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Abstract

Interconnected networking or inter networking is the connection of multiple networks. Internet is

an example of inter-networking where various networks are connected together to exchange messages, data for process synchronization among various device and applications. In addition to providing external connectivity, networks are commonly used to interconnect the components within a single computer at many levels, including the processor micro architecture. Definitions of Physical and Logical Topologies are provided. Additionally common Computer Network realizations of Physical Topologies are reviewed. This is followed by a discussion of Graph Theory and its relation to topological analysis. These examples are discussed to underscore the importance of topological design when constructing a new computer network, or adding to an existing one. Performance evaluation of such connected and interconnected networks has become a major concern. This project aims for evaluating the performance of various interconnection networks mainly different versions of Meshes and Torus networks. Various interconnection networks are analyzed and compared for major performance parameters like throughput and delay.

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