



EGI Network Support coordination VideoConference 7 April 2011 10:30 AM

Minutes

Participants:

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Alberto Escolano, Sergio Quezada / RedIRIS Madrid Spain
Domenico Vicinanza / DANTE Cambridge UK
Andres Aeschlimann, Chris Welti / SWITCH SWING Zurich Switzerland

Apologies: Bruno Hoefft / KIT NGI-DE

Agenda

- 1) HINTS update UREC and France Grille
- 2) NetJobs update GARR / UREC
- 3) Live-CD PerfSONAR for e2eMON update RedIRIS
- 4) PERT / NRENs GARR
- 5) PerfSONAR MDM update DANTE
- 6) Meeting in Vilnius next week
- 7) Meeting in Lyon in September
- 8) A.o.B.

Introduction

Mario: a very short introduction since there are many newcomers to the network support team: We last met in Amsterdam at the end of January where the outcome of the Network Support proposal task force has been presented, together with the results of a global questionnaire on Network Support distributed to the National Grid Initiatives in Europe.

In agreement with the indications given by the result of the questionnaire, we decided to focus our activity on providing few useful tools, which are being contributed unfunded, on a volunteering basis by some NGIs/NRENs.

HINTS is a tool on Network Troubleshooting on demand, focusing on providing on-demand information to exclude basic network issues behind issues experienced by Grid users and site administrators. It is based on perfSONAR protocols for web services underneath.

NetJobs is a tool for network monitoring for Grid based on the utilization of Grid jobs to gather basic monitoring information (n.hops, RTT, traceroute, available bandwidth). It requires no local deployment by sites. Sites do only need to allow 2 jobs permanently running on their CE.

Live-CD e2eMON PerfSONAR is a live perfSONAR distribution based on PerfSONAR MDM, providing tools for scheduled e2e monitoring between sites.

About our task's activities, the goal is to arrive at the Lyon EGI Technical Forum in September with tools mature and stable, tested enough to allow immediate usage and deployment by the EGI and NGIs community. We intend to organize another F2F meeting (OMB operation) dedicated to Network Support where the tools should be presented to the community.

1) HINTS update *Etienne, Olivier*

Etienne: I will leave at the end of the month. (Also Xavier left). We are trying to get something working and have it completely working, including installation and configuration, deployment, before the end of this month. About HINTS in particular:

I developed the installation procedure, I have sent a first version for beta testing to Oliver Lenormand, to have something easily deployable.

Olivier can give us our feedback about the installation right after..

My planning for the next weeks will be to finalize this installation procedures and send a final version to Olivier. In parallel, I would like to send the same version to GARR for the installation and have a production server in Rome. It would be good to have the production version in Rome and the development version managed by Olivier in France.

I am also the main developer of NetJobs, and I will support Mario to finalize the installation of the server in Rome.

Olivier: I would like to thank Etienne for his work: we managed to install HINTS on a brand new server here in Toulouse.

The installation process is very simple, as Etienne said. Even a newbie to the Grid world like I am has easily installed it. It's running on SLC6 (latest Linux distribution)

The tool uses the same probes as PerfSONAR. We are currently hosting the development version. We are planning to install probes, in order to install them locally.

We could run a version in Rome, a production version.

I am based in Toulouse, Marc is in Paris. We will deploy the probes on the MAN (distributed geographically), and we are in touch with Helene Cordier about deployment plans in future.

Olivier: I do not see main issue to prevent us (at least at this stage) to have a production version for September.

2) NetJobs update *Mario, Etienne*

Mario: I have installed a dedicated UI machine for NetJobs here at GARR. I have also installed the Postgresql DB for the tool. I am currently changing the front-end to have it pointing to the new DB in Rome. I will need some support to get into the core of the tool.. something to do is to clarify/resume the situation about the bandwidth measurements (we can no longer access the log file on the Storage Elements, this is considered a Security Vulnerability bug in the Middleware..)

Etienne further provides information on the tool:

The main limitation is that the jobs are not running as root on the worker nodes of the Grid.

We don't have root privileges. That's why the measurement are adapted to this environment.

We cannot start a process like ping or traceroute, we have to deploy some jobs that do not require root rights.

About the reading of the log file of SE, that is true, We probably will not keep doing /

We should keep the jobs doing some standard gLite things.

Maybe using globus-url-copy in a data transfer: with this kind of info we can have an idea of the bandwidth, We cannot do whatever we want with the jobs. No deployment → No root access.

Mario: we should have an improved/stable version by the end of September.

3) Live-CD PerfSONAR for e2eMON update *Alberto, Sergio*

Alberto: Sergio is the main developer of the tool here at RedIRIS.

The new packages that we will include are based on the Internet2 distribution of PerfSONAR: We integrated the pS-BUOI package in the CD distribution: the tool provides scheduled BWCTL bandwidth and OWD-Delay measurements.

