

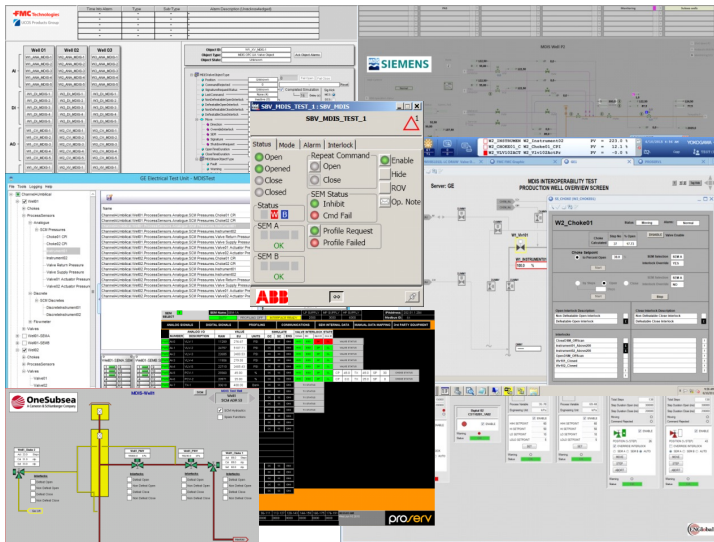
OPC UA and MDIS Complete Successful Interoperability Test



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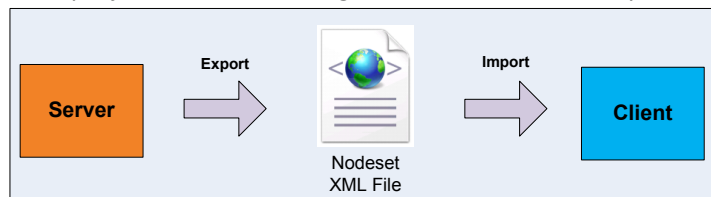
The MDIS network just completed a very successful interoperability test (IOP) in Amsterdam at its June meeting. The MCS-DCS Interface Standardization (MDIS) network was formed with involvement from key industry Subsea equipment vendors, Topside DCS vendors and Oil and Gas operating companies. Its stated goal is to standardize the interface between subsea systems and the topside-platform DCS system. This includes the both the communication (OPC UA) and the information model that is transferred.

The following vendors attended and provided MDIS interfaces at the IOP: ABB, CSE W-Industries, ENGlobal, FMC, GE, Honeywell, Kongsberg, OneSubsea, Proserv, Siemens and Yokogawa. The tests included 6 servers and 6 clients and an additional sample



server. Each vendor tested general communication and a series of MDIS defined information model test cases. This included testing Choke, Digital Instrument, Instrument and Valve models. The testing required a dedicated test between a single client and a single server. The goal of the testing was to verify the information model and to gain experience with the implementation requirements associated with the OPC UA Subsea to DCS interface communication. Vendors were encouraged to bring actual hardware, but since this was an initial IOP it was not expected that any released products would be provided.

One of the issues that MDIS is trying to solve is to reduce the engineering effort and testing effort that is caused by changes in a system, especially later in a project. The IOP testing also included the ability of client vendors to import configurations (Nodeset files) that are directly derived from a server configuration. This allowed a client DCS system to switch to a new subsea system very quickly during a test, but more importantly it demonstrated the capability of a DCS system to be configured semi-



automatically based on the exported configuration of the Subsea vendor and to easily import changes. The ability to correct or update configuration quickly and automatically greatly reduces the current manual engineering effort.

Clients (DCS vendors) and Servers (Subsea vendors) provided hardware solutions including actual graphics which represent what an operator would expect in platform implementations. A number of operators were present during testing to witness the interoperability test and provided feedback to vendors.

In general all vendors were very successful in testing the interoperability of their clients and servers and learned a great deal. As a result of the IOP there will be some minor updates to the information model test specification and the MDIS information model specifications. Additional IOPs are planned to test released products and to allow additional vendors to join.



More Information

The MDIS network is run by OTM Consulting, a division of Sagentia Group who offer specialist technology consulting services to the oil and gas sectors. For more information regarding the MDIS network please refer to the MDIS website <http://www.mdis-network.com/> or contact the MDIS network manager Rachael Mell <mailto:Rachael.mell@otmconsulting.com>



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