



DSA1.5 USER SUPPORT SYSTEM

HELP-DESK SYSTEM IN PRODUCTION AND USED VIA WEB INTERFACE

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Abstract

The aim of the support system is to help the users in their work in BalticGrid and to provide the ways how to solve their problems. The User support system consists of multiple parts: there are web pages, a ticketing system for help-desk, local and international mailing lists.

This document describes the deliverable DSA1.5 “User Support System: Help-desk system in production and used via web interface.”





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1. INTRODUCTION

1.1. BACKGROUND

The BalticGrid project [1] aims to

- develop and integrate the research and education computing and communication infrastructure of the Baltic States into emerging European Grid infrastructure;
- bring the knowledge in Grid technologies and use of Grids in the Baltic States to a level comparable to that in EU member states with a longer experience in the development, deployment and operation of Grids;
- engage further the Baltic States in policy and standards setting activities. The integration of the Baltic States into the European Grid infrastructure will primarily focus on extending the EGEE to the Baltic States (four partners are already engaged).

The BalticGrid project is of high strategic importance for the Baltic States and it is designed to give a rapid build-up of a Grid infrastructure, enabling the new member states to participate in the European Research Area.

The BalticGrid will take advantage of local existing e-infrastructures, designing and implementing most suitable applications as well as integrating computing infrastructure of academic institutions of the Baltic States.

1.2. PURPOSE OF THE DOCUMENT

This document describes the deliverable DSA1.5 “User Support System: Help-desk system in production and used via web interface.”

BalticGrid project is aiming to serve as large community as possible by providing stable infrastructure and wide range of services. To ensure this goal it is essential to define user groups that have to be addressed. For the purpose of user support system three main user groups are defined:

- users – most questions of this group are related to application, job submission, etc;
- site administrators – information on middleware and application installation topics;
- BalticGrid partners – information exchange on current issues.

On the initial stage of the project it was hard to identify the most suitable ways for feedback from users in the Baltic States. Therefore experiences in similar projects were studied and tools used in those projects were examined. As the result, user support system based on three different interface channels were chosen. Those interfaces are:

- ticketing systems;
- mailing lists;
- web pages.

No one of interfaces requires additional software installed on user computers and can be used by means of internet browser or mail client. This approach will help to:

- reach larger group of users: from novices to advanced users and site administrators;
- accumulate knowledge that could be used repeatedly;
- better understand user needs. That will help to improve services, develop more detailed and accurately targeted in-structions and manuals.

Current issues are tracked through a ticketing system, where users can submit their problems, and responsible site administrators have to react.



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Discussions about developments are done on mailing lists.

Issues gathered from mailing lists and ticketing system are added to SA1 activity **action list** <http://www.balticgrid.org/Internal/SA1/SA1-action-list>. This list is regularly updated and reviewed on SA1 weekly audio meetings.

Static information like tutorials, presentations and articles can be viewed and downloaded from web pages.



1.3. ACRONYMS

BalticGrid	Baltic Grid Project
BG	BalticGrid
CA	Certification Authority
CERN	European Organization for Nuclear Research
EENet	Estonian Educational and Research Network
EGEE	Enabling Grids for E-science
GÉANT	Multi-gigabit pan-European data communications network for research and education
GGUS	Global Grid User Support
GOCdb	Grid Operations Centre database
gLite	EGEE Middleware suite
KTH	Royal Institute of Technology
KTU	Kaunas University of Technology
LCG	LHC Computing Grid
LHC	Large Hadron Collider
NICPB	National Institute of Chemical Physics and Biophysics
PDC	Center for Parallel Computers
RT	Request Tracker
SPI	LCG Software Process & Infrastructure project
UIPnP	User Interface Plug and Play
VO	Virtual Organisation
VU	Vilnius University



1.4. REFERENCES

[1] Baltic Grid Project	http://www.balticgrid.org/
[2] LCG Savannah	https://savannah.cern.ch/
[3] Mailman	http://www.gnu.org/software/mailman/
[4] Request Tracker	http://www.bestpractical.com/rt/
[5] GGUS	https://gus.fzk.de/pages/ggus.php



2. TROUBLE TICKET SYSTEMS FOR HELP-DESK

When dealing with users' problems it is important that problems are tracked, the response is developed in timely manner and that actions are logged for future reference.

