

The First Step of Introducing Risk Management for Preprocessing SLAs*

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Abstract

Using Service Level Agreements (SLAs) is a central concept for the Grid commercialization since customers require guarantees for a successful job execution. However, agreeing on SLAs is a business risk for resource providers: system failures can lead to paying tremendous penalties. Accordingly, resource providers require an estimation about the risk of agreeing on an SLA. Furthermore, risks can be published and integrated into the negotiations as an additional SLA parameter.

Each offer is linked with a possible execution on a specific resource since the risk of failure depends especially on the resource's stability. Therewith making reservations is the initial step for integrating risk management into the Grid. This paper describes the necessary workflow and measurements for selecting a resource according to assessed risks. A global perspective is presented in order to afford user-specific configurations. Concrete examples for several measurements present one possibility for rating and the important input factors.

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