

**EGI Training for AEGIS Site Administrators  
Institute of Physics Belgrade**

# AEGIS Operations and Monitoring Tools

Vladimir Slavnic  
Institute of Physics Belgrade  
Serbia

slavnic@ipb.ac.rs



07/03/2011

- AEGIS RPM repository service
- AEGIS web site
- AEGIS Helpdesk
- AEGIS Nagios
- AEGIS MyEGI Portal
- AEGIS CA



Index of / - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://rpm.scl.rs/

Index of /



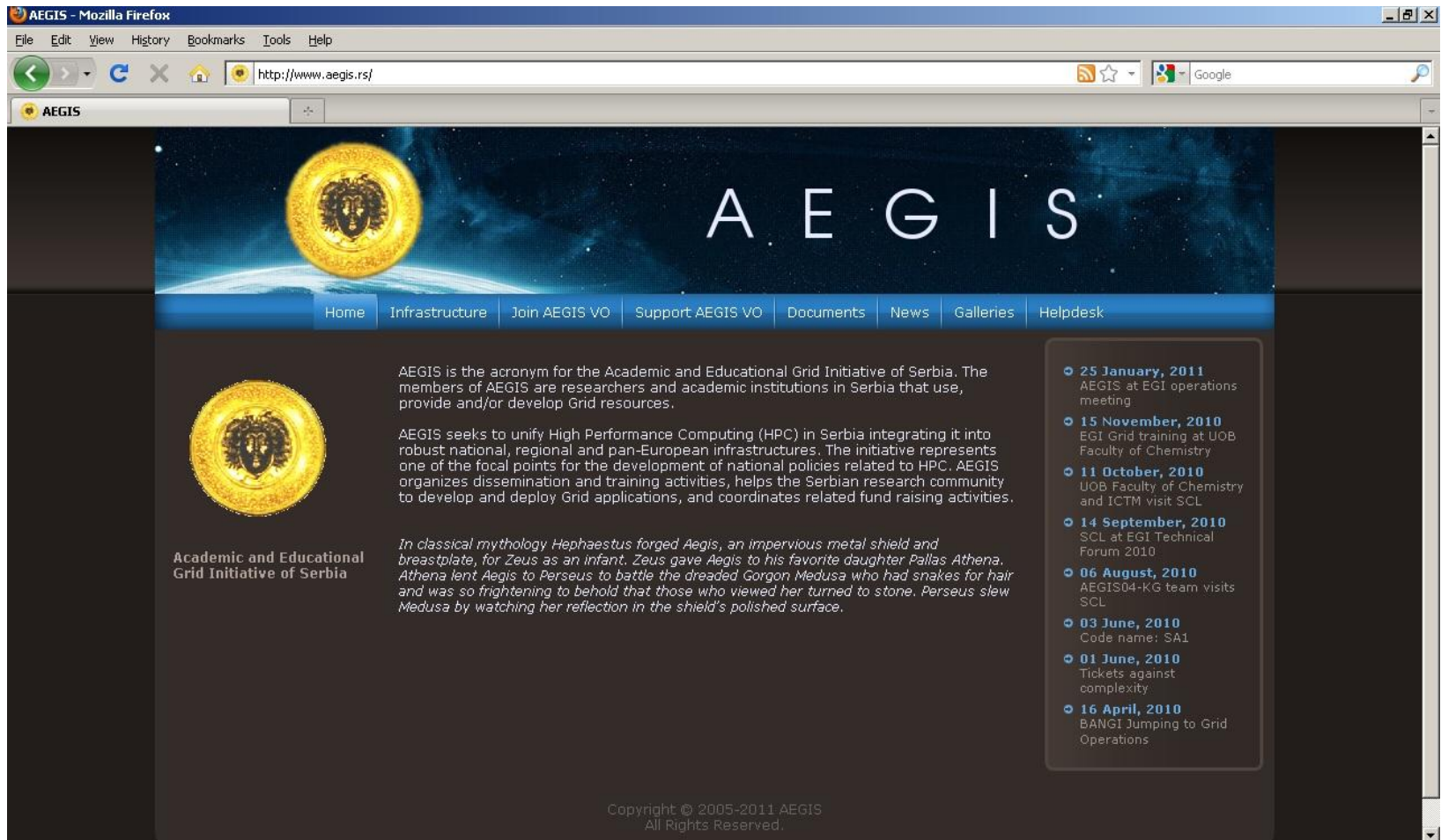
**SCL Repository Service**


<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
<a href="#">CTAN/</a>	05-Mar-2011 00:00	-	
<a href="#">ICG-CAs/</a>	30-Jul-2009 22:56	-	
<a href="#">apache/</a>	05-Mar-2011 19:19	-	
<a href="#">cas/</a>	10-Feb-2011 22:27	-	
<a href="#">daq/</a>	08-Aug-2009 17:23	-	
<a href="#">eclipse/</a>	01-Jan-1970 01:00	-	
<a href="#">qLite/</a>	25-Jul-2009 22:13	-	
<a href="#">ipackage/</a>	27-Apr-2009 10:08	-	
<a href="#">kav/</a>	17-Dec-2010 12:55	-	
<a href="#">linux/</a>	17-Nov-2009 13:24	-	
<a href="#">mysql/</a>	13-Aug-2010 18:38	-	
<a href="#">scl/</a>	25-Jan-2010 19:16	-	

[rpm@scl.rs](mailto:rpm@scl.rs)

Done

- Mirroring:
  - Scientific Linux and Ubuntu Linux distributions
  - gLite middleware packages (3.1 and 3.2)
  - Additional repositories such as DAG, MySQL etc.
  - <http://rpm.scl.rs>
- Repo files are available at <http://rpm.scl.rs/yum.conf/>



**A E G I S**

Home Infrastructure Join AEGIS VO Support AEGIS VO Documents News Galleries Helpdesk

**Academic and Educational Grid Initiative of Serbia**

AEGIS is the acronym for the Academic and Educational Grid Initiative of Serbia. The members of AEGIS are researchers and academic institutions in Serbia that use, provide and/or develop Grid resources.

