EMC ISILON SCALE-OUT STORAGE FOR EXPLORATION AND PRODUCTION

ESSENTIALS

- Industry-leading E&P application support: Leading applications are qualified for use on Isilon and running at customer locations worldwide
- Manage explosive data growth: EMC Isilon single file system, automatic load balancing, and non-disruptive upgrades
- Reduce costs: Experience utilization rates greater than 80%, pay-as-you-grow provisioning

STREAMLINE EXPLORATION AND PRODUCTION WORKFLOWS

EMC® Isilon® offers scale-out storage with the scalable capacity necessary to meet the growing needs of the oil and gas exploration and production industry. It directly addresses the primary challenges that our Oil & Gas customers are requesting: managing the storage required for rapidly increasing amounts of E&P data and making it accessible to geoscientists and engineers when they need it.

The EMC Isilon scale-out storage platform is used throughout the E&P workflow, whether you require primary storage for interpretation and modeling, or a secondary tier to keep less active data online and ready as needed. For instance, keeping large amounts of pre-stack data on primary storage is very expensive. Isilon provides a more cost-effective way to keep all of your data online and to avoid the costly maintenance and slow retrieval time of tape.

The EMC Isilon scale-out storage platform meets the oil and gas sector's most critical storage needs—from Tier-1 storage for demanding E&P applications like interpretation, modeling, and reservoir simulation, to Tier-2 archiving for historical E&P data. It delivers proven reliability and automated load balancing and tiering—all in a single file system. Using a single file system means that you no longer need to manage data from disparate storage solutions, increasing efficiency and reducing costs.

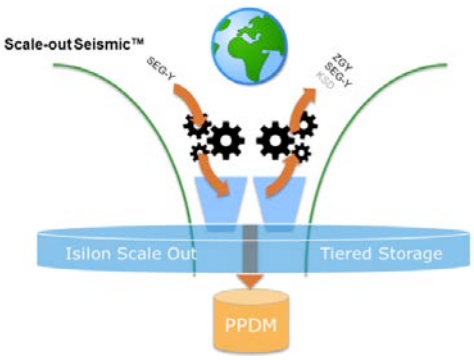
"Advancements in the collection of seismic data with unprecedented levels of detail is a wealth of information that overwhelmed our legacy storage systems. Isilon storage has dramatically reduced the time and resources required to manage our data and has allowed us to refocus vital resources towards interpretation and delivering results to our management and partners."

David Kirchhoff
Manager of Information Technology for Brigham Exploration

Brigham Exploration uses Isilon clustered storage with Schlumberger GeoFrame to unify its vast libraries of seismic data into one easily scalable and shared pool of data.

REDEFINE

EMC²

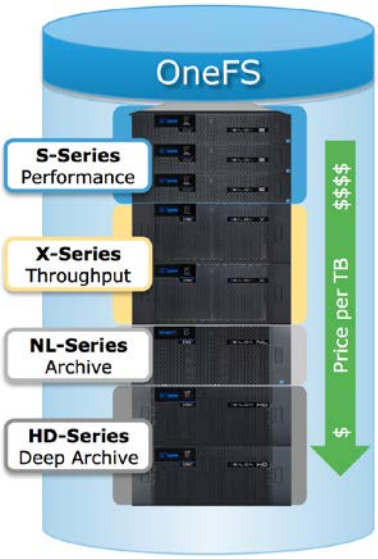


WORKFLOW AUTOMATION FOR SEISMIC DATA DELIVERY

Additionally, EMC has combined 3rd party data management workflow automation software from Meera Technologies with the EMC Isilon platform to produce a uniquely agile solution—EMC Scale-Out Seismic™, which accelerates the delivery of quality-checked seismic data to geoscientists, resulting in faster time to hydrocarbon discovery.

LINEAR SCALABILITY OF PERFORMANCE AND CAPACITY

With EMC Isilon, you can unify vast libraries of E&P data into one, broadly accessible shared pool of data, increasing the productivity of your geoscientists and engineers. It delivers industry-leading scalability—up to 144 nodes in a single cluster and up to 50 petabytes in a single file system—and EMC Isilon systems offer excellent throughput and I/O speeds. Every EMC Isilon solution can seamlessly scale on the fly, enabling the addition of hundreds of terabytes of storage in just minutes.



