EGI AND EDUGAIN – SUPPORTING THE "LONG TAIL" OF RESEARCH

Picture
Peter Solagna, Senior Operations Manager, EGI.eu

PETER, WHAT IS YOUR ROLE WITHIN EGI?

I am senior Operations manager at EGI.eu, which is the coordination body of the European grid infrastructure (EGI). Together with the Operations team at EGI.eu, I coordinate the operations activities of EGI, this includes the provisioning of the current portfolio of services - high throughput computing, cloud and storage resources and federation enabling tools - plus the rolling into production of the new services to support our stakeholders.

COULD YOU EXPLAIN WHAT YOUR PROJECT IS WORKING TO ACHIEVE?

EGI enables researchers to get access to distributed resources. The process of integrating a community in EGI works very well for the larger projects who have the experience and knowledge. However the process applied to individual researchers and small research teams sometimes is perceived as a big overhead, this added to some other technical barriers make some users struggle to access grid and cloud computing and storage resources from the network of NGIs to deploy 'big data applications'. EGI has recognised the need for simpler and more harmonised access for individual researchers and small research groups. So we're working to remove the barriers that discourage the new users of EGI, and to design and prototype a new platform to support this "long tail" of science.

WHAT DO YOU MEAN BY THE "LONG TAIL"?

Well most of the headline grabbing science is those huge projects like the high energy physics collaborations or the ESFRIS, and these projects are long-term, well organized research initiatives who already benefit from the services that EGI provides to enable large distributed collaborations. But a lot of research takes place in many very small teams across the world who have similar requirements but can't afford the dedicated IT resources that the major projects can command.

For us at EGI the long tail of science means users who do not need to join large distributed organization and who need to get access resources for a specific period in time to support a specific research project. There is a real need to provide support to these teams to help them in their research.

HOW WILL THESE SMALL RESEARCH PROJECTS BENEFIT?

The project will establish a set of services combining the most frequent grid and cloud computing systems that are suited to individual researchers and small research teams. This can lower the barrier of access to grid and cloud resources. The platform will serve users via a centrally operated 'user registration portal' and a set of science gateways that will be connected to resources in a dedicated catch-all Virtual Organisation. This will reduce to overhead for these small teams and allow them to focus on their research, no need to get a certificate if they don't have one, no need to set up a virtual organization or other collaboration infrastructures.

THIS SOUNDS EXCITING, HOW IS GÉANT AND EDUGAIN HELPING?

Of course the large data network capabilities of the NRENs and GÉANT make physical access to resources much easier but eduGAIN is the crucial aspect as it allows researchers to use their federated IDs to request and access distributed systems without the complexity of user account creation and management.

Users do not like to create a new credential for every service they access, and rightly so. IdPs federated in eduGAIN already provides high quality credentials to much of the research and education environment. When a user owns an eduGAIN credential we already know that he is involved in research and that the credential has a minimum level of security.

For users without eduGAIN or certificate credentials EGI will have to perform some vetting steps on the user request to access the platform, but we really count on eduGAIN to relieve most of this effort. eduGAIN dramatically reduces the cost of implementing the platform and greatly increases its scalability and usability.

WHERE CAN I FIND OUT MORE INFORMATION?

Information will be available online after the EGI Conference in Lisbon (18-22 of May) when we will present the pilot release of the service and can found at **www.egi.eu**.