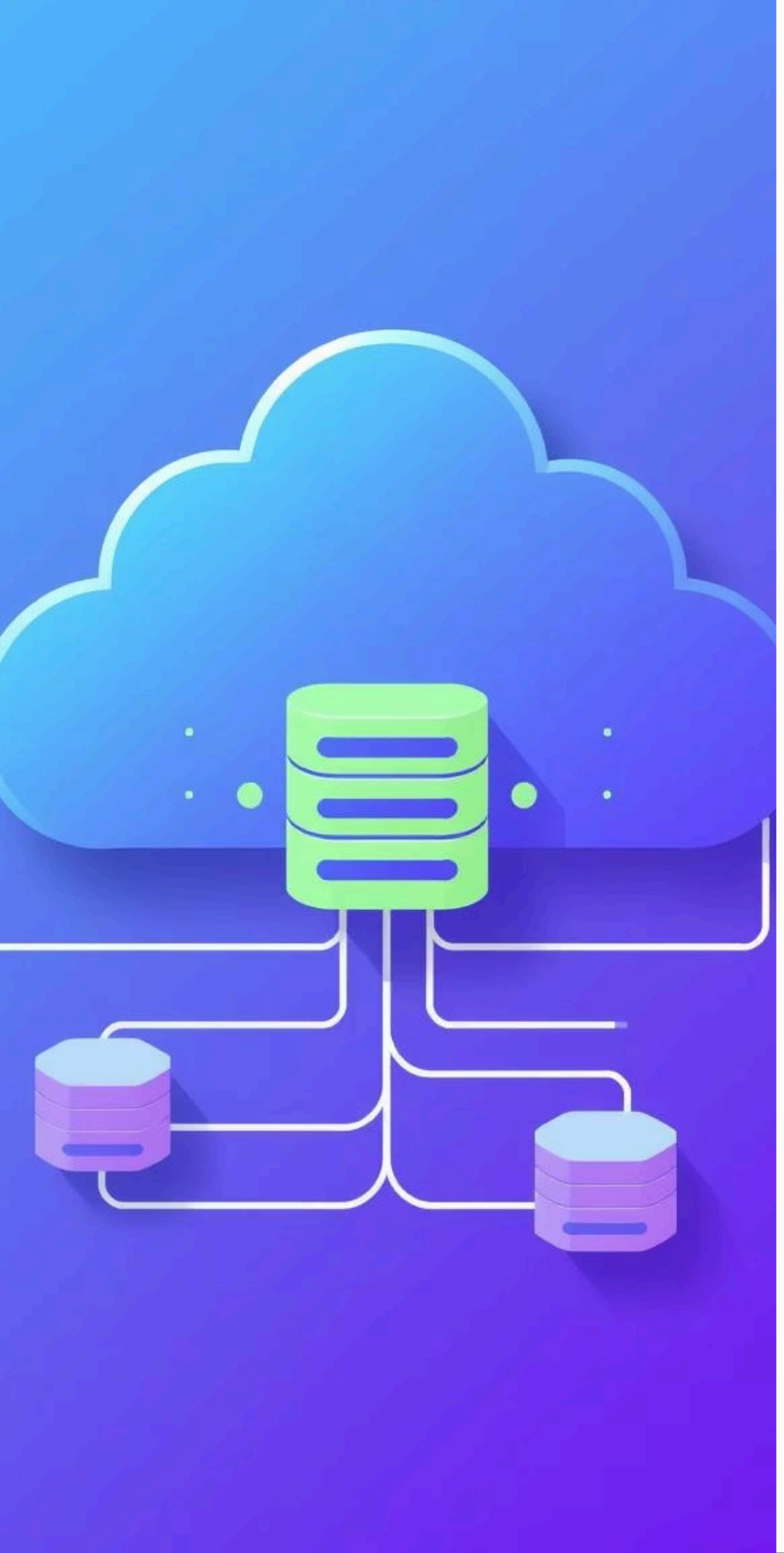


Azure Container Storage

Simplifying data management for containerized applications.

What is Azure Container Storage?

