EGI Hands-On Training for AEGIS Site Administrators
School of Electrical Engineering of the University of Belgrade

Grid Operations tools and procedures

Vladimir Slavnic
SCL, Institute of Physics Belgrade
Serbia
slavnic@ipb.ac.rs

23/11/2012

e-infrastructure

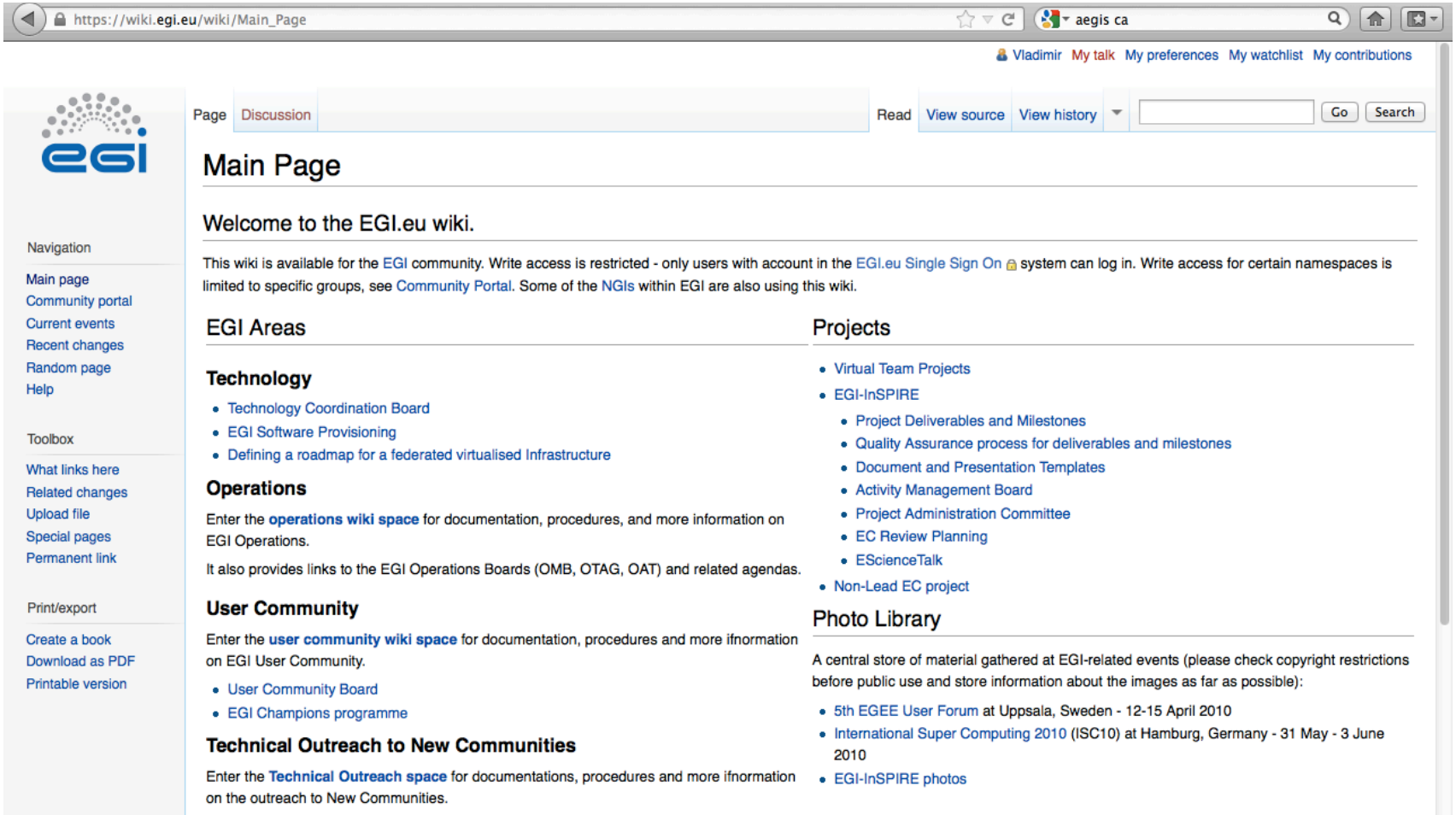
Overview

- EGI Wiki
- GOCDB
- Operations Portal
- Accounting Portal
- GStat
- GGUS
- AEGIS Website
- AEGIS Helpdesk
- NGI AEGIS SAM Instance
- NGI AEGIS MyEGI Portal
- AEGIS centralized apel service
- AEGIS CA
- AEGIS mailing lists
- EGI Operations Procedures

EGI Wiki [1]

- General Wiki available for EGI community.
- Covering all aspects of EGI:
  - Projects
  - Technology
  - Operations
  - User community
  - Security
  - …

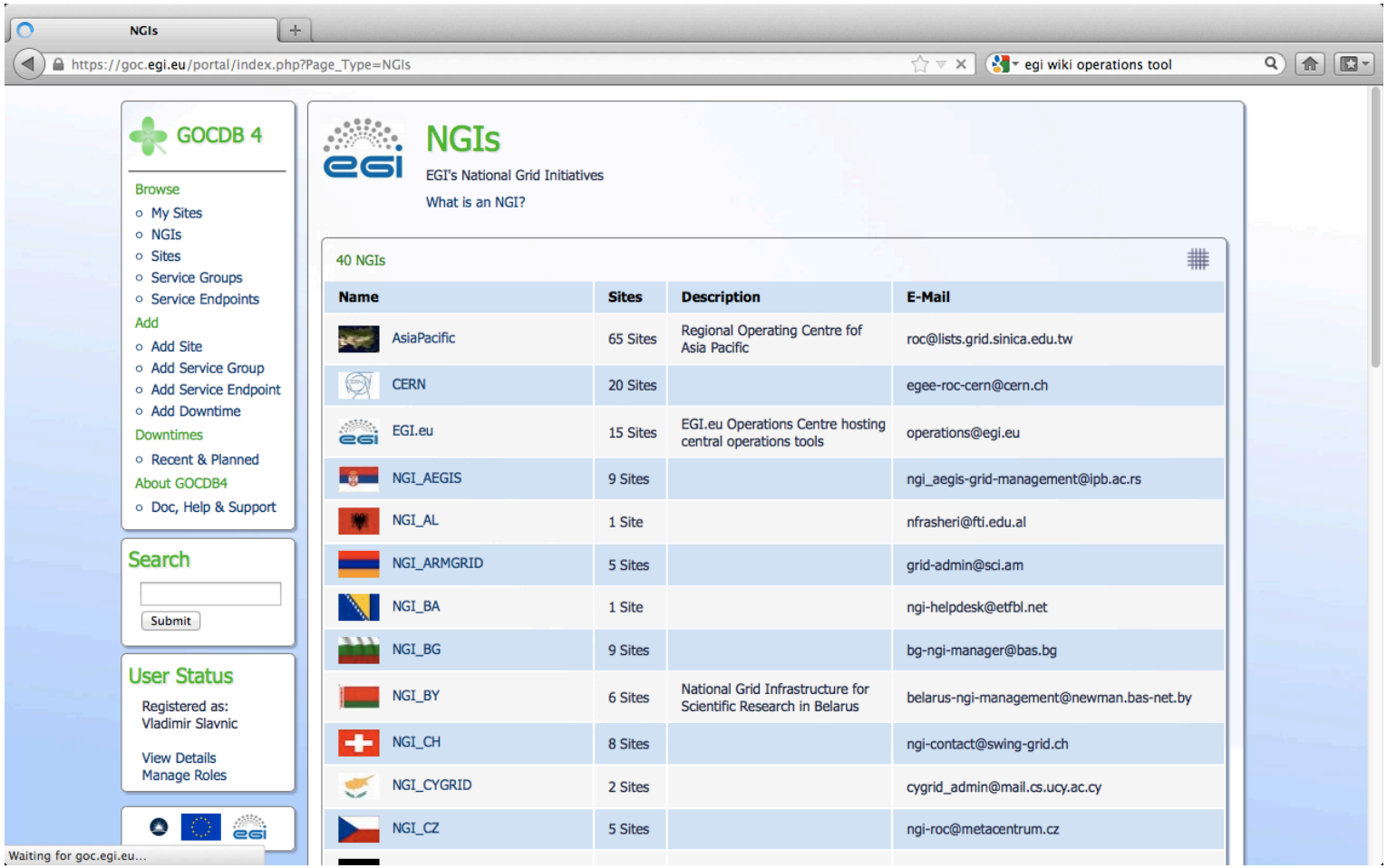
EGI Wiki [2]


https://wiki.egi.eu/wiki/Main_Page
aegis ca
Vladimir My talk My preferences My watchlist My contributions
Page Discussion Read View source View history Go Search
Main Page
Welcome to the EGI.eu wiki.
This wiki is available for the EGI community. Write access is restricted - only users with account in the EGI.eu Single Sign On system can log in. Write access for certain namespaces is limited to specific groups, see Community Portal. Some of the NGIs within EGI are also using this wiki.
Navigation
Main page
Community portal
Current events
Recent changes
Random page
Help
Toolbox
What links here
Related changes
Upload file
Special pages
Permanent link
Print/export
Create a book
Download as PDF
Printable version
EGI Areas
Technology
Technology Coordination Board
EGI Software Provisioning
Defining a roadmap for a federated virtualised Infrastructure
Operations
Enter the operations wiki space for documentation, procedures, and more information on EGI Operations.
It also provides links to the EGI Operations Boards (OMB, OTAG, OAT) and related agendas.
User Community
Enter the user community wiki space for documentation, procedures and more ifnormation on EGI User Community.
User Community Board
EGI Champions programme
Technical Outreach to New Communities
Enter the Technical Outreach space for documentations, procedures and more ifnormation on the outreach to New Communities.
Projects
Virtual Team Projects
EGI-InSPIRE
Project Deliverables and Milestones
Quality Assurance process for deliverables and milestones
Document and Presentation Templates
Activity Management Board
Project Administration Committee
EC Review Planning
EScienceTalk
Non-Lead EC project
Photo Library
A central store of material gathered at EGI-related events (please check copyright restrictions before public use and store information about the images as far as possible):
5th EGEE User Forum at Uppsala, Sweden - 12-15 April 2010
International Super Computing 2010 (ISC10) at Hamburg, Germany - 31 May - 3 June 2010
EGI-InSPIRE photos

