

# NGI operations in Czech Republic

Miroslav Ruda

CESNET

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MetaCentrum

- national academic network provider
- covers grids as first step to e-infrastructure provider
  - sustainability - 5 year project will start next year
- involved in all EGEE projects, also gLite development
- operating national grid MetaCentrum
  - for more than 10 years
- only two sites in EGI production infrastructure
  - CESNET+part of Academy of Science (HEP)
  - more collaborating on national level (universities)
- not using gLite internally, gLite+Globus gateways
- research in virtualization, scheduling, security

National grid (MetaCentrum) + EGEE operations -> NGI\_CZ

- EGI operations team is part of MetaCentrum operations
  - big overlap in functions
  - reasonable overlap in tools
  - some tools different

Major goals in EGI for the first year

- support regionalization of tools—setup on national level
  - use them directly
  - merge with our local part
  - modify to support local needs too
  - use only as EGI gateway, fill relevant data from our services
- minimize duplication of work, merge operation groups
- establish structure, rules, procedures (both on national and EGI level)
- continue with activities inherited from EGEE
  - VOCE, Auger, Pakiti

- ROC to NGI transition under way
  - helpdesk integration (RT/GGUS)
    - working in development version of GGUS
    - expected to be in next production release of GGUS (June)
  - Nagios certification is not expected to be problem
    - but depends on helpdesk(?)
- meetings, working groups
  - fully support OTAG, operations and ROD meetings, etc.
  - security (EGI CSIRT)
  - phone/videoconferencing as much as possible
- recommendations towards EGI meetings
  - face-to-face together with EGI conferences
  - or at least co-locate various SA1 meetings together

- helpdesk RT - heavily used on national level, also for VOCE and Auger VOs
  - RT/GGUS integration in development, expected to be available in next GGUS release
  - several queues synchronized with GGUS
  - will be used in SA2 internally too
  - web + email interface
- Nagios - used also on national level
  - plans to use hierarchy of Nagios servers within NGI -> site level too
- GOCDB
  - already running national GOCDBv3, will test v4
  - motivation—test usability for usage on national level, populate with more national sites, services ...
- dashboard-Nagios
  - already running, in evaluation phase
  - will be used by EGI operations
- myEGEE not yet tested

## Operation tools (cont.)

- accounting
  - already running national accounting repository
    - more detailed data (kernel accounting)
    - includes also non-EGI sites and users
  - EGI solution not yet deployed, will for sure investigate in next phase
  - filter+publish data from our service to national accounting service through adapter? Through APEL?
- Pakiti
  - running on national level
  - provided as a service for EGI
  - further development
- LB
  - further development in EMI
  - used on national level for PBS jobs too
- national virtualization infrastructure
  - virtual clusters (cloud-like ideas) integrated within batch system (PBSPro, Torque)
  - cooperative scheduling between Torque clusters, in development

## Oversight

- ROD + first-line teams exist
  - RT used as main communication channel
  - integrated with national helpdesk, ROD-equivalent, first-line support in MetaCentrum
- using both national monitoring (Nagios, Ganglia, Pakiti) and EGI services

## Growth

- number of CPUs + storage is expected slightly increase next year
- new big site visible in EGI may be setup in next years (depends on national project)
- other already connected sites (on national level) may become visible if user requirement exists

## Availability

- declared preferably through SLD, however EGEE SLAs already signed

- part of larger group in MetaCentrum
- HEP, computational chemistry, astrophysics users already active in EGEE/EGI
- user training on national level, two accredited EGEE trainers
  - materials and trainers for operations training missing, we are will to cooperate with other NGIs
- providing "complete set of services" for VOCE and Auger VOs
  - WMS, LB, DPM, VOMS, MyProxy, LFC, VOBOX, Argus, BDII, UI, registration portal, support in RT



# Contribution to EGI security



- continue with our EGEE OSCT work = EGI CSIRT
- EGI incident response team
  - responsibility rotates between several institutions, CESNET is one of them
- leading security monitoring (being defined)
  - Pakiti (monitoring of installed versions of Linux packages)
  - integration with Nagios
  - user activity monitoring (security challenges)

- regional VO, across Central Europe sites in EGEE
- plans to continue in EGI too
  - policy must be redefined
  - seed resources for newcomers (Auger and Compchem VOs started here)
  - used for application tests on large, heterogeneous testbed