



Enabling Grids for E-science

# User Support in EGEE

*Flavia Donno*

*Torsten Antoni*

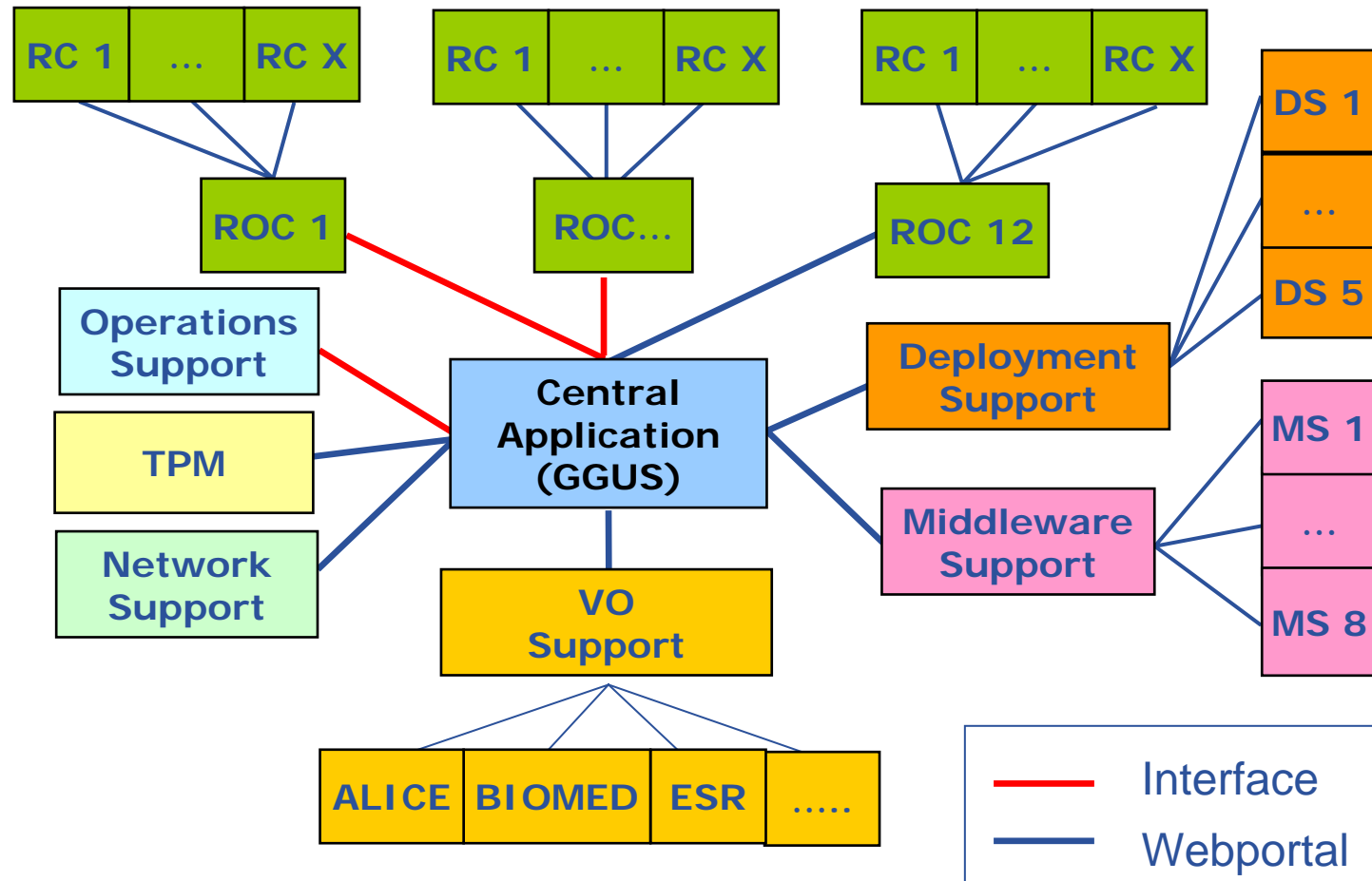
*on behalf of ESC*

[www.eu-egEE.org](http://www.eu-egEE.org)



The support model in EGEE can be captioned **“Regional Support with Central Coordination”**

The ROCs and VOs and the other project wide groups such as the Core Infrastructure Center (CIC), middleware groups (JRA), network groups (NA), service groups (SA) are connected via a central integration platform provided by GGUS.



- **Chaired by Flavia Donno/Alistair Mills**

(Kick off meeting of ESC at Karlsruhe - *27 January 2005*)

- **Goal:**

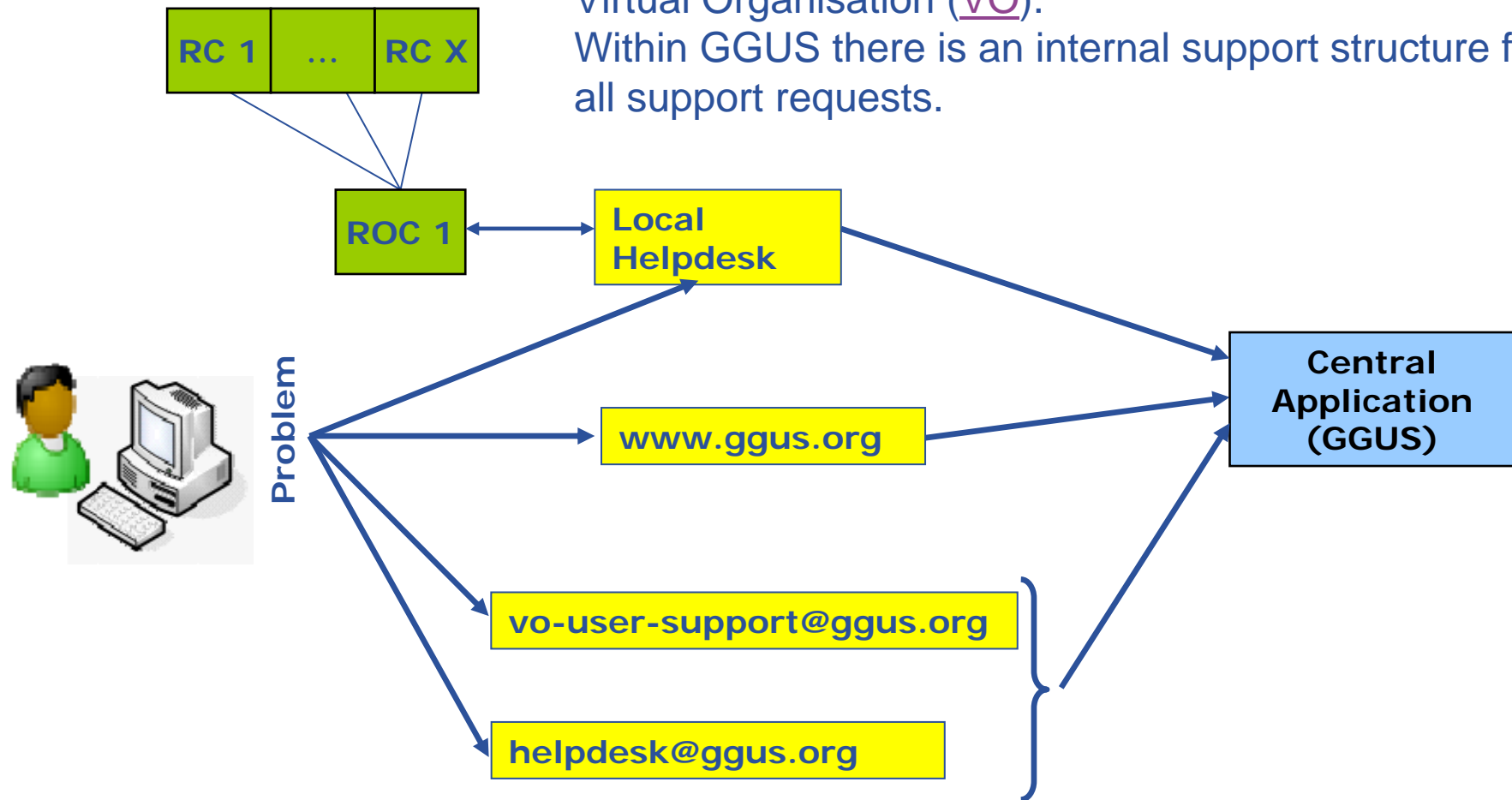
*To ensure an effective, efficient, scalable Grid User Support Service.*  
It coordinates operations, follows/cures infrastructure problems, takes users/supporters input.

