

Multiclass MLPPP Overview

Multiclass MLPPP enables the fragmentation of data packets of different priorities into multiple classes in an MLPPP bundle. It enables you to interleave data packets of higher priority between packets of lower priority before transmission.

When the MLPPP bundle consists of more than one multilink interface, multiclass MLPPP ensures the delivery of high-priority, delay-sensitive traffic, such as voice and video, in the proper sequence. Multiclass MLPPP accomplishes this by creating separate transmit and receive contexts for every multilink class in the MLPPP bundle. The transmit and receive contexts contain the sequence numbers and all other statistics pertaining to the multilink class

Multiclass MLPPP Fragmentation and Reassembly

You can configure fragmentation and reassembly on a multiclass MLPPP interface. Fragmentation is the process by which a large packet is broken up into multiple smaller fragments for simultaneous transmission across multiple links of an MLPPP bundle. Reassembly is the process by which the destination router reassembles the fragments into the original packets.

On MLPPP bundles that consist of physical links of different types, MLPPP does not guarantee the receipt of high-priority data packets in sequence. Multiclass MLPPP enables you to fragment data packets of different priorities into multiple multilink classes. Because every multilink class has its own transmit and receive context, data packets of each class are received in the same sequence they were transmitted.

With multiclass MLPPP, data packets of each multilink class are encapsulated in an MLPPP header. The sequence numbers of each class are also embedded within the header before transmission. The receiving peer processes each class independently and uses the sequence numbers in the MLPPP header to internally reorder and reassemble packets in the desired sequence.

Multiclass MLPPP Configuration Guidelines

Use the following guidelines while configuring multiclass MLPPP:

- Configure multiclass MLPPP on each link in the MLPPP bundle. If any link is not configured, the receiving peer might prevent the mismatched link from joining the bundle.
- The first link to join a bundle determines whether multiclass MLPPP is configured on the bundle. All subsequent links must also negotiate the same multiclass MLPPP parameters as that of the first link. The configuration for each link in a bundle is identical.

- Related Topics**
- *JUNOS Link Layer Configuration Guide, Chapter 9, Configuring Multilink PPP*
 - Configuring Multiclass MLPPP

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