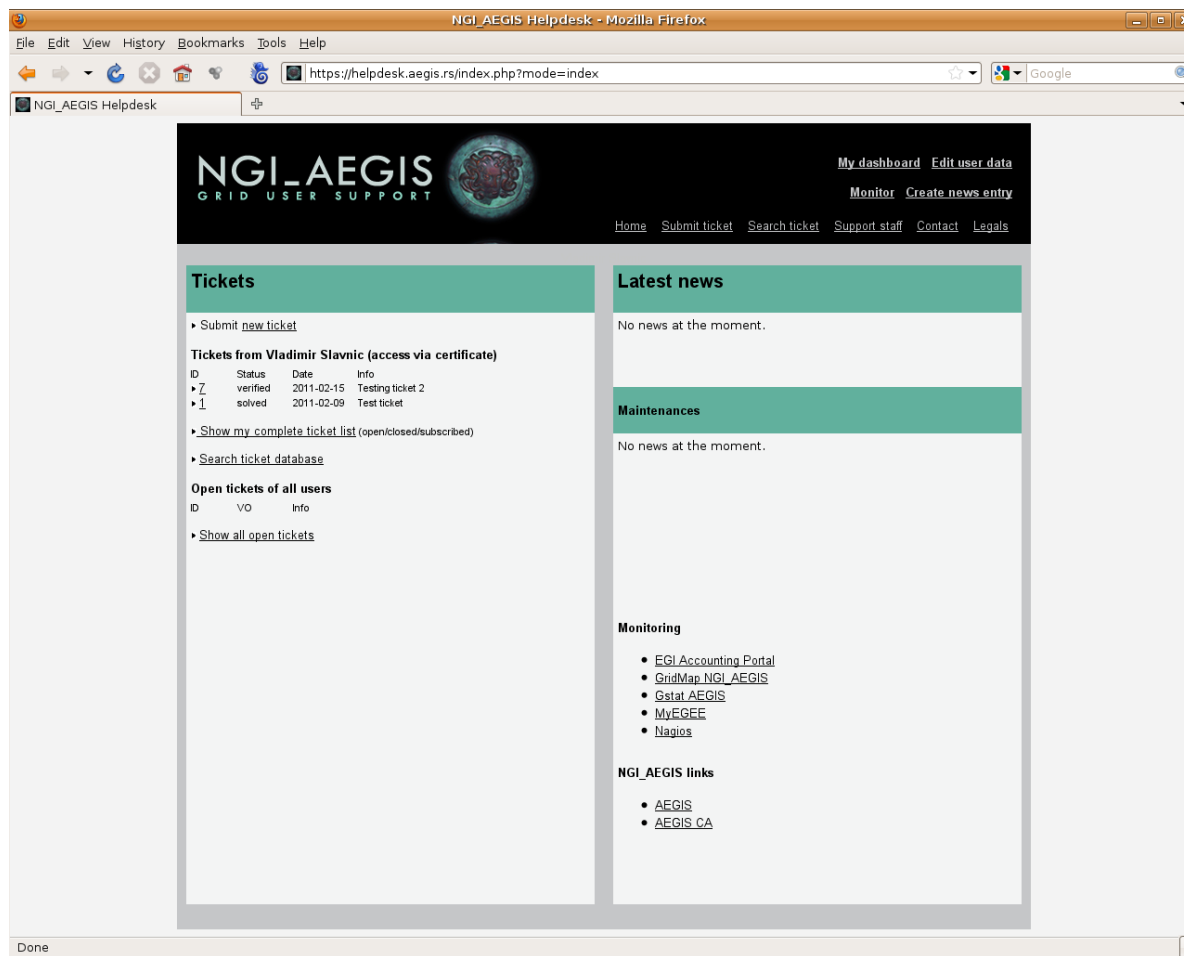
AEGIS seeks to unify High Performance Computing (HPC) in Serbia integrating it into robust national, regional and pan-European infrastructures. The initiative represents one of the focal points for the development of national policies related to HPC. AEGIS organizes dissemination and training activities, helps the Serbian research community to develop and deploy Grid applications, and coordinates related fund raising activities.

*In classical mythology Hephaestus forged Aegis, an impervious metal shield and breastplate, for Zeus as an infant. Zeus gave Aegis to his favorite daughter Pallas Athena. Athena lent Aegis to Perseus to battle the dreaded Gorgon Medusa who had snakes for hair and was so frightening to behold that those who viewed her turned to stone. Perseus slew Medusa by watching her reflection in the shield's polished surface.*

- 25 January, 2011  
AEGIS at EGI operations meeting
- 15 November, 2010  
EGI Grid training at UOB Faculty of Chemistry
- 11 October, 2010  
UOB Faculty of Chemistry and ICTM visit SCL
- 14 September, 2010  
SCL at EGI Technical Forum 2010
- 06 August, 2010  
AEGIS04-KG team visits SCL
- 03 June, 2010  
Code name: SA1
- 01 June, 2010  
Tickets against complexity
- 16 April, 2010  
BANGI Jumping to Grid Operations

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



The screenshot shows the NGI\_AEGIS Helpdesk interface. The browser window title is "NGI\_AEGIS Helpdesk - Mozilla Firefox" and the address bar shows "https://helpdesk.aegis.rs/index.php?mode=index". The page header includes the "NGI\_AEGIS GRID USER SUPPORT" logo and navigation links such as "My dashboard", "Edit user data", "Monitor", and "Create news entry".

