

Case Study: ABB AC400 Controller Integration

Provider Name	:	KALKI Communication Technologies (P) Ltd.
Client Name	:	Fortune 500 Automation OEM
Project Title	:	Pass Schedule Handling Software Integration with ABB AC400 Controller

The Problem

The Client, required for their Steel Rolling Mill automation system, a Pass Schedule Handling Software. This software was required to communicate with the ABB AC400 controller. Kalki supplied the client, with a customized pass schedule handling software, together with an interface driver based on OPC.

The Solution

The stated solution was developed using the following resources:

1. VC Based Pass Schedule Handling Software
2. VB Based OPC Client Software
3. VB Based Integration routines

The OEM required the Pass Schedule Handling software, to interface between their Level 1 and Level 2 systems. Kalki implemented the Pass Schedule Handling Software, using VB and MS SQL Server database. The software was required to communicate with the AC 400 Controller to obtain the upto data on the rolling mill. Based on this data the pass schedules are set in the software. Once the schedule is set, these schedules are stored in the Level 2 database, which is used by the Level 2 software to manage the rolling mill, by downloading appropriate data points on to the controller.

To achieve this, it was required to communicate with the Controller and get the upto-date data. OPC client software was implemented, which would talk to the Omni Server OPC server for AC400, and retrieve the data from the controller.

This data was used by the Scheduling software to update the schedules, and update to the level 2 database.

Tools Used:

1. OPC Client Toolkit
2. VB/C Programming Environment