

## **PlugAndPlay User Interface: a simple grid access designed on the basis of grid user requirements.**

*Wednesday, 9 May 2007 17:30 (20 minutes)*

**Describe the scientific/technical community and the scientific/technical activity using (planning to use) the EGEE infrastructure. A high-level description is needed (neither a detailed specialist report nor a list of references).**

PlugAndPlay User Interface(PnP UI) is a set of scripts allowing to access grid resources by any scientific/technical community in a simple and comfortable way, and with a valid proxy certificate. It is provided as a simple unique directory with all the required files, scripts and library, it doesn't require root privileges and can be used in AFS context. It was tested on the major Linux distributions. PnP UI can be configured by the final user through a text file to set required grid services.

**Report on the experience (or the proposed activity). It would be very important to mention key services which are essential for the success of your activity on the EGEE infrastructure.**

PnP UI is released in TAR and AFS versions: it can be used inside a shell just running an init script or with an active AFS client, or downloading the tar package containing the middleware. Although PnP UI is intended to be used by any not-root user of any RedHat platform, however the RPMs absence has made also possible to extend the scripting procedure for a configuration by root in order to enable PnP UI for all the user of a certain server node. This operation can be useful on an e-mail server. User configuration values can be easily set on a text file for all the types of PnP UI access: in the TAR version the configuration file is contained in the package, in the AFS and root version it appears automatically in the user home directory. PnP UI is tested on Scientific Linux, but exploiting the experience of the users, it has been made compliant with Fedora and Debian. It is totally integrated with gLite middleware.

**With a forward look to future evolution, discuss the issues you have encountered (or that you expect) in using the EGEE infrastructure. Wherever possible, point out the experience limitations (both in terms of existing services or missing functionality)**

The diffusion of the PnP UI can help to extend the grid user community and integrate in the EGEE infrastructure new and different applications (also easily including in the UI PnP the required libraries). It fulfils security requirements both on the user side and on the grid managers checking the right proxy details. During each user access, PnP UI also updates usage data collected on a Storage Element for statistics. The user easily can set grid services required by a Virtual Organizations(VO).

**Describe the added value of the Grid for the scientific/technical activity you (plan to) do on the Grid. This should include the scale of the activity and of the potential user community and the relevance for other scientific or business applications**

The development activity of the PnP UI is intended to easily extend all the grid advantages to wide and fast increasing communities. As it can be enabled on different RedHat platform without root privileges, the user can skip some disadvantages related to the classic UI: contacting a site manager to ask for an account on existing User Interface; transferring his data on an external and shared machine with necessary limits of storage space; compromising the management and the privacy of his scientific, technical or business data; risking to slow down his work because of high user traffic on the shared UI. PnP UI supports high potential diffusion among grid users also because the RPM absence makes it easily customized to be compliant with different systems. If libraries are missing on any RedHat platform or required for specific applications, they can be easily added without changing the previous system configuration.

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