

AEGIS

Academic and Educational Grid Initiative of Serbia

<http://www.aegis.rs/>

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Transition [1/3]

- AEGIS is founded in April 2005
- Mission: to provide Serbian research and development community with reliable and sustainable Grid infrastructure
- Members: 4 university computer centers, 17 research institutes, 2 international collaborations, and 2 SMEs
- AEGIS participated in 2 phases of the EGEE programme (EGEE-II and EGEE-III) and 3 phases of the SEE-GRID programme (SEE-GRID, SEE-GRID-2, SEE-GRID-SCI)
- As a part of the EGEE-SEE ROC, it has provided two Grid sites
 - AEGIS01-IPB-SCL (704 CPUs / 25 TBs)
 - AEGIS07-IPB-ATLAS (128 CPUs)
- During March and April 2010, three new sites have been added to the infrastructure
 - AEGIS03-ELEF-LEDA
 - AEGIS04-KG
 - AEGIS11-MISANU
- Set of national and regional core services
 - VOMS, PX, BDII, LFC, WMS/LBs

Transition [2/3]

- During the April 2010, AEGIS started with the operational transition to the autonomous NGI
- From the “Integration” document point of view, currently we are at step 1.7 - Nagios to perform H

<https://nagios.aegis.rs/nagios/>

- From the practical point of view, all tasks that are up to us are done, and validation progresses well, but procedurally slow
- Autonomous operation of NGI AEGIS from operational point of view is expected during June 2010

Transition [3/3]

- Currently there are no open issues regarding the transition
- Few technical problems related to Nagios and Grid services used by it for monitoring have been reported and solved
- We still wait for procedures for Nagios validation to be defined
 - see GGUS #57955

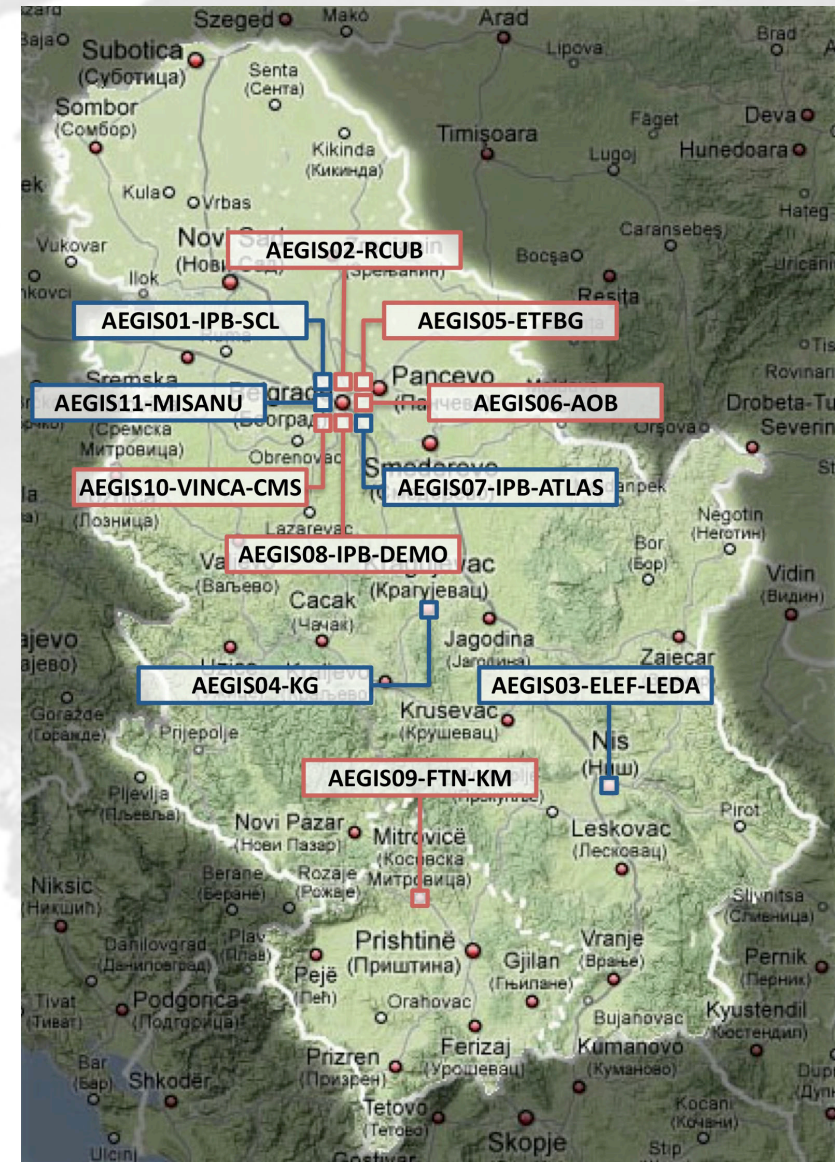
Becoming part of EGI: Governance

- Governance

- Institute of Physics Belgrade (IPB), NGI AEGIS coordinating institution, commits to participate in the NGI Operations Managers meeting
- AEGIS NGI operations staff will participate fortnightly in operations meetings for discussion of topics related to the middleware (releases, urgent patches, priorities...)
- AEGIS NGI already nominated a representative for the Operations Tool Advisory Group – OTAG – to provide feedback and requirements about operational tools to JRA1
- AEGIS participates in the Staged Rollout process, and is responsible for CREAM+Torque

