



## Tarmin Provides Solution for Oil & Gas

### Tarmin-IBM Solution Solves Data Management Challenges

#### Introduction

Oil and gas exploration is one of the most data- and compute-intensive applications, consisting of seismic imaging data and other geophysical information that typically produces multi-petabyte data stores. The industry is distributed geographically with operations, production sites, and exploration scattered around the globe, increasingly complicating effective storage management for such big data environments.

#### The Challenge



The amount and type of data generated by oil and gas visualization and modeling applications is quickly multiplying. Issues of data storage cost, security and accessibility continue to rise as the amount and importance of data increases. Limitations in traditional approaches to storing and managing growing volumes of data can negatively impact efficiencies and constrain continued operation.

For one of the UK's top oil and gas companies, the incessant data growth challenge was even more complex. The company's unstructured data volumes were driven by its renowned sophisticated geophysical modeling processes, expansive geologic image library combined with its recent aggressive acquisition strategy. These acquisitions increased the company's oil reserves by 60 million barrels. As a result, the company faced major IT challenges when having to integrate several other heterogeneous storage infrastructures into their existing environment while enabling global access to data that was captive in isolated systems. The company's operations were spread across six worldwide offices, with exploration and production operations on four continents in addition to two London data centers. With data residing on remote silos of storage, the company needed a single point of access across the organization and a new method of discovery and exploitation with on-demand access to data. Apart from these issues, the company faced unrelenting growth of unstructured data bringing a new set of problems, including affordable access, archiving and protecting huge data stores while ensuring that the data was placed on the most appropriate storage media.

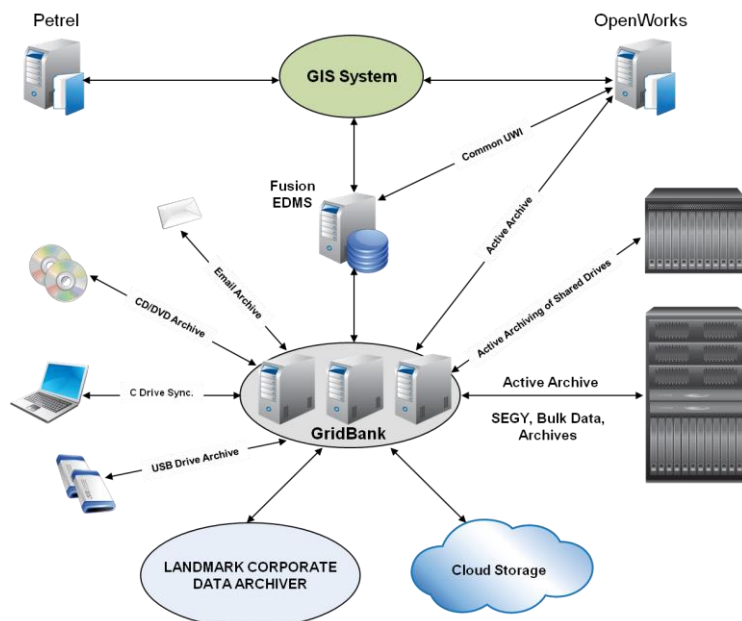


Figure 1: Tarmin GridBank within Oil and Gas IT Infrastructure

#### BENEFITS

- **Media Independent Data Storage**
  - Improve Operational Efficiencies
  - Reduce Storage TCO
- **Data Security & Identity Mgmt**
  - Secure Data Mobility
  - Compliance & Risk Mitigation
- **Distributed Metadata Repository**
  - Data On Demand
  - Improve Business Agility
- **Data Centric Management**
  - Monetize Data to Extract Value
  - Increase Competitive Advantage



*"Tarmin's GridBank software  
[addresses] all of the core issues with  
managing unstructured data over the  
long term"*

Steve Duplessie  
Founder, ESG

### Product Highlights

- Data Centric Storage
- File System Virtualization
- Distributed Object Dedupe
- AD/LDAP Security
- Information Governance
- GridSync & Smart Mobility
- Content Metadata Filtering
- Unified Enterprise Search
- Big Analytics Integration

