

# Transforming upstream economics: IBM Petroleum Solutions for ProSource

*Increase ROI with an integrated seismic data analytics and repository platform  
from IBM and Schlumberger*



## Highlight: IBM Petroleum Solutions for ProSource

Tougher regulations and market volatility require ready and quick access to data, and demand a more sophisticated, cost-effective data platform for exploration and production analytics. To address this need, IBM is partnering with Schlumberger to offer IBM® Petroleum Solutions for ProSource. The solution is an on-premises seismic data repository platform designed with an integrated architecture that supports archive and retrieval. IBM Petroleum Solutions for ProSource combines the industry-leading ProSource offering from Schlumberger with a VersaStack converged infrastructure solution that includes IBM Spectrum Storage™ Suite, IBM tape storage and IBM Aspera® Server on Demand, for high-speed file transfers to, from and across cloud and hybrid infrastructures. Delivered by IBM and Schlumberger, the ProSource solution enables firms to quickly, more efficiently and cost-effectively share, access and analyze petrotechnical data within and across on-premises and cloud environments. Allowing readier access to petrotechnical data, the solution comes in three configurations and supports a wide range of enterprise workloads.

### Benefits

- Intelligent data lifecycle management proven to handle petabytes of data and billions of files while optimizing storage efficiency
- Unified open architecture to support high-performance computing (HPC), big data and next-generation workloads
- Scalable tiered storage architecture, from cloud to flash to tape
- Three pre-tested configurations to suit the needs of the largest to the smallest firms
- One-stop global support for faster and simpler problem resolution
- Maximum transfer speeds for very large data sets, security and precise bandwidth control through Aspera Server on Demand

## Converged infrastructure solution can reduce deployment time on average by 83 percent<sup>1</sup>

Jointly developed by IBM and Cisco, VersaStack brings together Cisco Unified Computing System (Cisco UCS) integrated infrastructure with market-leading IBM software-defined storage, IBM Spectrum Storage. VersaStack options enable enterprises to easily and cost-effectively scale compute, network and storage capacity as needed. The solution is backed by Cisco Validated Designs and IBM Redbooks® application guides for faster delivery of infrastructure and workload/application deployment, plus support. The VersaStack solution simplifies access to the entire IBM Spectrum Storage family of software offerings to meet your data needs. Offerings include IBM Spectrum Scale™ to enable compute and/or data-intensive analytics, and IBM Spectrum Archive™ for active-archive management of cost-effective tape storage systems for massive data volume. IBM Petroleum Solutions for ProSource can leverage VersaStack capabilities to provide comprehensive, high-performance, cost-effective data processing infrastructure to scale and to accelerate more complex upstream and downstream analytics.

## Increasing IT efficiency and reducing storage costs up to 90 percent<sup>2</sup>

*How much are IT silos and inefficient resource utilization costing your business?*

Upstream oil and gas firms can maximize their data and IT investments for greater insights and profitability by moving to automated resource management. To enable this transformation, market leaders need a software-defined infrastructure rather than a traditional, siloed IT architecture. Software-defined IT infrastructure is simpler to manage and more resource-efficient. It is highly agile, allowing easier adaptation to changing requirements and technologies. Policy-based, automated management of IT resources enables firms to allocate resources based on needs, resulting in faster analytics even for very complex reservoir simulations and 2D/3D visualization.

## A multi-national energy company

According to a 2017 study by IDC,<sup>3</sup> in the current and prolonged period of price and regulatory instability, oil and gas firms need the agility to shift resources and priorities fast. With depressed prices, firms need to focus their efforts on minimizing the number of wells drilled and maximizing each well's output by analyzing all available data. In addition, heightened environmental concerns and stricter regulations are driving producers to deeper analysis of petrotechnical data.

One of the world's leading petroleum firms decided to address all these requirements with one solution from IBM. The firm lacked a centralized repository of petrotechnical data for optimizing geophysical workflow, real-time decision-making and delivery of secure access to investors. Multiple data silos inhibited ready access, use and sharing of field data—potentially impacting key decisions regarding lease management, reservoirs and drill-holes.

Instead of a “rip-and-replace” solution, the firm wanted a flexible architecture capable of ingesting petabytes of structured and unstructured data in a centralized repository that also enabled multiple users to simultaneously and securely access data, whether on-premises or in the cloud. After significant evaluation, the firm chose IBM Petroleum Solutions for ProSource.

The IBM and Schlumberger offering enables the firm to expand and contract its data footprint seamlessly without compromising on security, performance or flexibility. It also helps reduce administration costs and data delivery time to core applications.

## Consuming and monetizing all available data

*Can you collect, analyze and manage all data types from multiple sources—including sensors that didn't exist only a few years ago? Do you have the agile infrastructure with the necessary capabilities to deliver the most accurate insights your data can offer?*

With IBM Petroleum Solutions for ProSource, energy producers and service providers of all sizes can build a more cost-effective, faster and more tightly integrated seismic analytics and data infrastructure that supports HPC, big data and new workloads. Whether the goal is to increase production output,

make more accurate drilling decisions or accommodate changes in business priorities, the IBM and Schlumberger seismic repository offering enables a digital upstream.

## Leveraging the cloud

To maximize access to all available data and cloud infrastructures, IBM Petroleum Solutions for ProSource now uses Aspera Server on Demand for high-speed upload and download of large files and data sets. Utilizing FASP® transfer technology, Aspera Server on Demand offers maximum transfer speeds, security and precise bandwidth control.

IBM Storage and IBM Spectrum Storage software	Benefits
<b>Intelligent, high-performance file and data management including lifecycle data management with IBM Spectrum Storage software</b>	<ul style="list-style-type: none"> <li>• Lowers storage costs by up to 90 percent<sup>2</sup> with more intelligent use of storage for hot and cold data</li> <li>• Reduces data bottlenecks even for data-intensive analytics, including reservoir simulations and remote 2D/3D visualizations</li> </ul>
<b>VersaStack converged infrastructure, combining Cisco UCS integrated infrastructure with IBM software-defined storage, including IBM FlashSystem®, IBM Storwize® and even tape solutions</b>	<ul style="list-style-type: none"> <li>• Reduces deployment time by 83 percent, on average<sup>1</sup></li> <li>• Reduces project implementation time by 75 percent, on average<sup>1</sup></li> <li>• Lowers ongoing administrative and management costs by 66 percent, on average<sup>1</sup></li> </ul>
<b>Customer-choice deployment with direct-to-cloud transfer performance with native integration into cloud object storage. Enables maximum transfer speeds to, from and across cloud platforms, independent of latency and packet loss while providing complete data encryption and integrity verification</b>	<ul style="list-style-type: none"> <li>• Supports block, object and file, on-premises, cloud or hybrid in a single transfer session up to the cloud platform input/output limits</li> <li>• Drives maximum transfer speeds globally for massive files and data with patented Aspera FASP transfer technology</li> <li>• Provides secure authentication, encryption in flight and at rest in the cloud</li> <li>• Offers application, directory service or identity provider options without performance impact</li> </ul>

## Why IBM?

IBM is a leading provider of high-performance storage and software-defined infrastructure to leading firms in industries worldwide. With IBM Petroleum Solutions for ProSource, IBM provides an integrated, cost-effective seismic data analytics and repository platform for oil and gas producers and service providers of all sizes.

## For more information

To learn more about IBM Petroleum Solutions for ProSource, IBM Storage, and IBM Spectrum Storage, please [request an expert consultation](#) or contact your Schlumberger Account Manager within your geography.



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