Igneous

Modern Backup, Archive, and Cloud-Tiering for Dell EMC Isilon

DELL EMC

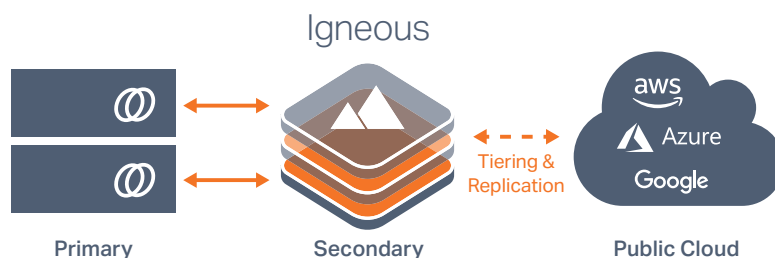## Modern Data Management Challenges

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.

Dell EMC Isilon and Igneous Unstructured Data Management Implementation

Igneous provides an Unstructured Data Management as-a-Service solution that was designed to handle the scale of Dell EMC Isilon's scale-out file system, OneFS. Igneous provides native integration for OneFS 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 dynamically scale out across the Dell EMC Isilon nodes, thus evenly distributing the backup load without interrupting the applications utilizing OneFS.

Dell EMC Isilon and Igneous Backup, Archive, and Cloud-Tiering Workflow

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Primary — Secondary — Tiering & Replication — Public Cloud — aws — Azure — Google

BUSINESS BENEFITS

Business benefits of using Dell EMC Isilon 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 Isilon and Igneous DataProtect Integration:

Igneous DataProtect provides API integration with Isilon's scale-out file system, OneFS. This integration provides organizations using Isilon for Network Attached Storage (NAS) with key functionality, including:

- **Automated permissions provisioning:** Using Isilon 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 Isilon 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 Isilon 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.
- **Protection for Multi-Protocol data:** In addition to protecting NFS exports and SMB shares on Isilon, Igneous DataProtect can also protect multi-protocol datasets. The NFS and SMB Access Control Lists for any object will be retained, allowing even the most complex environments to maintain consistency in permissions and protection.

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 Dell EMC Isilon backup, archive and cloud-tiering workflow, contact us:

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

About Dell EMC

Dell EMC, a part of Dell Technologies, enables organizations to modernize, automate and transform their data center using industry-leading converged infrastructure, servers, storage and data protection technologies. This provides a trusted foundation for businesses to transform IT, through the creation of a hybrid cloud, and transform their business through the creation of cloud-native applications and big data solutions. Dell EMC services customers across 180 countries – including 99 percent of the Fortune 500 – with the industry's most comprehensive and innovative portfolio from edge to core to cloud.

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