

*Mario Reale / IGI-GARR for the EGI Network Support task force team
(https://wiki.egi.eu/wiki/NST#Network_Monitoring_Proposal_Task_Force)*

1. Present the proposals from the EGI Network Support Proposal Task Force to the EGI operations NGI community on the 7 identified Use Cases around network support: GGUS, PERT, Network-related Scheduled Maintenances, TroubleShooting, e2e Multi-Domain Monitoring, DownCollector, Policy and Collaboration; Discuss with the community at the f2f meeting on Jan 24 in Amsterdam.

Also based on the outcome of the discussion in Amsterdam, the following work plan objectives will be pursued, prioritizing them according to the consensus reached within the EGI community:

Please note that all the proposed Milestones in this document will be subject to approval / discussion by the EGI Network Support community on Jan 24, 2011 at the NetSup F2F OMB in Amsterdam (EGI.eu).

2. Put the identified workflow for Network related issues in place in the GGUS Support system, in order to provide support to general network related tickets within the EGI community
MILESTONE-1: Workflow for handling network-related tickets in GGUS implemented and operational, procedures understood and shared, known.
3. Deploy the required local probes for the tool for troubleshooting on demand (HINTS), put the system in production (server, documentation, guides, support) , enroll sites in two phases: a first pilot phase with volunteering sites, then extend the site involvement to all interested sites. Organize basic training on the tool for the EGI community. Further refine the tool w.r.t.: server-probe communication, users-admin communication form, removing individual rights for users.
MILESTONE-2: HINTS system up and running, volunteering sites enrolled, pilot phase on-going
MILESTONE-3: HINTS system in production mode, community of sites extended to the whole community of EGI sites willing to join.
4. Provide the EGI network community with a customized distribution of perfSONAR on a live -CD for scheduled bandwidth and delay measurement, and the storing of the monitoring data on a DB. Provide a Graphical User Interface for Users to display the historical on monitoring measurement
MILESTONE-4: Live-CD ready and available to the EGI sites for performing measurements and archiving data
MILESTONE-5: Graphical User interface developed and available, complementing the tool provided functionality.
5. Discuss and permanently liaise with GN3 on the new PerfSONAR developments about the three major use case GN3 will be focusing upon: Network troubleshooting in multi-domain environment, circuit monitoring and SLA verification. Ensure the EGI community is linked to the GN3 one, both for what concerns the contribution EGI can provide to GN3 in terms of testing and early adopting on a volunteering basis , and in terms of GN3 taking into accounts the priorities, feedback and relevant instances coming from EGI for the tools, their deployment, their user-friendliness, the answers they provide to Grid related network use

cases and requirements. Produce a minimum of 2 periodic informative short reports in 1 year for the EGI Network Support community to inform about the progress and the updates from the GN3 PerfSONAR community, the tools, the covered use cases.

MILESTONE-6: Periodic reports from the GN3 PerfSONAR community to the EGI Network Support written and distributed.

6. Further improve the available NetJobs tool (network monitoring based on the usage of Grid jobs) , on a volunteering NGI basis, for e2e monitoring. Add new metrics, improve the Graphical User Interface, possibly interface to an Alarming system (to be evaluated) . Extend the community of involved sites. Improvements will concern mostly the GUI, making easier to correlate information coming from different probes, and improving the plug-ins for the capacity measurements.

MILESTONE-7: Improved NetJobs GUI available

MILESTONE-8: NetJobs in production mode, new sites enrolled, improved capacity measurements.

7. In particular, discuss within the NGI community and mostly with the EGI OTAG board and EGI-Inspire JRA1 the possible need to design a more efficient and user friendly tool for the handling of Scheduled Maintenances w.r.t. the current GGUS interface for Scheduled Maintenances or how to improve what is currently used (GOC-DB).

8. Further integrate all provided tools and documentation for Network Support in the operations portal for EGI.

MILESTONE-9: All approved and used Network Support tools documented

MILESTONE-10: GUIs integrated in the operations portal or at least linked by it

9. A targeted discussion on the strategy around IPv6 and IPv6-related Grid middleware and middleware deployment issues will be organized. A general strategy about IPv6 has to be discussed and agreed upon: it may fall out of the scope of EGI-Inspire, but will for sure impact the EGI network support community. Therefore we feel a strategy aimed at supporting the community at the evangelization should be envisaged, even if will fall out of the exclusive scope of the EGI-Inspire project. We should ensure the IPv6 issue is followed up at some level by either volunteering network support contacts from NGIs, or at least collaborating projects (middleware providers). Completely ignoring IPv6 doesn't seem to be a wise approach to the issue: IPv4 address exhaustion is foreseen for the end of this year/beginning of 2012. Possibly coordinate with the HEPiX IPv6 Group to exploit synergies and possible common educational/informative initiatives around IPv6. Evaluate useful collaborations with TSA1.8 of EGI-Inspire.

10. Organize a specific questionnaire targeting the National Research and Education Networks (NRENs), aimed at understanding their interaction model with NGIs and their approach to Grid user and site support. The outcome of this questionnaire will help further developing plans for the Network support coordination and liaising NRENs and NGIs at a European scale, in order to further refine the plans for the EGI Network Support coordination in future. (identifying possible relevant requirements, use cases and their corresponding tools which haven't been identified so far).

MILESTONE-11: Questionnaire produced and circulated to the NRENs, answers gathered, outcome provided to the EGI/EGI-Inspire Operations community.