



Challenge

Optimize Upstream Operations - the exploration and production functions depend on many complex niche software systems that are produced by a number of specialized vendors. These systems are difficult to connect, to each other and to other essential information systems. Shell's proprietary FieldWare ESP captures well data real-time operations then integrates it with a variety of niche applications. The Electronic Submersible Pump (SubPump), an ISH Energy modeler, is used for design and troubleshooting. Enterprise Enabler's feedback loop between FieldWare and SubPump can be triggered automatically or manually, typically in one of the following situations:

- A new well starts producing
- Flag from the operator
- Automatically triggered based on an alarm
- Regularly scheduled well review

The Stone Bond Solution

Create an Integrated Loop of Real-Time Well Data Transfer - Enterprise Enabler integrates the data between FieldWare and SubPump, enabling engineers to modify the pump model immediately when issues arise to achieve better performance. Stone Bond built the flexible interfaces in only a few days, and began automatically transferring data from FieldWare directly to SubPump. One sample run of operational data compared to SubPump expectations showed a production increase of over 8 percent, or approximately 650 barrels, resulting in significant savings. The ease of data transfer keeps the pump running optimally and helps to avoid unexpected shut downs. The next step is to use Enterprise Enabler to extend the scope of integration across other upstream applications.

Benefits

Increased Production, Improved Operations & Less Error - Enterprise Enabler replaced several manual data entry steps, eliminating opportunities for error, and the real-time data capture and integration speed the process of getting current data snapshots to the modeling system.

- Increase production by 8-10% through incremental improvement at each well
- Creates a feedback loop that improves operations and prevents shutdown, extending the life of the well
- Eliminates time and error factors by automating previously manual data transfers