SRM v2.2 Deployment Workshop, Edinburgh - UK
13,14 November 2007

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Organization of Storage Management Support
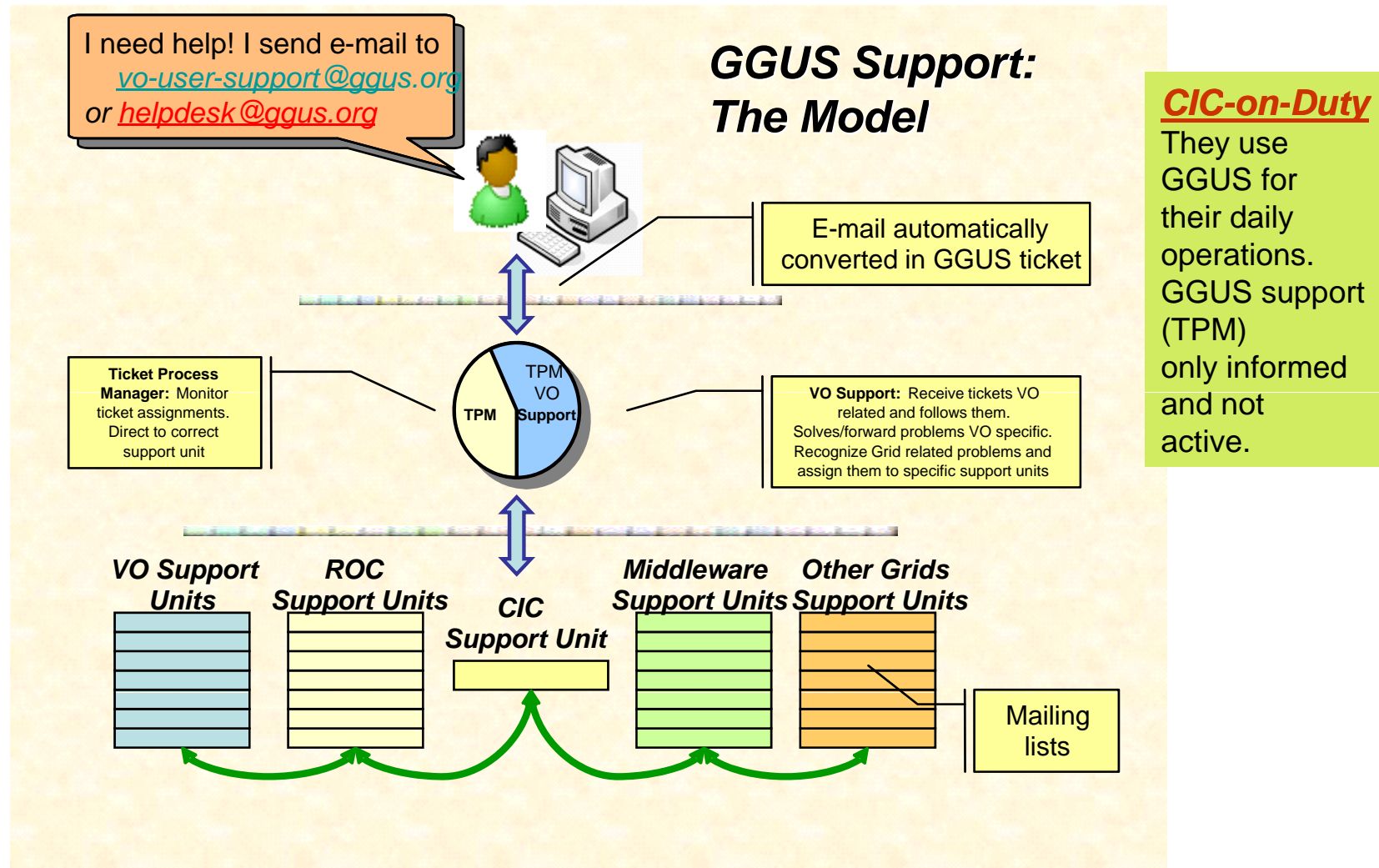
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Goal

- **Collect ideas on how to organize support**

- **Definition of the support bodies**

- **Define the support channels**

- **Define the procedures to be followed**

Some background

I need help! I send e-mail to
vo-user-support@ggus.org
or helpdesk@ggus.org

**GGUS Support:
The Model**

E-mail automatically converted in GGUS ticket

Ticket Process Manager: Monitor ticket assignments. Direct to correct support unit

TPM VO Support

TPM

VO Support: Receive tickets VO related and follows them. Solves/forward problems VO specific. Recognize Grid related problems and assign them to specific support units

CIC-on-Duty
They use GGUS for their daily operations. GGUS support (TPM) only informed and not active.