- **Members:**

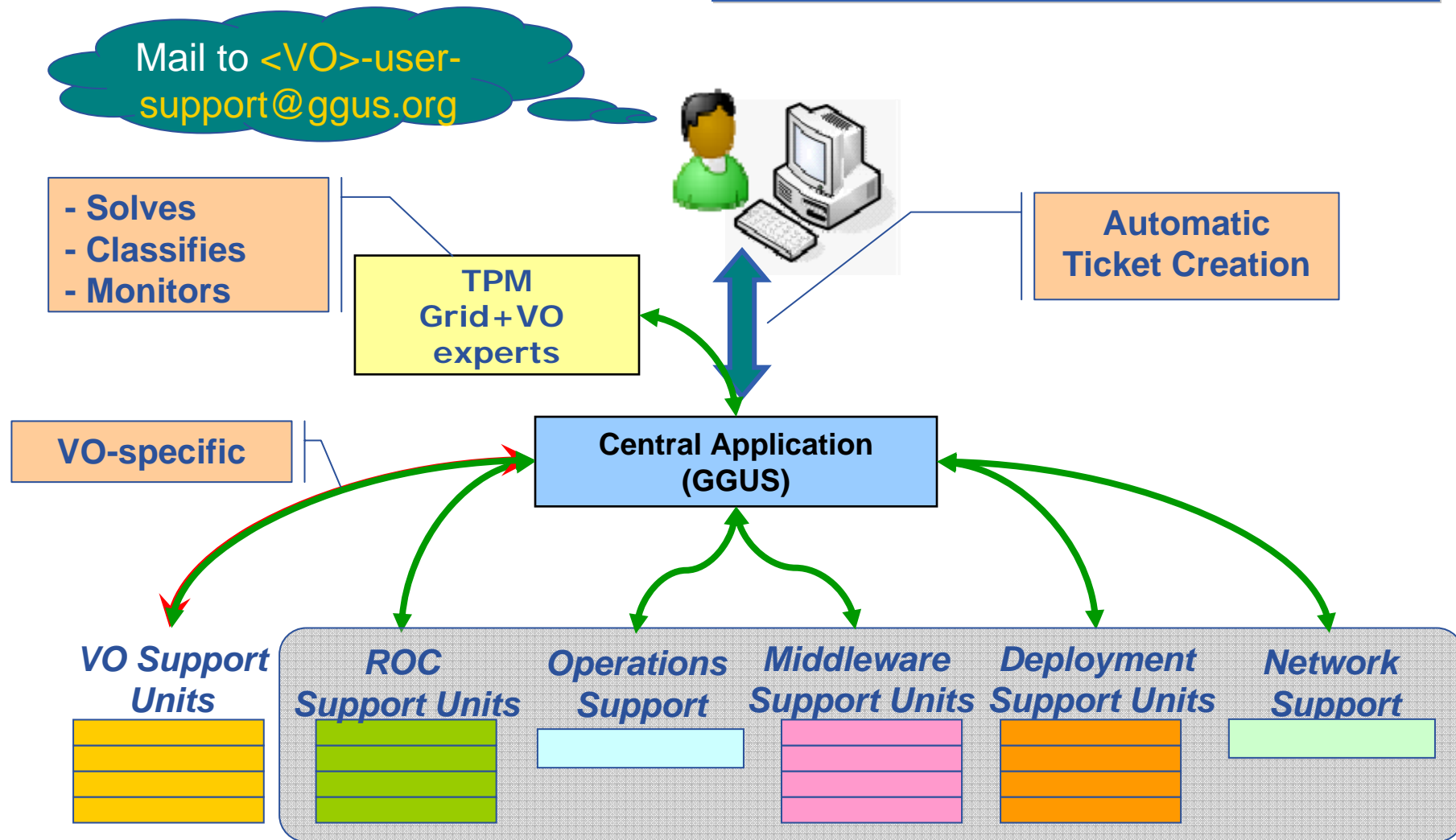
people from CERN, UK, France, Italy, Germany, Czech, ROCs, representatives from VOs, NA3, other Grids (OSG and NorduGrid), Taiwan, ROC\_US

- ESC meets monthly to discuss organization issues and problems.

Users can make a support request via their Regional Operations' Center (ROC) or their Virtual Organisation (VO).  
 Within GGUS there is an internal support structure for all support requests.