Becoming part of EGI: Infrastructure [1/2]

- AEGIS infrastructure consists of 11 Grid sites
 - ~ 1100 CPUs
 - ~ 60 TBs
 - SL4/SL5
 - Torque/Maui
 - gLite3.1/gLite3.2



Becoming part of EGI: Infrastructure [2/2]

- In EGI-InSPIRE DoW Table 11, 2 Grid sites and 800 CPUs were committed as available
- However, from the beginning of the transition phase (April 2010), 4 new AEGIS sites have been registered in GOCDB, and 3 of them are already migrated to EGI and in full production
 - AEGIS03-ELEF-LEDA
 - AEGIS04-KG
 - AEGIS11-MISANU
- Therefore, currently 5 AEGIS sites and 1010 CPUs are in production
- These numbers will increase as new sites are migrated to EGI and as the infrastructure is upgraded
- Plan is to migrate the complete AEGIS infrastructure to EGI
- New sites will be added in GOCDB as NGI_AEGIS becomes operationally autonomous

Becoming part of EGI: Procedures and policies

- AEGIS uses procedures and policies based on the well-established EGEE ones
- Since all AEGIS Grid sites are running gLite middleware, current set of the procedures fulfill all of our requirements

Becoming part of EGI: Support

- Each AEGIS Grid site is operated by at least one site administrator (usually two of them)
- Currently, within the NGI, sites are daily monitored by the national operations team at IPB, but in perspective we envisage the distributed monitoring shifts will be organized
- User and site admins support is performed through
 - Mailing lists
 - EGEE-SEE ROC Regional Helpdesk
 - Dedicated NGI_AEGIS GGUS support unit

Becoming part of EGI: Tools

- Current priority of tasks for AEGIS
 - **O-N-1 national Grid configuration database (GOCDB4)**
 - O-N-2 national accounting infrastructure
 - **O-N-3 NGI monitoring infrastructure (Nagios and MyEGEE)**
 - O-N-4 operations portal
 - **O-N-7 helpdesk: NGI view of GGUS** (later national helpdesk)
- A number of non-EGEE tools developed/deployed by IPB are used for daily operations in AEGIS
 - Ganglia (<http://ganglia.scl.rs/>)
 - Pakiti (<https://pakiti.scl.rs/>)
 - CGMT (<http://cgmt.scl.rs/>)
 - WMSMon (<http://wmsmon.scl.rs/>)
 - WatG Browser (<http://watgbrowser.scl.rs:8080/>)

Availability and Operations Level Agreements

- AEGIS is ready to continue the current level of availability/reliability (70%/75%) commitment
- This type of SLA is already signed by NGI and certified sites within the AEGIS infrastructure
- In addition, AEGIS NGI will be able to comply to the following EGI Operations Level Agreements
 - Minimum availability of core middleware services (top-BDII, WMS/LB, LFC, VOMS, etc.)
 - Minimum availability of core operational services such as: nagios-based monitoring, helpdesk
 - Minimum response time of operations staff to trouble tickets
 - Minimum response time of the NGI CSIRT in case of vulnerability threats

Training [1/2]

- AEGIS already has 7 EGEE accredited trainers
- In previous two years, during EGEE-III, AEGIS organized more than 20 training events
- 5 of them were purely site-administration oriented, and included hands-on demonstrations of site installation
- Practically, each new Grid site installation was preceded by a dedicated Grid site administration training event
- Training infrastructure: virtualized AEGIS08-IPB-DEMO Grid site is used purely for educational/training purposes

Training [2/2]

- Training material from these events are available at the EGEE digital library <http://egee.lib.ed.ac.uk/> and IPB Wiki page <http://wiki.ipb.ac.rs/>
- In addition, one national and two regional training events focused on transition to NGI-based Grid operations model were organized
- AEGIS will continue with training activities, and provide community with the up-to-date training material

Your best knowhow

- From the introduction of AEGIS operation in 2005, we have regularly published LCG and later gLite-related guidelines through the EGEE-SEE ROC Wiki
- Within the SEE-GRID framework we managed a set of YAIM regional templates, and produced detailed documentation on Grid site installation
- Recently we provided a detailed guides on MPI usage and installation on the Grid, together with a set of relevant RPMs

Interoperations

- In EGEE-III we participated in Operations Automation Team (OAT)
- IPB also coordinated interoperation between EGEE and SEE-GRID infrastructures
- In collaboration with EDGES team from SZTAKI, we have established a first bridge between Desktop Grid and SEE-GRID infrastructure at AEGIS01-IPB-SCL site