Definition - What does Peer-to-Peer Architecture (P2P Architecture) mean?

Peer-to-peer architecture (P2P architecture) is a commonly used computer networking architecture in which each workstation, or node, has the same capabilities and responsibilities. It is often compared and contrasted to the classic client/server architecture, in which some computers are dedicated to serving others.

P2P may also be used to refer to a single software program designed so that each instance of the program may act as both client and server, with the same responsibilities and status.

P2P networks have many applications, but the most common is for content distribution. This includes software publication and distribution, content delivery networks, streaming media and peercasting for multicasting streams, which facilitates on-demand content delivery. Other applications involve science, networking, search and communication networks. Even the U.S. Department of Defense has started researching applications for P2P networks for modern network warfare strategies.

P2P architecture is often referred to as a peer-to-peer network.