

# The Italian Regional Helpdesk System

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- **Overview of the system**
  - Framework
  - Base features
- **Extended features**
  - Custom fields
  - Web service interface
  - Interface with external systems
- **Conclusions**

- **The Italian Regional Ticketing System is built inside a OO CMS called XOOPS**
- **One of the available XOOPS modules (XHELP) provides a basic Ticketing System**
- **We extended the basic functionalities of XHELP in order to cope with the EGEE requirements**
  - Additional custom fields
  - Web service interface

- **XOOPS is a well known CMS completely open source and maintained by a very large community**
- **It's built on the standard "triad": Apache+PHP+MySQL**
- **XHELP already has almost all is needed for a ticketing system**
- **XHELP is completely integrated into XOOPS**
  - Single Sign On
  - Interaction with other modules (FAQ,WIKI,RSS etc..)

- **Possibility to define any number of support departments**
- **Users can be registered as department “staff members”**
- **Actions on tickets depend on staff member’s privileges (browser, ticket managers etc..)**
- **Internal engine allows to trigger various actions when tickets get modified**
- **E-mail notifications upon actions on tickets**
- **Tickets can be created/modified using web interface or e-mail**

EGEESA1 - Tickets - Mozilla Firefox

File Modifica Visualizza Cronologia Segnalibri Strumenti

http://gri52xl.to.infn.it/checkboxlist-new/modules/xhelp/index.php

HOME NEWS DOWNLOADS PHOTOS LINKS FORUM SEARCH

Welcome **rbrunetti** Account Edit Notification Message Administration Logout

Summary Log Ticket My Profile Knowledge base View All Tickets Search Unresolved Run Go

### New Tickets View More Tickets

ID:	GGUS-ID	Priority:	Subject:	Status:	Department:	Logged By:	Log Time:	Owner:
<input type="checkbox"/> 6454	40060	<span style="color:yellow">■ ■</span>	new test	Assigned	GGUS	GGUSTeam	2009/9/7 15:00:20	No owner
<input type="checkbox"/> 6453	40062	<span style="color:yellow">■ ■</span>	test from ggus	Assigned	GGUS	GGUSTeam	2009/9/7 15:00:19	No owner
<input type="checkbox"/> 6452	40064	<span style="color:yellow">■ ■</span>	asdadas	Assigned	INFN-TORINO	GGUSTeam	2009/9/7 15:00:18	No owner
<input type="checkbox"/> 6451	40066	<span style="color:yellow">■ ■</span>	uno	Assigned	GGUS	GGUSTeam	2009/9/7 15:00:17	No owner
<input type="checkbox"/> 6450	40070	<span style="color:yellow">■ ■</span>	test again from ggus	Assigned	INFN-TORINO	GGUSTeam	2009/9/7 15:00:16	No owner
<input type="checkbox"/> 6449	40125	<span style="color:yellow">■ ■</span>	test again from ggus	Assigned	GGUS	GGUSTeam	2009/9/7 15:00:15	No owner
<input type="checkbox"/> 6448	40188	<span style="color:yellow">■ ■</span>	test to IT	Assigned	INFN-TORINO	GGUSTeam	2009/9/7 15:00:14	No owner
<input type="checkbox"/> 6447	40185	<span style="color:red">■ ■</span>	Test 2 from IT	New	GGUS	rbrunetti	2009/9/3 11:32:37	No owner
<input type="checkbox"/> 6446	99300	<span style="color:green">■</span>	Test	New	GGUS	GGUSTeam	2009/9/1 15:16:01	No owner
<input type="checkbox"/> 6441	50434	<span style="color:yellow">■ ■</span>	Shared area problem at gridtce0...	Reopened	INFN-NAPOLI	Anonymous	2009/7/21 12:24:00	No owner

### Open Tickets Assigned to Me View More Tickets

No tickets found

### My Submitted Tickets View More Tickets

ID:	GGUS-ID	Priority:	Subject:	Status:	Department:	Logged By:	Log Time:	Owner:
<input type="checkbox"/> 6447	40185	<span style="color:yellow">■ ■</span>	Test 2 from IT	New	GGUS	rbrunetti	2009/9/3 11:32:37	No owner

### Highest Priority Unassigned Tickets View More Tickets

ID:	GGUS-ID	Priority:	Subject:	Status:	Department:	Logged By:	Log Time:	Owner:
<input type="checkbox"/> 6447	40185	<span style="color:red">■ ■</span>	Test 2 from IT	New	GGUS	rbrunetti	2009/9/3 11:32:37	No owner

Completato

- **Custom fields have been added to the ticket schema in order to be compliant with EGEE/GGUS schema**
- **A SOAP interface has been developed in order to exchange tickets with other helpdesk systems**
  - NB. In principle an arbitrary number of ticket formats and in/out interfaces can be defined but...

