

Case Study: IEC 61850 Client for Windows SCADA

Provider Name : KALKI Communication Technologies (P) Ltd.
Client Name : US SCADA Major
Project Title : IEC 61850 Native Driver on Windows SCADA

The Problem

The client, a Major SCADA OEM, required to support IEC 61850 Client Protocol Driver on its SCADA Platform. IEC 61850 is a complex protocol, which requires major modifications from any conventional driver systems integrated yet to the SCADA. The customer relied on Kalki's years of expertise in building such a solution.

The Solution

The stated protocol was developed using the following Resources:

1. Windows XP/2003 Support
2. ANSI C Source Code for IEC 61850
3. SCADA Device Interface Specifications
4. IEC 61850 Client Specifications as per IEC 61850 Conformance Blocks

The said SCADA platform runs on the Windows Platform. The SCADA interface available for adding protocol support was studied and a model prepared to make the said interface support the requirements of IEC 61850 including the longer tag name support, time-stamping, SCL integration support etc., The interface was designed using the existing SCADA driver API's with necessary modification to meet the interface specifications.

The IEC 61850 Client was tested with various 3rd Party IED's and RTUs with support for IEC 61850 Server.

Tools Used:

- Visual C Compiler
- IEC 61850 Protocol Stack