



TIER-3 MONITORING REQUIREMENTS

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Why

- Tier-3 operations can affect central services
 - File transfers from T1/T2
 - Jobs can reduce the pledged resources
- Tier-3 sites wish to have information on the jobs:
 - Local interest
 - Funding authorities
- Need an information on dataset access
 - Popularity
- Information on the site quality of service

Tier-3 Survey

- To be presented on Tier-3 session
- Preliminary conclusions
 - Most sites use fabric monitoring: ganglia, nagios
 - Some sites monitor the jobs/data
- What kind of monitoring Tier-3 sites prefer? Random answers:
 - Local
 - Central
 - None

General Guidelines

- T3s do not have to spend additional resources on the monitoring
- Monitoring must be automatically enabled for all transfers and all jobs
- Non-intrusive: must not create additional support requirements on sites or central services/operations

File transfers

- T0/T1/T2: monitoring through FTS
- T3s transfer/use data with:
 - FTS for grid sites
 - dq2-get (/FTS)
 - Xrootd
 - Direct copy, ...
- All the transfer modes need to be monitored to
 - Show the transfer statistics, throughput
 - Monitor for transfer failures
 - Enable transfer throttling site blacklisting

Jobs Monitoring

- Not so clear as for central production and analysis, diverse methods of job submission
 - Using standard tools, pathena, ganga -> Job monitoring through panda
 - Local batch submission
 - Proof
 - Interactive jobs
 - In-house developed tools
- Jobs might access remote data
 - Xrootd, gsidcap, ...

Monitoring strategy

- Favor using Atlas provided tools for all kinds of jobs
 - pathena, ganga (done)
 - Local batch, proof, interactive jobs
- Provide the monitoring hooks within the tools
 - Publishing monitoring records to central monitoring on-the-fly, no local data collection service
 - Need to define what information can be published to collector

Conclusions

- Tier-3 sites must be registered in AGIS and use consistent configuration for monitoring records.
- Data transfer monitoring:
 - A must for every site
 - Needs development for most of the transfer methods. Some probably at the DDM and core service level
- Job monitoring:
 - If the Tier-3 site wishes
 - Many sites would like to use it
- Monitoring group shall investigate the development effort for
 - Non FTS transfers
 - Non pathena/ganglia jobs
- Monitoring group has manpower to develop additional tools for T3 monitoring