**We need to define and use a standardization for tickets format and communication**

The screenshot shows a web browser window titled "EGEESA1 - Tickets - Mozilla Firefox" with the URL "http://gri52xl.to.infn.it/checklist-new/modules/xhelp/addTicket.php". The interface includes a navigation menu on the left with sections for "User Menu", "Main Menu", and "Department Tickets". The main content area is titled "Log Ticket" and contains a form with the following fields:

- Username:** rbrunetti (with a "Lookup User" icon)
- Assign To:** GGUS (dropdown menu)
- Priority:** Radio buttons for different priority levels
- Subject:** Text input field
- Description:** Large text area
- Add File:** "Sfoglia..." button
- VO:** None (dropdown menu) - **This field is circled in red.**
- VO specific problem:** Radio buttons for Yes/No
- Category:** Other (dropdown menu)
- Responsible Unit:** TPM (dropdown menu)
- User notification:** Solution (dropdown menu)
- Submitter mail:** Text input field
- Share with:** Text input field
- Related issue:** Text input field

At the bottom of the form, there is a section for "Available Filetypes" with a list: sh, tar, gtar, zip, doc, pdf, csh, src, bmp, gif, jpeg, jpg, jpe, png, tiff, tif, html, txt, rtf, log, jdl, gz, tgz.



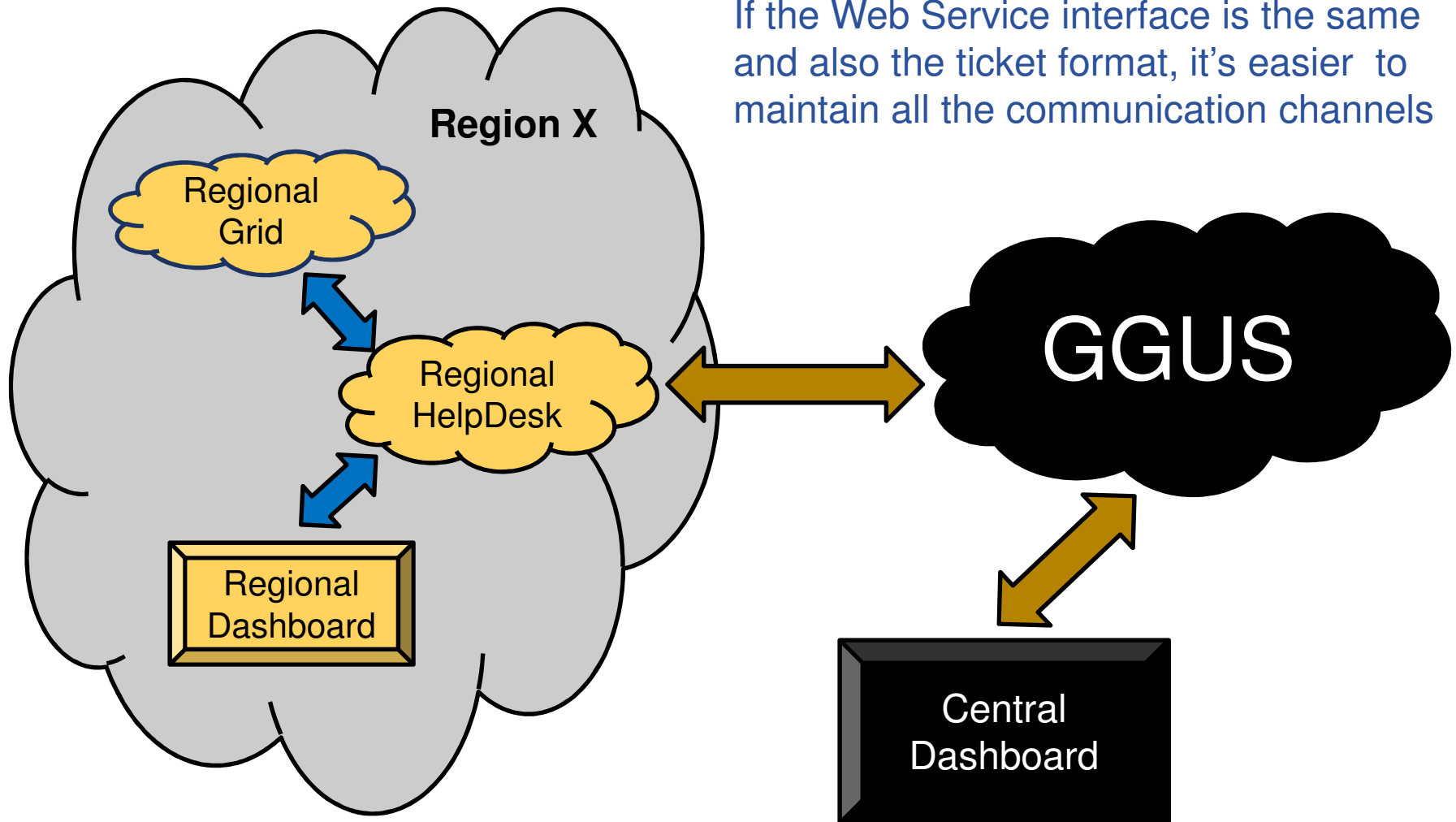
- **The interface with the external helpdesks is based on Web services.**
  - Before summertime:
    - Input : e-mail + external e-mail parser
    - Output: integrated web service client
  - Now:
    - Input: integrated web service server
    - Output: integrated web service client
- **The same input web service interface can be used to communicate with other regional helpdesk systems and/or other operational tools (dashboards etc..)**