We have now a full set of tools, providing a measurement archive storing measurements gathered by several probes. You just set up the tools and then several measurements are done periodically, they are stored in MySQL database.

Sergio developed some tools to display the data in a web browser: he used the Google API to plot the measurement in the browser.

What pS-BUOI provides also is the definition of profiles for different users, groups, test profiles, you can define for example profiles for doing high b/w test, or limited b/w tests. There are probes sending data to the central node. The machine will do all the required logistics.

Overall, therefore, this is the current status and the new things we are providing in the distribution.

In the e2e measurement system, Sergio developed the web service for the e2e monitoring system as well. So, it is now included in the WS system, tomcat based.

Sergio also did a web tool to make things easier: to facilitate configuration of the e2e system.

It's easy to configure and to add a new e2e path in the monitoring system,

The e2emon tool is provided in our distribution as an independent package.

Sergio included a new e2e monitoring system in a separate package, in order not to need to install the full set of tools. We also changed the appearance/look and feel (internally for RedIRIS).

Only for those tools, all the other stuff – all the stuff fits on the CD.

For the sites the deployment of the tool is very easy, just based on the live CD.

Domenico: Are you using pS MDM 3.3 in the CD ?

Alberto: Yes, we are based on MDM 3.3 provided by pS . Domenico: You then store in a MySQL DB ? Alberto: yes.

Alberto: I am not sure I will be able in Lyon in September, the tools should be ready, ready to be demonstrated, shown.

4) PERT / NRENs Questionnaire *Mario*

Mario: I will circulate to you and to the Network Support list a new questionnaire for NRENs (analogous, but of course different to the one we have distributed to the NGIs). This is to better understand the NREN-NGI interaction model, and understand whether there is further room to address issues at a global, EGI scale (for example PERT issue, and Scheduled Maintenances..). I will ask for your feedback before distributing this to the NRENs.

We namely need to understand whether NRENs would be keen to appoint a specific, dedicated contact person for PERT issues for the EGI project, and how anyhow PERT issues should be addressed, also to liaise with the Federated PERT.

5) PerfSONAR MDM update *Domenico*

Domenico: a couple of updates from the PerfSONAR MDM community:

Since end of January we have a new development coordinator: Josva Kleist from Nordunet.

Since February we use a new development model, an agile one; we'll have mini releases every 3 months., Next one will be at the end of May, We won't have any more big bang releases. We will have in the repository only the new dev tested certified components in the 3 months cycle. This is a big change. This will allow us to be more effective.

About the next release at the end of May: we are releasing a new RRD MA. RRD-MA is for router-switches interfaces utilization, errors drops. We are changing the back ends. No longer based on the eXist XML DB, we will use MySQL. Performances are better. Scales linearly with the # of monitored links. Performances are better by a factor of 10. Good results. Good news. Especially for big users, like EGI.

Also: we have now brand new Web Site. PerfSONAR.geant.net – take a look. Make comments on it. Provide feedback

Another point; on the same nodes, on multimedia web media side, we have a twitter page, perfSONAR-MDM twitter page. Idea is to collect comments, news, update as community. (<http://twitter.com/#!/perfSONARMDM>)

So EGI is welcome to comment, send tweets about what is going on. Feel free to use it. To comment. Exchange ideas there.

Final news: we will have the first user panel in f2f meeting in Prague on May 17. Afternoon. We're meeting f2f to contribute steering pS according to what the user priority is.

One of things we're discussing is the new web based pS UI. – The current JAVA based pS- UI will move to a Web based one. We are asking our user to help us to define what is needed and to move towards to.

Alberto asks about how sure is the date for the f2f in Prague: 17 of May, User Panel. Domenico: it is sure. Alberto: I will try to be there .

Alberto adds a comment on the live CD:

All our deployments in pS are MDM-based. If you release a new version and it is ready for installation, please let us know. We will use that distribution. We use MDM 3.3 as basis... Let us know about new releases.

6) Meeting in Vilnius at the EGI User Forum

Mario: we have a slot to meet in person in Vilnius and discuss about what NGIs are further expecting from the Network Support in EGI, besides the tool we are currently working on. This will therefore concern more the processes, models for providing GGUS and PERT support. And what should be clarified in the NGI-NREN interaction model, to be included in the Questionnaire for the NRENs.

The slot for Net Sup is on Monday April 11, 4 PM to 5:30 PM, Epsilon Room.

7) Meet in September in Lyon at the EGI Technical Forum

Mario: as I already said in the introduction, we will meet in Lyon in a f2f meeting to update the EGI operations community (SA1, TSA1.7, TSA1.4 especially) about the tools, the result of our work in the next months, and to possibly design a deployment strategy for the tools themselves.

8) A.o.B.

Mario: I think we should meet in VCONF every 6 to 8 weeks, so probably next VCONF should be at the end of May, beginning of June. Thanks everyone for having joined today.