A Taxonomy and Survey of Grid Resource Planning and Reservation Systems for Grid Enabled Analysis Environment

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ABSTRACT

The concept of coupling geographically distributed resources for solving large scale problems is becoming increasingly popular forming what is popularly called grid computing. Management of resources in the Grid environment becomes complex as the resources are geographically distributed , heterogeneous in nature and owned by different individuals and organizations each having their own resource management policies and different access and cost models. There have been many projects that have designed and implemented the resource management systems with a variety of architectures and services. In this paper we have presented the general requirements that a Resource Management system should satisfy. The taxonomy has also been defined based on which survey of resource management systems in different existing Grid projects has been conducted to identify the key areas where these systems lack the desired functionality.