

Scientific Workflows with UNICORE 6

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UNICORE is a Grid middleware providing seamless, secure, and intuitive access to distributed resources and data. It offers an integrated software stack from an easy-to-use graphical client down to the interfaces to Grid resources. The talk deals with the workflow capabilities of UNICORE 6, the current version of the middleware, which is based on web service technologies. The main concepts of UNICORE 6 will be presented, as well as a view on its basic architecture. Next, the design goals of the newly developed workflow system will be introduced, followed by a discussion of their realization in the system. The graphical workflow editor, developed for UNICORE's Eclipse-based client framework, will be shown. The talk also covers the recent development of a data management system allowing for distributed data storage and metadata queries. Finally, the ongoing application of these systems in the domains of biology and quantum chemistry will be outlined.

