

## TO UNDERSTAND THE IMPORTANCE OF QUALITY OF SERVICE,

or QoS, first imagine a postal system  
without any express delivery services.

All your packages and letters, no matter  
how urgent, would be treated no differently  
than the most trivial piece of junk mail.



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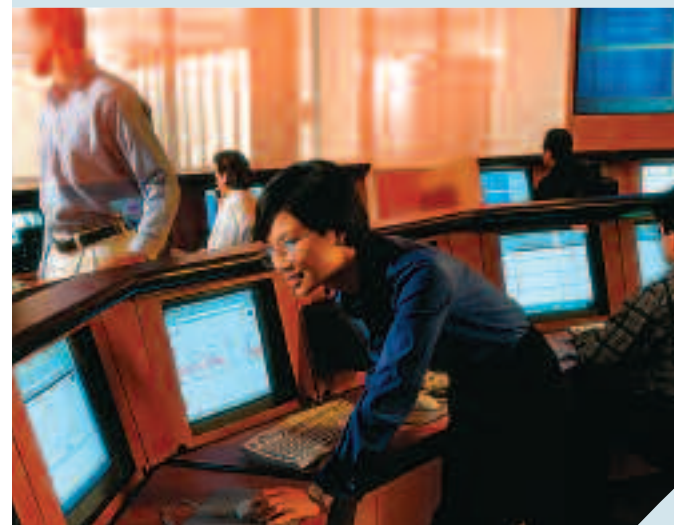
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# QUALITY OF SERVICE

## IN CISCO CATALYST® SWITCHES



**FOR MORE CONTROLLABLE,  
PREDICTABLE, AND ADAPTABLE  
NETWORK PERFORMANCE**



Without the right combination of QoS features, a network cannot differentiate between high- and low-priority data, so it cannot intelligently serve applications – or adequately address business priorities.

As a result, many organizations aren't getting the most out of their IT investments. Voice, video, and important business applications, which depend on the immediate, uninterrupted flow of data, can falter while the network processes less urgent traffic. Unregulated streams of data can also lead to congestion and packet loss, reducing overall network performance. The deployment of new applications only compounds the performance problems, adding to the cost and complexity of future growth.

**CISCO CATALYST INTELLIGENT SWITCHES HELP COMPANIES AVOID THESE AND OTHER PROBLEMS, ENABLING ORGANIZATIONS TO MAINTAIN PRODUCTIVITY LEVELS AND GET MORE OUT OF THEIR NETWORKS, TODAY AND TOMORROW.**

Through a unique combination of advanced QoS features, organizations can ensure every application gets the bandwidth it needs for guaranteed, predictable performance, time after time. And they can gracefully integrate new applications as needed, without having to add hardware or change the network architecture.

#### IDENTIFY AND PRIORITIZE

Cisco Catalyst intelligent switches inspect and classify every data packet based on the priorities you set, so your most urgent traffic always gets handled first. Access Control Lists (ACLs), a popular security feature, also can be used to identify and tag packets, using both Class of Service (CoS) and Differentiated Services Code Point (DSCP) markings to show their relative importance. This unique combination ensures QoS levels are maintained throughout the network, even across WAN links.

#### MANAGE AND SORT

Cisco's innovative policing features regulate the flow of traffic by checking packets to make sure they fit the profiles you specify, and dropping or marking down those that don't. Each packet is assigned to one of four output queues based on how fast it needs to be delivered.

#### PROCESS AND SEND

An expedite queue sends your highest priority packets first, while three Weighted Round Robin (WRR) queues take turns transmitting the remaining traffic. The end result: All your applications perform the way you want them to, and one never compromises the performance of another.

#### SIMPLIFY AND STREAMLINE

With Cisco AutoQoS, you don't need a big IT department or a lot of expertise to take advantage of these advanced QoS features. Just one click automatically sets all the parameters for IP telephony, so other traffic won't interfere with network-based phone conversations.



**CISCO CATALYST INTELLIGENT SWITCHES OFFER THE INDUSTRY'S MOST ADVANCED QoS FEATURES, BRINGING NEW LEVELS OF CONTROL, PREDICTABILITY, AND ADAPTABILITY TO NETWORKS OF EVERY SIZE. FROM THE CORE TO THE WIRING CLOSET, THE CISCO CATALYST FAMILY LETS YOU GET MORE OUT OF YOUR NETWORK, TODAY AND TOMORROW.**