

## Marathon Oil United Kingdom

### The company ...

Marathon Oil U.K., Ltd is a wholly owned subsidiary of Marathon Oil Company with corporate offices in Houston, Texas. Marathon Oil is a worldwide company active in exploration, production, refining, transportation and marketing. Marathon is recognized for its expertise in reservoir management and modeling, and is one of the first companies to incorporate 3-D seismic attributes into construction of reservoir models.

Ranking in the top-10 producing U.S.-based energy companies, Marathon Oil is active in 14 countries, with production in six: the United Kingdom, United States, Canada, Gabon, Ireland and the Netherlands.

In the U.K., Marathon has been active in the North Sea since receiving its offshore-licensing in 1964. Marathon operates the Brae oil and gas production complex where production from six fields centers on three major platforms. This pipeline and platform complex handles production from 15 additional fields operated by other companies, four of which are processed on Marathon's platforms. Marathon also has a major interest in the Scottish Area Gas Evacuation (SAGE) pipeline and processing system.



### The challenge ...

It's no secret that the data created by oil exploration is growing at a staggering rate. One industry observer estimates that the information generated is doubling, and perhaps even quadrupling. This information needs to be stored, but even more importantly, it needs to be readily accessible.

To ensure data availability, Marathon Oil was looking for a scalable and reliable storage system that would provide a central repository for its expanding volume of data — data that is needed for geophysical and geoscientific (G&G) analysis and interpretation.

**“Marathon Oil U.K. has implemented the MetaStor E4400 to address immediate concerns with disc capacity on the various servers supporting G&G applications in the Aberdeen operations center.”**

**Bruce Dempsey**  
Senior IT Analyst  
Marathon Oil U.K.

“These G&G applications provide essential information and allow the exploitation/subsurface group to make informed decisions on well/reservoir production and development,” says Bruce Dempsey, senior IT analyst for Marathon Oil U.K.

For most businesses today, storage space is a valuable commodity, and Marathon Oil is no exception. Marathon needed a system that would provide a single, consolidated storage solution for the various G&G applications being served by multiple servers. Marathon’s IT personnel were concerned with disk capacity on the various servers supporting G&G applications, as well as a shrinking backup window. And with a growing database, Marathon needed a storage system that would scale to handle the growing workload.

Not a list of needs that’s easily fulfilled in light of tightening IT budgets, but not an impossible task.

By being able to process G&G data faster, Marathon can improve interpretation, reduce exploration risks and improve time-to-revenue opportunities. Having a storage system that is reliable, scalable and that has high data availability can help any company meet its objectives. And LSI Logic Storage Systems’ E4400 storage solution helped Marathon Oil do just that.

#### **The solution ...**

Marathon Oil U.K. considered various solutions before adopting the MetaStor® E4400 system. According to Dempsey, the E4400 allowed the company to take a phased approach from an initial starting point to installing a full SAN system. The E4400 provides a modular expansion upgrade path that Dempsey says “was successfully installed in Marathon’s Houston offices.”

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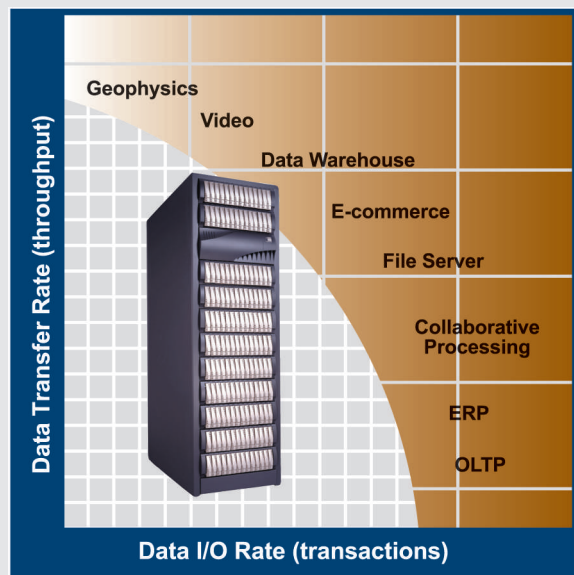


**The MetaStor E4400 storage solution from LSI Logic Storage Systems is designed to handle the rigors of high-performance computing.**

G&G applications in the Aberdeen operations center,” Dempsey says. “The E4400 has addressed this issue, allowing the removal of a variety of SCSI-attached disk arrays from various servers. This has led to a reduction in ‘firefighting’ disk capacity issues, and it has also had a positive impact on the backup window.”

The E4400 solution provided an entry point of just more than two terabytes, allowing the central serving of data to three main application servers. But the E4400 also gives Dempsey a solution that provides a modular upgrade path to more than 16 TB of storage capacity.

The E4400 is connected via Fibre Channel to a Sun E450 running Solaris



2.6. Data and applications are served via NFS links to numerous workstations and three other servers. Two of these servers will have direct gigabit access, via a dedicated switch, to the E4400 in the near future. Both servers run Irix 6.5, one being an Origin 200, the other an Origin 2000. These functions will be expanded when additional servers are brought online and as Marathon converts to a full SAN fibre implementation. Dempsey says a SAN implementation, which will include NT data in addition to UNIX, is being

From geophysics to OLTP, the MetaStor E4400 is optimized for both high throughput and transaction-intensive work loads, making our solutions an ideal choice for a range of demanding applications.

considered. He says the E4400 has met the company’s expectations, and believes the LSI Logic’s storage solution will be around for quite awhile.

“The performance and the high availability redundancy built into the E4400 configuration,” says Dempsey, “has resulted in Marathon having confidence in planning future storage requirements around LSI Logic Storage Systems’ E4400.”

Marathon Oil U.K. worked with Houston-based reseller UDI on the E4400 implementation, building on a relationship formed with Marathon’s Houston office. As is usually the case in implementations of this size, Dempsey admits there were a few “teething problems,” but adds support from LSI Logic’s offices in the U.K. and in Wichita, Kan., took care of any issues.

“Support relations with LSI representatives have provided an additional confidence layer for any technical concerns.”

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Senior IT Analyst  
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