The main content area is divided into two columns:

- Tickets:**
  - Submit [new ticket](#)
  - Tickets from Vladimir Slavnic (access via certificate)

ID	Status	Date	Info
2	verified	2011-02-15	Testing ticket 2
1	solved	2011-02-09	Test ticket

  - [Show my complete ticket list](#) (open/closed/subscribed)
  - [Search ticket database](#)
  - Open tickets of all users

ID	VO	Info
----	----	------

  - [Show all open tickets](#)
- Latest news:**
  - No news at the moment.
- Maintenances:**
  - No news at the moment.
- Monitoring:**
  - [EGI Accounting Portal](#)
  - [GridMap NGI\\_AEGIS](#)
  - [Gstat AEGIS](#)
  - [MyEGEE](#)
  - [Nagios](#)
- NGI\_AEGIS links:**
  - [AEGIS](#)
  - [AEGIS CA](#)

NGI\_AEGIS Helpdesk - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://helpdesk.aegis.rs/index.php?mode=ticket\_submit

NGI\_AEGIS Helpdesk

**NGI\_AEGIS**  
GRID USER SUPPORT

[My dashboard](#) [Edit user data](#)  
[Monitor](#) [Create news entry](#)

[Home](#) [Submit ticket](#) [Search ticket](#) [Support staff](#) [Contact](#) [Legals](#)

**Submit ticket**

**User information**

\* Name: Vladimir Slavic \* E-Mail:

Notification on:  solution  every change CC to:

---

**Ticket information**

\* Short description:

\* Describe your problem:   
(Limit to 4000 characters)

Affected VO:  VO specific problem?  yes  no

Type of problem:

Affected site:  Priority:

Assign ticket directly to **(please note)**

Upload attachment:    
(no exe/php/htm(l) files please; max. 2 MB)

(\* Required fields)

Done



- Regionalized instance of GGUS Helpdesk
  - <https://helpdesk.aegis.rs>
- Interfaced with main GGUS instance (<https://gus.fzk.de>) through NGI\_AEGIS support unit
- Ticket submission is available through web interface and e-mail ([helpdesk@aegis.rs](mailto:helpdesk@aegis.rs))

Nagios Core - Mozilla Firefox

File Edit View History Bookmarks Tools Help

ipb.ac.rs https://nagios.ipb.ac.rs/nagios/

N Nagios Core

**Nagios**

General

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- Documentation

Current Status

- Tactical Overview
- Map
- Hosts
- Services
- Host Groups
  - Summary
  - Grid
- Service Groups
  - Summary
  - Grid
- Problems
  - Services (Unhandled)
  - Hosts (Unhandled)
  - Network Outages

Quick Search:

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- Availability
- Trends
- Alerts
  - History
  - Summary
  - Histogram
- Notifications
  - Event Log

System

- Comments
- Downtime
- Process Info
- Performance Info
- Scheduling Queue
- Configuration

**Current Network Status**

Last Updated: Sun Mar 6 21:45:52 CET 2011  
 Updated every 601 seconds  
 Nagios Core™ 3.2.3 - [www.nagios.org](http://www.nagios.org)  
 Logged in as /C=/RQ/O=AEGIS/OU=Institute of Physics  
 Belgrade/CN=Vladimir Slavnic

[View History For All Hosts](#)  
[View Notifications For All Hosts](#)  
[View Host Status Detail For All Hosts](#)

**Host Status Totals**

Up	Down	Unreachable	Pending
31	0	0	0

All Problems: 0 | All Types: 31

**Service Status Totals**

Ok	Warning	Unknown	Critical	Pending
284	14	1	13	13

All Problems: 28 | All Types: 335

**Service Status Details For All Hosts**

Host	Service	Status	Last Check	Duration	Attempt	Status Information
ipb.ac.rs	org.bdi.Entries	OK	03-06-2011 21:19:46	88d 22h 47m 58s	1/4	OK: time=0.16s, entries=4062
	org.bdi.Freshness	OK	03-06-2011 21:37:02	88d 22h 40m 25s	1/4	OK: freshness=21s, entries=1
ce-atlas.ipb.ac.rs	tr.srce.CADist-Check-Iops NGI/Serbia	OK	03-06-2011 21:30:14	5d 10h 35m 20s	1/2	wn16.ipb.ac.rs: CA DIST OK - The official version is 1.38. Using AAACertificateServices to get CA distribution version. The following CAa have info file but CA certificate files is missing: HellasGridDemo. CAa distribution is correctly installed.
	tr.srce.GRAM-CertLifetime	OK	03-06-2011 21:01:52	31d 8h 44m 12s	1/2	CERT LIFETIME OK - Certificate will expire in 100.48 days (Jun 15 07:38:21 2011 GMT)
	org.apel.APEL-Pub	OK	03-06-2011 14:10:13	29d 21h 35m 51s	1/2	goc-accounting.grid-support.ac.uk: OK [ last published 2 days ago: 2011-03-03 ]
	org.apel.APEL-Sync	OK	03-06-2011 14:13:50	28d 21h 32m 1s	1/2	goc-accounting.grid-support.ac.uk: OK [ last published 3 days ago: 2011-03-01 ]
	org.bdi.Entries	OK	03-06-2011 21:27:27	31d 9h 18m 25s	1/4	OK: time=0.04s, entries=5
	org.bdi.Freshness	OK	03-06-2011 21:43:34	27d 9h 24m 21s	1/4	OK: freshness=62s, entries=1
	org.opus.Tickets	OK	03-06-2011 18:27:34	88d 22h 40m 11s	1/4	GGUS OK - Site: AEGIS07-IPB-ATLAS, SU: all. 0 tickets in states 'waiting for reply on hold', 0 other open tickets.
	org.qstnt.SanityCheck	OK	03-06-2011 21:22:20	27d 9h 24m 10s	1/4	OK - errors 0, warnings 0, info 0
	org.sam.CE-JobSubmit-Iops NGI/Serbia	OK	03-06-2011 21:36:02	8d 22h 42m 9s	1/2	OK: success.
	org.sam.CE-JobSubmit-Iops NGI/Serbia	OK	03-06-2011 21:36:02	31d 8h 31m 43s	1/2	OK: success.
	org.sam.VN-B-Iops/NGI/Serbia	OK	03-06-2011 21:30:13	88d 22h 24m 33s	1/2	wn16.ipb.ac.rs: OK: getCE ce-atlas.ipb.ac.rs:2119/jobmanager-pbs-ops
	org.sam.VN-C-Aver-Iops/NGI/Serbia	OK	03-06-2011 21:30:23	5d 10h 35m 11s	1/2	wn16.ipb.ac.rs: OK
	org.sam.VN-C-H-Iops/NGI/Serbia	OK	03-06-2011 21:30:15	88d 22h 24m 31s	1/2	wn16.ipb.ac.rs: OK
	org.sam.VN-H-Iops/NGI/Serbia	OK	03-06-2011 21:34:51	31d 8h 36m 2s	1/2	wn16.ipb.ac.rs: OK: MPI Status: OK
	org.sam.VN-Rep-Iops/NGI/Serbia	OK	03-06-2011 21:30:44	88d 22h 23m 52s	1/2	wn16.ipb.ac.rs: OK: success.
	org.sam.VN-RepCr-Iops/NGI/Serbia	OK	03-06-2011 21:30:31	88d 22h 24m 6s	1/2	wn16.ipb.ac.rs: OK: File was copied to SE dpm.ipb.ac.rs and registered in LFC prod-lfc-shared-central.cern.ch. CLI
org.sam.VN-RepDel-Iops NGI/Serbia	OK	03-06-2011 21:30:44	88d 22h 23m 51s	1/2	wn16.ipb.ac.rs: OK: Replicas for [lfrn:gridops/SAM/sam-jcg-mm-cr-wn16.ipb.ac.rs:110306203021.4057358] were deleted. CLI	
org.sam.VN-RepFree-Iops NGI/Serbia	OK	03-06-2011 21:30:17	88d 22h 24m 29s	1/2	wn16.ipb.ac.rs: OK: ok	
org.sam.VN-RepGet-Iops NGI/Serbia	OK	03-06-2011 21:30:39	88d 22h 23m 58s	1/2	wn16.ipb.ac.rs: OK: File was copied from SRM. Diff successful. CLI	
org.sam.VN-RepServ-Iops NGI/Serbia	OK	03-06-2011 21:30:16	88d 22h 24m 29s	1/2	wn16.ipb.ac.rs: OK: LCG_GFAL_INFOSYS is set to bdi.ipb.ac.rs:2170	
org.sam.VN-RepRep-Iops NGI/Serbia	OK	03-06-2011 21:30:40	88d 22h 23m 55s	1/2	wn16.ipb.ac.rs: OK: File was replicated to SE(s) dpm.ipb.ac.rs. There were problems listing replicas. CLI	