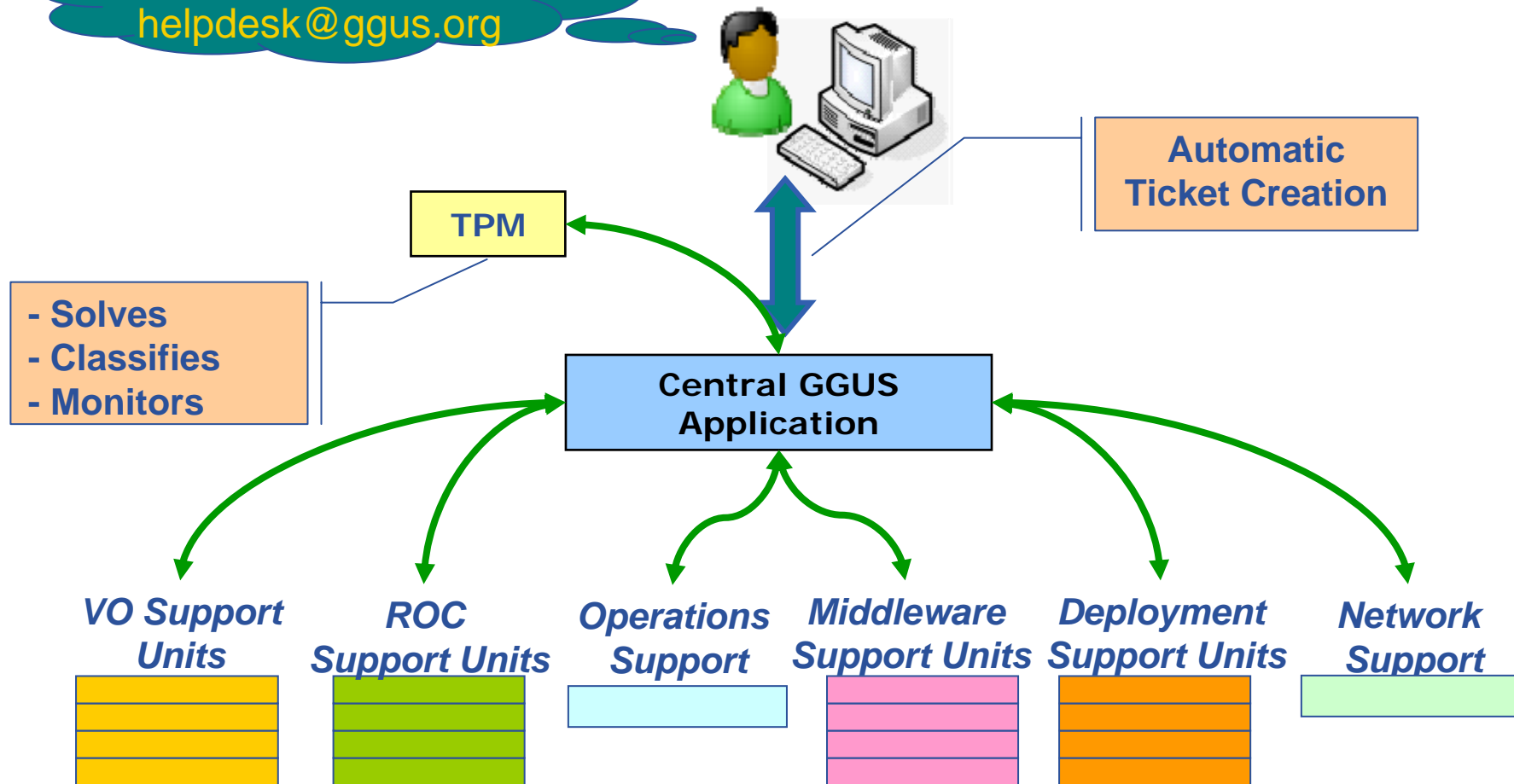


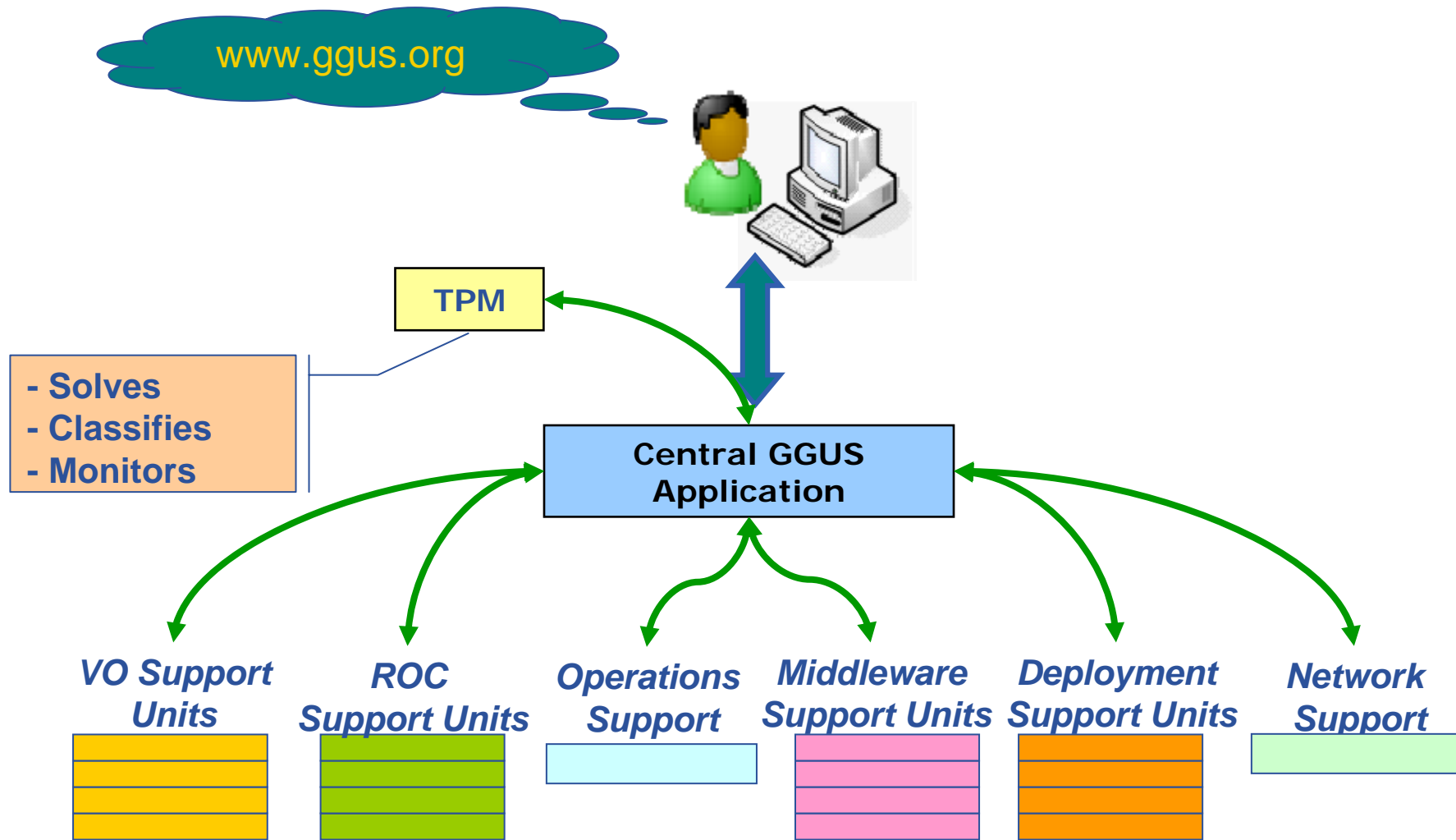
For VO users and VO specific problems

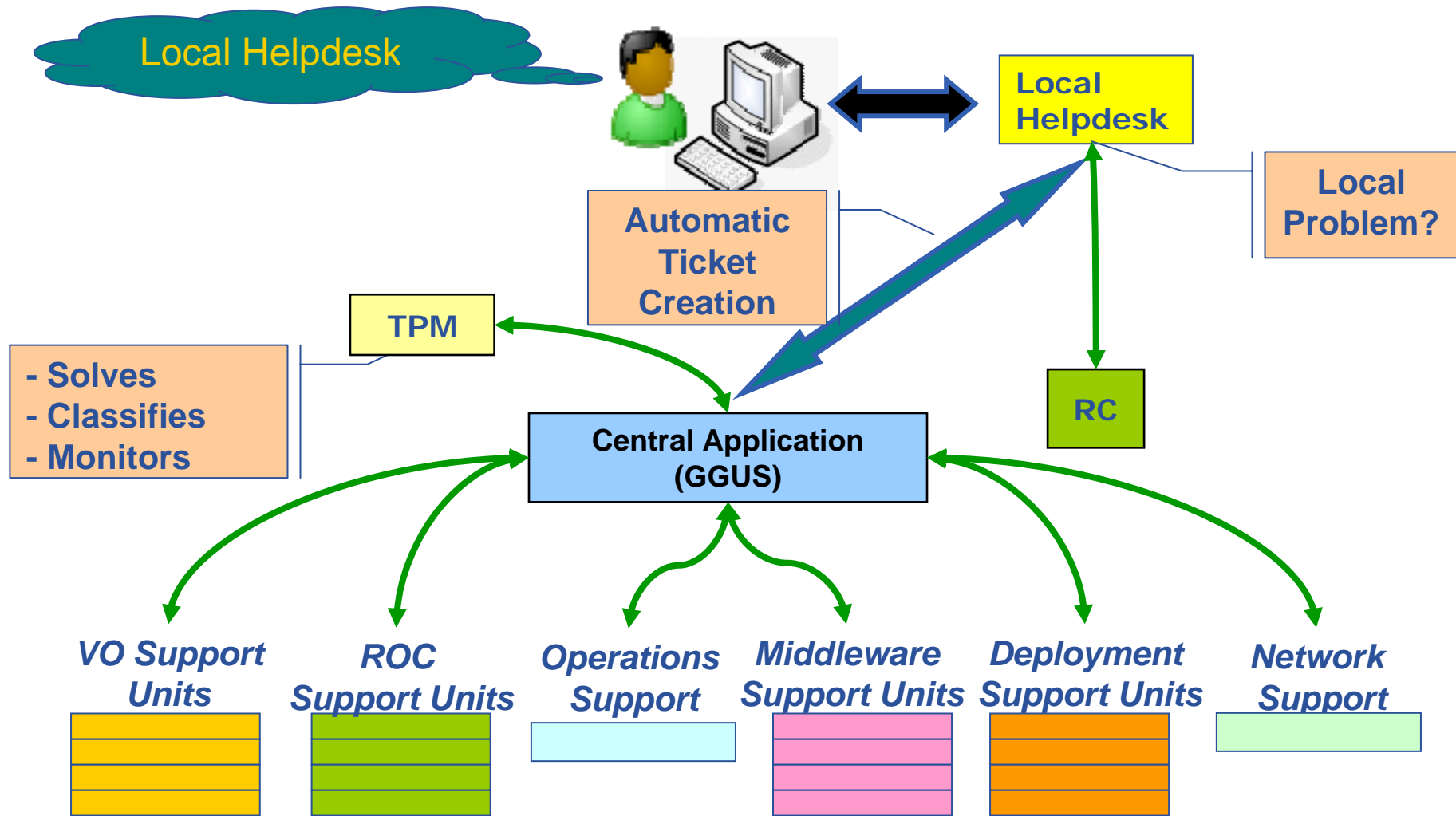


For general Grid problems: beginners, Operations, Deployment, etc.

Mail to [helpdesk@ggus.org](mailto:helpdesk@ggus.org)









The screenshot shows the GGUS portal interface. Key sections include:

- Welcome to Global Grid User Support**
- What is GGUS?** - Read more about the idea and the concept of GGUS
- Tickets @ GGUS** - Submit new ticket, new: Create ticket using the email-interface. Find details here
- Tickets from Torsten Antoni (access via certificate)** - Table of tickets with columns: ID, Status, Date, Info.
- Open tickets of all users** - Table of tickets with columns: ID, VO, Date, Info.
- Latest news** - News from GGUS, News from GridKa
- Monitoring Infos** - CIC-Portal, GOC Downtime Report, GOC Grid Monitoring, GridCE, Jobstatus GridKa
- GGUS Search** - Search input field and Search button

**Browseable tickets**

**Search through solved tickets**

**Useful links (Wiki FAQ)**

**Latest News**

**GGUS Search Engine**

**Updated documentation (Wiki FAQ)**

```

lxslc3.cern.ch - PuTTY
*****
*
*          The LXPLUS Public Login Unix Service
*          (Scientific Linux SLC 3.0.5)
*
*
* A web page containing information about this Linux version on LXPLUS:
* http://cern.ch/plus/SLC3.html
* In case of problems, please contact the helpdesk: tel 78888
* If you have any feedback not already included there please send it to:
* it-dep-fio-lxslc3@cern.ch
*
* In
* http://cern.ch/plus          : Information on the usage of LXPLUS/LXBATC
* http://cern.ch/ComputingRules : Govern the use of CERN computing facilities
*
*****
[lxplus056] ~ >
[lxplus056] ~ > !source
source /afs/cern.ch/project/gd/LCG-share/2.6.0/sl3/etc/profile.d/grid_env.csh
[lxplus056] ~ > ldapsearch -H $LCG_GFAL_INFOSYS -b "mds-vo-name=local, o=grid" -x
Could not create LDAP session handle (3): Time limit exceeded
[lxplus056] ~ >
  
