



Modern Backup, Archive, and Cloud-Tiering for NetApp



Modern Data Management Challenges

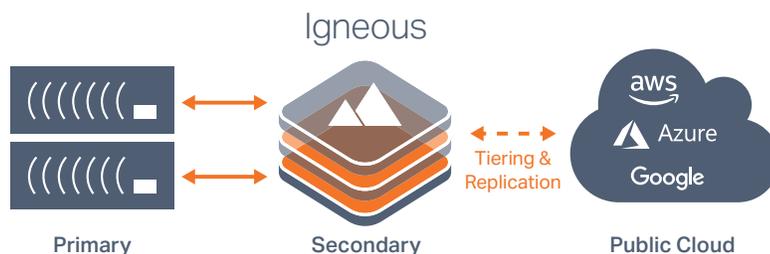
Enterprises are faced with the challenge that, within their own organizations, data doubles every two to four years. While this growth can also contribute to innovation, new services or general business expansion, these enterprise-transforming benefits come with a new set of data management challenges, like:

- **Billions of Files:** Managing billions of files is hard because it applies a density that seriously stresses the catalogs of legacy data management applications. This is true whether talking about everyday backup and archive or a one-off disaster recovery (DR) situation.
- **Visibility and Insight:** Large data sets make traditional approaches to visibility, such as tree walks, take an unreasonable amount of time. When there are petabytes of data, it can take days to get information about the file system, which means that information is useless.
- **Petabytes of Data:** Billions of files can translate into petabytes (or more) of data. All of this data is incredibly painful for enterprises to store, manage and move. Also, moving this much data strains software that was built for terabytes, not petabytes, of data. Single-threaded protocols, like NDMP, simply take too long to move large amounts of data.

NetApp and Igneous Unstructured Data Management Implementation

Igneous provides an Unstructured Data Management as-a-Service solution that was designed to seamlessly integrate with NetApp's Data ONTAP file system. Igneous provides native integration for Data ONTAP at an API level, simplifying the tasks of system discovery, snapshotting, and preservation of permissions on file system export. Data protection is as simple as setting a policy on the export. Igneous' data movement engine is optimized to monitor latency on NetApp nodes and throttle backup operations when latency is high, thus continuously running backups without interrupting the applications utilizing Data ONTAP.

NetApp and Igneous Backup, Archive, and Cloud-Tiering Workflow



BUSINESS BENEFITS

Business benefits of using NetApp and Igneous Unstructured Data Management as-a-Service solution include:

- Modernized storage portfolio, leveraging powerful software architectures to improve supportability, visibility, analytics, and protection across the primary, secondary, and cloud tiers.
- Scale-out architectures across both performance and capacity tiers for maximum scalability of large datasets.
- Compelling economics, with hard dollar cost savings over traditional vendors.
- Heterogeneous solution that offers API integration for NetApp, Dell EMC Isilon, Pure Storage FlashBlade, Qumulo QF2 and other NAS systems

Key Features of NetApp and Igneous DataProtect Integration

Igneous DataProtect provides API integration with NetApp's Data ONTAP file system. This integration provides organizations using NetApp for Network Attached Storage (NAS) with key functionality, including:

- **Automated permissions provisioning:** Using NetApp APIs, Igneous DataProtect will create a backup user, and set appropriate permissions on any dataset that requires protection automatically. This eliminates the headaches of failed backups due to permissions issues, and makes setup as simple as importing systems and applying policies to data.
- **Read consistency:** Igneous DataProtect will automatically create, and release snapshots on a NetApp system with each backup. This allows end-users to continue working unimpeded while maintaining read consistency of backups, and avoiding accumulation of unnecessary snapshots.
- **Protection for NFS and SMB data:** NFS, SMB, and Multi-Protocol datasets on NetApp Cluster Mode systems, or NFS datasets on NetApp 7-Mode systems can be protected by Igneous DataProtect. The Access Control List for any NFS or SMB object will be maintained through the backup and restore process.

Igneous DataProtect Overview

Igneous DataProtect simplifies and automates data protection and archive, giving IT teams the ability offer self-serve data protection services across the enterprise. With support for any file and object protocol, any NAS platform, and for any public cloud platform, Igneous DataProtect enables IT and end users to consolidate their data protection and archive operations without vendor lock-in.

Igneous DataProtect is protocol agnostic, centralizing backup and archive data from every NAS instance in the enterprise. Organizations that deploy a mix of NAS architectures can use Igneous to consolidate data from all systems, either onsite, offsite or in the public cloud.

Contact Igneous

To learn more about the Igneous and NetApp backup, archive and cloud-tiering workflow, contact us:

1-844-IGNEOUS or 206-504-3685 or info@igneous.io



About NetApp

NetApp is the data authority for hybrid cloud. NetApp provides a full range of hybrid cloud data services that simplify management of applications and data across cloud and on-premises environments to accelerate digital transformation. Together with their partners, NetApp empowers global organizations to unleash the full potential of their data to expand customer touchpoints, foster greater innovation, and optimize their operations. For more information, visit www.netapp.com.



About Igneous

We deliver the only UDM as-a-Service solution enabling data-centric organizations with visibility, protection and data mobility at scale, wherever datasets and workflows live. Our customers see, organize and understand all of their unstructured data – anywhere. Our customers protect petabytes of data on a single cloud-native platform – at scale. Our customers automate movement of datasets – for everyone needing them. We combine all UDM functions into a single, API-enabled, cloud native solution.

The right data, in the right place at the right time.

Find out more at igneous.io

