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Design Considerations of IEEE 802.1CB with End-to-End Safety Protocols

Wilfried Steiner

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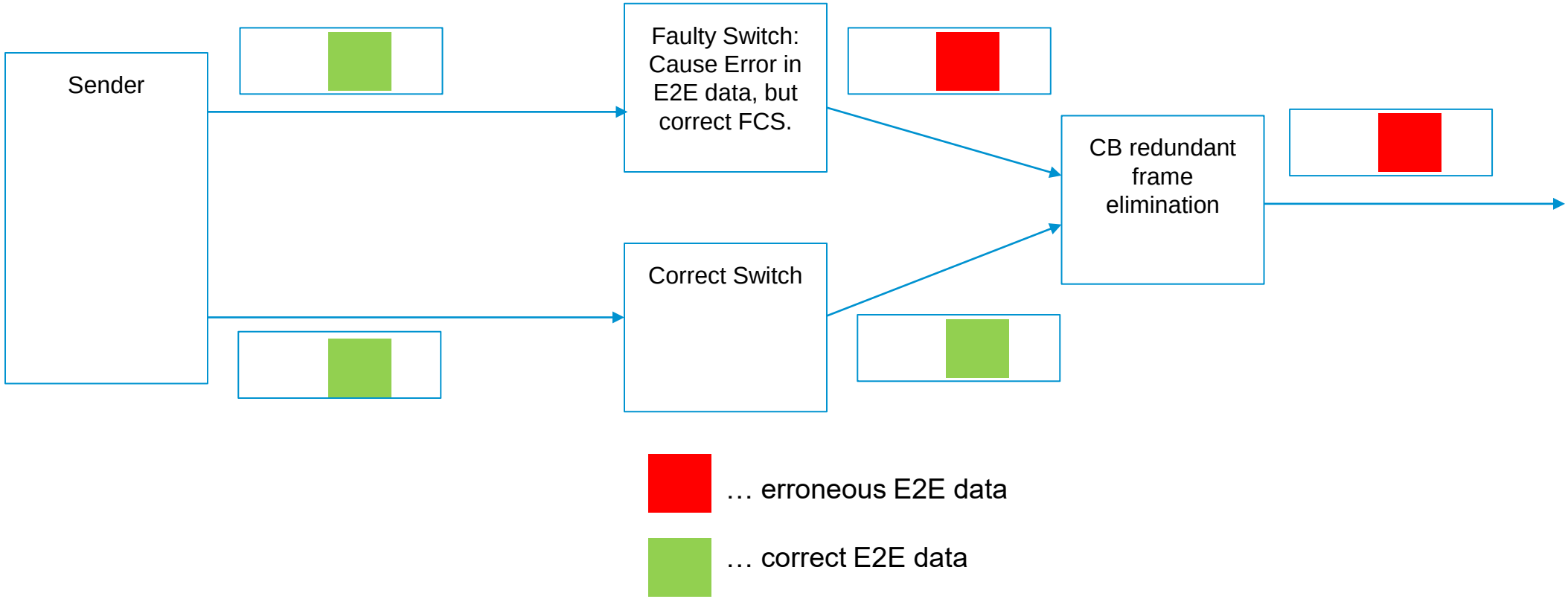
End-to-End (E2E) is payload information (typically CRCs, Sequence Numbers, Timestamps) with the purpose to identify failures in the communication channel (e.g., bridge failures).



Conclusions

- A faulty switch can cause an error in the E2E data but may generate a correct FCS.
- Thus, a receiving end station using .1CB may pick the frame with the erroneous E2E data.
- The receiving end station detects the error only in higher protocol layers but the correct frame from the alternative transmission path is already dropped by .1CB redundant frame elimination.

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