



## Cohesity Cloud Integration

### Solution Overview and Value Proposition

According to Gartner, the Cloud infrastructure services (IaaS) is projected to be upwards of \$20B in 2016. This is driven by an increase in shift of legacy IT services to cloud-based services. From a storage perspective, organizations have invested in multiple on-prem solutions across backup, replication, DR, and archival to create and manage multiple copies of data.

Cohesity enables enterprises to take control of increasingly complex storage environments through a hyperconverged secondary storage infrastructure. Cohesity DataPlatform consolidates multiple use cases such as data protection, test/dev, file services and analytics onto a single web-scale platform. The Cohesity solution integrates with public cloud services such as Microsoft Azure, Amazon S3/Glacier, and Google Cloud Storage. Customers can leverage the public cloud as an extension of the on-prem Cohesity infrastructure in one of three ways

- (i) CloudTier™ - use cloud as an extension to Cohesity's built-in storage to tier the data between Cohesity cluster and the Cloud
- (ii) CloudArchive™ - archive older local snapshots in the Cohesity cluster to cloud for long-term retention
- (iii) CloudReplicate™ - replicate data from on-prem Cohesity cluster to a virtual Cohesity instance on Microsoft Azure Compute/Amazon Elastic Compute Cloud (EC2)/Google Compute Engine. The virtual instance can be used to failover to the Cloud in the event of an outage at the local data center

### Technical Features

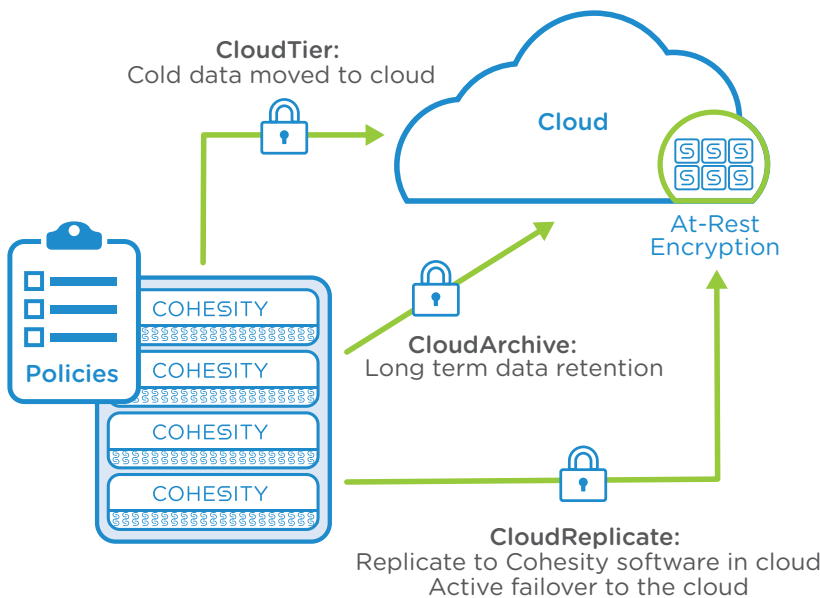


Fig 1: Cohesity Cloud Integration covers tiering, archival and replication to public and private clouds

**CloudTier:** - Use public cloud as an extension of on-prem storage. Cloud is treated as another storage tier, so we end up with 3 tiers of storage: SSD, HDD, and Cloud

- Policy based waterfall model moves cold data into the Cloud. Data temperature is determined based on last access time. Cold data tiers to the cloud when preset threshold is reached in terms of on-prem storage consumption
- Temperature policy and threshold levels can be configured
- Upon read of data that is tiered to the cloud, it is retrieved back to the on-prem storage
- Data is encrypted using AES-256 algorithm for data in-flight and at-rest in the Cloud

## Key Benefits

- Leverage cloud storage scalability to handle spikes in storage demand without the need for cloud gateways and disparate point solutions to connect to the cloud
- Achieve additional data protection by maintaining copy of data in cloud in addition to on-prem for Disaster Recovery, Test/dev, and analytics
- Transition from large capex investments to pay-as-you-go (PAYG) operational budget model with the ability to leverage other services and applications available in the public cloud

One Platform.  
Infinite Possibilities.