VO Support Units

ROC Support Units

CIC Support Unit

Middleware Support Units

Other Grids Support Units

Mailing lists

Who are the supporters and what do they need to do ?

- **TPM** : first level support - general Grid experts who analyze the problems reported and find a solution or forward the problem to a more specialized second level support unit
- **TPM VO**: VO first level support - VO general experts who solve VO specific problems
- **VO Support**: VO second level support – VO specialists who solve VO/Grid related problems
- **Specialized Support**: middleware second and third level support – specialist of Grid middleware
- **ROC, ENOC**: operations second and third level support – Regional and network Grid specialists for deployment problems

Grid Storage Expert

TPM Support

Conclusions of the last GSSD

- Several different types of problems reported:
  - Problems reported by users and understood by the sites (solved at ROC level)
  - Problems reported by site admins
  - Problems reported by Tier-1s
- It was agreed that issues that fall in 1) are the ones GGUS can address. However, 2) and 3) are better addressed via other means
  - Site-admins forums (already existing for most of the storage services available)
  - Well defined channels to developers support infrastructures
- It is important to build a second level support specialized in storage service
  - A group of expert site-admins or users who can help non-expert Tier-2s sort out common problems
  - Such a group of expert could also be a formal GGUS group. In this way problems reported by site-admins can be traced, if GGUS tickets are open.
  - It looks like we have enough experts around and they are willing to provide support. Candidates are in UK, Italy, Spain
  - Second level support will be discussed during the Tier-1/Tier-2 storage workshop at Edinburgh
  - It was agree to also create a channel between the EU and the US second level support so that knowledge can be built in a broad way

Conclusions of the last GSSD

- It was stressed that support for storage is very important and cannot come for free
  - Funding is needed in order to build such a group of dedicated experts
- How should VOs report problems during data challenges or production activities ?
  - As of now VOs contact directly Tier-1s. This should not change.
  - At the same time a GGUS ticket should be open for traceability
- For what concerns Tier-1s, the site-admins forum can be used but also a direct channel with the developers should be established.
  - GGUS tickets should be created for traceability
  - A feed should be created so that GGUS TPM can assign problems to the developers
- GSSD will organize the support for Storage in coordination with GGUS/ESC.

What is missing ?

1. *We need to identify second and third level support for Storage*
2. *Second level : experience site admins available to help others resolving problems related to a specific storage solution.*
3. *Third level: identify a set of developers who looks after GGUS tickets assigned to the specific storage support unit*
4. *What about site-admins forums for storage problem discussions ? Is the LCG-ROLLOUT list enough ?*
5. *How should experiments report problems ? Do we need to establish privileged channels with developers ?*

A proposal

1. *Identify second and third level support* **for Storage in GGUS. GGUS tickets submitted by second level support to third level support with high priority should be given the necessary attention. Some committment needed.**
2. *Create or publicize existent user/site admin forums* **for storage problem discussions**
3. *Create an initial second level support team* **(at CERN ?) specialized in dCache and DPM.**
    *   **The team will follow the discussions in the user/site admins forums and open and follow/solve GGUS tickets accordantly.**
    *   **The team will be part of GGUS Storage second level support**
    *   **The team will have privileged channels with the developers**
    *   **Do we need a second level for CASTOR ?**
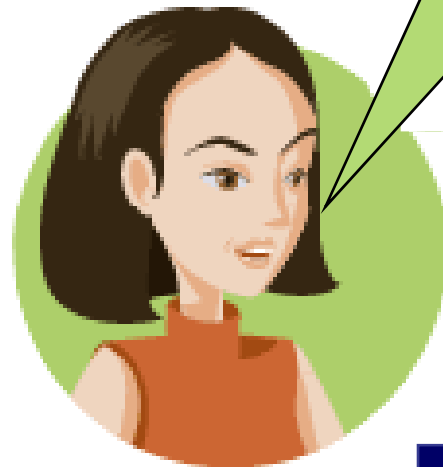
A proposal

4. **Organize _specialized storage support for the experiments_.**
   - **This team will follow closely experiments activities such as data challenges (Mx, CCRC08, etc) and production activities**
   - **It will work closely (or be part) of the second level support team**
   - **It will have privileged channels with the developers**
   - **It will filter experiments problem reporting to Tier-1s and storage developers**
5. **_Establish_ well defined channels for _second/third level support with GGUS_ for all storage systems**

And ....