GOCDB [1]

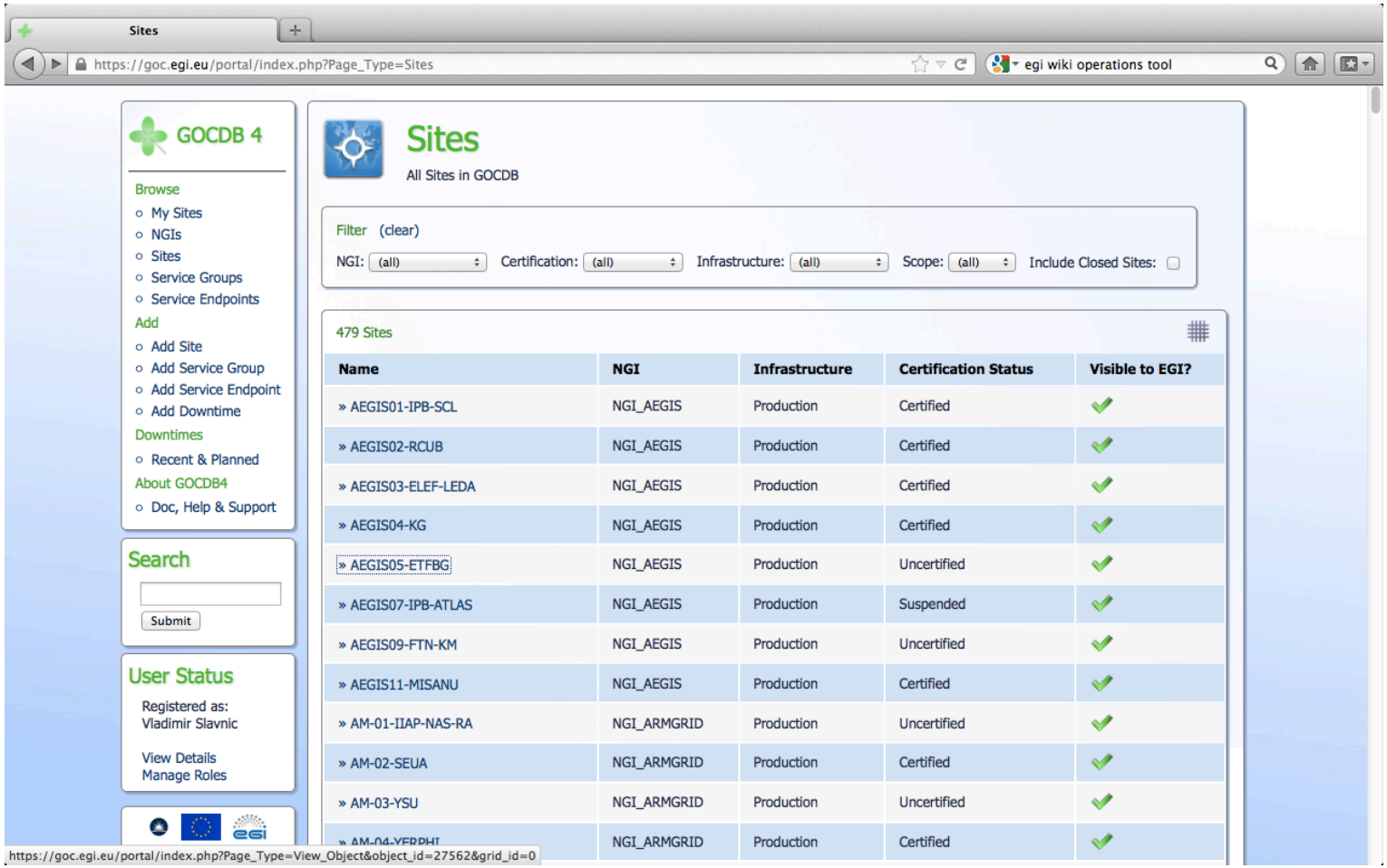
- Grid Configuration Database (GOCDB) contains general information about the sites participating to the production Grid.
- Accessed by all the project actors (end-users, sitemanagers, NGI mangers, support teams, VO managers), by other tools and by third party middleware in order to get Grid topology.

GOCDB [2]



Name	Sites	Description	E-Mail
AsiaPacific	65 Sites	Regional Operating Centre fof Asia Pacific	roc@lists.grid.sinica.edu.tw
CERN	20 Sites		egee-roc-cern@cern.ch
EGI.eu	15 Sites	EGI.eu Operations Centre hosting central operations tools	operations@egi.eu
NGI_AEGIS	9 Sites		ngi_aegis-grid-management@ipb.ac.rs
NGI_AL	1 Site		nfrasheri@fti.edu.al
NGI_ARMGRID	5 Sites		grid-admin@sci.am
NGI_BA	1 Site		ngi-helpdesk@etfbl.net
NGI_BG	9 Sites		bg-ngi-manager@bas.bg
NGI_BY	6 Sites	National Grid Infrastructure for Scientific Research in Belarus	belarus-ngi-management@newman.bas-net.by
NGI_CH	8 Sites		ngi-contact@swing-grid.ch
NGI_CYGRID	2 Sites		cygrid_admin@mail.cs.ucy.ac.cy
NGI_CZ	5 Sites		ngi-roc@metacentrum.cz

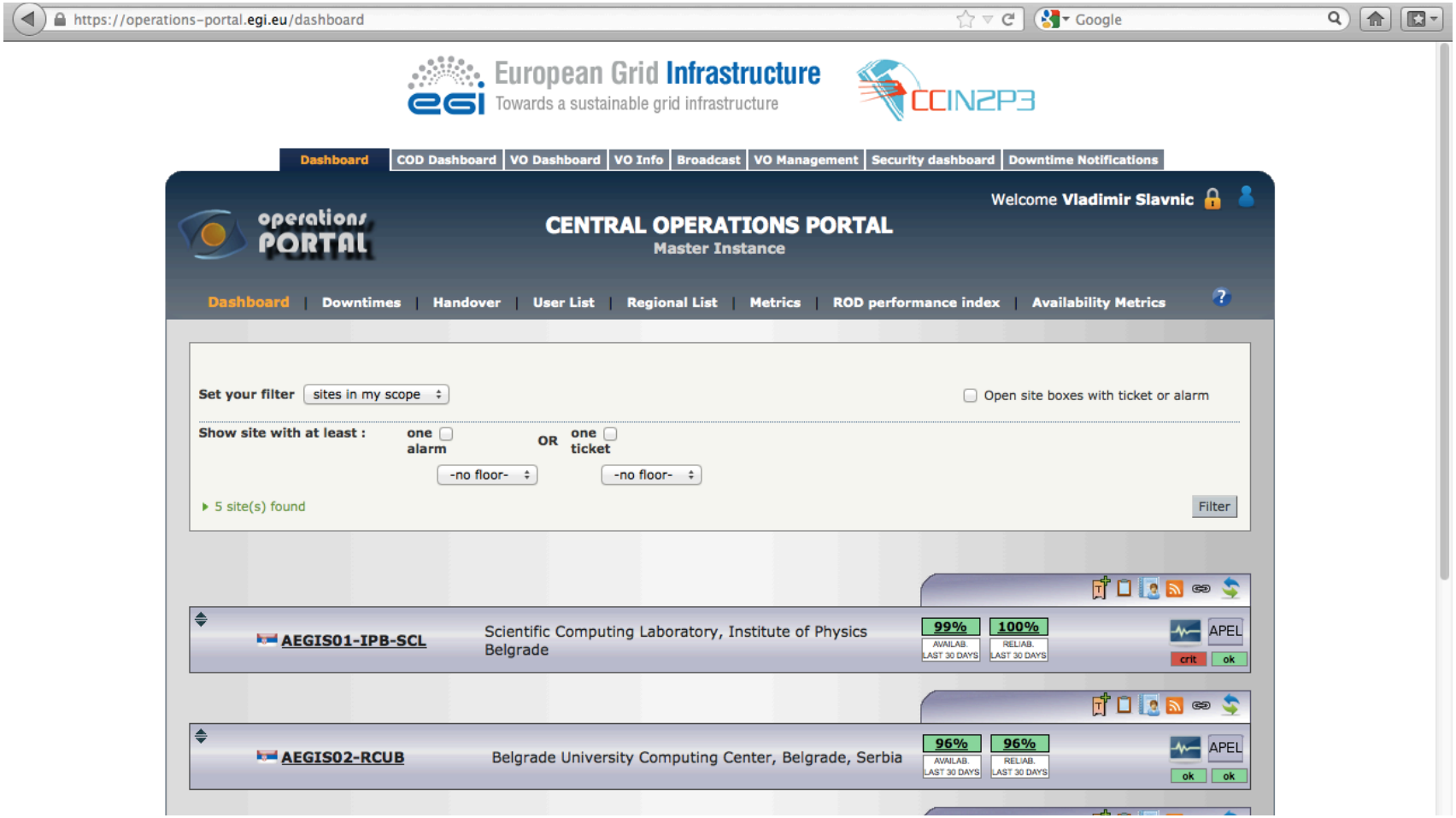
GOCDB [3]


