Grid Deployment Experiences: The Interoperations Cookbook

Laurence Field and Markus W. Schulz, CERN
Laurence.Field@cern.ch

Over recent years a number of grid projects, many of which had a strong regional presence, have emerged to develop middleware, help coordinate institutions and enable grids. Today, we face a situation where a number of grid projects exist, most of which have slightly different middleware. Grid interoperation is trying to bridge these differences and enable virtual organizations to access resources at the institutions independent of the grid project affiliation. This paper gives an overview of grid interoperation and describes the current methods used to bridge the differences between grids. It highlights the most important interfaces required for interoperation and hence demonstrates the need for standardization in these areas. A summary of the standardization efforts in these areas is also given and it illustrates why waiting for standardization efforts is not an option.