

***Abstract: An Efficient Structure of Communication Stack Library
Based on IEC 61850 International Standard***

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Abstract

In this paper an efficient structure of communication stack library' based on IEC 61850 standard is proposed. IEC 61850 international standards is the core technology of developing and managing the digital based Substation Automation Systems (SAS) which applies IT technologies for controlling, monitoring, protection and communication. To implement the proposed stack library used in substation based on IEC 61850, we use the method of object-oriented programming (OOP) based on C++ language. The proposed structure of stack library mainly consists of three layers: IEC 61850 Service Layer, MMS Service Layer and Communication Service Layer. Each layer has many objects implemented with class of C++. With the proposed structure, our library can take advantages of maintenance, management, alteration and reuse.

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