

# A Cost Effective Object Storage Alternative to the Public Cloud

**Software-defined object storage for web applications, big data analytics, data lifecycle management, global data availability, and rich content**

IIS Object Storage is an architecture that manages data as objects, as opposed to using a filesystem that manages data in a file hierarchy, or block storage that manages data as blocks within sectors and tracks. With IIS Object Storage, data objects are accessed with user-defined metadata, providing extremely high performance by efficiently storing massive volumes of unstructured data.

IIS Object Storage complements IIS Unified Storage solutions that now offer block, file and object storage on the same platform. IIS Object Storage provides practically infinite scalability for storing data that is static in nature, such as: multimedia, web content, big data, archive and backup files. It provides easy access to storage anywhere, anytime, and from any device over HTTP, and allows remote access to the data, even over the Internet.

IIS Object Storage is a private storage solution that is compatible with public object storage, and supports the same interface (S3 RESTful APIs, Swift API) while allowing customers to keep the data on-premises or in the cloud. IIS Object Storage is unique in the industry in that it provides “private” object storage with dedicated storage resources. This provides higher levels of security, but also guarantees consistent levels of performance.

IIS Object Storage also provides the highest levels of availability by replicating data multiple times across availability zones ensuring your data is always protected. The IIS Object Storage offering also provides key features such as simplified management, usage chargeback and billing for departmental or customer-specific invoicing. Best of all, the IIS Object Storage solution comes with all of the OPEX, Storage-as-a-Service features you are familiar with from public cloud providers.

## **Today's Challenges:**

The Internet of Things not only propels massive data growth in unstructured data, but it also changes how data is stored and accessed. As data is created and consumed across many sites – as opposed to a more traditional centralized data center – IT departments must reevaluate how to manage a large amount of data that is spread over several locations.

Users demand 24/7 access from any location and device; at the same time, IT must be able to guarantee the integrity and security of the data. In many cases, business and compliance requirements mandate that this data outlive the underlying storage infrastructure, in some cases by many generations. To be able to store this data and meet requirements for durability, availability,

and performance, all while containing costs, many IT organizations have turned to cloud-based software such as object storage.

However, new questions have arisen: What happens if requirements change? Can customers dynamically reevaluate existing data storage policies?

## Key Benefits:

### **IIS Object Storage is a service built for Web-Scale Data Repositories:**

Build massively scalable, globally distributed object stores that support industry-standard object APIs such as Amazon S3 and Swift.

### **Infinite Scalability:**

Petabytes of capacity and billions of objects.

### **Consistent Performance:**

Performance scales as the capacity grows.

### **High Availability:**

Keeps multiple copies of data across availability zones.

### **Private Object Storage:**

Your object storage is private and your resources are dedicated — providing security and guaranteed performance.

### **Balances Performance, Durability, and Cost:**

Protect data with hierarchical erasure coding, which combines node-level and geo-distributed erasure coding to efficiently prevent data loss from disk, node, rack, or site outages.

### **Enables a Hybrid Cloud with Best-in-Class Flexibility:**

Leverage combinations of engineered appliances and software-only nodes on virtual machines and

By choosing one solution, is vendor lock-in created? How can customers maintain the flexibility to use both on-premises and public cloud solutions while maintaining control?

heterogeneous storage; seamlessly tier between on-premises and public cloud storage with policy-based data movement.

### **Uses a Metadata-Driven Policy Engine:**

Optimize data availability, performance, geo-distribution, retention, protection, and storage cost with metadata-driven policies and adjust them dynamically as the business value of data evolves.

### **Enable Cloud Transformation through Object Storage as a Service**

IIS delivers heterogeneous object storage solutions that enable customers to transform their storage landscape and support existing brownfield applications leveraging traditional file/block protocols while empowering greenfield workloads and supporting API access.

Not only can these solutions provide a shift from CAPEX to OPEX, but they can provide the means by which to reduce OPEX costs over the lifecycle of your data.

IIS cloud-based integration provides a means for our clients to receive full lifecycle support for all of their transformational workloads and data. This provides businesses the speed and agility of leveraging metered services from cloud providers without sacrificing security, while increasing the speed at which workloads can move in and out of platforms like private cloud, public cloud and PaaS offerings.

## **IIS Object Storage as a Service Use Cases:**

**Web 2.0:** Anything as a Service

**Active Archive:** Consolidation

**Collaboration:** Media Creation

**Data Availability:** Backup Replacement

## **IIS Object Storage as a Service Features**

- Data Lifecycle Management assessment
- Data Migration
- Public Cloud Integration
- Multiple Endpoints Integration
- Capacity Planning
- Compliance Reporting
- Big Data Analytics
- File/Block gateways for traditional access by brownfield applications
- Integration with ServiceNow to ensure ITIL process compliance

## **Business Drivers:**

- Lower Operational Costs
- Increased Data Growth Rates
- Increased Regulatory Requirements
- Ability to utilize data across platforms
- Cloud 2.0

## **Business Outcomes:**

- Global Data Availability
- Enhanced Data Protection
- Enable software-defined storage
- Self-healing and platform intelligence
- Cloud Integration

## **IIS Day 2 Operational Support Features:**

IIS offers managed services and a by-the-drink consumption model to assist our customers in their Day 2 operations associated with the object storage solutions we provide.

## **Deliver Business Agility and Drive Growth**

Realize the business advantages that come with delivering IIS Object Storage as a Service on demand to achieve the right mix of storage tiers, hybrid cloud integration, and operational support.

[Learn more: IISL.com](https://www.ibm.com/cloud/learn/iisl)