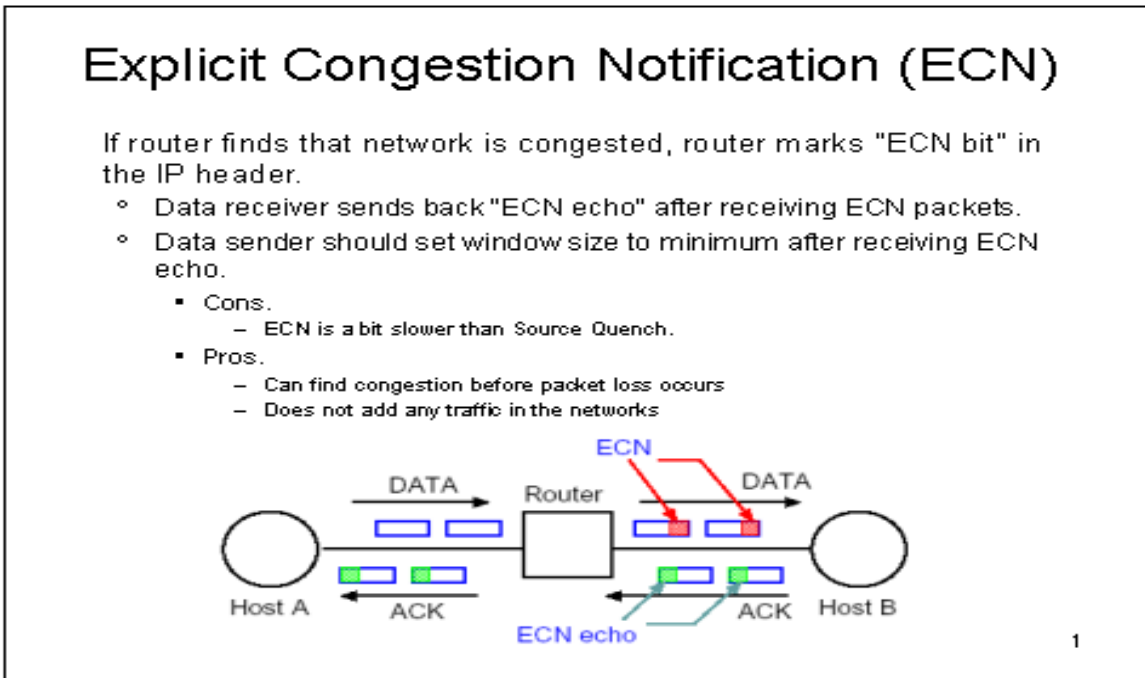


TCP Explicit Congestion Notification

The TCP Explicit Congestion Notification (ECN) feature allows an intermediate router to notify end hosts of impending network congestion.

It also provides enhanced support for TCP sessions associated with applications, such as Telnet, web browsing, and transfer of audio and video data that are sensitive to delay or packet loss.

The benefit of this feature is the reduction of delay and packet loss in data transmissions. Use the `ip tcp ecn` command in global configuration mode to enable TCP ECN





Explicit Congestion Notification (ECN)

- Standard TCP:
 - Losses needed to detect congestion
 - Wasteful and unnecessary
- ECN:
 - Routers mark packets instead of dropping them.
 - Receiver returns marks to sender in ACK packets.
 - Sender adjusts it's window as it would have done if the packet had been dropped.
- Advantages:
 - Bandwidth up to bottleneck not wasted.
 - No delay imposed by retransmission.