

OPC XML-DA Client Implementation - A case study

A Senior Capstone Design Team of the University of Idaho is in the process of developing an OPC XML-DA Client solution that connects to a network of Synchrophasor devices and allows the use of OPC to retrieve data from the devices. The goal of the project is to create a "product" that power and electrical distribution companies can use to monitor their network of Synchrophasor devices. The University of Idaho in partnership with SEL (Schweitzer Engineering Laboratories) selected Softing's OPC Linux Toolbox for implementing a customizable OPC XML-DA client because it enables the Design Team to concentrate on the project goal and not on learning the intricacies of DCOM, SOAP, or other technologies.



The main goals of the project are to

- Monitor a Synchrophasor network in near real-time
- Visualize the Synchrophasor data
- Archive Synchrophasor data for further analysis
- Monitor the health of Synchrophasors

In addition to the main requirements the proposed solution must

- Be easy-to-use
- Work through firewalls
- Run on cross-platform systems

Using Softing's OPC Toolbox, the Design Team is currently in the process of developing a web application that is able to connect to an OPC server. The partnering company SEL stated that Softing's OPC Toolbox is very useful in the development of the Web application. "With the toolbox, a developer does not necessarily need to have expertise in SOAP or even the OPC protocol and can focus, instead, on the non-OPC-specific components of the application."

Industry

Power generation
Electrical distribution

Task / Objective

Monitor power grid
from multiple locations

Requirements

Work through firewalls
Run cross-platform
Easy-to-use

Solution

Develop OPC Client
based on Softing's
OPC XML-DA

Benefits

Short development
time Adhere to standard

Market segments

Electrical Distribution