Web Services Agreement-based
Resource Negotiation in UNICORE*

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Abstract

Service Level Agreements provide the foundation to negotiate for a distinct Quality of Service level between
the provider and the consumer of a service. Since the Grid community is adopting concepts of Service-Oriented
Architectures and Web Services are capturing their space within the Grid landscape, resource management within
Grids increasingly evolves towards the management of resources represented as services. To make allowance
for this the Global Grid Forum develops the Web Services Agreement specification to support standardised cre-
ation and negotiation of guarantees related to services. This paper illustrates the integration of a Web Services
Agreement-based resource management framework into the UNICORE Grid system, a development motivated by
the system’s transition towards a service-oriented Grid and the limitations of the current solution.

Keywords. SLA, SOA, UNICORE, UniGrids, Web Services, WS-Agreement

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