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g-Eclipse - user and developer friendly access to Grids and Clouds

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g-Eclipse is both a user friendly graphical user interface and a programming framework for accessing Grid and Cloud infrastructures. Based on the extension mechanism of the well known Eclipse platform, it provides a middleware independent core implementation including standardized user interface components. Based on these components, implementations for any available Grid and Cloud middleware can be added by using the Eclipse plug-in mechanism.

Currently g-Eclipse provides support for the gLite and GRIA Grid middlewares, as well as for the Amazon WebServices cloud computing (EC2) and storage (S3) offers. The data management component enables a seamless and interworking storage access across different middlewares. I.e. data from Amazon S3 can be moved to gLite resources just by the drag-and-drop mechanism. Furthermore, the tool provides Grid job management functionality including a JSDL standard conformant job description editor, automatic update of submitted jobs' status, parametric job creation and direct access to the job input and output files. Many other elements contribute to the g-Eclipse eco system to make up for a fully integrated user, operator and developer environment, like a graphical workflow editor, a batch system management component, a resources test framework, scientific visualization support and others. g-Eclipse provides a variety of integrated tools for the future e-Scientist working on the Grid and other emerging e-Infrastructures.

In this presentation we will introduce the framework and demonstrate the tool online by accessing the different supported infrastructures. The presentation will focus on the user and the developer's perspectives.

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