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QoS



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(1) (Quality Of Service) A defined measure of performance in a system. For example, the maximum response time to complete a transaction must be no longer than 10 seconds.

(2) (Quality Of Service) In general, to be able to prioritize one type of transmission over another in a communications network.



(3) (Quality Of Service) A defined measure of performance in a communications network. For example, to ensure that real-time voice and video are delivered without annoying blips, a traffic contract is negotiated between the customer and network provider that guarantees a minimum bandwidth along with the maximum delay in milliseconds that can be tolerated.

Because dedicated channels are set up between parties, the plain old telephone system (POTS) delivered the highest QoS for years. However, when data are broken into packets that travel through routers in a LAN or WAN, QoS mechanisms are used to give higher priority to real-time data, such as voice over IP (VoIP), than to non-real-time data, such as file downloads. Another option in packet switching is to overbuild the network, ensuring that it will accommodate all traffic fed to it. See [packet switching](#).

ATM was one of the first packet technologies to build in modes of service. Today, almost everything is built around IP, and there are a variety of methods that provide QoS in IP networks (see [802.11e](#), [TOS](#), [RSVP](#), [Diffserv](#) and [MPLS](#)).

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QoS vs. CoS

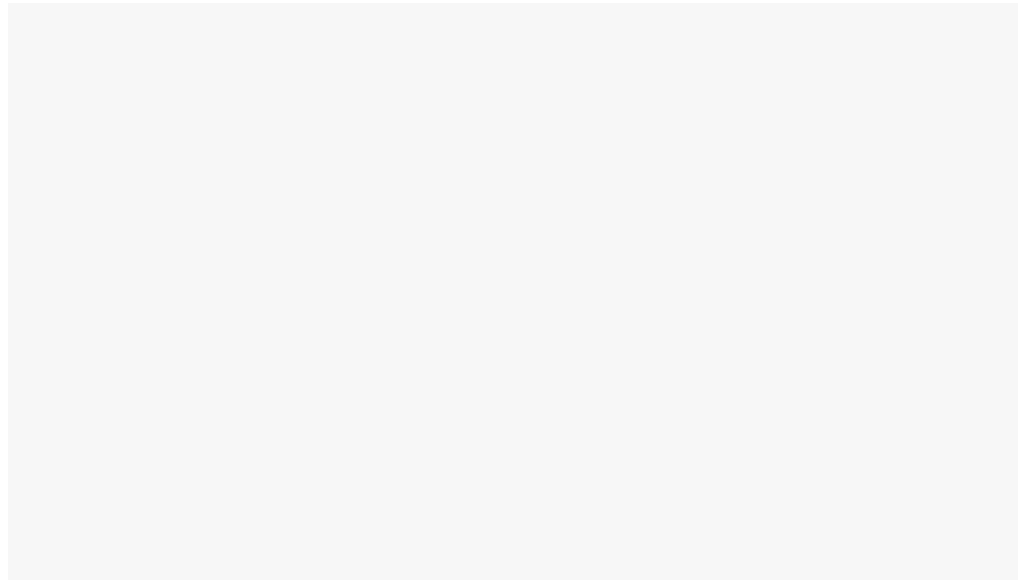


QoS (quality of service) refers to the mechanisms in the network software that make the actual determination of which packets have priority (see [packet scheduler](#)). CoS (class of service) refers to feature sets, or groups of services, that are assigned to users based on company policy. If a feature set includes priority transmission, then CoS winds up being implemented in QoS functions within the routers and switches in the network. See [class of service](#).

Circuits to Packets to Circuits?

Nothing provides better quality than a dedicated channel between two parties. Some say, in time, with ever-increasing wavelength division multiplexing (WDM), there will be enough optical bandwidth to have an available circuit between every user in every home and office in the world, and we will revert to circuit switching once again.

In the meantime, the late 1990s saw a huge buildup of fiber backbones in the U.S., which resulted in a glut of capacity after the turn of the century. This fiber overbuild has allowed for quality voice and video calls over the Internet. See [infranet](#) and [QoE](#).



It's All About Prioritization

QoS is of interest to many people. This package touts the unique feature of this home router, which gives priority to the games identified by the user.

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