

# Questions: Storm, SRM, ...

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Atlas, CMS T2



# Generic questions: Storm (and gLite)

- ACL's, space protection, etc.
  - “Short term plan available by end Oct. 08??” *was a week ago.*
    - On the “Storm release plan site”.
- The 1.4 version contain features we need, and we will be needing them by the end of year (planned downtime).
- Storm on the gLite main stack, “number of sites is growing”:
  - “*Guaranteed to grow **at least** by 2 more sites until the end of year.*”
    - *Federated Portuguese T2 (3 sites) will add up to a total of 1.2PB of disk.*
  - Configuration is to bound to ItalianGrid (not showstopper, but annoying)
- (RHEL&Co.)5/64bits OS/arch: showstoppers are the glite-security-\* + few others (gLite not Storm people).

# Documentation: Storm

- Title says it all:
  - To have as many use cases as possible:
    - Details on the “namespace.xml”;
      - ***“Everything you can do, and how, with...”***
  - Gather as much as possible from the Storm tutorials and papers and put it in a single doc/wiki.
  - “Asking too much?” administration manual including; specific usage scenarios, clustering, troubleshooting, etc..

# Technical/config. questions: Storm

- Repeating: IG\_YAIM bound to Italian Grid and it's specificities.
- MetaPackage cleanup dependencies:
  - Don't need in the Storm-FE/BE thing like: DPM-\* or castor-libs, or vdt\_globus\_jobmanager, others?
  - Don't need in gridftp servers: mpi, vdt\_globus\_jobmanager, edg-fmon-\*?
  - I suppose that whomever will need them could install them apriori or with another metapackage?
- Dynamic info provider (should not be in a cron job!)
- Not necessarily to do with Storm devel., but one has to know the “technical translation” between atlas space token XXX and it's exact implementation on each SRM implementation, what ACL's, DN's VOMS-FQAN's have “rwx” permission, and ownerships for that space.

# Storm vs. underlying filesystem

- Questions in this section are a bit vague, having to do with ACL's, space protection, space limitation (without quotas).
  - Do we enforce ACL's on the filesystem level (our case Lustre), or ***somehow*** on the Storm level (namespace.xml)?
  - At a certain moment I thought that I could do “ST limits” in namespace.xml:
    - `<TotalOnlineSize unit="Byte">SIZE_LIMIT</TotalOnlineSize>`
    - Or `<space lifetime... guarsize="SIZE_LIMIT" totalsize="SIZE_LIMIT"/>`
    - To limit the space size for each ST, available to the SRM interface and into the GIP published information.
    - ***BTW, this number is in kB, not in Bytes***

# A “few” issues (not only Storm): optional

- The gridftp server: I had to put the option:
  - **-no-use-home-dirs**, because otherwise srmcp's etc., put the home dir of the mapped user account before the correct path. Does not happen with lcg\_utils. (Using dcache-srm-client)
- Known bug: <https://savannah.cern.ch/bugs/?33288>: lcg-utils creation of subdirectories.
- There seems to be a problem in the logrotation of /opt/srmv2storm/var/log/srmv2storm.log, more than once I found it with “zero” size (did not investigate further yet).
- LCAS/LCMAPS logs are a “mess”, one should disable them completely, in the default config. they just give useless info. Increasing the log level “they” are able to write 1000 lines in less than a second (I have “**wc -l**” them) and bring the services/machine down.

# “*A last comment*”

- After administering a dCache system for more than 2.5 years, Storm/Lustre is like “*heaven*”.
- I was “surprised” by what I got “for free”:
  - Space tokens easily setup and “**properly published in the info system**”.
  - ACL's from the start (of course this comes from the underlying FS).
  - POSIX FS for the users (they “*thank you*” for that).
  - No DB for the namespace bound to the SRM system.
- Proper and useful logging both on the level of Storm, (and Lustre).
- And ... more.
- **Of course there are problems, the point is how much it takes to discover it's origin and be able to solve them.**<sup>7</sup>

# Further questions and a problem

- “file” protocol: how is it used by a user creating and writing a file directly on the FS/SpaceToken?
- Related to “Storm not in main gLite stack”:

```
/opt/glite/yaim/functions/config_vomsmmap
```

```
glite-yaim-core-4.0.4-2
```

```
### Temporary fix to extend the file in the cronjob definition
```

```
if ( ! echo " ${NODE_TYPE_LIST} " | egrep -q "creamCE|WMS" ); then
```

```
glite-yaim-core-4.0.5-7
```

```
### Concatenate this file to the "general" grid-mapfile
```

```
if ( echo " ${NODE_TYPE_LIST} " | egrep -q "CE" ) && ( ! echo " ${NODE_TYPE_LIST} " |  
egrep -q 'creamCE' ); then
```