User support is established using a ticketing system (RT) and migration from the previous discussion based support schema using mail lists is presently taking place. As the usage of the Grid grows the need for user support will grow proportionally. To handle this efficiently all the different categories of supporters such as, systems experts, and applications experts will use the common BalticGrid ticketing system.

2.1. RT AT [HTTPS://SUPPORT.BALTICGRID.ORG](https://support.balticgrid.org)

#	Subject	Priority	Queue	Status
88	CE registration	0	support	open

#	Subject	Queue	Status	Created	
61	dpm	support	open	6 weeks ago	Take
16	spamfilter for support.bg.org	support	open	3 months ago	Take
10	Why not use certificates for access to RT ?	support	open	3 months ago	Take

Queue	New	Open
General	0	0
support	0	4

Figure 1 : RT at support.balticgrid.org

The BalticGrid project uses the Request Tracker (RT) ticketing system developed by the Best Practical Solutions LLC.

RT is a system for keeping track of open problems and issues. It keeps systematic log about jobs which are already done and which are still in work. The difference between usual mailing list and ticketing system is that in ticketing system each ticket (or job) has status field: new, open, resolved, deleted, etc; every ticket may have owner who is responsible for solving that particular issue.

The tickets can be opened via sending e-mail to support@balticgrid.org, which is linked to special queue in RT system. Queue watchers will receive notice about new trouble ticket. The ticket will be assigned to a suitable person behind the scenes, and there are checks to ensure that answers are provided in a timely way.

The system is available for all users of BalticGrid project.

From Best Practical website [4]:

RT is an enterprise-grade ticketing system which enables a group of people to intelligently and efficiently manage tasks, issues, and requests submitted by a community of users.



The RT platform has been under development since 1996, and is used by systems administrators, customer support staffs, IT managers, developers and marketing departments at thousands of sites around the world.

RT manages key tasks such as the identification, prioritization, assignment, resolution and notification required by enterprise-critical applications including project management, help desk, NOC ticketing, CRM and software development.

RT system has been used in EENet for over three years with great success for tracking its customers problems. Currently there are over 25000 tickets in that system. It has eased the extraction of knowledge from the past issues and the identification and tracking of users' needs.

2.2. GGUS SYSTEM, [HTTP://WWW.GGUS.ORG/](http://www.ggus.org/)

GGUS system is developed and used by EGEE project for tracking problems and issues in EGEE infrastructure.

GGUS is EGEE2 central troubleticket system used throughout Europe for ranging of problems from single users having trouble with their applications to site level problems reported from central monitoring frameworks like SFT-s. It is a tool outside of the BalticGrid project, but as there is close collaboration between EGEE2 and BalticGrid in almost all aspects, the BalticGrid also uses the same trouble ticket system for escalations and problems beyond the control of Baltic partners.

It is used for reporting problems from the monitoring system to BalticGrid site administrators who have to respond to all tickets opened for their sites. Also users outside the Baltic Grid can use GGUS to notify the BalticGrid administrators about problems in their sites.

From GGUS page [5]:

The support model in EGEE can be captioned "regional support with central coordination". Users can make a support request via their Regional Operations' Center (ROC) or their Virtual Organisation (VO). A VO is a geographically independent group of collaborating scientists. Within GGUS there is an internal support structure for all support requests. 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) will be connected via a central integration platform provided by GGUS. The process of integrating all of these organisations will take place during 2005 and is expected to be complete in 2006.

This central helpdesk keeps track of all service requests and assigns them to the appropriate support groups. In this way, formal communication between all support groups is possible. To enable this, each group has to build only one interface between its internal support structure and the central GGUS application.

GGUS also acts as portal for all users that do not know where to send their requests. They can enter them directly into the GGUS system via a web form or email.

Since GGUS is the central point for all service requests, it is also the right place to build a knowledge base for all grid related problems and their solution. Additionally GGUS acts as a central repository and portal for user oriented documentation, FAQs and news.

To ensure 24x7 support, it was decided to have 3 GGUS teams in different time zones. GGUS started off at Forschungszentrum Karlsruhe in Germany in 2003 and has had a partner group at Academia Sinica in Taiwan since April 2004. A third partner in North America will complete the 24 hours cycle.