Sites
https://goc.egi.eu/portal/index.php?Page_Type=Sites
egi wiki operations tool
GOCDB 4
Browse
My Sites
NGIs
Sites
Service Groups
Service Endpoints
Add
Add Site
Add Service Group
Add Service Endpoint
Add Downtime
Downtimes
Recent & Planned
About GOCDB4
Doc, Help & Support
Search
Submit
User Status
Registered as:
Vladimir Slavnic
View Details
Manage Roles
Sites
All Sites in GOCDB
Filter (clear)
NGI: (all) Certification: (all) Infrastructure: (all) Scope: (all) Include Closed Sites:
479 Sites
Name | NGI | Infrastructure | Certification Status | Visible to EGI?
» AEGIS01-IPB-SCL | NGI_AEGIS | Production | Certified
» AEGIS02-RCUB | NGI_AEGIS | Production | Certified
» AEGIS03-ELEF-LEDA | NGI_AEGIS | Production | Certified
» AEGIS04-KG | NGI_AEGIS | Production | Certified
» AEGIS05-ETFBG | NGI_AEGIS | Production | Uncertified
» AEGIS07-IPB-ATLAS | NGI_AEGIS | Production | Suspended
» AEGIS09-FTN-KM | NGI_AEGIS | Production | Uncertified
» AEGIS11-MISANU | NGI_AEGIS | Production | Certified
» AM-01-IIAP-NAS-RA | NGI_ARMGRID | Production | Uncertified
» AM-02-SEUA | NGI_ARMGRID | Production | Certified
» AM-03-YSU | NGI_ARMGRID | Production | Uncertified
NGI_ARMGRID | Production | Certified
https://goc.egi.eu/portal/index.php?Page_Type=View_Object&object_id=27562&grid_id=0

Operations portal [1]

- Consists of web pages providing information to various actors (NGI Operations Centers, VO managers) along with related facilities, such as:
  - Regional dashboard
  - VO registration tool
  - Security dashboard
  - Broadcast and downtime system
  - …

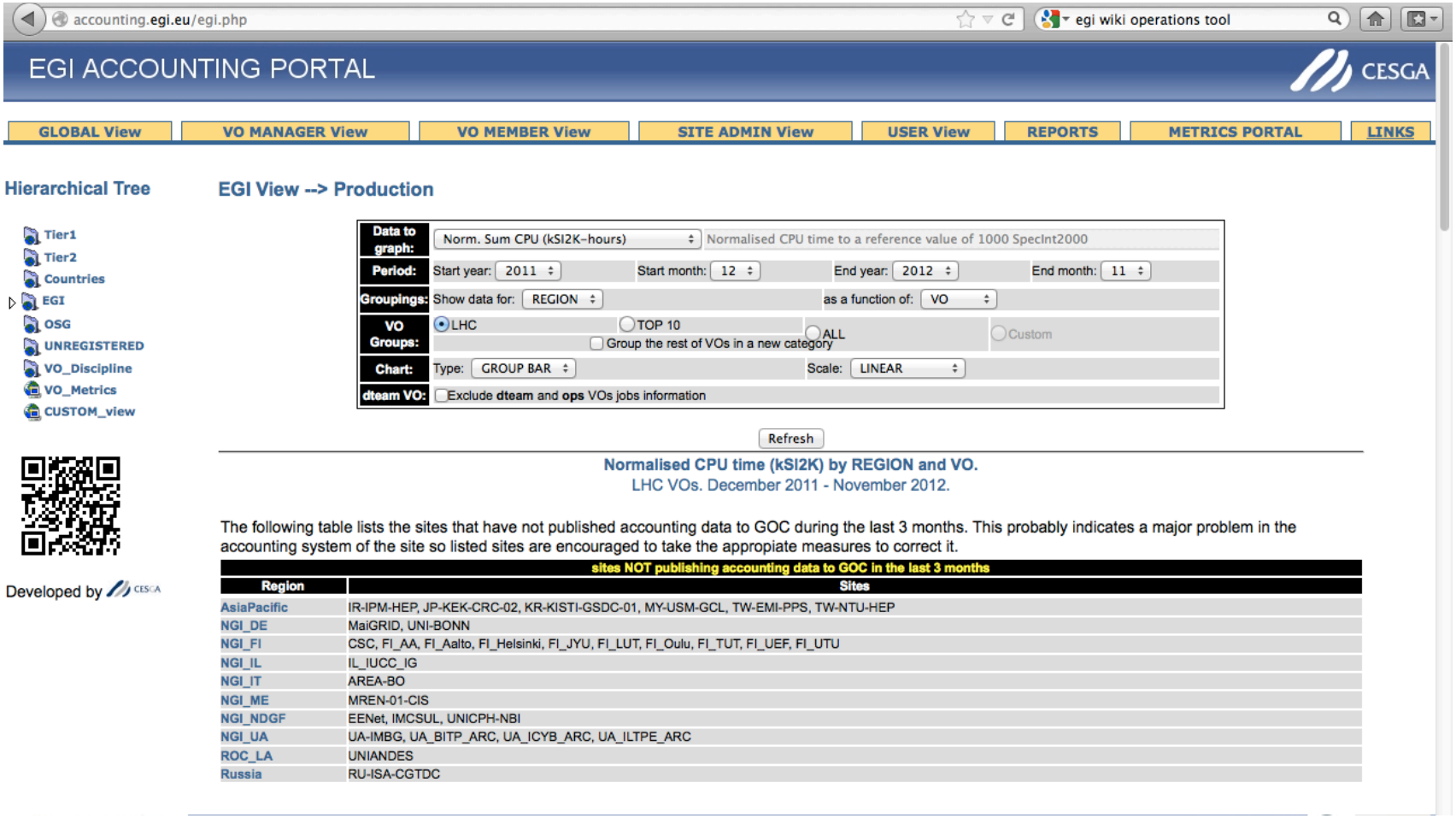
Operations portal [2]



Accounting Portal [1]

- The accounting infrastructure is a complex system that involves various sensors in different regions, all publishing data to a central repository.
- The data is processed, summarized and displayed in the accounting portal.
- Portal acts as a common interface to the different accounting record providers.
- Presents a homogeneous view of the gathered data.

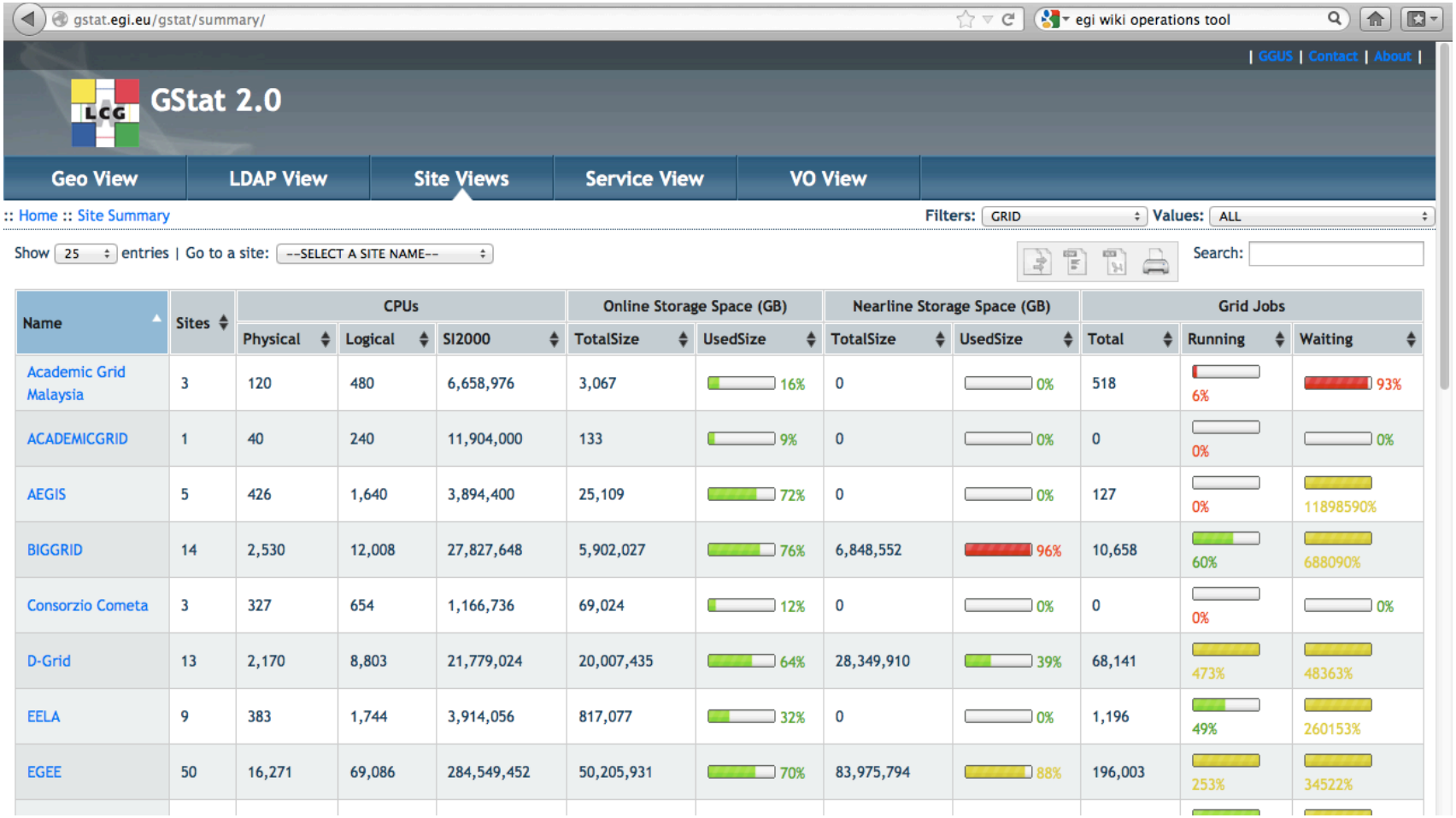
Accounting Portal [2]



GStat [1]

- GStat displays information about Grid services, the Grid information system itself and related metrics.
- GStat provides a method to visualize a Grid infrastructure from an operational perspective based on information found in the Grid information system (BDII).