https://nagios.ipb.ac.rs/nagios/cgi-bin/status.cgi?host=all

Nagios Core - Mozilla Firefox

File Edit View History Bookmarks Tools Help

ipb.ac.rs https://nagios.ipb.ac.rs/nagios/

N Nagios Core

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  - Services (Unhandled)
  - Hosts (Unhandled)
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  - Histogram
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- Downtime
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**Current Network Status**

Last Updated: Sun Mar 6 21:46:13 CET 2011  
 Updated every 601 seconds  
 Nagios@Core™ 3.2.3 - [www.nagios.org](http://www.nagios.org)  
 Logged in as /C=/RQ/O=AEGIS/OU=Institute of Physics  
 Belgrade/CN=Vladimir Slavnic

[View Service Status Detail For All Service Groups](#)  
[View Status Summary For All Service Groups](#)  
[View Service Status Grid For All Service Groups](#)

**Host Status Totals**

Up	Down	Unreachable	Pending
31	0	0	0

All Problems: 0 | All Types: 31

**Service Status Totals**

Ok	Warning	Unknown	Critical	Pending
293	14	1	14	13

All Problems: 29 | All Types: 335

**Service Overview For All Service Groups**

/ops/NGI/Sarbia (ops/NGI/Sarbia)

Host	Status	Services	Actions
ce-atlas.ipb.ac.rs	UP	17 OK	🔍 🚨 🛑
ce-mi.sanu.ac.rs	UP	17 OK	🔍 🚨 🛑
ce-sq.arena.ge	UP	14 OK	🔍 🚨 🛑
ce84.ipb.ac.rs	UP	17 OK	🔍 🚨 🛑
cluster1.csk.kg.ac.rs	UP	17 OK	🔍 🚨 🛑
cream-demo.ipb.ac.rs	UP	9 OK 4 WARNING 1 CRITICAL	🔍 🚨 🛑
cream.ipb.ac.rs	UP	17 OK	🔍 🚨 🛑
dom.ipb.ac.rs	UP	9 OK	🔍 🚨 🛑
grid-ce.etf.bg.ac.rs	UP	1 OK 4 WARNING 1 CRITICAL 13 PENDING	🔍 🚨 🛑
grid01.efak.ni.ac.rs	UP	17 OK	🔍 🚨 🛑
grid01.rcub.bg.ac.rs	UP	17 OK	🔍 🚨 🛑
grid02.efak.ni.ac.rs	UP	9 OK	🔍 🚨 🛑
grid02.rcub.bg.ac.rs	UP	2 OK	🔍 🚨 🛑
grid15.rcub.bg.ac.rs	UP	9 OK	🔍 🚨 🛑
fc.ipb.ac.rs	UP	2 OK	🔍 🚨 🛑
mproxv.ipb.ac.rs	UP	2 OK	🔍 🚨 🛑
nagios.ipb.ac.rs	UP	9 OK	🔍 🚨 🛑
se-demo.ipb.ac.rs	UP	6 WARNING 2 CRITICAL	🔍 🚨 🛑

RDII (RDII)

