

## Case Study: ABB Symphony DCS Integration

<b>Provider Name</b>	:	KALKI Communication Technologies (P) Ltd.
<b>Client Name</b>	:	Fortune 500 Automation OEM
<b>Project Title</b>	:	ABB Symphony DCS Integration to Boiler Efficiency Application

### The Problem

Kalki supplied the client, with our standard Boiler Efficiency Software Application. It was required that this software acquires data from the DCS, for its various parameters. The Symphony DCS system supported two interfaces. Modbus and OPC. Kalki developed a solution where in the integration was possible both through OPC as well as through Modbus based on the end-client requirements.

### The Solution

The stated solution was developed using the following resources:

1. VC Based Modbus Master Software
2. VB Based OPC Client Software
3. VB Based Integration routines to Boiler Efficiency Software Application.

The OEM required the Boiler Efficiency Calculation software to directly retrieve data from the DCS, rather than from a preset database. Hence, the project objective was to enable the Boiler Efficiency Calculation Software to retrieve the data from the DCS using the supported interfaces.

### Modbus Master:

Modbus master, was implemented, using Kalki's standard Modbus master solution, which would communicate with the Symphony DCS and retrieve data from the DCS. This data was fed to the Boiler Efficiency Software for further processing, and for setting certain set point parameters on the DCS as required.

### OPC Client

OPC Client software was implemented, using Kalki's standard OPC client tools. This OPC Client would communicate over OPC with Symphony OPC Server, and retrieve the data from the DCS as well as set data tags on the DCS as required.

### Tools Used:

1. Modbus Software Source Code Library
2. OPC Client Toolkit
3. VB/C Programming Environment