GStat [2]



gstat.egi.eu/gstat/summary/

egi wiki operations tool

| GGUS | Contact | About |

GStat 2.0

Geo View | LDAP View | Site Views | Service View | VO View

:: Home :: Site Summary

Filters: GRID Values: ALL

Show 25 entries | Go to a site: --SELECT A SITE NAME--

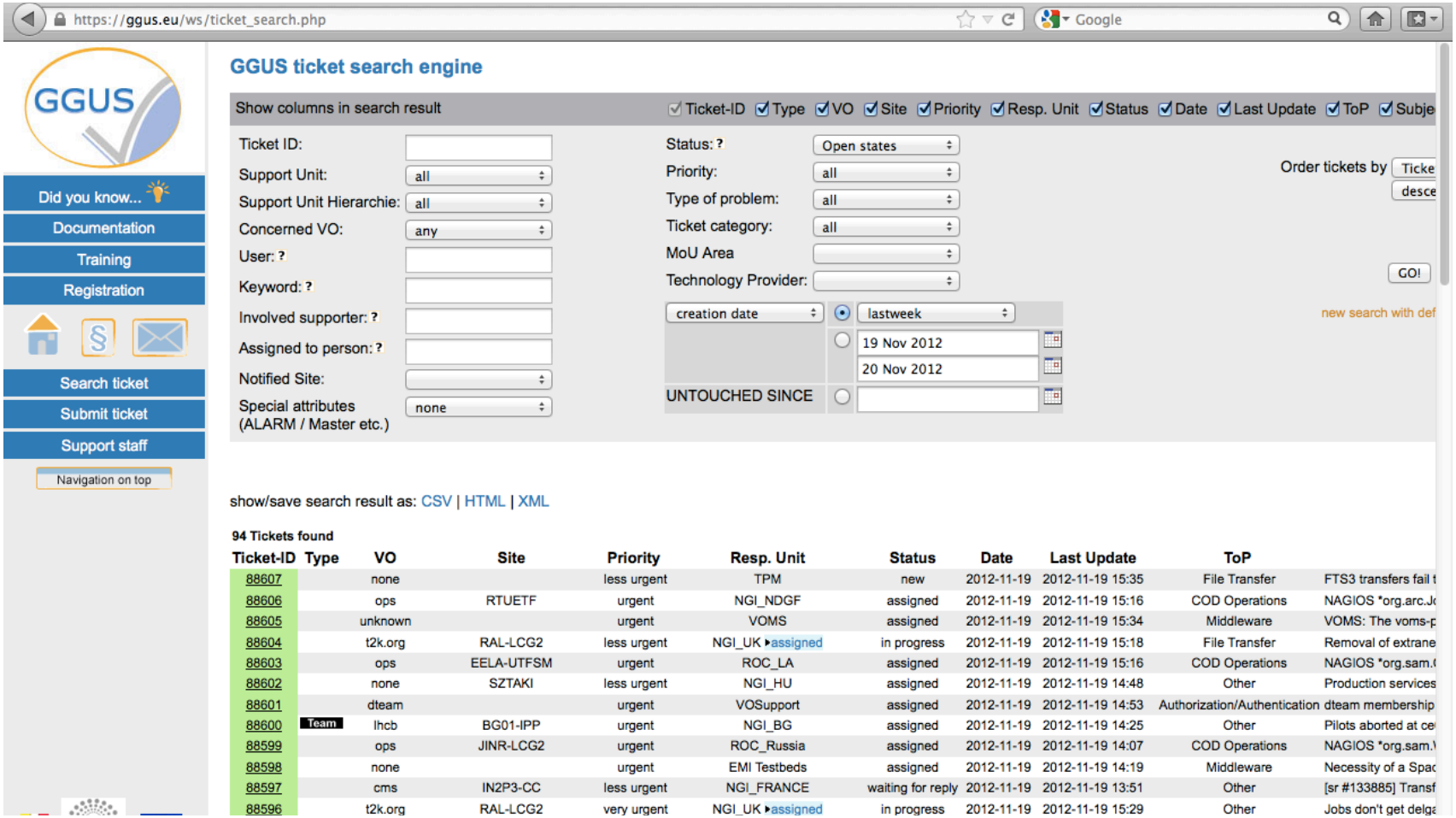
Search:

Name	Sites	CPUs			Online Storage Space (GB)		Nearline Storage Space (GB)		Grid Jobs		
		Physical	Logical	SI2000	TotalSize	UsedSize	TotalSize	UsedSize	Total	Running	Waiting
Academic Grid Malaysia	3	120	480	6,658,976	3,067	16%	0	0%	518	6%	93%
ACADEMICGRID	1	40	240	11,904,000	133	9%	0	0%	0	0%	0%
AEGIS	5	426	1,640	3,894,400	25,109	72%	0	0%	127	0%	11898590%
BIGGRID	14	2,530	12,008	27,827,648	5,902,027	76%	6,848,552	96%	10,658	60%	688090%
Consorzio Cometa	3	327	654	1,166,736	69,024	12%	0	0%	0	0%	0%
D-Grid	13	2,170	8,803	21,779,024	20,007,435	64%	28,349,910	39%	68,141	473%	48363%
EELA	9	383	1,744	3,914,056	817,077	32%	0	0%	1,196	49%	260153%
EGEE	50	16,271	69,086	284,549,452	50,205,931	70%	83,975,794	88%	196,003	253%	34522%

GGUS [1]

- Global Grid User Support (GGUS) system
- Primary mean by which users request support when they are using the grid
- The GGUS system is the main support access point for the EGI project
- The GGUS system creates a trouble ticket to record the request and tracks the ticket from creation through to solve

GGUS [2]


https://ggus.eu/ws/ticket_search.php
Google
GGUS
Did you know...
Documentation
Training
Registration
Search ticket
Submit ticket
Support staff
Navigation on top
GGUS ticket search engine
Show columns in search result
Ticket-ID Type VO Site Priority Resp. Unit Status Date Last Update ToP Subje
Ticket ID:
Support Unit: all
Support Unit Hierarchie: all
Concerned VO: any
User:
Keyword:
Involved supporter:
Assigned to person:
Notified Site:
Special attributes (ALARM / Master etc.) none
Status: Open states
Priority: all
Type of problem: all
Ticket category: all
MoU Area
Technology Provider:
creation date lastweek
19 Nov 2012
20 Nov 2012
UNTOUCHED SINCE
Order tickets by Ticke
desce
GO!
new search with def
show/save search result as: CSV | HTML | XML
94 Tickets found
Ticket-ID Type VO Site Priority Resp. Unit Status Date Last Update ToP
88607 none less urgent TPM new 2012-11-19 2012-11-19 15:35 File Transfer FTS3 transfers fail
88606 ops RTUETF urgent NGI_NDGF assigned 2012-11-19 2012-11-19 15:16 COD Operations NAGIOS *org.arc.J
88605 unknown urgent VOMS assigned 2012-11-19 2012-11-19 15:34 Middleware VOMS: The voms-p
88604 t2k.org RAL-LCG2 less urgent NGI_UK ▸assigned in progress 2012-11-19 2012-11-19 15:18 File Transfer Removal of extrane
88603 ops EELA-UTFSM urgent ROC_LA assigned 2012-11-19 2012-11-19 15:16 COD Operations NAGIOS *org.sam.
88602 none SZTAKI less urgent NGI_HU assigned 2012-11-19 2012-11-19 14:48 Other Production services
88601 dteam urgent VOSupport assigned 2012-11-19 2012-11-19 14:53 Authorization/Authentication dteam membership
88600 Team lhcb BG01-IPP urgent NGI_BG assigned 2012-11-19 2012-11-19 14:25 Other Pilots aborted at ce
88599 ops JINR-LCG2 urgent ROC_Russia assigned 2012-11-19 2012-11-19 14:07 COD Operations NAGIOS *org.sam.
88598 none urgent EMI Testbeds assigned 2012-11-19 2012-11-19 14:19 Middleware Necessity of a Spac
88597 cms IN2P3-CC less urgent NGI_FRANCE waiting for reply 2012-11-19 2012-11-19 13:51 Other [sr #133885] Transf
88596 t2k.org RAL-LCG2 very urgent NGI_UK ▸assigned in progress 2012-11-19 2012-11-19 15:29 Other Jobs don't get delga

AEGIS website [1]