```

```

lxslc3.cern.ch - PuTTY
[lxplus056] ~ > clear
[lxplus056] ~ > ldapsearch -H ldap://$LCG_GFAL_INFOSYS -b "mds-vo-name=local, o=grid" -x | more
version: 2

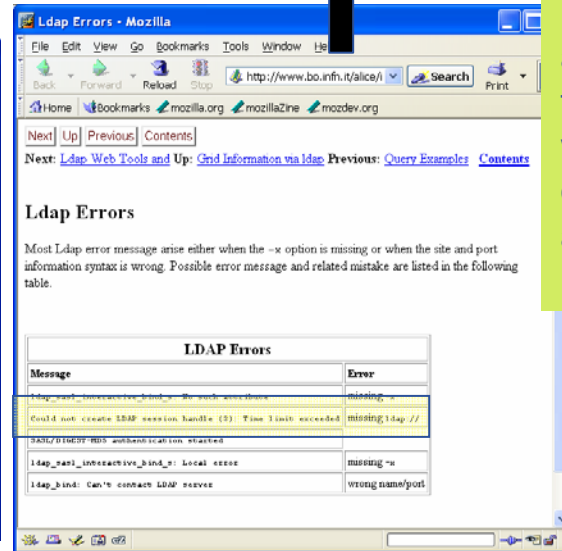
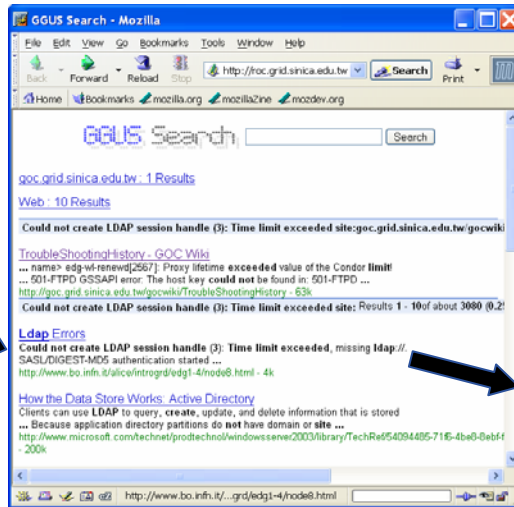
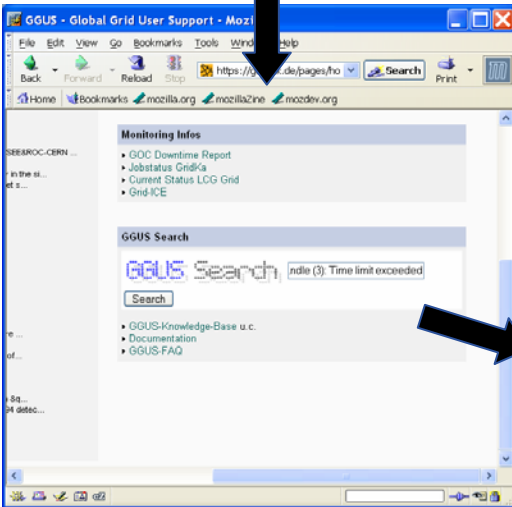
#
# filter: (objectclass=*)
# requesting: ALL
#
# local, grid
dn: mds-vo-name=local,o=grid
objectClass: GlueTop

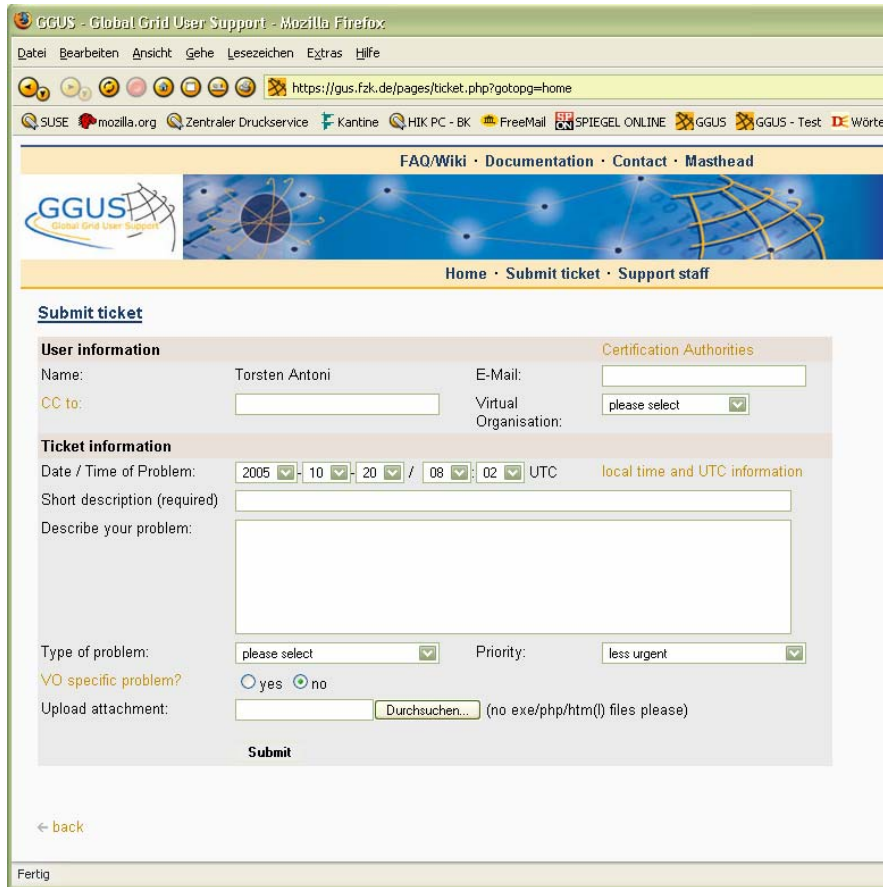
# nsc, local, grid
dn: mds-vo-name=nsc,mds-vo-name=local,o=grid
objectClass: GlueTop

# pic, local, grid
dn: mds-vo-name=pic,mds-vo-name=local,o=grid
objectClass: GlueTop

# BIFI, local, grid
dn: mds-vo-name=BIFI,mds-vo-name=local,o=grid
  
```

**GGUS Search Engine**  
Ongoing work to make it faster and to search through a wider set of docs and DBs






**GGUS email-interface**

Information

GGUS offers to VO users the possibility to create tickets also via email. If an email is sent to one of the following email addresses a ticket will be created in the GGUS system and automatically assigned to the appropriate VO-support unit. The subject of the email will show up a short description of the problem, the body of the email as detailed description. The submitter of the email will be notified about the ticket creation by email, including the ticket-ID and a pointer to GGUS.

**New:** You can add a priority to the mail.  
Just add one of the following strings to the subject of your mail:

- [1] - less urgent
- [2] - urgent
- [3] - very urgent
- [4] - top priority

Example: Subj: [2] Problems deleting a file on the grid

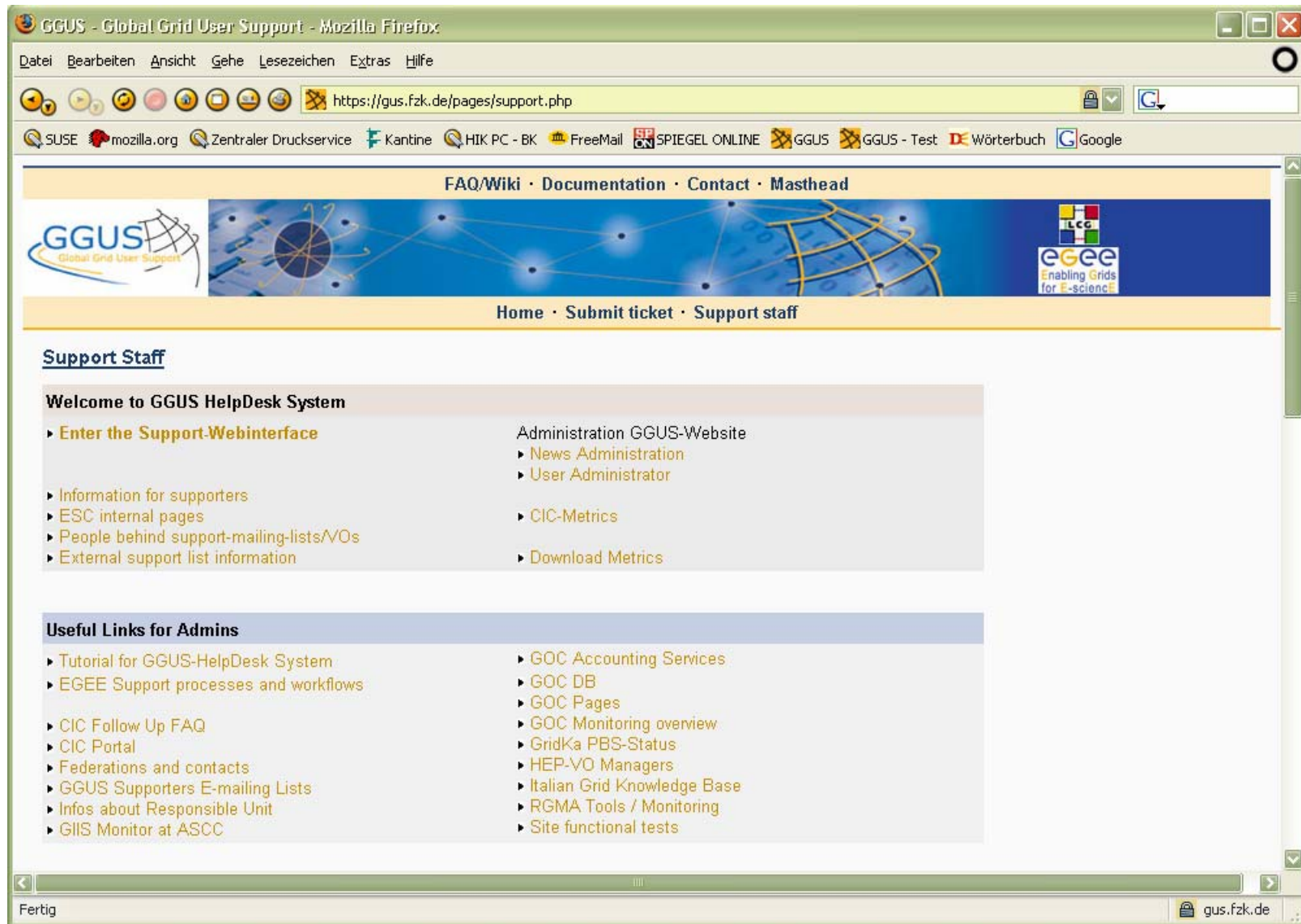
If you don't add any string to the ticket the priority will be considered as "less urgent".

