## Researches of Key Technologies for Data Grid\*

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## **ABSTRACT**

Data Grid is a large-scale, scalable framework structure of sharing and managing storage resources and distributed data resources in the Grid environment. It adapts to demands of data sharing and handling that are needed by data intensive applications also, it provides users with transparent mechanisms of accessing heterogeneous data resources. After analyzing the characteristics and architecture of Data Grid, this paper researches key technologies of Data Grid, such as security and architecture designs etc. In the end, it gives some Data Grid research programs.

**Keywords:** Grid, Data Grid, architecture, data access, GridFTP, replica management

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