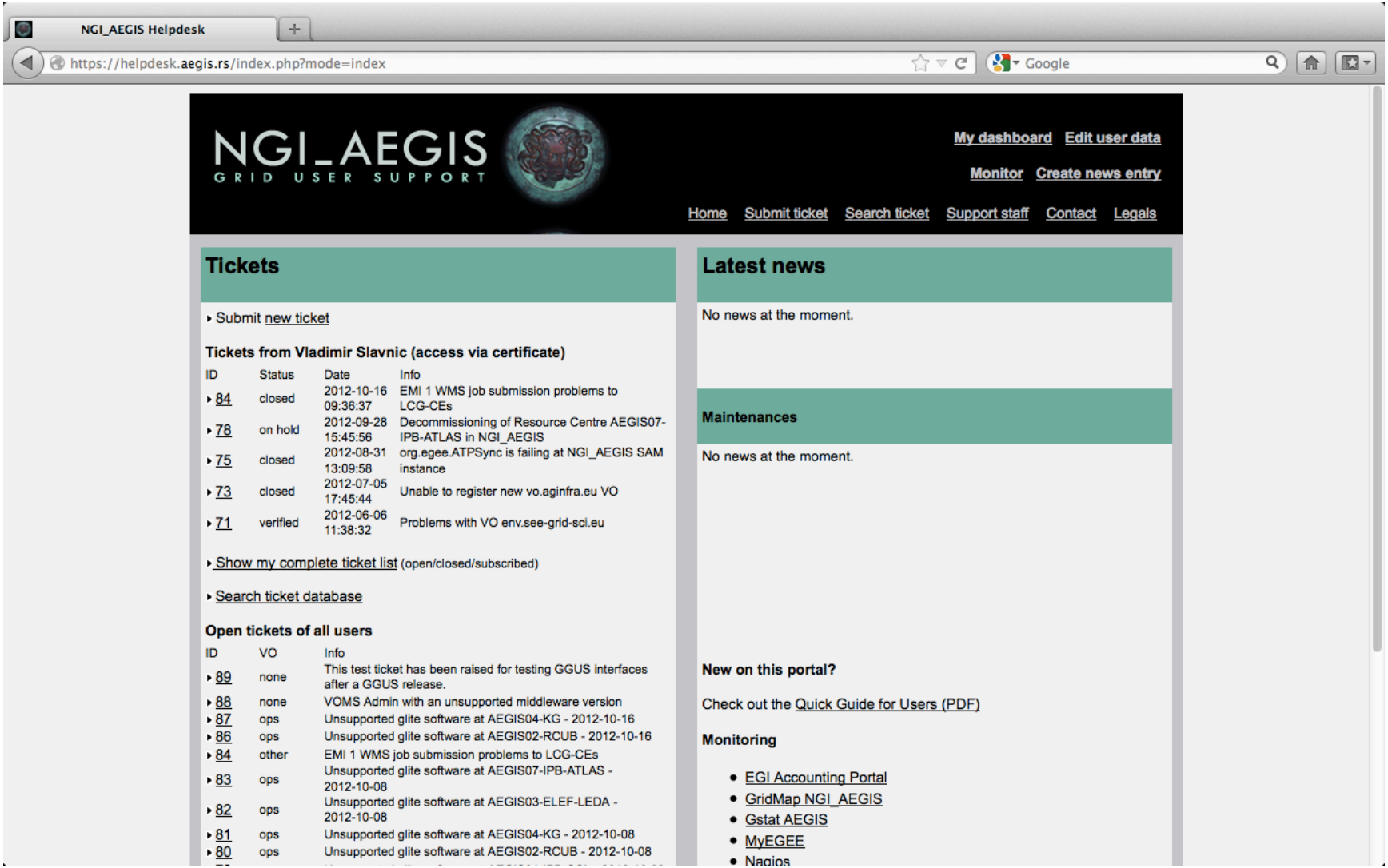
- AEGIS Grid Initiative website
- Contains all important information concerning AEGIS infrastructure and aegis VO

AEGIS website [2]

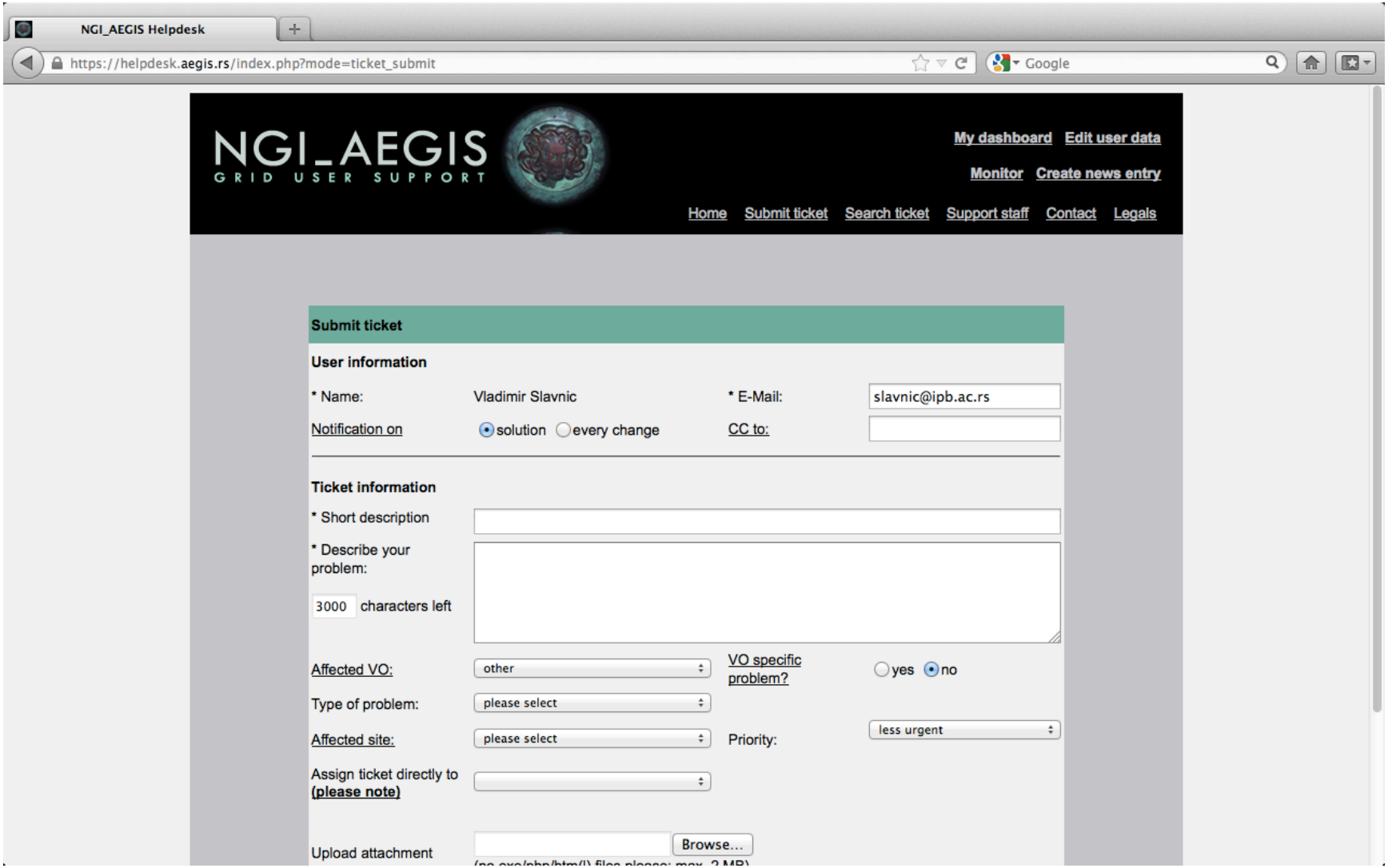
AEGIS Helpdesk [1]

- Regionalized instance of GGUS Helpdesk
  - https://helpdesk.aegis.rs
- Interfaced with main GGUS instance (https://ggus.eu/) through NGI_AEGIS support unit.
- Ticket submission is available through web interface and e-mail (helpdesk@aegis.rs).

AEGIS Helpdesk [2]



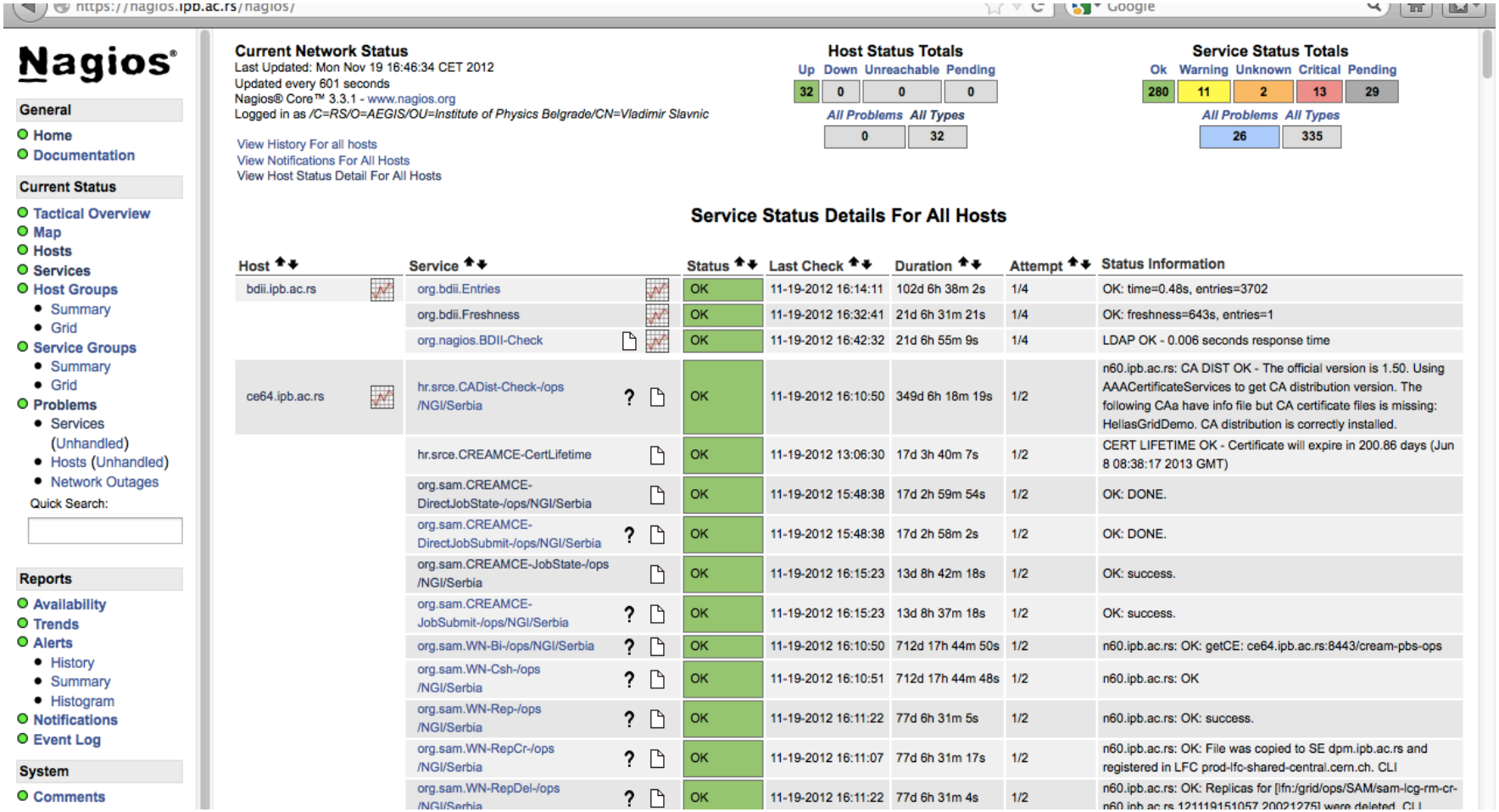
AEGIS Helpdesk [3]



