

ALM solution using RFID devices



Business Challenge

Client of RFID Solution Group is an international leading provider of highquality oil and gas drilling equipment for drilling a broad range of exploration and production targets. Client operates equipments for limited period in "Rig" location and planned movement across the globe. The client had operational challenges in performing regular and maintenance activities for highly expensive equipments, with improper maintenance by the technicians, delay in couriering the physical reports to the head-office etc., resulting in temporary shutdown of the production rig and incurring losses leading to huge financial implications.

Technology Solution

Deployed the ALM through RFID product. All the equipment's have been tagged with UHF RFID tags for unique identification and an integrated mobile tablet (tough pads) and RFID solution has been developed using Microsoft Technologies and Bluetooth enabled RFID reader. The mobile tablet connect to the server for technician and rig location specific maintenance activities. It ensures that the technician perform activities and provides real time equipment status to the head office.

Technology Used

.NET Framework, .Net Compact Framework, SQL Server / Oracle Database, IIS 7.0, Windows 2008 R2, Windows CE. UHF RFID Device drivers

Implementation challenges

- > Deployment of application in remote locations
- Pushing Data from Hand Held Device to external server

Overall Benefits

- > Secure data transmission over the public network using encryption algorithms
- ➤ Data Compression to increase the data transfer success rate over the low latency network communication
- Queue implementation for the Asynchronous data transfer which enables RIG sites to consume data on network availability
- ➤ Flexible design of the server & RFID Device application to make configurations a according to business need
- Portability

Sample Screenshot



Offering ALM Solution

Domain Manufacturing

Client RFIDGroup / Tri

RFIDGroup / Trinidad Drilling