
Invalid Packet Marker

When a packet has been received with an error, the invalid packet marker is appended when the packet is retransmitted to an end node or another hub in a cascaded network. Invalid packet marker information is useful during training and during normal packet transmission.

During training, if a packet is received at the end node with an invalid packet marker attached, this implies that an error occurred on the link where the packet was transmitted from the end node to the hub. If a packet is received at the end node with no invalid packet marker but an error is detected on the link, this implies that an error occurred on the link where that packet was transmitted from the hub to the end node. In either case, the packet is not counted as a good training packet.

During normal packet transmission, the detection of the invalid packet marker indicates that an error occurred in a link upstream from where the invalid packet marker was detected. For example, in a cascaded repeater network, the combination of receive error and invalid packet marker detection can be used to determine which link in the cascade produced the error. Excessive errors on any one link could indicate a marginal physical connection. A network administrator might then decide to examine the link to improve network performance.