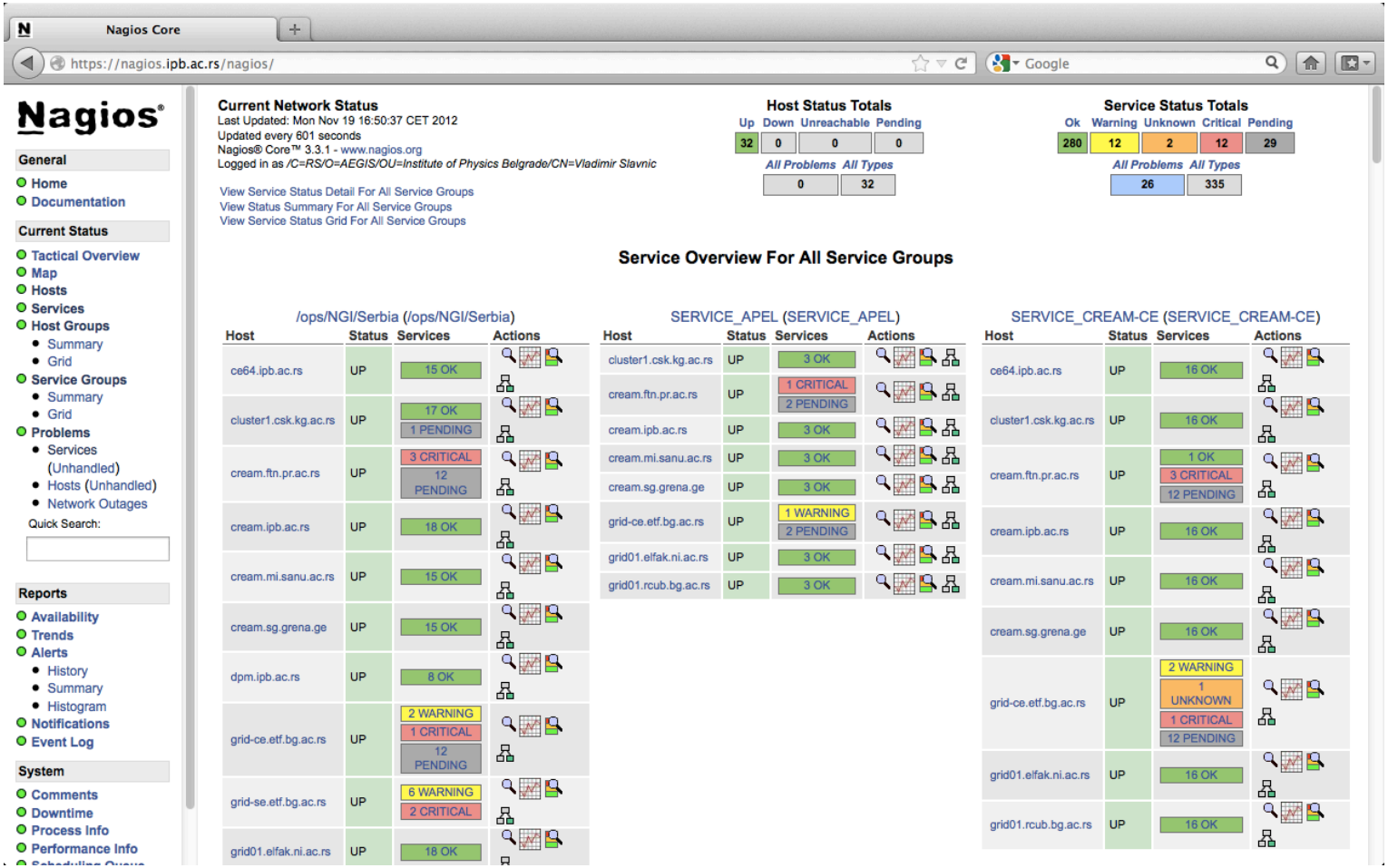
NGI AEGIS SAM Instance [1]

- Service Availability Monitoring (SAM) system is used to monitor the resources within the production infrastructure
  - https://tomtools.cern.ch/confluence/display/SAMDOC/SAM+Public+Site
- SAM monitoring data is used for calculation of availability and reliability of grid sites.

NGI AEGIS SAM Instance [2]



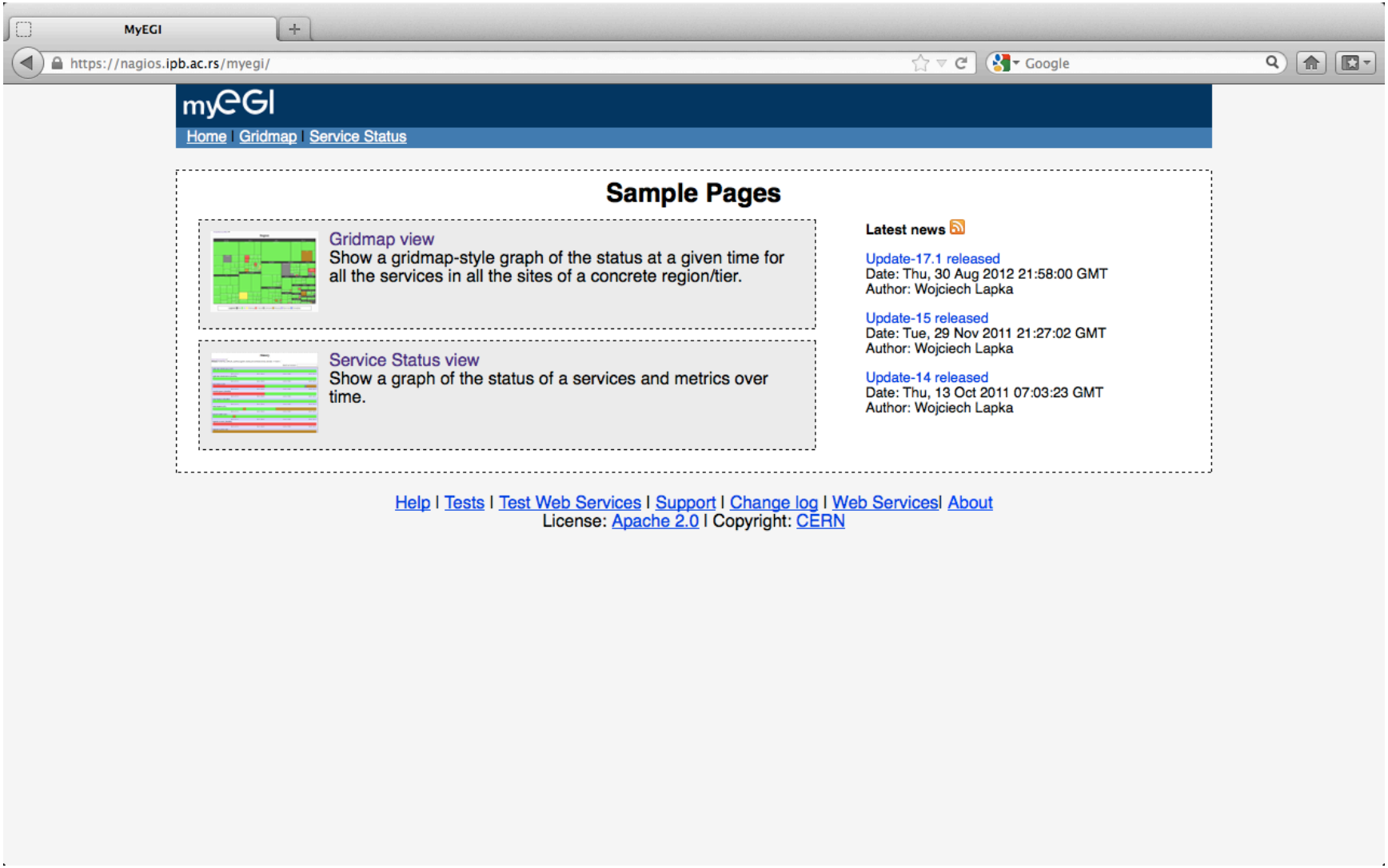
NGI AEGIS SAM Instance [3]