- ▶ [alice-user-support@ggus.org](mailto:alice-user-support@ggus.org)
- ▶ [atlas-user-support@ggus.org](mailto:atlas-user-support@ggus.org)
- ▶ [biomed-user-support@ggus.org](mailto:biomed-user-support@ggus.org)
- ▶ [cdf-user-support@ggus.org](mailto:cdf-user-support@ggus.org)
- ▶ [cms-user-support@ggus.org](mailto:cms-user-support@ggus.org)
- ▶ [compchem-user-support@ggus.org](mailto:compchem-user-support@ggus.org)
- ▶ [enoc-support@ggus.org](mailto:enoc-support@ggus.org)
- ▶ [esr-user-support@ggus.org](mailto:esr-user-support@ggus.org)
- ▶ [lhcb-user-support@ggus.org](mailto:lhcb-user-support@ggus.org)
- ▶ [magic-user-support@ggus.org](mailto:magic-user-support@ggus.org)

If the user does not know which VO list to use, then the user can use the generic mail address for GGUS which is called:

- ▶ [helpdesk@ggus.org](mailto:helpdesk@ggus.org)

- **Support for all VOs** will available:
  - global (recognized throughout EGEE)
  - and regional (support provided by specific ROCs)



GGUS - Global Grid User Support - Mozilla Firefox

https://gus.fzk.de/pages/support.php

FAQ/Wiki · Documentation · Contact · Masthead

GGUS Global Grid User Support

Home · Submit ticket · Support staff

### Support Staff

**Welcome to GGUS HelpDesk System**

- ▶ **Enter the Support-Webinterface**
  - Administration GGUS-Website
    - ▶ News Administration
    - ▶ User Administrator
- ▶ Information for supporters
- ▶ ESC internal pages
- ▶ People behind support-mailing-lists/VOs
- ▶ External support list information
- ▶ CIC-Metrics
- ▶ Download Metrics

**Useful Links for Admins**

- ▶ Tutorial for GGUS-HelpDesk System
- ▶ EGEE Support processes and workflows
- ▶ GOC Accounting Services
- ▶ GOC DB
- ▶ GOC Pages
- ▶ GOC Monitoring overview
- ▶ GridKa PBS-Status
- ▶ HEP-VO Managers
- ▶ Italian Grid Knowledge Base
- ▶ RGMA Tools / Monitoring
- ▶ Site functional tests
- ▶ CIC Follow Up FAQ
- ▶ CIC Portal
- ▶ Federations and contacts
- ▶ GGUS Supporters E-mailing Lists
- ▶ Infos about Responsible Unit
- ▶ GIIS Monitor at ASCC

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GGUS - Global Grid User Support - Mozilla Firefox

Datei Bearbeiten Ansicht Gehe Lesezeichen Extras Hilfe

https://gus.fzk.de/ws/overview.php

SUSE mozilla.org Zentraler Druckservice Kantine HIK PC - BK FreeMail SPIEGEL ONLINE GGUS GGUS - Test Wörterbuch Google

FAQ/Wiki · Documentation · Contact · Masthead

Home · Submit ticket · Support staff

### GGUS WEB HelpDesk

**START SEARCH:** Ticket-ID:  go Support Unit - User - Keyword - GGUS mail  
latest - new - open - solved - reopened - all - tickets

**17 tickets found. Criteria: status=open**

Ticket-ID	Virt. Org.	Resp. Unit	Status	Date	Info
4867	none	ROC_Italy	assigned	n/a	down
4866	none	ROC_France	in progress	n/a	Job submission failed
4865	none	ROC_Russia	assigned	n/a	Job list match fails
4864	none	ROC_UK/Ireland	assigned	n/a	Job list match fails
4863	none	CIC-on-duty	assigned	n/a	info not published
4860	atlas	VOSupport	in progress	2005-10-19	clrlcgce01.in2p3.fr does not compile C++ code
4854	none	ROC_CERN	assigned	n/a	down
4852	none	ROC_DE/CH	in progress	n/a	CA rpms version
4848	cdf	ROC_DE/CH	in progress	2005-10-18	instable connection
4847	none	ROC_SE	in progress	n/a	replication failed
4846	none	ROC_UK/Ireland	in progress	n/a	replication failed
4824	atlas	ROC_DE	in progress	n/a	IC Job not on emergency units in the Condor@atlas

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GGUS - Global Grid User Support - Mozilla Firefox

https://gus.fzk.de/ws/overview.php?qual=solved&resultlist=1&ticket=4862

[History] [Modify Ticket]

**Information Ticket-ID: 4862**

<p><b>Submitter of this ticket</b></p> <p>Name: Farida Fassi          Login: Mail-Bot          E-Mail: farida@ific.uv.es</p> <p>Links "Mail to submitter/anybody" have been moved to the <a href="#">modify section</a>.</p>	<p><b>Ticket relevant data</b></p> <p>Date of problem: 2005-10-19 11:10 UTC          Type of problem: Core Services          VO specific: No          Priority: less urgent          Virtual Organisation: none          Responsible Unit: TPM          Status: <b>solved</b></p>
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

**Description:** edg-irc command  
 Detailed description:  
 Hello,  
 Could you tell me what is wrong in the following, I have not managed to get it working.

```
-bash-2.05b$ edg-irc pfnsForGuid
guid:B6DF2D9C-238B-D911-9466-003048293916 --endpoint $LRC_ENDPOINT
Unexpected exception from server : No such operation 'getPfnis'
-bash-2.05b$ echo $LRC_ENDPOINT
http://lrisatlas.cern.ch:7777/atlas/v2.2/edg-replica-metadata-catalog/services/edg-replica-metadata-catalog
```

Many thanks in advance  
 Farida

**Solution:** Wrong LRC endpoint  
 Detailed solution:  
 Dear user, the LRC endpoint you are using is wrong. You are using the RMC endpoint instead. The correct LRC endpoint is:  
<http://lrisatlas.cern.ch:7777/atlas/v2.2/edg-local-replica-catalog/services/edg-local-replica-catalog> The LRC/RMC endpoints can be obtained using the lcg-infosites command: % lcg-infosites --vo atlas lrc <http://lrisatlas.cern.ch:7777/atlas/v2.2/edg-local-replica-catalog/services/edg-local-replica-catalog>  
 Make sure that LCG\_GFAL\_INFOSYS points to lcg-bdii.cern.ch. [xplus070] ~ > lcg-infosites --vo atlas lrc <http://lrisatlas.cern.ch:7777/atlas/v2.2/edg-local-replica-catalog/services/edg-local-replica-catalog>  
 [xplus070] ~ > echo \$LCG\_GFAL\_INFOSYS lcg-bdii.cern.ch:2170 Please, for further details check the LCG User Guide: <https://edms.cern.ch/file/454439/LCG-2-UserGuide.html> Flavia

You may also want to look in the ticket history if there are any  
 - preliminary solutions - internal diary entries - assignments to person - involved persons.

