SOLUTION BRIEF

Igneous

NAS Backup: Igneous to Microsoft Azure

Cloud-based data protection at enterprise scale

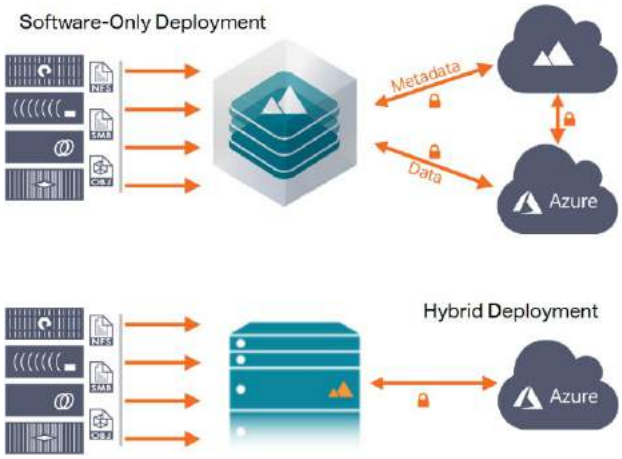
Azure

Legacy data protection solutions are unable to keep up with the exponential pace at which unstructured data continues to grow. Costs are out of control, backups are failing, and data centers are out of space. The challenge facing enterprise organizations today is finding a cost-effective storage option to replace legacy data-center platforms. Cloud-based storage services like Microsoft Azure deliver immediate and unlimited storage, providing an easy path to comprehensive data-management at scale.

With a data-management plan that combines data visibility from Igneous and storage services from Azure, enterprises can easily manage onsite and cloud backup operations using a single intuitive web interface, reducing secondary storage, freeing up data center space for all your primary workloads, and streamlining operations. Igneous offers seamless Azure blob store integration – enabling a cost-effective backup solution to all three Azure storage tiers – with a few simple clicks.

How It Works

Engineered to move petabytes of data and billions of files at line speed without impacting production NAS systems, Igneous delivers efficient file backups, efficient data movement, efficient cloud storage, and efficient data expiration, capable of handling your toughest file environment.



Igneous offers deployment flexibility to integrate with Azure in any environment.

Azure blob storage offers economical data-protection solutions to safeguard your business against data loss. With a data-protection solution built using the combined features of Igneous and Azure, enterprises can keep up-to-date copies of their data in the cloud, enabling flexible backup options, easy recovery of lost data, and disaster-recovery strategies with endless configuration options.

Together, Igneous and Azure allow you to back up unstructured data stored on your primary NAS systems. Customers can adopt a software-only or hybrid deployment.

Policy-Driven Flexibility for any Use Case

With Igneous' powerful, flexible backup capabilities, data owners and administrators can create data-protection policies that leverage Igneous' own data-movement engine and Azure's blob storage to meet any requirement, such as:

- Remote sites backing up to different Azure geographical regions
- Flexible deployment options – software-only via virtual machine or hybrid deployment with cached on-premises storage
- Scalable backup with single-pane-of-glass management even for large data-center deployments
- Dual-write policies to split backup between different locations

Key Benefits

A combined data-protection strategy that leverages Igneous DataProtect and Microsoft Azure for cloud storage all delivered as-a-Service with the following benefits:

Backup flexibility. With full support for any Azure storage tier, and with simple policy-driven data movement, DataProtect lets data owners control their backup settings to meet any business need for any RTO/RPO and get data out of the datacenter.

Cloud integration, even at scale. Manage petabytes of data and billions of files, both locally and in the cloud. Since data movement from local backups to cloud-based archive tiers is automated and policy-driven, data moves seamlessly from Igneous to any defined cloud target and tier.

Operational simplicity. With an as-a-Service delivery model, Igneous remotely monitors system performance and service telemetry in customer data centers, letting customers focus on business operations without spending additional administrative cycles to manage and monitor backup, archive, and migration tasks.