**CloudArchive:** Move backup data to public cloud for long term data retention

- Policy based archival of older snapshots in the Cohesity cluster to Cloud for long-term retention
- Data is indexed for fast search and retrieval back to on-prem from the cloud
- Metadata is also stored along with the archived data set. This enables full recovery to a new Cohesity cluster on a different site in the event the primary cluster fails
- Data is encrypted using AES-256 algorithm for data in-flight and at-rest in the Cloud

**CloudReplicate:** Replicate local storage instances to remote public or private cloud services. Businesses benefit by obtaining a low-cost disaster recovery solution in the cloud

- Policy based replication of local snapshots to Cohesity virtual cluster running in the Cloud
- Data is indexed to allow search capability within the Cohesity virtual cluster
- Single user interface to manage on-prem and Cloud Cohesity clusters
- Data is encrypted using AES-256 algorithm for data in-flight and at-rest in the Cloud

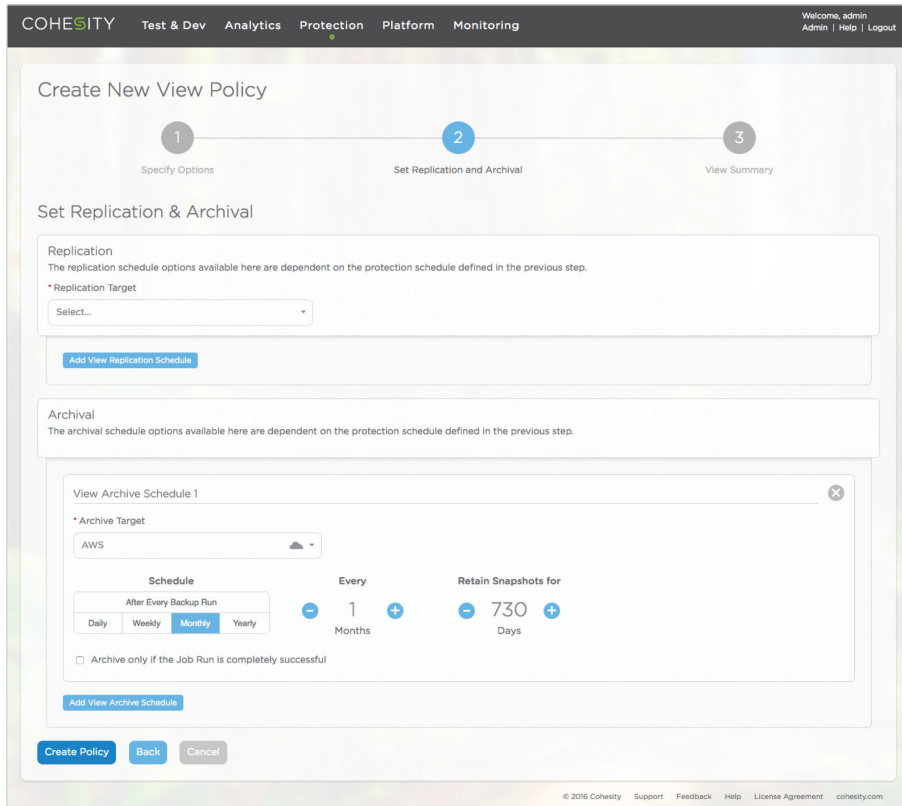


Fig 2: Cloud policy setting for long term data retention

“As our research shows, companies of all sizes are focused on the benefits of cloud computing, but for many larger organizations making the switch can be an incredibly difficult and complex task. Cohesity’s hyperconverged secondary storage platform eliminates data fragmentation and offers an array of public and private cloud integrations that make it easy to shift resources to the cloud in cases where it’s most efficient.”

- ESG Senior Analyst Scott Sinclair

## Conclusion

Cohesity DataPlatform is helping usher in new technology to achieve data protection business objectives. Besides the on-prem integrated data protection capabilities for physical and virtual environments to shrink RTO/RPO windows, the platform provides seamless connectivity to public cloud services as an extension of the data center infrastructure for tiering, archival and replication.