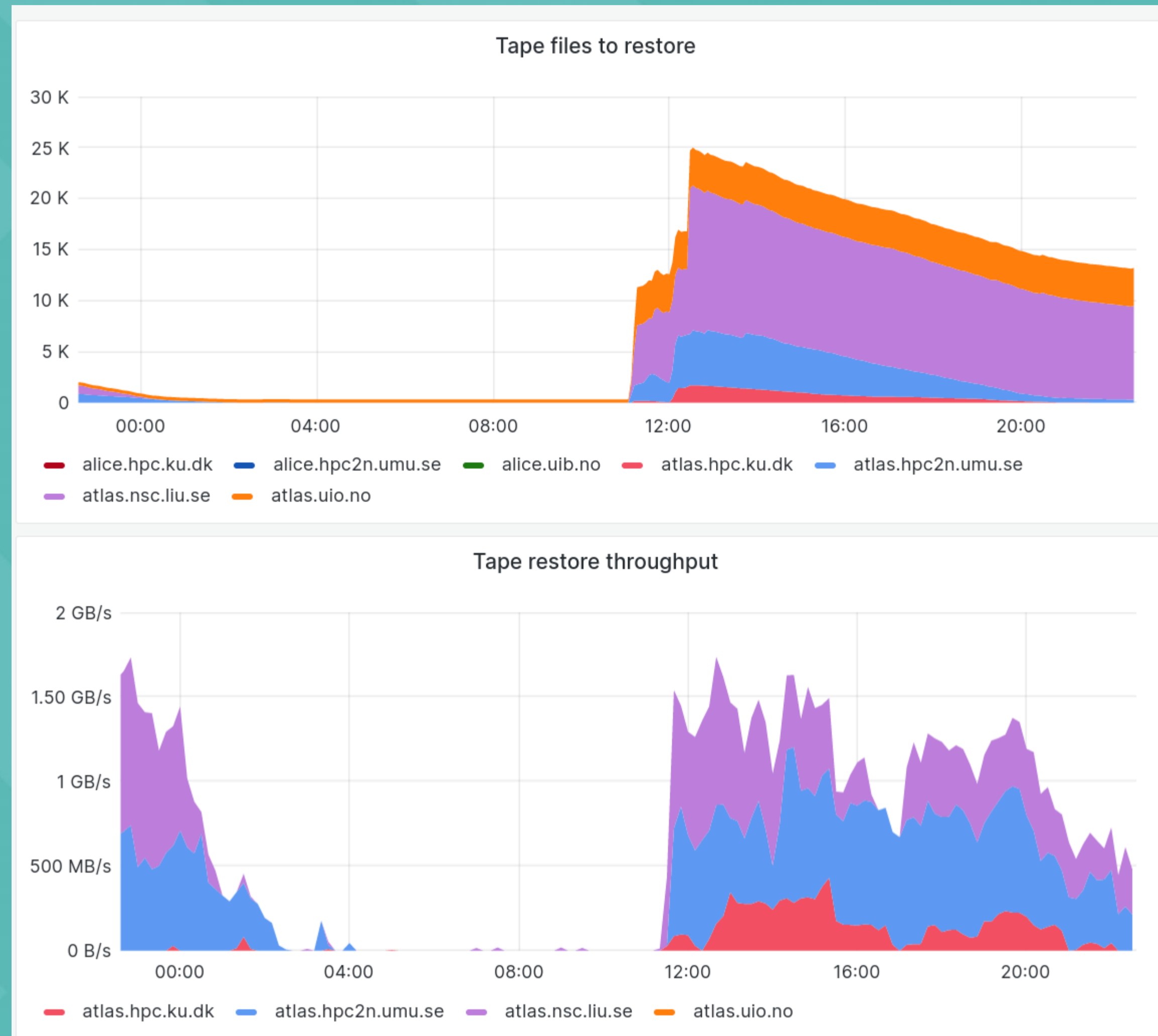
Issues: Low on speed

- At 1GByte/s staging to tape we fill up ATLAS write buffer space before they're done writing a single dataset
- Before emergency tuning yesterday afternoon, we were doing $\sim 0.8\text{GB/s}$



Issues: Low on speed

- This user behavior doesn't help either
- The “emergency tuning” was basically emergency breaks for restores



Future

- Large increase in capacity
- Probably need to scale bandwidth with capacity
- Shorter latency in the feedback loop
 - Things are slow
 - Various tuning effort
 - Request funding for new tape drives
 - Install new tape drives
 - See if it is fast enough



Future

- Endit plugin not reserving space for files to be read
 - Got stuck behind other tasks and issues for testing
 - Will try to fix and get some data over the summer



Solutions

- IBM sorts out next tape generation and ships it
- HPC2N can borrow some ALICE tapes for ATLAS
 - But they'll have to be back by Heavy Ion run...
- Make writes go faster at KU and especially NSC where most of the free space is
- Big buffer on disk pool nodes that then gets migrated to the “correct” places
- More ideas?





Discussion