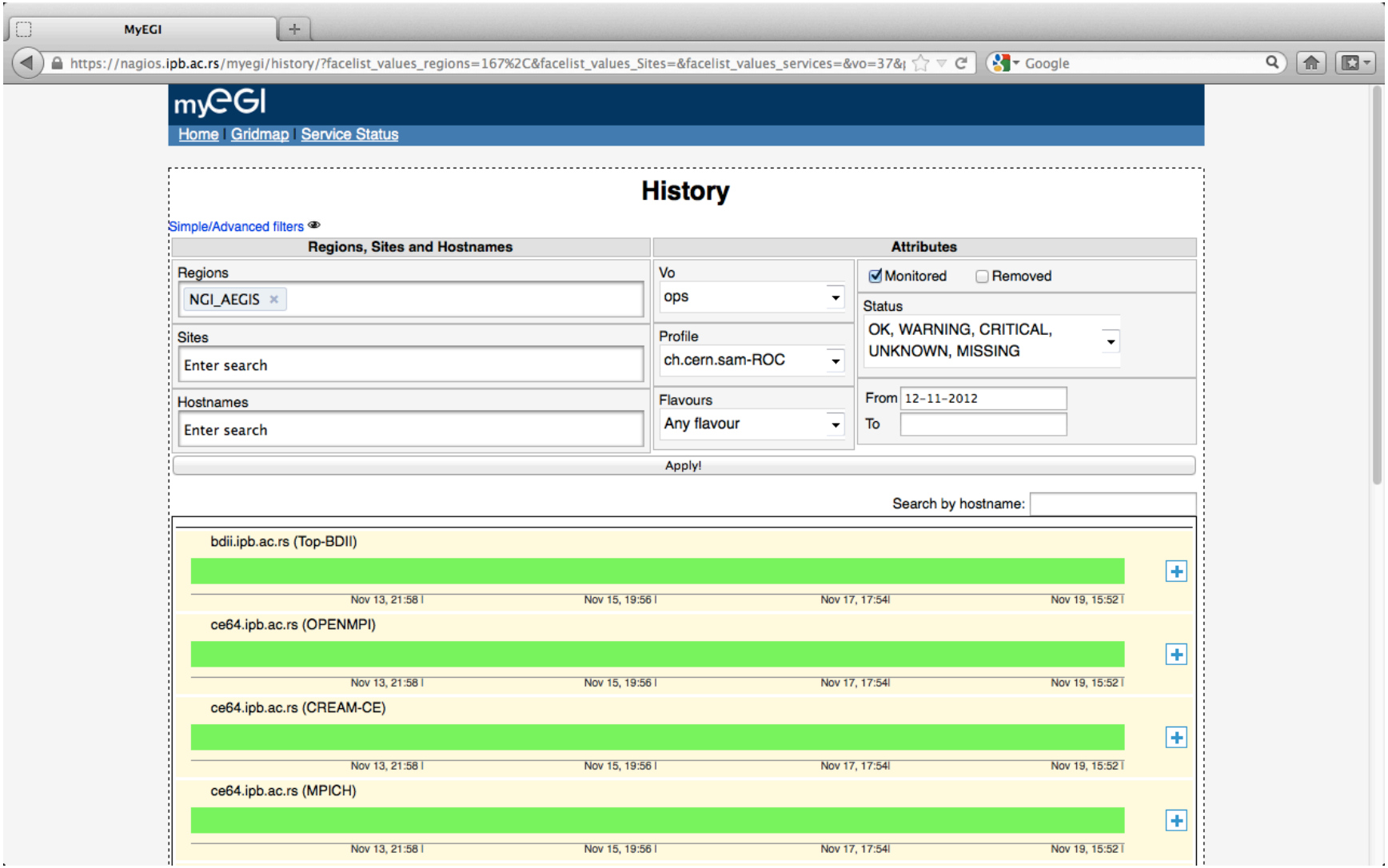
NGI AEGIS MyEGI Portal [1]

- Visualization tool to present a grid-aware view of the data collected by the Service Availability Monitoring framework.
- Features:
  - Services view to select services
  - Status view to see the status of latest metric results for a service
  - History view to navigate throughout the status of services overtime
  - Common filtering patterns for easy selection
  - https://tomtools.cern.ch/confluence/display/SAM/MyEGI

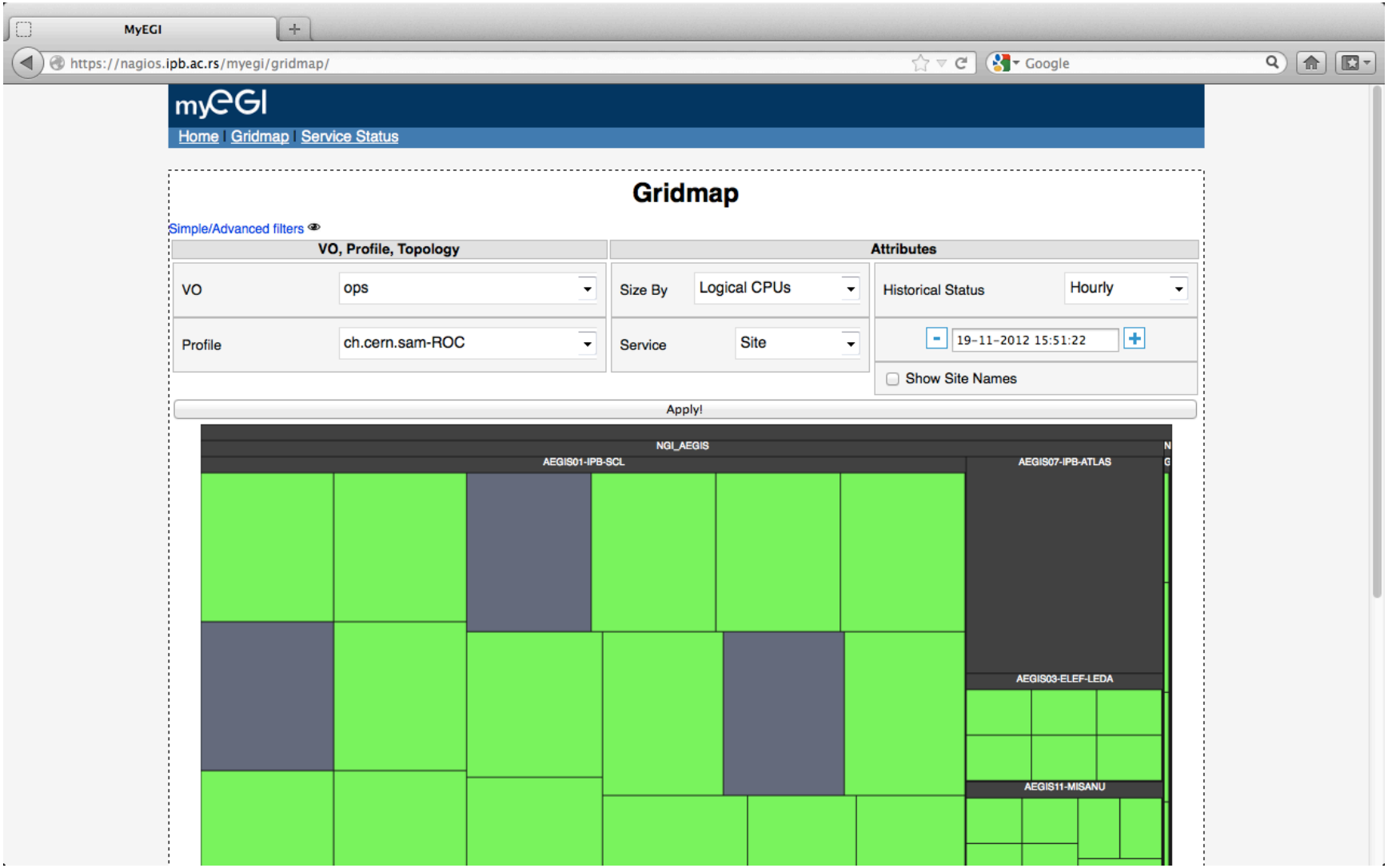
NGI AEGIS MyEGI Portal [2]



NGI AEGIS MyEGI Portal [3]