[TOP] [Modify ticket]

**History Ticket-ID: 4862**

Date of change / Last modifier	Action taken
2005-10-19 11:10 UTC Farida Fassi	new (GlobalGridUserSupport)
2005-10-19 11:21 UTC	changed type of problem: Core Services

Warten auf gus.fzk.de...

GGUS - Global Grid User Support - Mozilla Firefox

https://gus.fzk.de/ws/overview.php?qual=solved&resultlist=1&ticket=4862

[TOP] [Modify ticket]

### History Ticket-ID: 4862

Date of change / Last modifier	Action taken
2005-10-19 11:10 UTC Farida Fassi	new (GlobalGridUserSupport)
2005-10-19 11:21 UTC Farida Fassi	changed type of problem: Core Services
2005-10-19 11:22 UTC Guenther Grein	assigned (TPM)
2005-10-19 14:21 UTC Flavia Donno	solved (TPM) Wrong LRC endpoint Dear user, the LRC endpoint you are using is wrong. You are using the RMC endpoint instead. The correct LRC endpoint is: <a href="http://isatlas.cern.ch:7777/atlas/v2.2/edg-local-replica-catalog/services/edg-local-replica-catalog">http://isatlas.cern.ch:7777/atlas/v2.2/edg-local-replica-catalog/services/edg-local-replica-catalog</a>  The LRC/RMC endpoints can be obtained using the lcg-infosites command: % lcg-infosites --vo atlas lrc Make sure that LCG_GFAL_INFOSYS points to lcg-bdii.cern.ch.  [xplus070] ~ > lcg-infosites --vo atlas lrc <a href="http://isatlas.cern.ch:7777/atlas/v2.2/edg-local-replica-catalog/services/edg-local-replica-catalog">http://isatlas.cern.ch:7777/atlas/v2.2/edg-local-replica-catalog/services/edg-local-replica-catalog</a> [xplus070] ~ > echo \$LCG_GFAL_INFOSYS lcg-bdii.cern.ch:2170  Please, for further details check the LCG User Guide: <a href="https://edms.cern.ch/file/454439/LCG-2-UserGuide.html">https://edms.cern.ch/file/454439/LCG-2-UserGuide.html</a>  Flavia

[TOP] [History]

### Modify section Ticket-ID: 4862

Mail to submitter (farida@ific.uv.es)  
Mail to anybody

Assign ticket to support unit:

Change status:

Type of problem:

Assign ticket to one person:

Change VO:

Change priority:

(valid email address please)

Involve others:

VO specific?  yes  no

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https://gus.fzk.de/ws/overview.php?qual=solved&resultlist=1&ticket=4862

[TOP] [History]

**Modify section Ticket-ID: 4862**

Mail to submitter (farida@fic.uv.es)  
Mail to anybody

Assign ticket to support unit: TPM  
Change status: solved  
Type of problem: Core Services

Assign ticket to one person:   
Change VO: none  
Change priority: less urgent

(valid email address please)

Involve others:   
VO specific? yes  no

(separate multiple emails by ";")

Internal diary (Message is visible for support staff only)

Insert/add short solution (will not be displayed in ticket history unless status is being set to solved)

Wrong LRC endpoint

Insert/add detailed solution or comments (also to be used for preliminary solutions)

Dear user,  
the LRC endpoint you are using is wrong. You are using the RMC endpoint instead.  
The correct LRC endpoint is:  
http://rlsatlas.cern.ch:7777/atlas/v2.2/edg-local-replica-catalog/services/edg-local-replica-cat

The LRC/RMC endpoints can be obtained using the lcg-infosites command:  
% lcg-infosites --vo atlas lrc  
Make sure that LCG\_GFAL\_INFOSYS points to lcg-bdii.cern.ch.

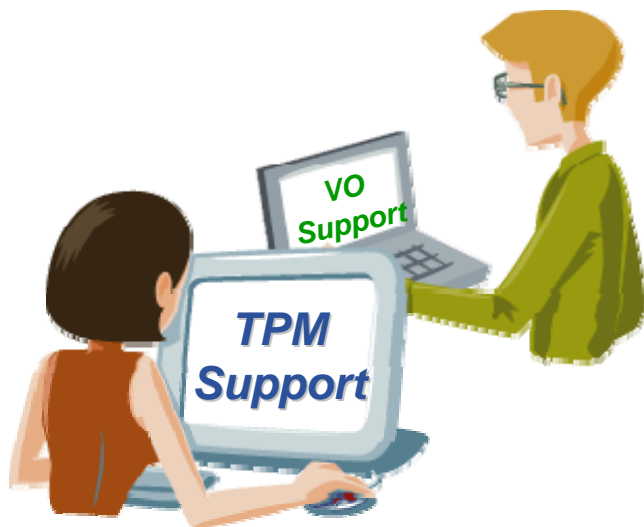
[xplus070] ~ > lcg-infosites --vo atlas lrc  
http://rlsatlas.cern.ch:7777/atlas/v2.2/edg-local-replica-catalog/services/edg-l

Want to upload attachment?

**Save modification and submit**

Fertig gus.fzk.de





- **Ticket Processing Managers (TPM)** :  
Generic grid experts
- **VO TPMs**:  
First line supporters for VOs
- **Specialized Support**:  
Middleware, Deployment,  
specialized VO Support
- **ROCs**:  
local support and services
- **ENOC**:  
network support

- You need to **register** in order to be able to use the GGUS portal (***GSI*** or password based)
- Documentation available describing the duties of a supporter: docs 1300, 1200, 1100, 8600.
- **Supporter ?** If you think you have a good knowledge in Grid and have time to provide support, please contact your ROC or directly ESC at:

To apply as a supporter:

<https://gus.fzk.de/admin/apply4staff.php>

[\*\*project-eu-egEE-sa1-esc@cern.ch\*\*](mailto:project-eu-egEE-sa1-esc@cern.ch)

There are *two kinds* of Ticket Processing Managers:

- **The Generic TPM:**

- Generic Grid middleware experts
- Experience in Grid installation and configuration
- First line support
- Provide answers to tickets whenever possible
- Assign the ticket to one of the second level support units or to a ROC
- Follow all tickets and make sure they receive a timely and correct answer
- Can be contacted via [support@ggus.org](mailto:support@ggus.org)
- Can contact themselves using the e-mailing list [tpm-grid-support@cern.ch](mailto:tpm-grid-support@cern.ch)

- **The VO TPM:**

- People with experience in both generic Grid problems and VO specific software
- Receive VO specific tickets at the same time or after the generic TPM depending on VO
- They have the same duties as a generic TPM
- If a problem is really due to VO software they use the VO support structures to solve the problem



There are *two kinds* of Ticket Processing Managers:

- **The Generic TPM:** they are generic Grid middleware experts with some experience in Grid installation and configuration. They are the first line support and provide answers to tickets whenever possible => they look into the tickets details and try to understand the nature of the problem providing a solution. If the problem goes behind the expertise of a generic TPM, then the TPM assigns the ticket to one of the second level specialized support units or to a ROC. Their responsibilities are described in the document 8600. They keep users updated with the status of the ticket (will be made automatic with the next portal release – however this responsibility will stay for TPMs). They follow all tickets (beside CIC-on-Duty) and make sure they receive a timely and correct answer. They can be contacted by [support@ggus.org](mailto:support@ggus.org) and they can contact themselves using the e-mailing list [tpm-grid-support@cern.ch](mailto:tpm-grid-support@cern.ch).
- **The VO TPM:** they are people with experience in both generic Grid problems and VO specific software. Depending on the VO, they can receive VO specific tickets at the same time a generic TPM receives them or after the generic TPM has process the ticket and decided to hand it over to VO TPM. Their responsibilities are documented in 8600 and VO specific FAQs docs. They have the same duties as a generic TPM. If they recognize that the problem is really due to VO software and does not concern the Grid, then they use the internal VO specialized mailing lists to contact experts and have the problem solved. Once they receive the answer from the VO experts, they fill the answer in the “Solution” field of the ticket and set the ticket status to “solved”, so that the user gets notified.



- At present the **ROCs contributing to the TPM effort** are the following:  
ROC-CERN, ROC-CE, ROC-SE, ROC-SW, ROC-Russia  
for a total of 20 people. Other ROCs will join soon.
- The **CERN Helpdesk** is at the moment able to process between 1000 and 1400 tickets per week, having about 30 TPM equivalent on shift in groups of 5 to 7 people.
- The current TPMs normally take **weekly shift of one or 2 people** (CERN is always present). Normally a TPM does not spend more than 2 hours to process the tickets assigned.
- The people contributing to TPM are now quite sufficient for the task. With the available people the same person takes shift every 8-9 weeks.
- A **TPM can always ask for the help** of other TPMs with experience for solving a problem sending e-mail to [tpm-grid-support@cern.ch](mailto:tpm-grid-support@cern.ch). That's how a TPM gets trained as well, beside the documentation and the training courses organized by NA3.

