

Head of Line blocking prevention

Incoming and outgoing data is buffered in a switch (queue handling), this is normally based on FIFO handling, i.e. first in -first out. When the received data needs to be sent to several ports and one of these is overloaded, it is necessary to wait until the overloaded buffer can receive data again. The function is called Head of Line (HoL) blocking.

If a switch has several queues for low and high priority data, a high priority packet can be delayed due to HoL.

Head of Line blocking prevention can manage this situation by checking whether the packet has been assigned priority, if this is the case the packet is placed in a separate queue, or if it is a question of low priority data in the queue this can be discarded (port 3 in the figure opposite). The low priority data can be discarded as applications or the TCP protocol keep track of whether a retransmission is necessary or not.

