

## IBM Cloud Object Storage

### First cloud storage for hybrid clouds

- IBM Cloud Object Storage is a new and robust hybrid cloud storage-as-a-service.
- It enables organizations to distribute data slices across on-premises servers and storage systems to IBM public and private clouds, providing greater storage flexibility, as well as security.
- EMC, Amazon, Google and other cloud storage providers can only distribute data slices across systems that are on premises, or in cloud deployments, but not across hybrid clouds.

### IBM Cloud Object Storage provides the most secure cloud storage

- At the heart of the solution is IBM's innovative **SecureSlice**, which combines encryption, erasure coding and geo-dispersal of data for greater security, flexibility and availability across clouds.
- IBM is the only company to have combined erasure coding with encryption.
- When data comes into the IBM Cloud Object Storage system, SecureSlice automatically encrypts each segment of data before it is erasure coded and dispersed.
  - The content can only be re-assembled through IBM Cloud's "Accesser" technology at the client's primary data center, where the data was originally received, and decrypted by SecureSlice.

### 'Always-On' availability of data

- SecureSlice and other innovations mean IBM Cloud Object Storage can tolerate even catastrophic regional outages without any down time or the need for customer intervention. Continuous availability is inherent in the architecture.
- Traditional cloud storage providers, like Amazon and others, place the burden of data management and the cost for creating and maintaining a second copy on the client.

### Most flexible cloud storage platform

- IBM Cloud Object Storage services are available in three distinct configurations.
  - **Standard** is a high-performance public cloud offering based on IBM Cleversafe technology with new S3 object storage API interfaces.
  - **Vault** provides a cloud infrastructure for infrequently accessed data at a lower cost than most off-premise options and is ideal for archive, back-up, and other workloads delivered across select IBM Cloud data centers.
  - **Dedicated** is a single-tenant IBM Object Storage system running on dedicated servers in IBM Cloud data centers. Available as an IBM managed service or as a self-managed cloud solution, this offering gives clients access to object storage with no need for extra hardware or data center space.
- The service supports existing Cleversafe on-premises and dedicated offerings.

- The new services complement the company's existing IBM Cloud Object Storage System for on premises object storage, and the IBM Cloud Object Storage Dedicated Service, a private cloud offering that runs on bare-metal servers.
- All of the IBM Cloud Object Storage services on or off-premises support Amazon S3 and OpenStack Swift interfaces for greater programming flexibility.

### **Broad API support**

- Unlike competitive cloud storage services from Amazon, EMC, Microsoft and others, IBM Cloud Object Storage supports a common set of APIs, including OpenStack Swift and Amazon S3.
  - These APIs can be employed with IBM Cloud services as well as IBM Object Storage on-premises offerings - existing applications that are built to support S3 or Swift can be pointed to an IBM Cloud Object Storage environment with minimal-to-no retrofitting.
  - For example, backup, archiving, tiering, and other applications that support S3 can be easily and quickly integrated into IBM Cloud Object Storage services.

### **Cross Regional and Regional Services**

- IBM Cloud Object Storage comes in two services: Cross Regional & Regional.
  - Cross Regional Service sends the sliced data to at least three geographically dispersed regions across IBM Cloud data centers.
  - Regional Service holds the data in multiple data centers in a given region.
- Both the Regional and Cross Regional services provide SecureSlice. To achieve similar functionality and support with Amazon S3, a client would have to invoke "cross-region replication" to create a second copy of the data which would reside in a secondary region. But because that data would be a copy, and not a set of data slices, it would be vulnerable to threats and compromise.

### **Availability**

- IBM Cloud Object Storage is available now for enterprise clients across IBM Cloud data centers in the US and Europe and will be available in the Asia Pacific region in December. Availability via digital channels, with swipe-and-go credit card support, will begin in the US starting in December and Europe soon thereafter.