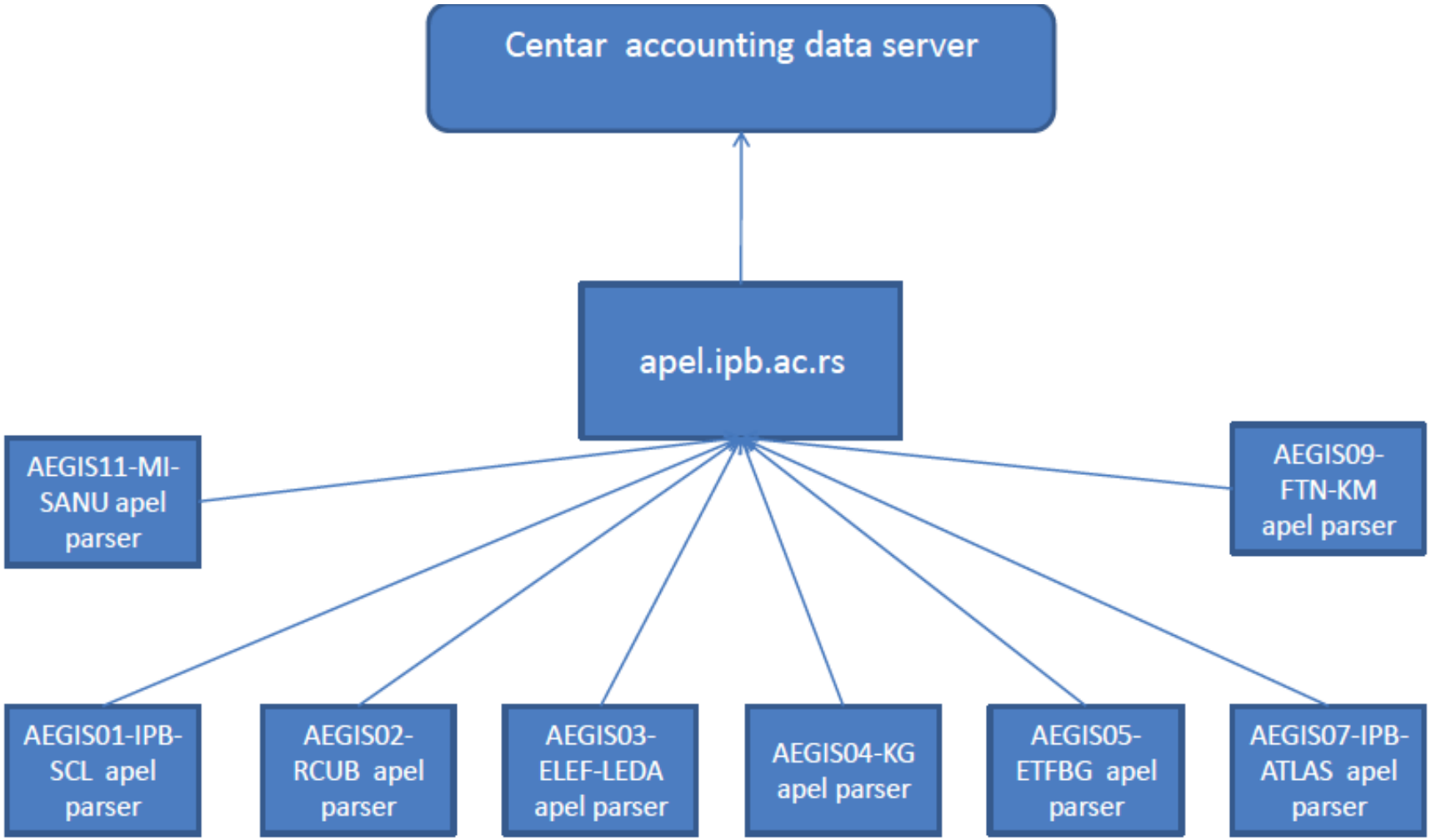
NGI AEGIS MyEGI Portal [4]



AEGIS Centralized APEL service [1]

- Centralized APEL node :
  - apel.ipb.ac.rs
- All AEGIS Computing Elements are publishing to apel.ipb.ac.rs which is publishing accounting data to centralized server.

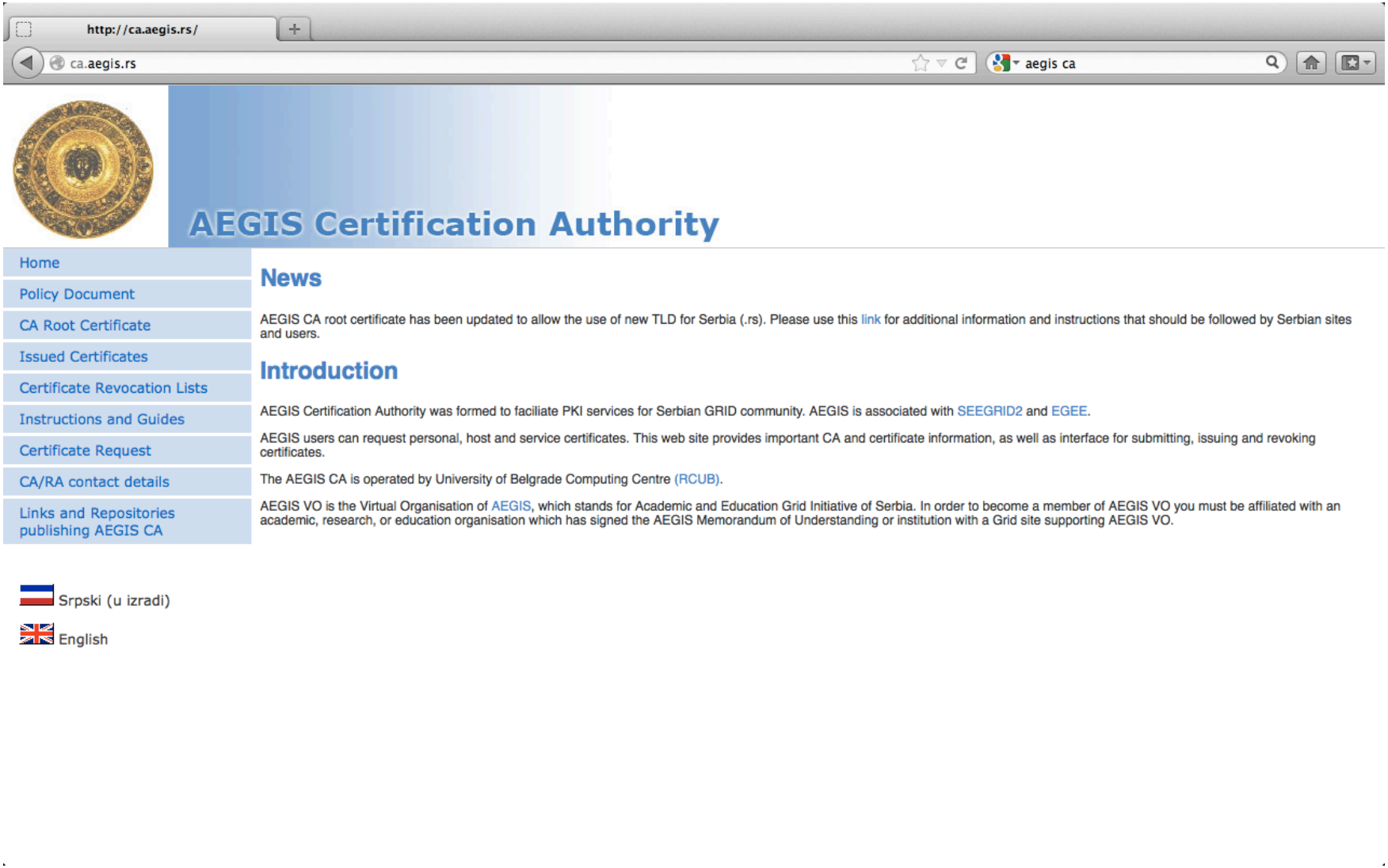
AEGIS Centralized APEL service [2]



AEGIS CA [1]

- AEGIS Certification Authority was formed to faciliate PKI services for Serbian GRID community.
- AEGIS users can request personal, host and service certificates.
- This web site provides important CA and certificate information, as well as interface for submitting, issuing and revoking certificates.
- The AEGIS CA is operated by University of Belgrade Computing Centre (RCUB).

AEGIS CA [2]


http://ca.aegis.rs/
ca.aegis.rs
aegis ca
AEGIS Certification Authority
Home
Policy Document
CA Root Certificate
Issued Certificates
Certificate Revocation Lists
Instructions and Guides
Certificate Request
CA/RA contact details
Links and Repositories publishing AEGIS CA
News
AEGIS CA root certificate has been updated to allow the use of new TLD for Serbia (.rs). Please use this link for additional information and instructions that should be followed by Serbian sites and users.
Introduction
AEGIS Certification Authority was formed to faciliate PKI services for Serbian GRID community. AEGIS is associated with SEEGRID2 and EGEE.
AEGIS users can request personal, host and service certificates. This web site provides important CA and certificate information, as well as interface for submitting, issuing and revoking certificates.
The AEGIS CA is operated by University of Belgrade Computing Centre (RCUB).
AEGIS VO is the Virtual Organisation of AEGIS, which stands for Academic and Education Grid Initiative of Serbia. In order to become a member of AEGIS VO you must be affiliated with an academic, research, or education organisation which has signed the AEGIS Memorandum of Understanding or institution with a Grid site supporting AEGIS VO.
Srpski (u izradi)
English

AEGIS mailing lists

- Various mailing lists dedicated to NGI AEGIS activities are created:
  - Grid support mailing list
  - Infrastructure mailing list
  - Security mailing list
  - Training mailing list
  - User support mailing list

EGI Operations Procedures [1]

- EGI Operational Procedures are prescriptive documents that describe step-by-step processes involving several partners
- The purpose of a procedure is define the related workflow.
- https://wiki.egi.eu/wiki/Operations_Procedures

EGI Operations Procedures [2]

- Examples:
  - PROC 09 “Resource Centre Registration and Certification” - Registration of a new Resource Centre in the GOCDB
  - SEC 01 “EGI Security Incident Handling`’ - The "Security Incident Handling Procedure" define site and incident coordinator responsibilities when handling Grid-related security incident. ALL EGI sites are required to follow this procedure to report and handle Grid-related security incident.

Links [1]

- EGI Wiki - https://wiki.egi.eu/
- EGI WIKI tools page - https://wiki.egi.eu/wiki/Tools
- EGI WIKI operations procedures page - https://wiki.egi.eu/wiki/Operations_Procedures
- GOCDB - https://goc.egi.eu/
- Operational Portal - http://operations-portal.egi.eu/
- Accounting Portal - http://accounting.egi.eu/
- GGUS - https://gus.fzk.de/
- Gstat - https://gstat.egi.eu/

Links [2]

- AEGIS website - http://www.aegis.rs/
- AEGIS Helpdesk - https://helpdesk.aegis.rs/
- AEGIS Nagios - https://nagios.ipb.ac.rs/
- AEGIS MyEGI Portal - https://nagios.ipb.ac.rs/myegi
- AEGIS CA - http://ca.aegis.rs/