

DIFFICULTIES AND CHALLENGES IN BUILDING DISTRIBUTED DATABASE SYSTEMS

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Abstract

A Distributed Database (DDB) is formed by a collection of multiple databases logically inter-related in a Computer Network. Any testing process, when used in DDB correlates a series of stages for the construction of a DDB project beginning from the ground and is employed in homogeneous systems. This paper covers number of difficulties that often challenge the programmers in building DDB Systems. These difficulties are identified as openness, concurrency, scalability, fault tolerance, latency, global clock, security, and heterogeneity. In this paper, each issue is presented and is accompanied by the solutions.

Keywords: Distributed Database System, Openness, Latency, Security, Heterogeneity