

# Implementing WS-Agreement in a Globus Toolkit 4.0 Environment\*

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## Abstract

Service Level Agreements are an integral part on the path towards the commercial uptake of Grids in industry. A paying user of the Grid needs assurances that jobs are processed according to negotiated procedures and requires financial compensation in case these are violated. The WS-Agreement specification serves this purpose and went into recommendation status recently. Now, independent implementations are necessary to prove interoperability in order to allow the standardization effort proceed. At the same time, several research projects would like to build on a framework instead of developing a WS-Agreement implementation from scratch. This paper presents first experiences with implementing a negotiation service with WS-Agreement using the Globus Toolkit 4.0. It presents the architecture and discusses advantages and disadvantages of using the Globus Toolkit as well as difficulties implementing WS-Agreement and how these were addressed. Thereby, it shall support other projects which want to employ WS-Agreement and need to select a Grid middleware.

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