

Total Exploration and Production - UK

Using the OPC DataHub to bypass firewalls

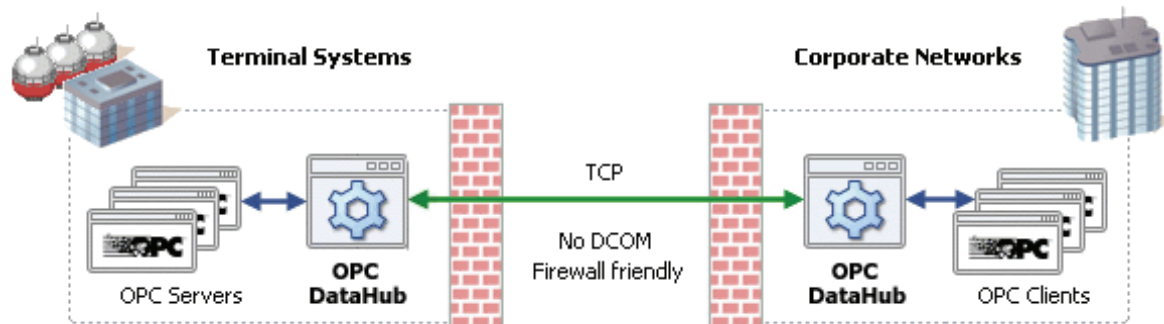
Total Exploration and Production (Total E&P) is a subsidiary of the Total Group, operating in over 120 countries worldwide. Total E&P is among the largest oil and gas producers on the UK Continental Shelf. The Aberdeen, Scotland, headquarters of Total E&P employs about 750 people, and operate or own significant interests in the Alwyn Area fields in the UK Northern North Sea, the Elgin Franklin Area fields in the Central Graben Area North Sea, and the St. Fergus Gas Terminal on the north east coast of Scotland.



For the past several years, production engineers at the Aberdeen facility have been using the OPC protocol to gather data at their terminals. Recently their management asked them to connect the terminal system to the corporate networks, to gain access to valuable production data in real time. When the engineering team set about making the connection they soon ran into the problem that many others have experienced: OPC works well on a single machine, but not so well over networks, particularly firewalled networks like theirs. This is because OPC relies on DCOM for networking, and configuring DCOM security to work through firewalls is known to be a significant challenge for even the most experienced network professional.

“These are secure systems, and OPC doesn’t like to go through firewalls,” said Rob Sidebottom, project leader. “We did manage to get DCOM working, but it was so slow. Our large amount of data was the problem.”

So they decided to try OPC tunnelling, which bypasses DCOM by using TCP to send data across the network. They tested several OPC tunnelling products, and chose the OPC DataHub because of its ease of use, reliability, and extra features. “The OPC DataHub is a powerful tool,” said Rob. “Quick and robust, it’s just what we wanted.”



To configure the tunnel, the team first connected one OPC DataHub to their OPC servers running on the terminal system. Next they configured the DataHub on the corporate network to connect through the firewall to the first OPC DataHub. Finally, they simply

configured the OPC client programs on the corporate system to connect locally to the second OPC DataHub. This completely removed any need to configure DCOM or security settings on either computer.

“The OPC tunnelling is going well, no problems,” said Rob after several months of operation. “We are just doing tunnelling at the moment, but there are lots of possibilities. It is quite a powerful conversion tool, and it will come in handy for other uses.”

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The OPC DataHub is a highly optimized integration tool for real-time data. It provides quick, reliable and secure access to valuable process and production data and makes it available to management systems, database archives, and remote clients. Combining a number of innovative technologies, the OPC DataHub makes it easy for you to access the real-time data you need to make informed and timely decisions that save time, reduce waste, and increase profitability.

Founded in 1995, Cogent Real-Time Systems is the leader in real-time data integration between Windows, Linux and QNX systems. Customers include the Bank of Canada, Cadbury Chocolate and the European Space Agency. Cogent leverages its experience in real-time data communications to provide the next generation of OPC products. For more information, please contact Cogent at info@cogent.ca or visit our web site at www.opcdatahub.com. You can also call us at +1 (905) 702 7851.