- NA3 participates to GGUS/ESC discussions. Using material partially produced by members of ESC in various occasions they have prepared training sessions for users. One of the event was the Biomed training in Clermont-Ferrand  
<http://agenda.cern.ch/fullAgenda.php?ida=a053765>
- The CERN Help Desk has been trained to direct users to GGUS.
- Supporters are also trained while doing their support job. They are assisted by more experienced supporters. They can always ask questions to [tpm-grid-support@cern.ch](mailto:tpm-grid-support@cern.ch) for technical support. They can contact [support@ggus.org](mailto:support@ggus.org) for procedural questions. A GGUS telephone hot line has been put in place.
- Documentation available for the duties of a supporter: docs 1300, 1200, 1100, 8600, 9100  
[https://gus.fzk.de/pages/info\\_for\\_supporters.php](https://gus.fzk.de/pages/info_for_supporters.php).  
 It is constantly updated.



## Next Training Event:

Supporters training at Forschungszentrum Karlsruhe 10-11/11/05

Presentations about the Support System for Supporters, TPM and VO TPM

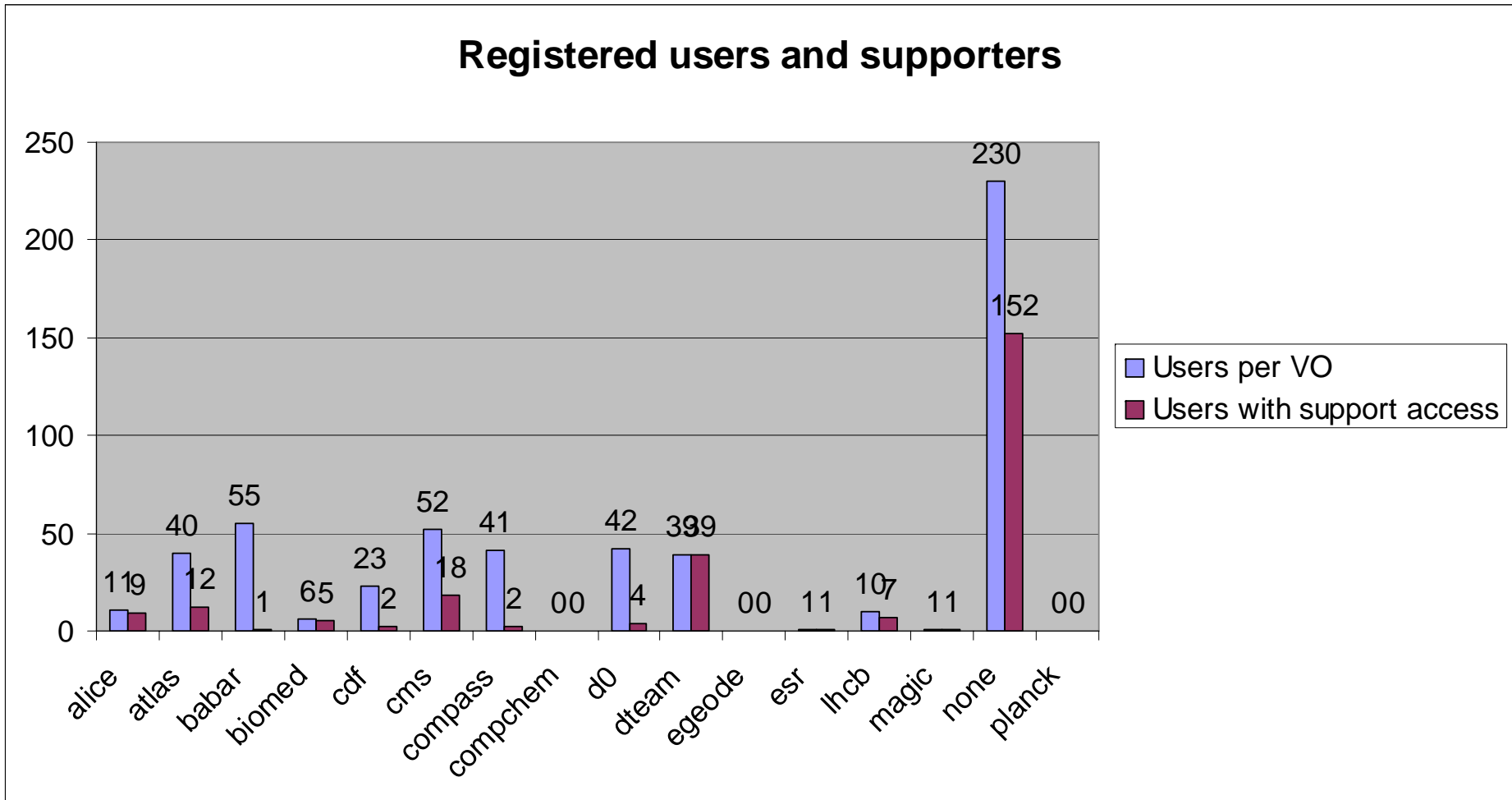
Hands on GGUS

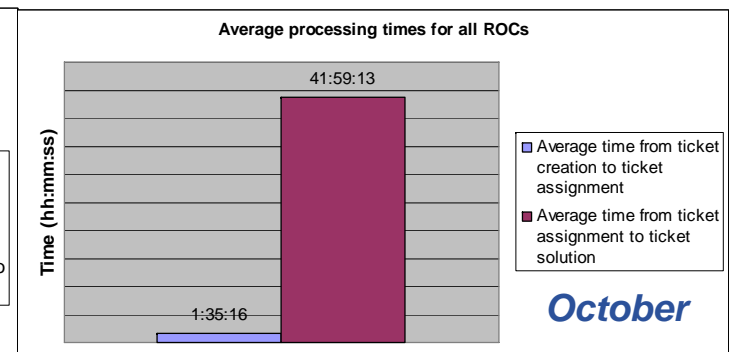
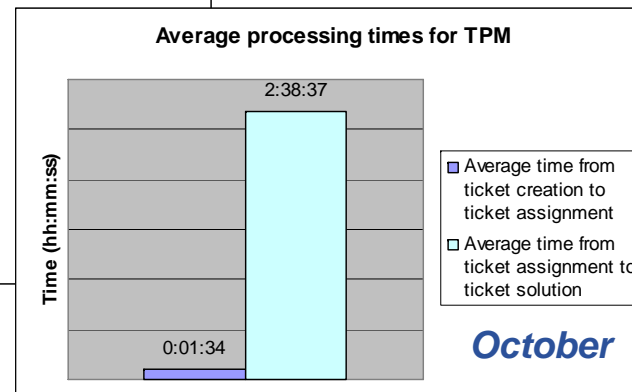
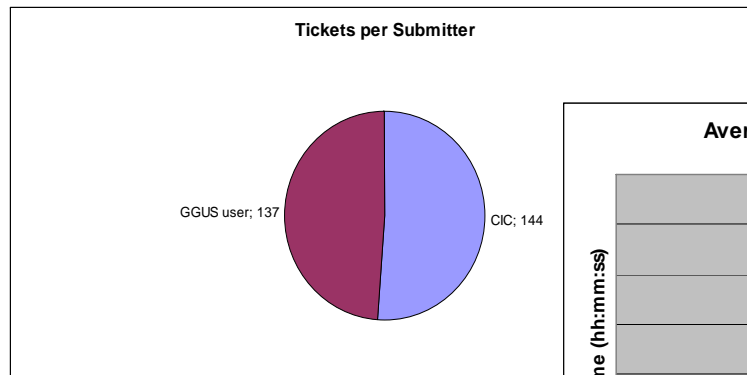
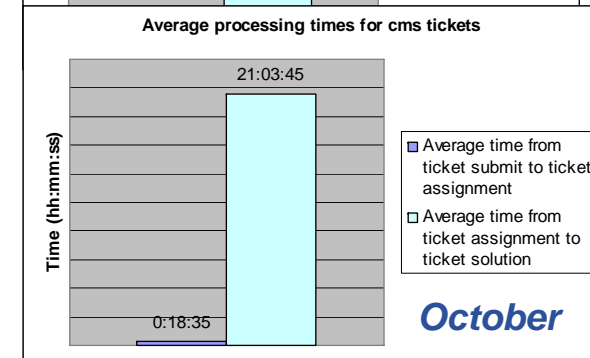
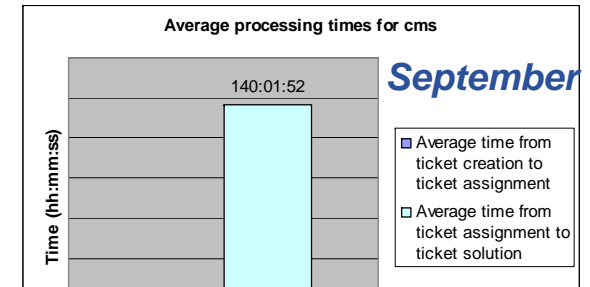
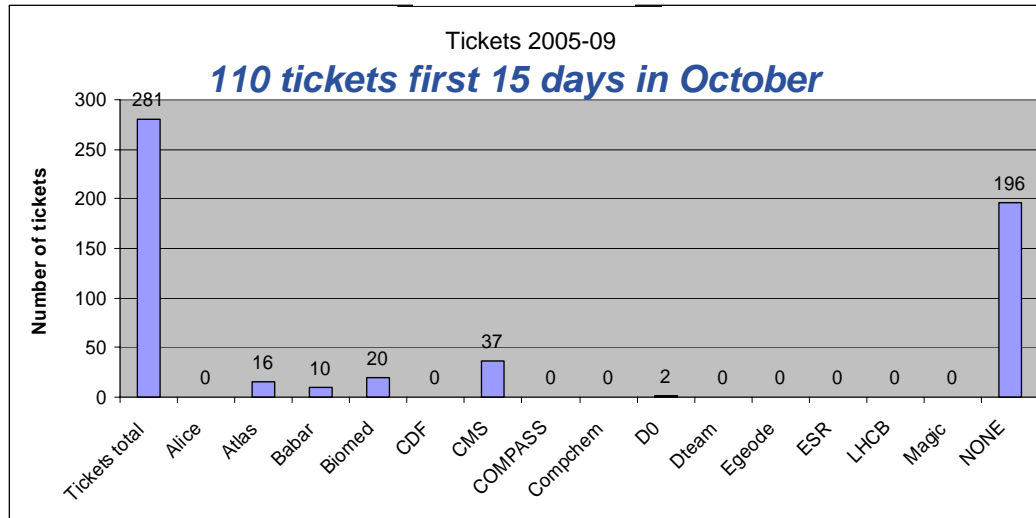
<http://agenda.cern.ch/fullAgenda.php?ida=a056547>