Host	Status	Services	Actions
rdii.ipb.ac.rs	UP	1 OK	🔍 🚨 🛑
ce-atlas.ipb.ac.rs	UP	1 OK	🔍 🚨 🛑
ce-mi.sanu.ac.rs	UP	1 OK	🔍 🚨 🛑
ce-sq.arena.ge	UP	1 OK	🔍 🚨 🛑
ce84.ipb.ac.rs	UP	1 OK	🔍 🚨 🛑
cluster1.csk.kg.ac.rs	UP	1 OK	🔍 🚨 🛑
cream-demo.ipb.ac.rs	UP	1 OK	🔍 🚨 🛑
cream.ipb.ac.rs	UP	1 OK	🔍 🚨 🛑
grid-ce.etf.bg.ac.rs	UP	1 OK	🔍 🚨 🛑
grid01.efak.ni.ac.rs	UP	1 OK	🔍 🚨 🛑
grid01.rcub.bg.ac.rs	UP	1 OK	🔍 🚨 🛑
s2.ngi.arena.ge	UP	1 OK	🔍 🚨 🛑

IGTF-CA (IGTF-CA)

Host	Status	Services	Actions
nagios.ipb.ac.rs	UP	1 OK	🔍 🚨 🛑

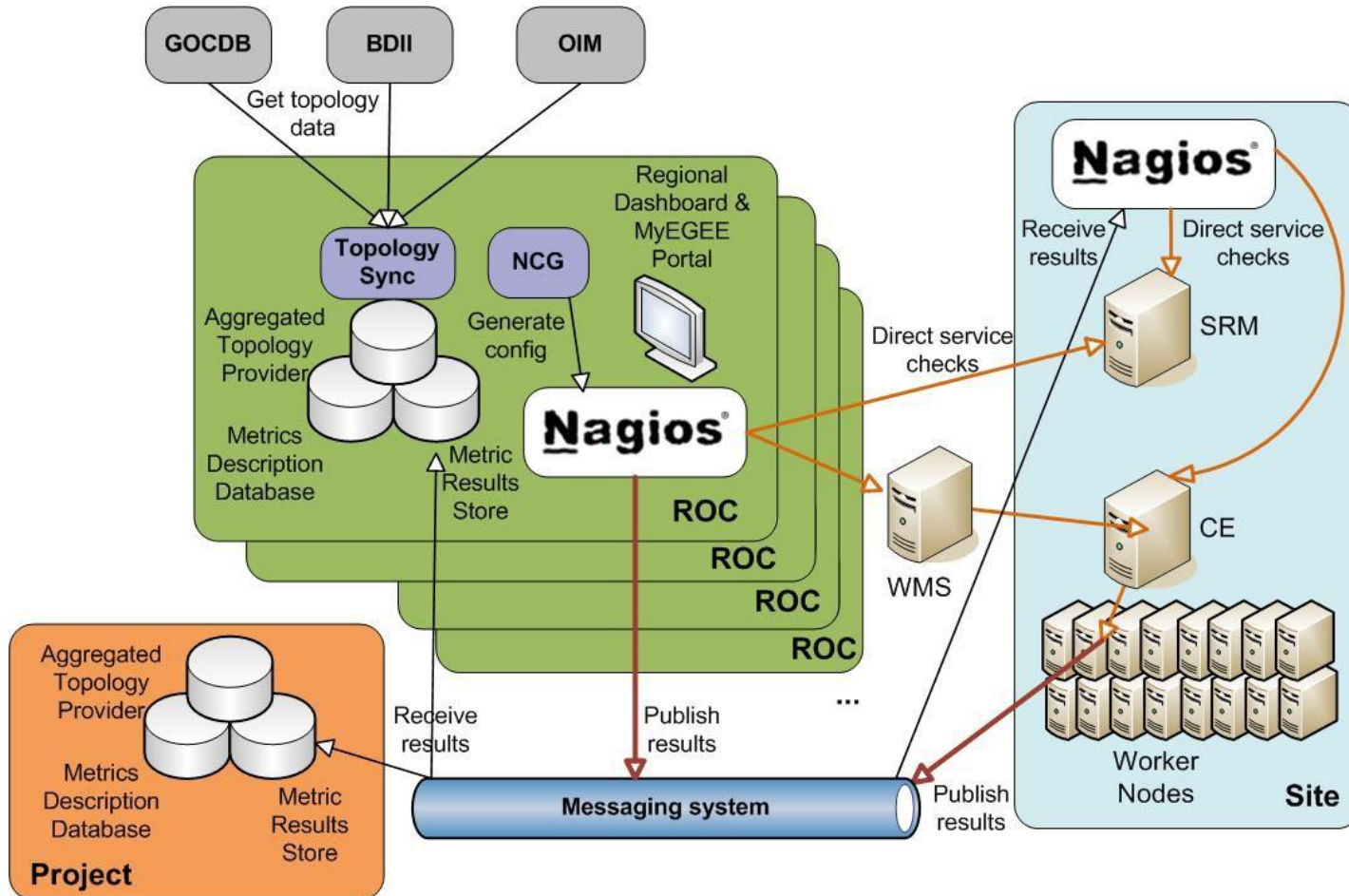
https://nagios.ipb.ac.rs/nagios/cgi-bin/status.cgi?servicegroup=all&style=overview