Microsoft Azure Blob Storage Overview

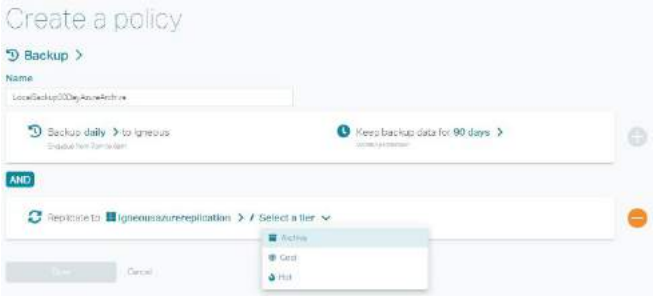
With 95% of all Fortune 500 customers already using Microsoft Azure cloud services, Azure Blob storage integrates seamlessly into nearly all enterprise operations. Azure Blob Storage is available globally for a uniform backup strategy, on any of three different tiers that offer high resiliency with set-it-and-forget-it simplicity. The differentiation between tiers is the variable time to first byte, cost, and minimal data storage lengths.

- **Hot storage**, optimized for hosting frequently-accessed data
- **Cool storage**, for data that requires only infrequent access, with similar time-to-access and durability requirements as hot storage, and will be hosted for a minimum of 30 days
- **Archive storage**, used for data that will be rarely needed once uploaded, can be stored offline until needed, and will be hosted for at least 180 days

Igneous includes native support for all three Azure storage tiers, and can be configured to write directly to specific Azure tiers defined in the Igneous backup policy. Regardless of which tier is needed for a specific use case, Igneous delivers policy-driven backup services – leveraging both onsite and cloud storage as appropriate – from a single intuitive web portal.

Igneous Backup as-a-Service

Igneous DataProtect simplifies and automates data protection operations, even at multi-petabyte scales with billions of files. With native support for any file protocol and for object storage, support for all NAS systems, and Azure blob storage, DataProtect simplifies backup operations for even the largest enterprises.



Configuring an Igneous policy for Azure-based backups.

Igneous is the only backup solution that includes full API integration with Dell EMC Isilon™, NetApp FAS™, Pure Storage FlashBlade™, and Qumulo QF2™, leveraging each platform's specific capabilities for export and share discovery, snapshot management, file-system security, and data-path management for optimal throughput and backup performance.

Backup Features

- API integration with Dell EMC Isilon, NetApp, Pure Storage FlashBlade, and Qumulo QF2
- Seamless support for all other NAS systems, including VAST Data™, WekaIO™ Matrix™, IBM™ Spectrum Scale™, Quantum™ Stornext™, Panasas™ ActiveStor™, Hitachi™ HNAS™
- Support for NFS, SMB/CIFS, object, GPFS, and Lustre protocols
- Multi-protocol permission recognition on select storage platforms using mixed-mode storage
- Highly-parallel data movement and scan operations without impact to production workloads
- Baseline and then "incremental forever" backups run quickly and efficiently
- "Virtual full" restore interface presents complete view of data at any point in time
- Restore back to NAS with all metadata and file permissions intact
- Write-Once-Read-Many (WORM)
- End-to-end compression for throughput and storage efficiency
- Immutable objects with versioning
- Comprehensive activity logging and audit trails

Cloud-Tiering Features

- Lifecycle management across Igneous and Azure, enabling version control and expiration of old data
- Direct and native integration with all Azure storage tiers
- Efficient movement of data to cloud storage that minimizes ingress and egress transaction costs
- Replication between Igneous and cloud storage for offsite redundancy
- Direct-to-cloud backup and archive for software-only Igneous deployments, and as appropriate for hybrid environments
- Search both onsite and cloud-based datasets, with enforced file permissions, to enable self-service restore operations

Contact Igneous

To learn more about Igneous and about our data migration solutions, contact us:

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

About Igneous

Igneous delivers the industry's only as-a-Service solution for unstructured data management, giving data-centric enterprises visibility, protection, and data mobility at scale.

Igneous' API-enabled, cloud-native solution combines all unstructured data-management services, letting organizations tap the value of their unstructured data while reducing risk and optimizing IT resource utilization.

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

Visit igneous.io for more information, and to register for a live demo of Igneous' data management services.

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