Abstract

High speed communication between IED to IED is required for successful implementation of protection schemes in a substation automation system. IEC 61850 is an International standard that supports high speed peer-to-peer services like GOOSE. The communication using GOOSE protocol replaces point to point copper wiring between the IEDs in conventional substations with high speed communication over Ethernet technology. Individual IED needs to be tested before they are installed in the field. In this paper the practical setup for testing of protection schemes of an IED and its conformity to GOOSE protocol of IEC 61850 standard is presented. Brief introduction to the GOOSE protocol and its advantages is presented in the paper.

References

- R. E. Mackiewicz, Member, IEEE “Overview of IEC 61850 and Benefits “.
- M., Ikbal Ali, Sr. Assistant Professor, Senior Member, IEEE, “High-speed Peer-to-peer
Testing of Goose Protocol of IEC61850 Standard in Protection IED

- http://blog.iec61850.com/
- IEC 61850-7 part series of the standard.

Index Terms
Computer Science
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