

ABSTRACT

The Resource Oriented Authorization Manager (ROAM) was created to provide a simple but flexible authorization system for the FusionGrid computational grid. ROAM builds on and extends previous community efforts by both responding to access authorization requests and by providing a Web interface for resource management. ROAM works with the Globus Resource Allocation Manager (GRAM), and is general enough to be used by other virtual organizations that use Globus middleware or X.509/TLS authentication schemes to secure a grid of distributed resources. In addition to describing ROAM, this paper discusses the basic design parameters of a grid authorization system and the reasons for the choices made in the ROAM design.