



# Self-Service Data Management with Data Tiering and Placement

The exponential growth of data presents a double-edged sword for organizations. While valuable insights lie within, managing vast data volumes across diverse storage systems can be a complex and costly endeavor. Traditional storage approaches and point solutions often lead to inefficiencies, with critical data buried in lower-cost tiers while less relevant information resides on expensive high-performance storage.

This inefficient storage utilization creates several challenges:

- **High Storage Costs:** Organizations pay for underused storage capacity, hindering budget optimization.
- Application Performance Issues: Critical data trapped in lower-tier storage can lead to application slowdowns and user frustration.
- Increased Management Overhead: Manually managing data placement across various tiers is a time-consuming and error-prone process.

In the era of hybrid cloud storage and escalating storage costs, how can organizations unlock the true potential of their storage infrastructure by intelligently classifying data and automating its placement across various tiers?

#### This is where Zubin steps in.

By 2025, 80% of organizations will have adopted a hybrid cloud storage strategy, leading to even greater complexity in data placement and utilization (Gartner).

Zubin is Data Dynamics' Al-powered self-service data management software, bringing a fresh approach to privacy, security, compliance, governance and optimization in the world of Al-led workloads. It empowers enterprises by enabling users across all levels - from C-suite to data owners - to discover, define, act, transform, and audit data through a user-friendly interface. Zubin brings correlation, consistency and standardization across your organization by delivering granular insights, deriving recommended workflows, and automating actions using personalized policies and RBAC-driven processes. This transformation fosters a culture of data ownership, where everyone becomes a data champion, and the organization fulfills its responsibility as a data custodian.

Zubin's Data Tiering and Placement empowers organizations to optimize storage utilization and application performance by intelligently allocating resources and data storage based on usage patterns and access requirements. This feature leverages data insights and machine learning to automatically identify, classify, and map physical and virtual data locations, ensuring optimal performance for frequently accessed data while minimizing storage costs for less active datasets.

### **Key Functionalities**

### Automated Data Identification and Classification

- Content Analysis: Zubin analyzes data content using advanced algorithms to identify data types (documents, images, videos, etc.) and classify them based on predefined categories (e.g., PII, PHI, Passwords, IP, etc).
- Metadata-Driven Classification:
   Leverages existing metadata tags and attributes associated with data to further refine its classification and understand its business context.

## Physical and Virtual Location Mapping

Zubin accurately maps the physical and virtual locations of data across storage systems. This includes on-premises storage (SAN, NAS) and cloud storage solutions (object storage, cloud file shares).

### Dynamic Data Tiering

- Intelligent Algorithms: Zubin utilizes intelligent algorithms to analyze data access patterns and identify frequently accessed "hot" data and less frequently accessed "cold" data.
- Automated Data Movement: Based on the classification and access patterns, Zubin can automatically migrate data between storage tiers:
  - High-Performance Storage: Hot data requiring fast access speeds is placed on high-performance storage tiers (e.g., solid-state drives).
  - Cost-Effective Storage: Cold data is migrated to lower-cost storage tiers such as object storage, optimizing storage expenditure.
- User-Defined Policies: In addition to automated tiering, Zubin allows administrators to define personalized data workflows based on corporate governance and compliance policies created for custom placements of specific data categories or applications.







### Workload Optimization

Zubin considers workload requirements during data placement. Workloads (applications and associated data) are placed on optimal compute resources based on resource needs and usage patterns, further enhancing overall system efficiency.

### **Benefits**

- Reduce Storage Costs with Automated Tiering: A 2023 study by IDC found that organizations leveraging data tiering strategies for storage optimization experience a 30% reduction in storage costs. Zubin utilizes intelligent algorithms to automatically migrate less frequently accessed data to lower-cost storage tiers (object storage), freeing up valuable resources and potentially reducing storage expenses.
- **Enhance Application Performance with Intelligent** Placement: A 2022 report by TechTarget highlights that organizations with automated data tiering solutions see a 20% improvement in application responsiveness. Zubin's automated data placement prioritizes frequently accessed data on high-performance storage, minimizing latency and improving application performance.
- Simplify Management with Automation: A 2023 study revealed that organizations with automated data management processes experience a 25% increase in overall data management efficiency. Zubin automates data tiering and placement, reducing manual administration overhead and freeing up your IT team for more strategic initiatives.

- Gain Insights with Data Classification: Organizations with data classification strategies report a 15% improvement in storage resource allocation (Gartner). Zubin's data classification helps identify data types (documents, images) and sensitivity (PII, PHI), enabling optimal storage allocation based on its value and access needs.
- Strengthen Data Security with **Informed Decisions:** A 2023 study by IBM found that data breaches due to improperly stored sensitive data cost organizations an average of \$5 million. Data classification from Zubin empowers you to implement appropriate security measures based on data sensitivity, potentially reducing the risk of data breaches.