EGI-InSPIRE RI-261323

EGI Training for AEGIS Site Administrators

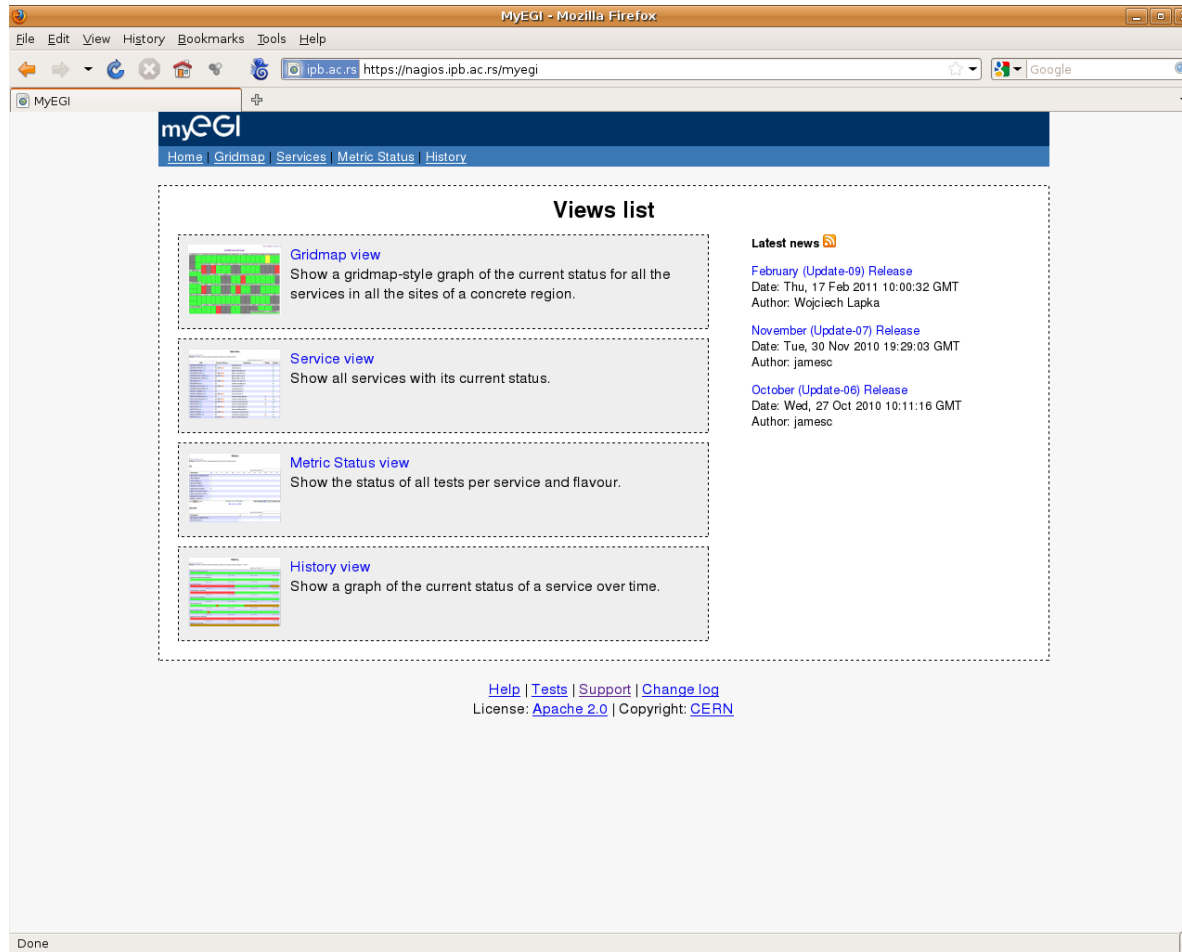
www.egi.eu

- Service Availability Monitoring (SAM) system is used to monitor the resources within the production infrastructure
  - <https://tomtools.cern.ch/confluence/display/SAMDOC/Home>
- SAM monitoring data is used for calculation of availability and reliability of grid sites.
- It includes the following components:
  - Probes: a test execution framework (based on the open source monitoring framework Nagios) and the Nagios Configuration Generator (NCG)
  - Aggregated Topology Provider (ATP), the Metrics Description Database (MDDDB), and the Metrics Results Database (MRDB)
  - Message bus to publish results and a programmatic interface
  - the visualization portal (MyEGI)



\* Image obtained from EGI Technical Forum 2010 Nagios/MyEGI presentation by David Horat::

<https://www.egi.eu/indico/getFile.py/access?contribId=172&sessionId=20&resId=0&materialId=slides&confId=48>



MyEGI - Mozilla Firefox

File Edit View History Bookmarks Tools Help





ipb.ac.rs https://nagios.ipb.ac.rs/myegi

MyEGI

myEGI

Home Gridmap Services Metric Status History

### Views list

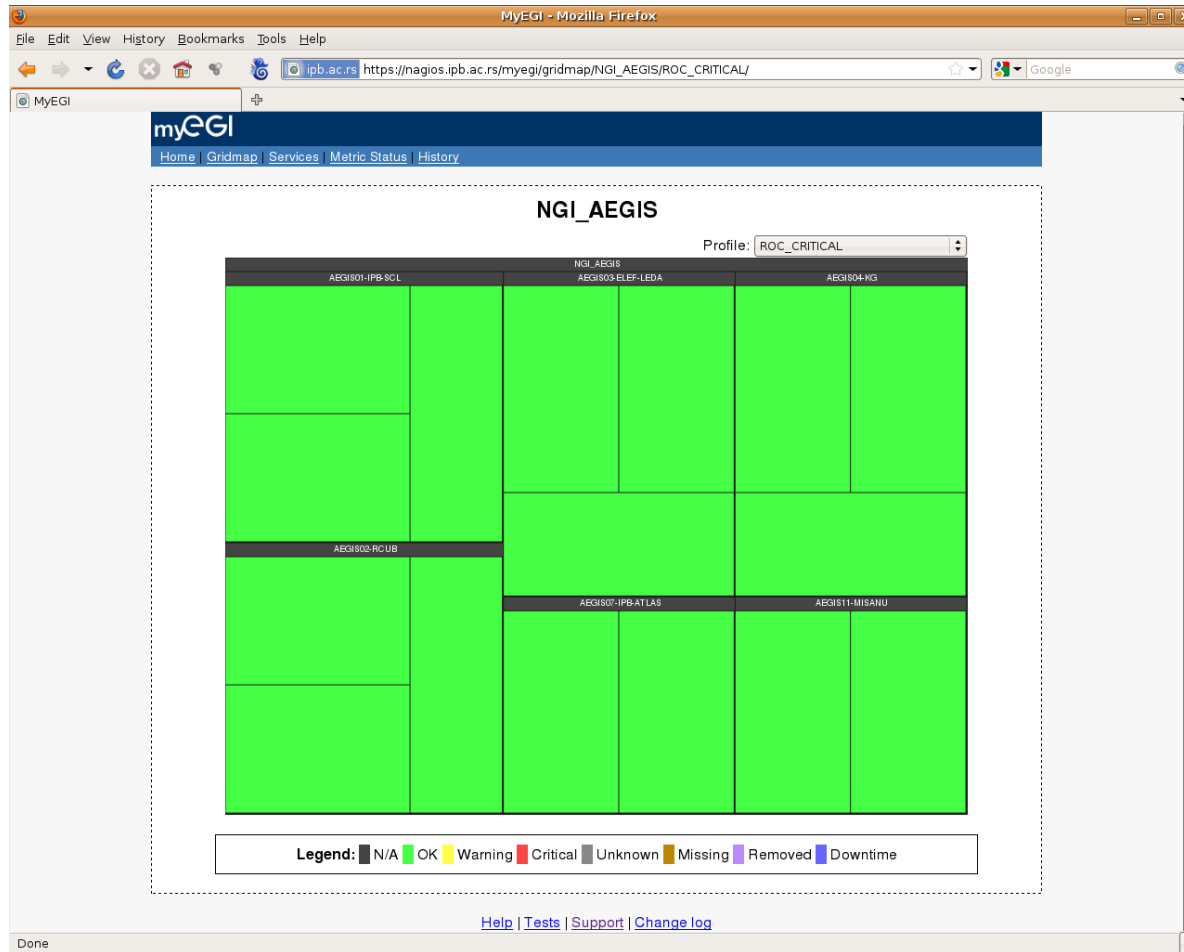
-  **Gridmap view**  
Show a gridmap-style graph of the current status for all the services in all the sites of a concrete region.
-  **Service view**  
Show all services with its current status.
-  **Metric Status view**  
Show the status of all tests per service and flavour.
-  **History view**  
Show a graph of the current status of a service over time.

