Geoscience data management for oil and gas companies

Paradigm™ Epos™ is the open, innovative infrastructure underlying Paradigm applications, that allows seamless operations across diverse E&P disciplines. The Epos infrastructure incorporates common data models, common interfaces, common services, and common visualization platforms to extend both the scalability of the system and the reach of the geoscientist.

### Paradigm Applications

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### Data Repositories

- Other Data Types
- OpenWorks GeoFrame
- Recall
- Paradigm 3rd Party Services
- Epos
- Petrel

### Epos is: The Foundation

- Comprehensive geoscience data repositories
- Independent
- Scalable
- Data type-optimized repositories and infrastructure

### Epos is: The Tools

- Streamlined daily data management
- Web-based visualization of all your data for rapid reconnaissance
- Flexibility to build corporate-wide data management solutions and best practices

### Epos is: Open and Connected

- Access to multiple geoscience data types and G&G applications
- OpenGeo™ Software Development Kit
- Industry partnerships and collaboration
Epos is a highly advanced digital platform offering dynamic, configurable, network-based data management to the oil and gas industry. Epos offers enterprise-wide, secure data access, with optimal use of network bandwidth.

The Paradigm Epos infrastructure and data management system underlies the Paradigm application suite, links the applications to shared databases, and provides a common working environment for individuals or teams across disciplines. It is based on a client/server architecture, and offers a multi-user, multi-project environment for data sharing and collaborative work.

The light and scalable Epos architecture easily supports deployments of all sizes, from a single user working on a laptop, to teams collaborating over a network. The system offers cross-platform functionality, so that users who are connected to the same network can work together, even if some are working on Windows and others on Linux.

The system’s interoperability infrastructure enables data from other E&P software vendor companies, or real-time feeds from external sources, to be linked or transferred into Epos for access by Paradigm applications. Customers leverage this capability to manage multi-vendor configurations. Additionally, these links provide a mechanism to smoothly transition data from legacy systems to Epos, while ensuring that projects remain active and operational throughout the process.

Optimal data security and project control
The Epos infrastructure offers a centralized and secure system that supports the needs of both IT professionals and geoscientists. Customizable, role-defined user permission, and access control tools optimize data security and enable administrators to define the teams that can access and share data on a project, survey or site. A common infrastructure for all Paradigm applications and repositories makes them easy to organize and administer, even in companies with hundreds of users.

Features
- Client/server architecture providing a multi-user environment for data sharing and collaboration
- A distributed data management system that supports the growing industry need for huge data storage
- A light, robust relational database
- Dedicated data repositories for each data type, making it possible to balance the load on the system
- Full IT control over the location and arrangement of repositories
- Global user permission management
- Support for Linux® and Microsoft® Windows®, including cross-platform Linux-Windows support and multi-user project sharing in Windows
- Easy assembly of groups of seismic surveys, well data, culture data, reservoir data, and drilling data for collaborative work by geoscience teams on a regional basis
- Support for data stored using different units and projection systems
- On-the-fly access from third-party well databases, ensuring a unified view without changing the original data
- Dynamic and extensible project definition
- Multi-site synchronization
- Flexible backup and restore capabilities
- Restore from snapshot

Interoperability
All Epos™-based applications enable interoperability with third-party data stores, including:
- RESQML 2.0.1
- OpenWorks® R5000.10
- GeoFrame® 2012
- Petrel* 2017 & 2016
- Recall™ 5.4.2

(* is a mark of Schlumberger)