- **Both client and server use the native PHP5 SOAP libraries**
- **The Web service exposes the same interface as GGUS (same methods and attributes)**
  - OpCreate
  - TicketModify
- **Tickets in the local system and in the remote systems are kept synchronized using the ticket-id**
  - I.e. When a ticket from GGUS comes in, a new internal ticket is created and the pair (GGUS-ID, internal-ticket-id) is used to manage the following workflow

- 1. A ticket is opened on GGUS and assigned to ROC\_Italy**
  1. A new ticket is created and assigned to the generic GGUS department
- 2. A ticket is opened on GGUS and assigned to (ROC\_Italy, INFN-TORINO)**
  1. A new ticket is created and assigned directly to INFN-TORINO
- 3. A new ticket is created on the local helpdesk and assigned to (GGUS, SuppX)**
  1. A new ticket is created on GGUS and assigned to SuppX
- 4. An existing internal ticket is modified to become a GGUS ticket for SuppX**
  1. A new ticket is created in GGUS and assigned to SuppX
- 5. A ticket has been wrongly assigned to ROC\_Italy**
  1. The ticket can be placed in “Reassigned” state. It means “closed” in the internal system, but not in GGUS. The future modification can eventually be propagated back to XOOPS/XHELP

- **Italy is interested in having a local version of the dashboard that can be operated at the regional level.**
- **The dashboard that is now centrally used is interfaced through web service with GGUS.**
- **The web service now available for the Italian ticketing system is the same as GGUS**
  - It should be not so difficult to interface the regional dashboard with the regional ticketing system.
    - Need to understand better the role of Lavoisier
- **Work started in April, but the web service for the helpdesk system was not ready yet**
- **Now we could go on and try to setup a test environment**

If the Web Service interface is the same and also the ticket format, it's easier to maintain all the communication channels



Posted Tickets (GGUS) (GGUS %)	Month
160 (119) (74%)	January
122 (61) (50%)	February
161 (63) (40%)	March
118 (93) (79%)	April
177 (108) (61%)	May
118 (103) (87%)	June
164 (138) (84%)	July
105 (68) (65%)	August

- **The Italian regional helpdesk is based on XOOPS/XHELP**
- **The system was customized to fulfill the requirements of both the international and national user communities, and of the NGI site managers**
- **The system is fully interfaced with the EGEE central helpdesk and support a variety of ticket workflow types**
- **The web service currently exposed by the system facilitates its direct integration with the regional dashboard**
- **We recommend it to new NGIs willing to operate a local helpdesk, we can provide support if needed.**
- **The system requires ongoing maintenance to keep pace with the evolution of the user requirements and of relevant operations tools**
- **Thanks to all the GGUS people for the support**