2.3. LCG SAVANNAH, [HTTPS://SAVANNAH.CERN.CH](https://savannah.cern.ch)

LCG Savannah [2] is a web site provided by the LCG Software Process & Infrastructure (SPI) project. It offers facilities for development, distribution and maintenance of LCG software projects and related projects. The software used to run that site has been developed by the GNU/Savane project and customized for LCG use by SPI.

Savannah is meant for use by advanced users and site administrators. The BalticGrid users can submit there their problems related directly to LCG/gLite software.



3. USER SUPPORT THROUGH MAILING LISTS

Mailing lists for the BalticGrid Project are run by EENet on server lists.eenet.ee. Mailman [3] list management software is used. For users and list owners there is available web interface for administering their subscriptions. Also, archives of messages are available. The language used in those lists is English.

3.1. BALTICGRID-SA1@BALTICGRID.ORG

This mailing list is primarily for SA1 activity “BalticGrid Operations”. It has all site administrators as well as some people working for NA3 and other activities. Before the RT ticketing system was installed, the support@balticgrid.org address was also linked to this mailing list. This mailing list is very active with more than 950 messages in nine months.

3.2. BALTICGRID-NA3@BALTICGRID.ORG

The NA3 activity, “Application Identification and Support” uses mailing list balticgrid-na3@balticgrid.org. There were around 80 messages from the project beginning to August 2006. The list is mostly used by the NA3 activity for applications related discussions however it has also been used for user support and in helping the VO managers in their tasks of remote software installation and VO management.



4. USER SUPPORT THROUGH WEBPAGES

4.1. BALTICGRID CENTRAL HOMEPAGE [HTTP://WWW.BALTICGRID.ORG](http://www.balticgrid.org)

The main BalticGrid webpage has information about the project, contacts and technical guides. There are research papers, overview talks, reference manuals, user guides, installation instructions, conference presentations and even tutorial materials.

For beginners there is separate section - “**Using Grid**” (http://www.balticgrid.org/Using_grid/Try_grid). This contains step-by-step explanation about how to use the BalticGrid.

4.2. VOMS SERVER [HTTP://VOMS.BALTICGRID.ORG](http://voms.balticgrid.org)

This server contains technical information for installing and configuring the grid services as well as the stand-alone user interface package UIPnP (User Interface Plug and Play). It contains the central list of BalticGrid resources and VOMS user interface.

Top level configuration for BDII server: <http://voms-web.balticgrid.org/lcg2-all-sites.conf>

4.3. BALTIC GRID CERTIFICATION AUTHORITY [HTTP://CA.BALTICGRID.ORG](http://ca.balticgrid.org)

This page contains guides for getting and renewing the end entity certificates signed by Baltic Grid CA.



5. LOCAL USER SUPPORT IN BALTIC STATES

5.1. ESTONIA

Estonian Grid has web page <http://grid.eenet.ee> that contains various information like grid tutorials and documents about how to get started with grid in Estonia.

There are two lists for grid-related discussions: more general questions at grid-tech@lists.eenet.ee and specific problems about using grid at grid-users@lists.eenet.ee. Those Estonian mailing lists are quite actively in use within Estonian grid community.

5.2. LATVIA

Latvian Grid activities are described on <http://grid.latnet.lv>, it contains detailed information on how to start using grid, including instruction on receiving and installing a personal certificate.

General information about grid activities can be asked by e-mail info@grid.latnet.lv. For grid-related discussions there is mailing list liste@grid.latnet.lv, the subscribers are mostly site administrators, but also advanced users.

5.3. LITHUANIA

Lithuanian Grid initiative has page <http://www.litgrid.lt>. This website contains information for users how to start using grid and useful documents for cluster administrators as well. Monitor of LitGRID resources is available on the website.

Users can send their problems to litgrid-admin@grid.mif.vu.lt, where Lithuanian site administrators are listening. Also mailing list algis-litgridpart@uosis.mif.vu.lt is available to grid users for discussions.



6. SUMMARY

Support systems for the Baltic Grid users include the following: ticketing system, mailing lists and web pages. We are in cooperation with EGEE on user support and use also their central ticketing system and mailing lists.

Currently the mailing lists are in the most active use. Usage of ticketing system is a bit lacking behind, the problems may be due to complicated user interface or lack of publicity on that option. We are working to make ticketing system more usable for users and site administrators as a primary problem tracking tool.