

## OPC technology in Oilfield Operations

### Schlumberger selected Softing's OPC and CAN technology

Schlumberger Limited is the world's largest oilfield services corporation operating in approximately 80 countries, with about 70,000 people of 140 nationalities. Several of Schlumberger's Technology Centers selected Softing's OPC Toolkits to develop OPC clients and servers. In particular, Schlumberger's Sugar Land Technology Center, located in Texas, has used Softing's OPC Toolkit for C++ to develop an OPC server for its Smart Winch Control Terminal (SWCT). The SWCT is a proprietary software application that controls basic winch operations, provides safety awareness, and enables automated control and monitoring of the wireline inside a wireline-truck. Schlumberger selected Softing's OPC Toolbox for implementing a customizable OPC Server because it enables the Design Team to concentrate on the project goal and not on learning the intricacies of DCOM, SOAP, or other underlying Microsoft technologies.



However, what is a wireline? In the oilfield industry the term wireline describes well service and evaluation operations that are conducted using a single-strand or multi-strand wire or cable. Although applied inconsistently, the term commonly is used in association with electric logging and cables incorporating electrical conductors. Similarly, the term slickline is commonly used to differentiate operations performed with single-strand wire or braided lines. In layman's terms, a wireline usually refers to a cabling technology used by operators of oil and gas wells to lower equipment - wireline tools - into an existing well for maintenance, modification, repair, or evaluation purposes.

Very early in the development process of the SWCT software, Schlumberger's design team decided on OPC technology to standardize the data exchange mechanism. Using Softing's OPC Toolkit, Schlumberger was able to quickly develop a customizable OPC Server that is able to communicate with the according actuators and sensors using both Ethernet and CAN-bus technology. Schlumberger's implementation supports Softing's comprehensive line of industry-hardened CAN interface boards used to access CAN nodes on the wireline truck.

Softing, a member of the European Steering Committee of the OPC Foundation and author of the OPC Book, actively contributes to the success of OPC by providing high quality OPC products that enable our customers to stay in the lead.

#### Industry

Manufacturing  
- Industrial Automation  
- Industrial Controls

#### Task / Objective

Develop economical and customizable OPC server and client

#### Requirements

High-performing but standardized control of winch operations

#### Solution

Smart Winch Control Terminal OPC Server using Softing OPC toolkits and CAN interface boards for device access

#### Benefits

Cost savings, all Softing CAN interface boards supported, robust and efficient data communication

#### Market segments

Oil and gas industry