A Survey of Data Center Network Topology Structure

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***Abstract*—In the new application mode, data center network (DCN) is faced with many challenges. Firstly, this paper introduces the requirements of modern data center network, such as network scalability, network fault tolerance, network bandwidth, equipment overhead, etc. Then it introduces the characteristics of the traditional data center network architecture and divides the data center network into two types: switch-centered and server-centered. Then, the representative structures of the two types of structures are reviewed in detail, and the above requirements are compared. Finally, a summary of the paper is made and the future development direction is pointed out.**

***Keyword*—Data center network; Structural features; Topology; Scalability; Fault tolerance**

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