Registration page:

<http://www.egee.nesc.ac.uk/>

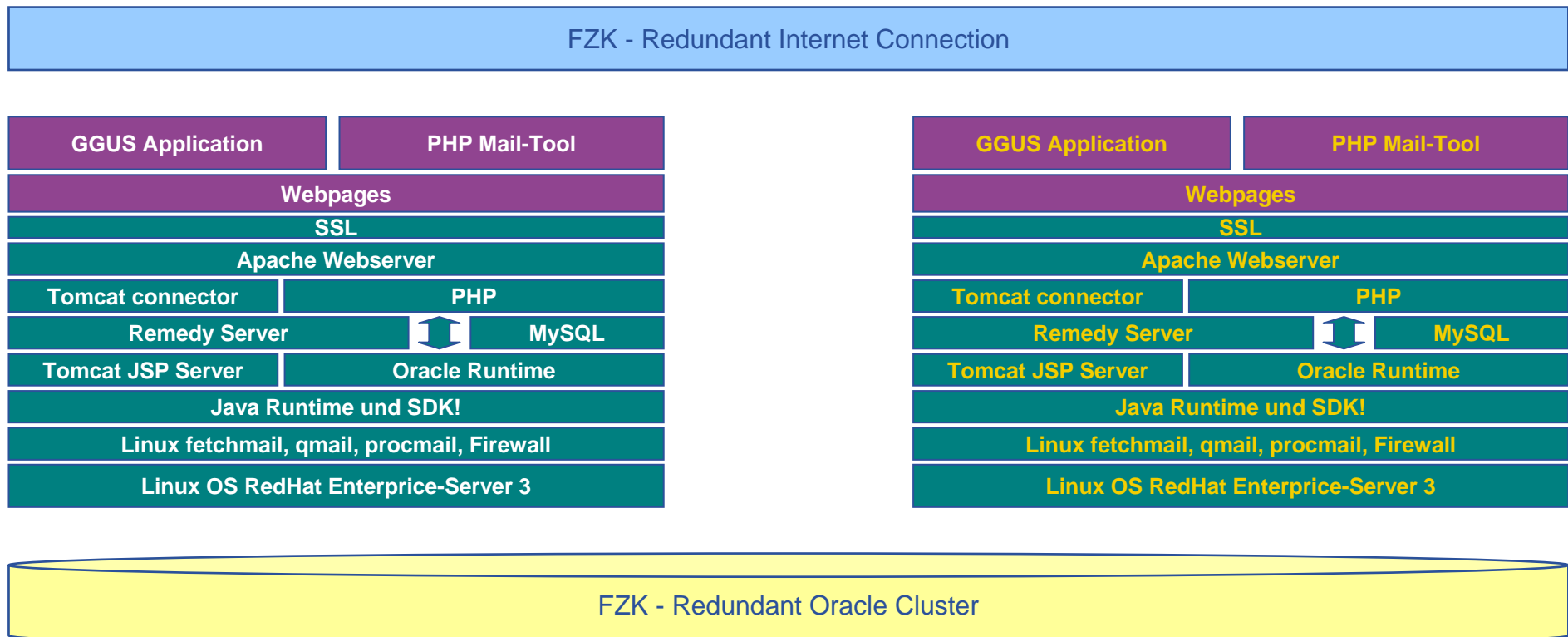








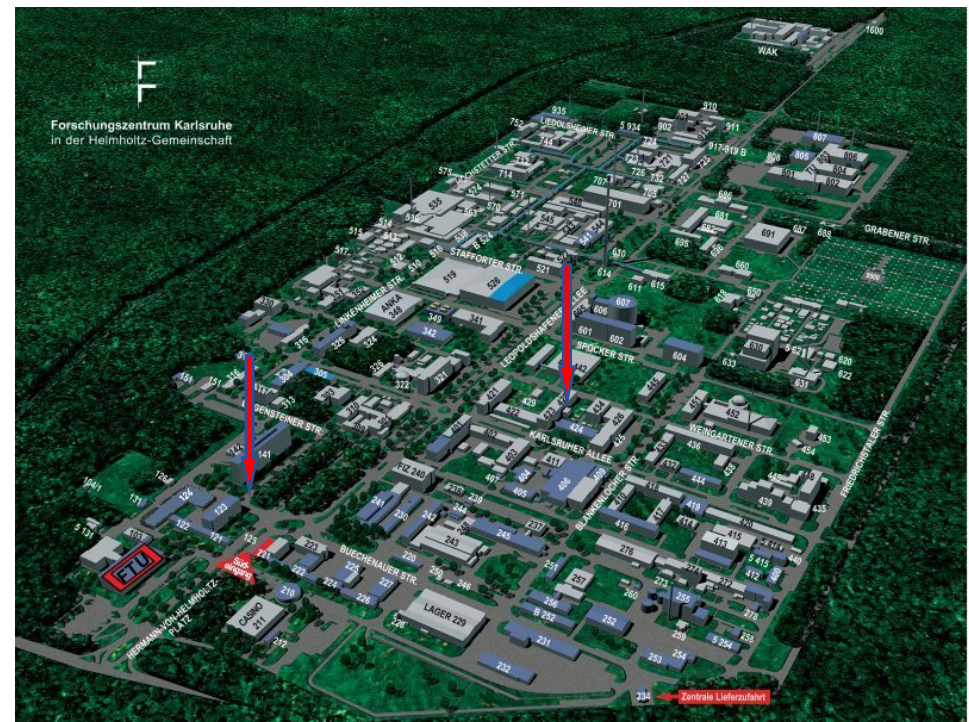
- Ensure the availability of the GGUS System with Remedy Server Groups option: two identical systems can access the same DB-tables at the same time + enables load balancing



*GGUS/ESC is now taking part to the Grid Operations meeting.*

*GGUS/FZK is working on a redundant system consisting of two identical systems at two different locations within the FZK-campus. They share the load. If one fails the other can take over the whole work.*

*GGUS/FZK is not resilient to network failures. A plan is being put in place to create a clone of the infrastructure somewhere else (Taiwan). This was an explicit request coming from Grid Operations to make the infrastructure more robust.*



- The functionality and usability of the **GGUS** system **has improved** in the last months, thanks to the help of the ROCs (more tickets submitted, more customers and general appreciation of the service).
- **GGUS/ESC** coordinates the effort and operations: key body.
- The existent **interfaces with the ROCs** are quite practical and make the system function as one. Most ROCs have established functional interfaces with GGUS, the others are working on it.
- The ticket traffic is increasing. We still **do not know** what a **realistic figure** would be for the number of ticket to be expected. The system can be dimensioned appropriately with more TPMs and support units.
- A lot of **metrics established** to measure the performance of the system (performance of a supporter/support unit, tickets solved/week/VOs, # of tickets filed in Wiki pages, etc.). The measures refer only to the central system. Each ROC processes and solves also local requests. Measures for each ROC are also available.
- GGUS is working on a **plan to offer resilience to system and network failures**.
- **We need more specialized supporters** in order to help the supporters at CERN who now are the main source of knowledge and help.