**Latest news**

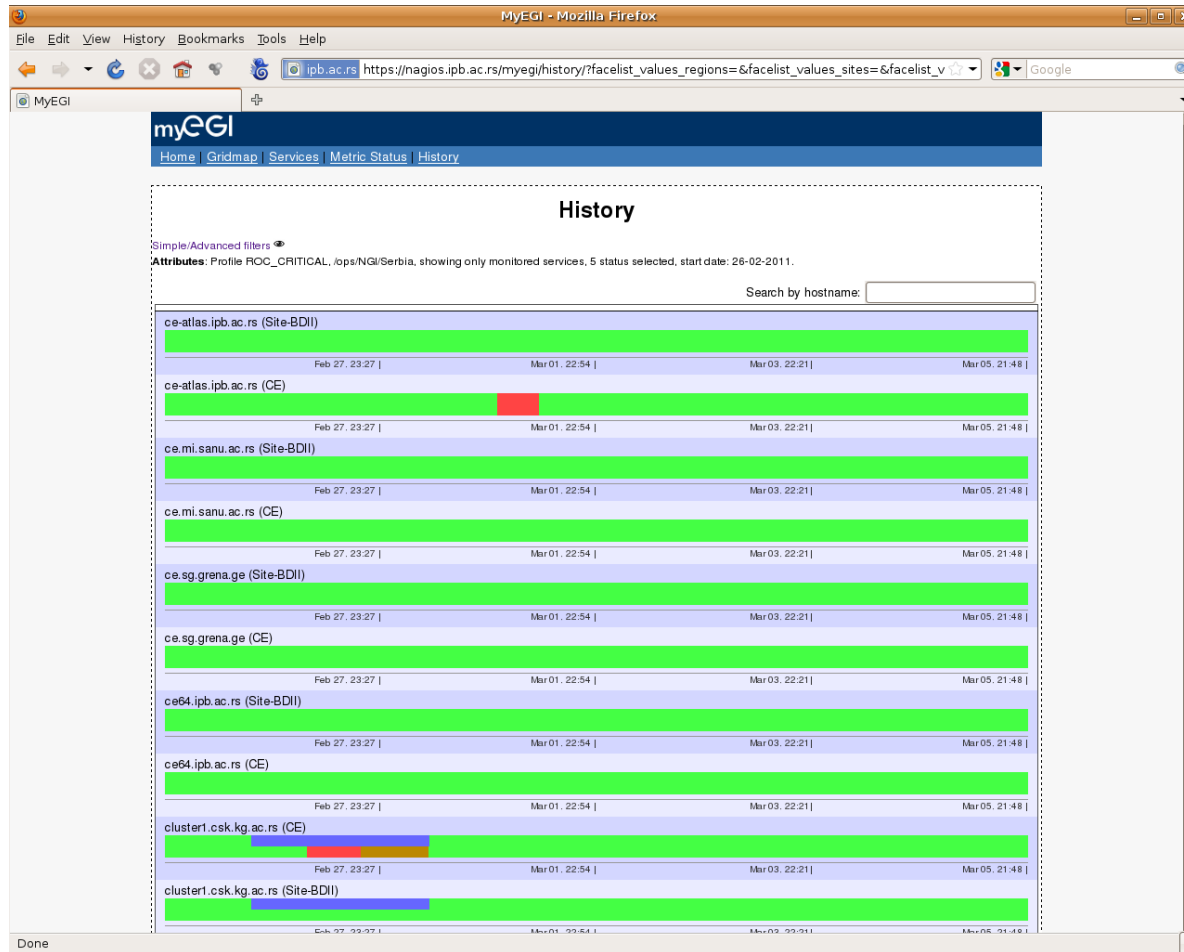
- February (Update-09) Release**  
Date: Thu, 17 Feb 2011 10:00:32 GMT  
Author: Wojciech Lapka
- November (Update-07) Release**  
Date: Tue, 30 Nov 2010 19:29:03 GMT  
Author: jamesc
- October (Update-06) Release**  
Date: Wed, 27 Oct 2010 10:11:16 GMT  
Author: jamesc