SIMPLIFY STORAGE MANAGEMENT WITH A SINGLE INTELLIGENT FILE SYSTEM

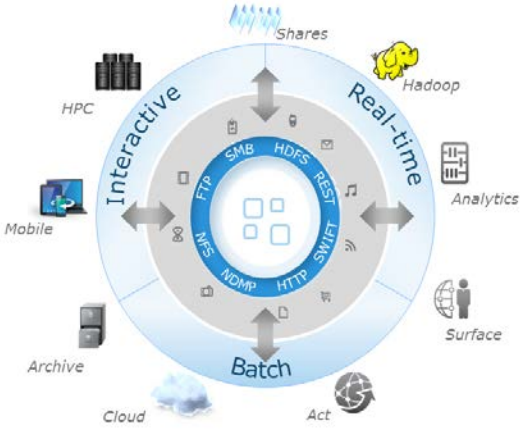
IT staff supporting E&P environments complain that traditional NAS requires time-consuming migration from one device to another for load balancing. Powered by the EMC Isilon OneFS® operating system, every EMC Isilon cluster is a single pool of storage with a global namespace, which eliminates the need to support multiple volumes and file systems. EMC Isilon offers automatic load balancing so you get the best performance and utilization available.

OneFS combines the three layers of traditional storage architectures—file system, volume manager, and data protection—into one unified software layer, creating a single intelligent file system that spans all nodes within a cluster. Unlike simple NAS namespace aggregation products, the EMC Isilon OneFS operating system is truly distributed and intelligently balances data across all of the nodes in a cluster to create a single, shared pool of storage.

EMC Isilon hardware platforms are designed for simplicity, value, and outstanding performance. The EMC Isilon S-Series delivers performance for file operation-intensive applications, the X-Series is ideal for high-concurrent and sequential throughput workflows, and the NL-Series provides economical Tier-2 storage that enables oil and gas companies to keep seismic data online and available for longer periods of time.

"My goal is to assemble the highest performing technologies I can find into a powerful yet flexible platform to run our company on...With SMT Kingdom running on EMC Isilon, I can focus on building the infrastructure and providing support to enhance what Kingdom does for our company, keeping our exploration team productive."

Eric R. Bass
Director of Information Technology, Cypress E&P Corporation



MULTI-PROTOCOL DATA INGEST FOR EXPLORATION & PRODUCTION DATA LAKE

As Oil & Gas companies look ever closely at leveraging a diverse range of data types to transform their operations into more efficient businesses, finding the right platform to collect, analyze, and drive decisions in an agile way is paramount. Such platforms, now commonly referred to as Exploration & Production Data Lakes, are conceptually sound, but extremely challenging to implement in a practical way.

The EMC Isilon Scale-Out Data Lake is an ideal platform for handling data type diversity using a consistent and unified approach that is easy to implement and manage - Multi-protocol Ingest of Data. Following an October 2014 Lab Validation of EMC Isilon Scale-Out Data Lake, IDC stated that businesses will find it easy to build out workflows using the EMC Isilon Scale-Out Data Lake because:

- It enables the use of existing and known file protocol mechanisms (instead of Hadoop-specific mechanisms that require specific application-level modifications)
- Its performance optimization capabilities make it an ideal platform for enterprise-wide data storage/analytics with a centralized storage repository
- The use of native protocols allows in-place analytics (eliminates migrations), makes data workflows faster and allows businesses to gain faster insights

With EMC Isilon, possible data ingest protocols include NFS, SMB and HDFS, which covers a wide range of data types used across the Hydrocarbon Value Chain.

KEY OIL FIELD SERVICES PARTNERSHIPS

With our partners, EMC Isilon is dedicated to building complementary solutions through optimization and technology validation. These leading companies are members of the EMC Isilon Systems Technology Partner Program.

- Landmark Halliburton
- Schlumberger

Contact us for more information about the benefits of automated data management workflow software combined with the EMC Isilon platform, and the new storage cost model for E&P data it brings.

CONTACT US

To learn more about how EMC products, services, and solutions can help solve your business and IT challenges, contact your local representative or authorized reseller, visit www.emc.com, or explore and compare products in the EMC Store.