Faced with these challenges and the limitations of its current storage infrastructure, the company launched a search for a new data management system that would deliver on the following key criteria:

- Restrain costs of unstructured data
- Consolidation of disparate data silos
- Efficient discovery across all company data
- Data accessibility for a global workforce

### The Solution

After a comprehensive search and evaluation, the company chose a modern data centric solution from Tarmin and IBM, specifically optimized for the oil and gas industry. The Data Defined Storage solution is the industry's first purpose built data management architecture with a comprehensive data management capability built on Tarmin's GridBank Data Management Platform and IBM System X servers with multiple terabytes of IBM storage. The Tarmin-IBM solution is the only solution on the market to meet the company's complex and demanding storage needs. Surprisingly, the impetus for the comprehensive data management upgrade came from the geologists and geophysicists team who needed a more suitable system that would allow them to focus on data accessibility and the value of information as a strategic business enabler.

### The Benefits

The joint Tarmin-IBM multi-site solution implementation delivers a massively scalable, transparent and unified approach for consistent data management, storage, protection and search across cloud and traditional storage infrastructure. Delivering media independent storage abstraction, Object Dedupe, compression and encryption, archival and tiering, failsafe replication and unified search across 500+ file types, including O&G specific formats, the solution ensures continuous high availability access to previously siloed data, trapped in remote data centers. Tarmin supplied a specialized version of its GridBank Data Management Platform with performance and functionality specifically optimized for sophisticated globally-distributed energy exploration companies. GridBank transforms the way organizations manage, scale, search and gain value from unstructured data by uniting application, information and storage tiers into a single, integrated data centric management architecture. The GridBank oil and gas module:

- Reduces costs with increased storage utilization by as much as 100%
- Improves flexibility to handle heterogeneous storage environments
- Provides a single view of digital assets across the enterprise
- Accelerates access to oil and gas specific data types
- 80% migration cost savings with existing heterogeneous storage pools integrated into the grid
- Data growth exceeded 200% with no additional storage management cost increase

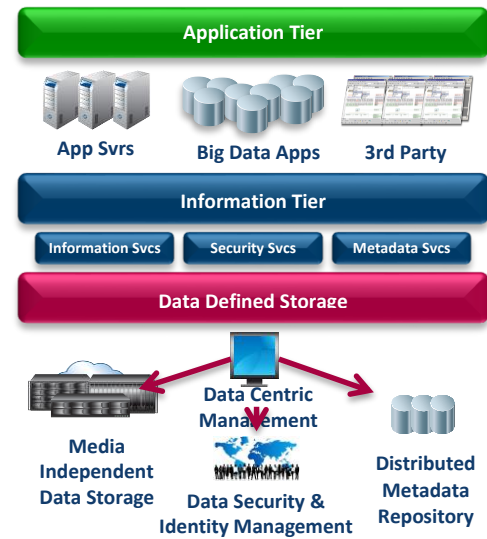
The first-phase implementation has already met the company's objectives for significant cost savings and enhanced business performance. The Tarmin-IBM solution is projected to increase business efficiencies through improved data discovery saving 5% of employee time, an 80% reduction in unnecessary rework of inconsistent data between sites, and reduce hardware acquisition costs by more than 50% by leveraging the storage abstraction and thin provisioning functionalities within GridBank.

### Conclusion

The joint Tarmin- IBM solution provided improved operational efficiency, reduced business risk, greater business agility, and stronger competitive market positioning through accelerated discovery of natural resources.

### About Tarmin

Tarmin Inc., the leading provider of Data Defined Storage solutions, unlocks the value of data as a strategic business enabler, delivering a massively scalable, transparent and unified approach for consistent data management, storage, retention, security and search across cloud and traditional storage infrastructure.



**Figure 1: Data Defined Storage Architecture Delivers Globally Scalable Information Archiving**



**"GridBank 3.0's massively scalable model allows businesses to consolidate their data globally across silos to reduce cost...and enhance the value of their data."**

**Ashish Nadkarni**

**IDC**