[Help](#) | [Tests](#) | [Support](#) | [Change log](#)  
License: [Apache 2.0](#) | Copyright: [CERN](#)

Done

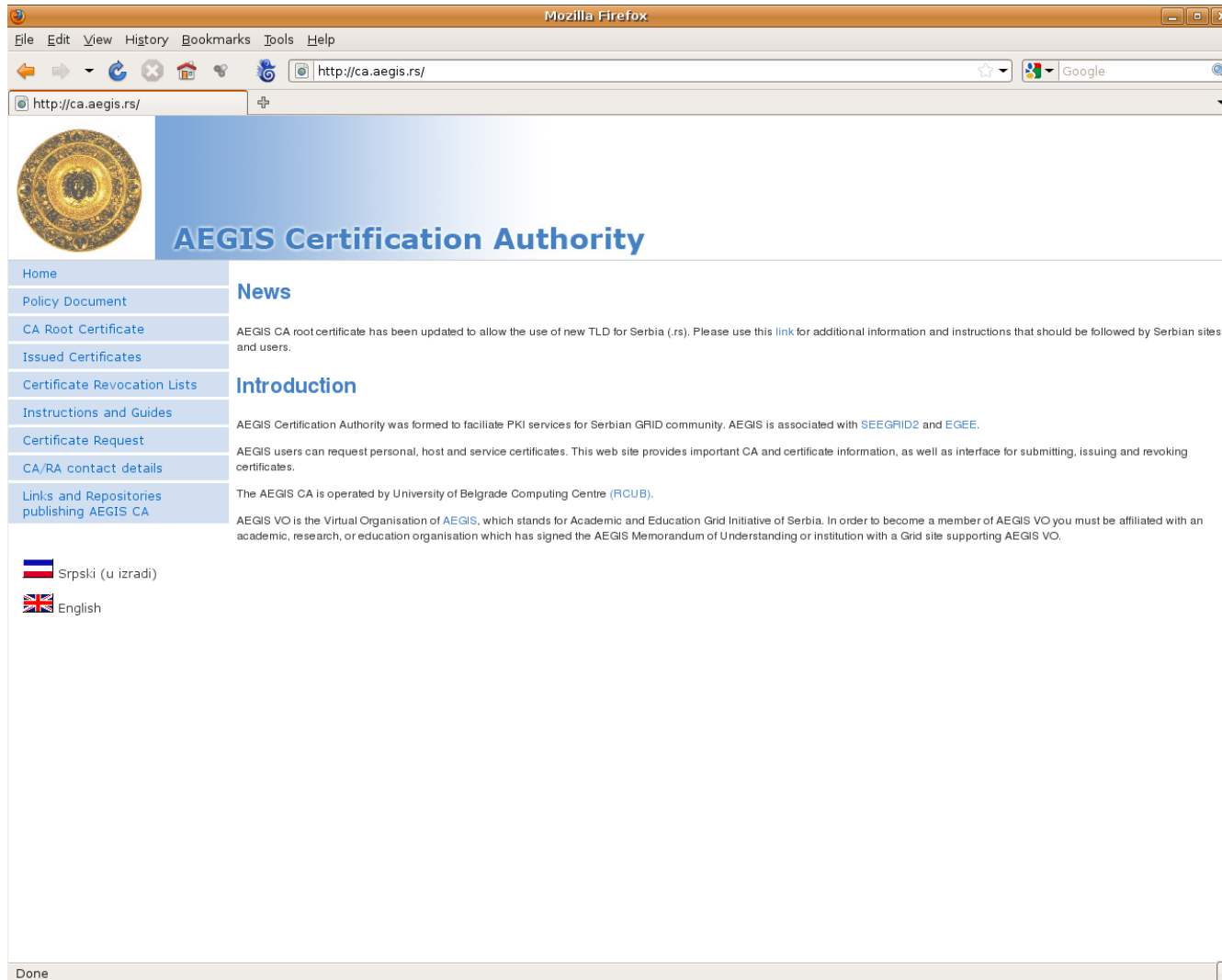


The screenshot shows a web browser window titled "MyEGI - Mozilla Firefox" displaying the MyEGI portal. The browser's address bar shows the URL: `https://nagios.ipb.ac.rs/myegi/gridmap/NGI_AEGIS/ROC_CRITICAL/`. The portal header includes the "myEGI" logo and navigation links: Home, Gridmap, Services, Metric Status, and History. The main content area is titled "NGI\_AEGIS" and features a "Profile:" dropdown menu set to "ROC\_CRITICAL". Below this is a gridmap showing a grid of service status indicators. The grid is mostly green, indicating "OK" status. A legend at the bottom of the gridmap defines the status colors: N/A (grey), OK (green), Warning (yellow), Critical (red), Unknown (grey), Missing (orange), Removed (purple), and Downtime (blue). At the bottom of the browser window, there are links for "Help", "Tests", "Support", and "Change log".





- Main 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>



The screenshot shows a Mozilla Firefox browser window with the address bar set to <http://ca.aegis.rs/>. The website header features a circular gold seal on the left and the text "AEGIS Certification Authority" in blue. A navigation menu on the left lists: Home, Policy Document, CA Root Certificate, Issued Certificates, Certificate Revocation Lists, Instructions and Guides, Certificate Request, CA/RA contact details, and Links and Repositories publishing AEGIS CA. The main content area is divided into sections: "News" with a paragraph about a root certificate update for Serbia (.rs); "Introduction" with two paragraphs explaining the authority's purpose and its affiliation with the University of Belgrade Computing Centre (RCUB) and the AEGIS VO; and a language selection section with options for "Srpski (u izradi)" and "English". The browser status bar at the bottom shows "Done".

- AEGIS Certification Authority was formed to facilitate 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 RPM repository service
  - <http://rpm.scl.rs/>
- AEGIS web site
  - <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>
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  - <http://ca.aegis.rs/>