

A Taxonomy of Data Location Themes for Storage Cluster and Storage Grid

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ABSTRACT

In storage cluster and storage grid, data location theme is important for improving availability, performance and manageability, but its complexities are poorly understood. There are too many conflict requirements. And possible optimizations are infrequently taken advantage of. To address these difficulties, some assessments criteria will be presented firstly, and then the design spaces are demystified by presenting taxonomy of the themes in use. After analyzing and evaluating a number of popular data locating themes with the taxonomy and assessment criteria, it is expected that data location theme designers can pick one or integrate some of algorithms explained in this paper, even create a new data location theme based on them, to meet their requests.

Keywords: data location themes, storage cluster, storage grid, taxonomy, assessments criteria.