

Changes to Section 6.2.6.3

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6.2.6.3. RTS/CTS Recovery Procedure and Retransmit Limits

Many circumstances may cause an error to occur in a RTS/CTS exchange.

For instance, CTS may not be returned after the RTS transmission. This can happen due to a collision with another RTS or a DATA frame, or due to interference during the RTS or CTS frame. It can however also be that CTS fails to be returned because the remote station has an active carrier sense condition, indicating a busy medium time period.

If after an RTS is transmitted, the CTS fails in any manner within a predetermined CTS_Timeout expires (T1), then a new RTS shall be generated while following the basic access rules for backoff. Since this pending transmission is a retransmission attempt, the CW shall be doubled as per the backoff rules. This process shall continue until the number of attempts a RTS_Retry_Counter exceeds reaches the a Short RTS_Retry_LMax limit.

The same backoff mechanism shall be used when no ACK frame is received within a predetermined ACK_Timeout Window (T3) after a directed DATA frame has been transmitted. The ACK_Timeout value is the time required to transmit the ACK frame plus a SIFS interval. Since this pending transmission is a retransmission attempt the CW will be doubled greater than one as per the backoff rules. This process shall continue until the number of attempts a Data_Retry_Counter exceeds reaches the a Long Data_Retry_LMax limit for DATA frames the length of which exceed a RTS_Threshold or a Short_Retry_Limit for DATA frames the length of which do not exceed a RTS_Threshold.

