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A taxonomy and survey of grid resource management systems

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ABSTRACT

The resource management system is the central component of network computing systems. There have been many projects focused on network computing that have designed and implemented resource management systems with a variety of architectures and services. In this paper, we develop a comprehensive taxonomy for describing resource management architectures. We use this taxonomy in identifying approaches followed in the implementation of real resource management systems for large scale network computing systems known as Grids. We use the taxonomy and the survey results to identify architectural approaches that have not been fully explored in the research.