

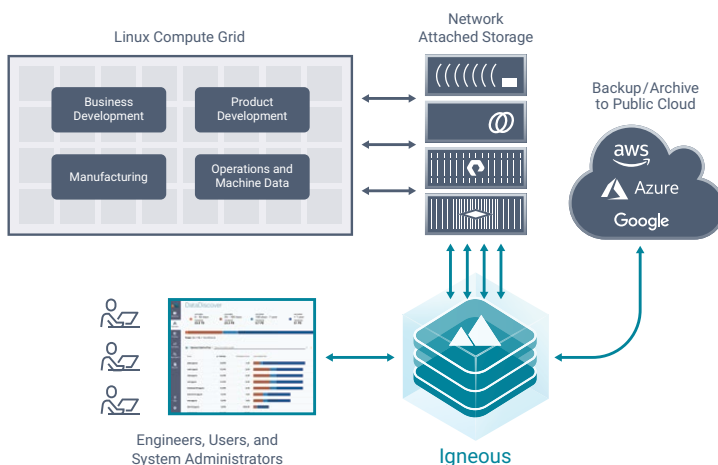


# Modern Backup, Archive, and Cloud Tiering for High-Tech Manufacturing

High-tech manufacturing is at the epicenter of all new technology, leading to innovations in medicine, physical and life sciences, media and entertainment, and artificial intelligence. Behind every advance in manufacturing technology are powerful development tools that are pushing the industry to unprecedented capabilities, with state-of-the-art CAD/CAM/CAE applications and 3D modeling tools generating enormous amounts of critical unstructured data. Today, with high-tech manufacturing teams and departments increasingly distributed across the globe, the design, simulation, production and assembly processes likely happen in different locations. As manufacturers continue to generate file data that is growing at double digits every year – and with that data forming the core of the organization's intellectual property – sharing, moving, and protecting it is critical. Data management at this scale requires performance, flexibility, and a cost-efficient solution to keep up with today's massive data growth.

This surge in unstructured data is overwhelming the legacy data-management solutions that these enterprises have used to analyze, protect, and move their data. Many of these same high-tech manufacturers must comply with government regulations and industry standards that require the long-term retention of petabytes of historical data. They need scalable, fast, easy-to-use solutions that can deliver visibility, mobility, protection and archive of their data – at every stage of its lifecycle, in any location.

## Igneous Unstructured Data Management for High-Tech Manufacturing



*Visualize, protect and move data through all High-tech manufacturing phases, including Business and Product Development, Manufacturing, and Operations and Machine Data*

## Requirements of Unstructured Data Management for High-Tech Manufacturing

### Fast, efficient data mobility

With divisions and teams working in multiple cities and sites, and needing access to petabytes of file data generated elsewhere, high-tech manufacturers need automated, reliable data movement through all phases of the manufacturing lifecycle. They need a solution that can move massive datasets quickly and reliably to and from devices, storage platforms, locations and cloud targets, and which can leverage today's 10GbE networks to move data at scale.

### Petabyte-scale data protection

Legacy backup solutions that were never intended to support current rates of new and changed files are no longer effective at protecting data. Modern manufacturing companies need data-protection solutions that can handle petabyte-scale data and file-dense workloads.

### Powerful data visibility and search capabilities

With petabytes of data and billions of files, distributed across hundreds of file systems and dozens of sites, today's organizations need to find data wherever it sits – by path, file type, name, or owner – or to identify cold data that can be archived.

### Performance and throughput

Through every aspect of managing their data, high-tech manufacturing environments need a high-throughput solution that doesn't impact production workloads or services, and which delivers universal interoperability with every NAS platform, file-system protocol, and cloud-storage platform.

## Business Benefits

Business benefits for high-tech manufacturing organizations using Igneous SaaS data management solutions include:

- **Consolidated data management** that works with every type of NAS system and cloud service, enabling data visibility, data protection, and data mobility from anywhere to anywhere, at any scale.
- **Deployment flexibility and scalability** to support any amount of unstructured data, even in exabyte-size environments with hundreds of billions of unique files.
- **Compelling TCO** through greater operational efficiency over legacy solutions for all aspects of unstructured data management.

## Igneous Overview

Igneous provides data management for any NAS, any cloud, and any workflow. Igneous consolidates all data management functions, empowering organizations to fully tap the value of their unstructured data while lowering costs, reducing risk, and optimizing IT resources.

**Igneous DataProtect** simplifies and automates data protection and archive in high-tech manufacturing environments. With support for any file and object protocol, any NAS platform, and any public cloud, Igneous DataProtect lets organizations easily consolidate their backup workflows and eliminate vendor lock-in. Even in heterogeneous environments with a mix of NAS architectures, Igneous can protect data from any system and use any available storage – NFS, S3, or any public cloud platform and tier – for backup and archive capacity.

**Igneous DataDiscover** is the fastest way to see all data across all NAS systems – including data age, usage patterns, total capacity, and object counts at any level – all through an intuitive global view showing where data is, how old it is, and the last time it was accessed. DataDiscover can search and analyze data, by name, file type, path, or owner, with results that can be organized into collections or shared with data owners or other stakeholders to help maximize data value, as well as manage the explosive data growth common in high-tech manufacturing environments.

**Igneous DataFlow** can easily move any amount of data from any NAS system to any other – including the cloud. Moving large amounts of data has traditionally required lots of labor, time, and patience. Igneous eliminates the bottlenecks of legacy tools that were designed for one-and-done data movement, automating the movement of any amount of data and simplifying even the largest migration tasks – all without impacting production systems.

Purpose-built to handle unstructured data at any scale, including hundreds of file systems and petabytes of data, Igneous delivers high-speed data protection, data visibility and data mobility in even the largest environments. To protect business-critical workloads, Igneous monitors system latency during discovery, backup, and data movement operations, and automatically throttles back on resource consumption as necessary during busy periods to ensure system availability.

## Key Features of Igneous Unstructured Data Management:

- **SaaS delivery.** For simplified deployment and streamlined operations, Igneous remotely monitors, troubleshoots, and performs all software updates.
- **High performance.** Igneous moves data in parallel streams to maximize network bandwidth and manage data at scale from any NAS system.
- **Search.** Igneous' scale-out index store provides integrated search and discovery of all file data on primary, secondary, and cloud tiers.
- **Cloud integration.** Igneous integrates seamlessly with all cloud providers, locations, and tiers. Igneous also offers data bundling of small files, and data compression in-flight and at rest, minimizing cloud consumption and transaction costs.

## The Igneous Difference



Fast file movement:  
up to 100TB per day



Simple solution delivered,  
managed, and consumed  
as-a-Service



Support for any NAS system,  
file protocol and cloud service



Support for on-premises,  
cloud, or hybrid backup and  
archive workflows



Time to Value in minutes and  
hours, vs. days and weeks as  
with other solutions

### Before Igneous

- Legacy backup infrastructure and processes
- Disk-to-Disk (D2D) replication silos
- Offsite tape rotation

### With Igneous

- High-performance, latency-aware data protection
- Consolidated, platform-agnostic data movement
- Backup and archive to and from cloud storage

## About Igneous

Igneous is the SaaS data management solution for file intensive environments. Data-centric enterprises trust Igneous to provide visibility, protection, and movement at scale. Find anything. Protect everything. Move anywhere.

**Igneous: Petabytes today, exabytes tomorrow.**

To learn more about Igneous unstructured data management and your high-tech manufacturing environments, contact us:

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