Evaluation on Ethernet based Passive Optical Network Service Enhancement through Splitting of Architecture

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Abstract

This Paper Proposes a Survey study of fully distributed Ethernet over Star coupled PON (Passive Optical Network) Architecture. The architecture uses a collision free DBA scheme in which the Optical line Terminal (OLT) is excluded from the implementation of the time slot assignment. To have a distributed architecture, Optical Network Units (ONU's) must be in place without imposing any constraint on the PON Topology. In addition the reliability and performance improvement while using decentralized Ethernet based PON architecture with bandwidth allocation algorithms are discussed.

References

2. D. Mynbaev, “From Core to Metro to Access Networks –The Need for Passive Optical Networks.”


**Index Terms**

Computer Science  
Networks

**Keywords**

PON Architecture, EPON, Distributed Algorithm, Splitting Architecture.