A Microsoft cloud service designed for storing data for container-based applications.

Cloud Service

Provided by Microsoft for containerized app data.

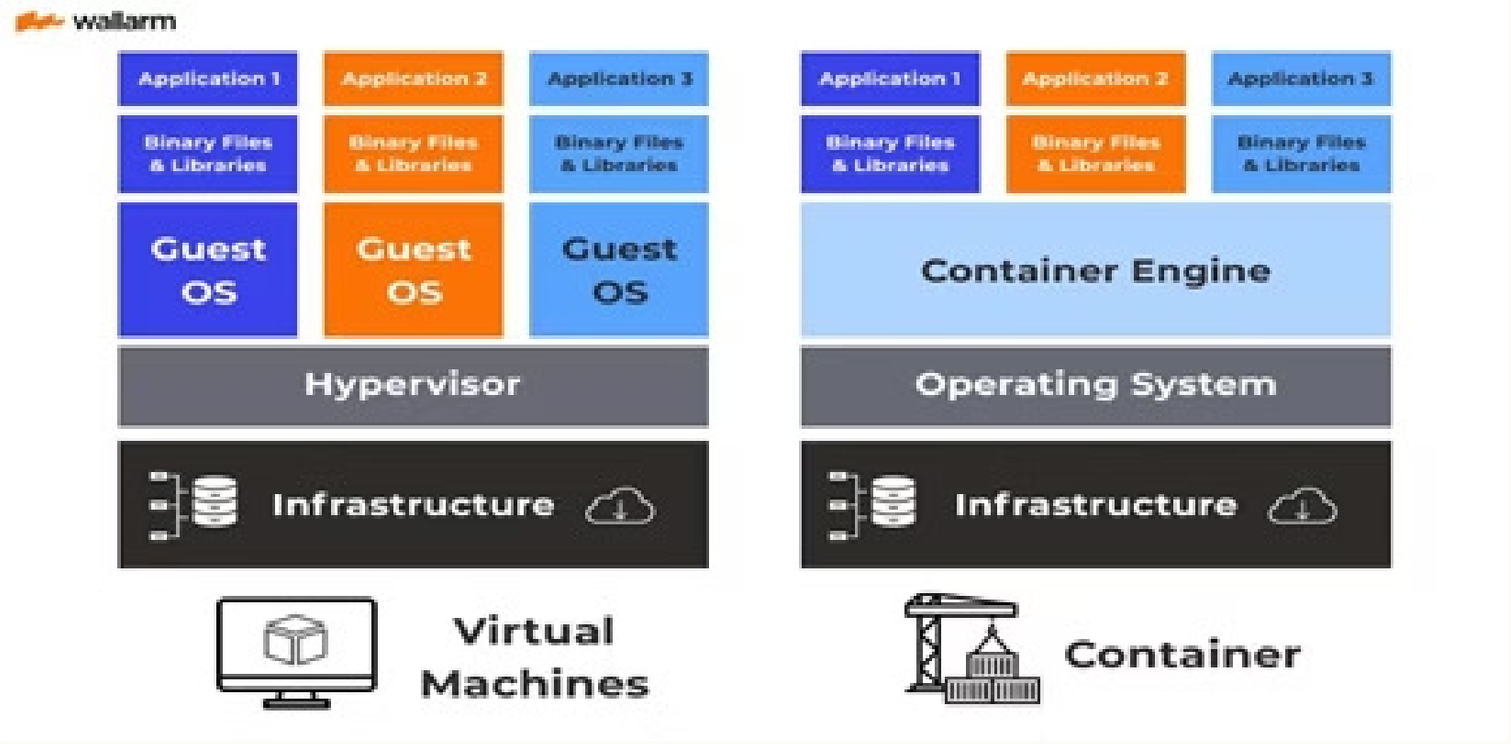
Container-Based Apps

Applications packaged and run inside containers.

Understanding Containers

Containers package an app's code, tools, libraries, and settings, ensuring consistent operation across environments.

- Self-contained units for applications.
- Run consistently on any computer.
- More efficient than virtual machines for stateful apps.



Key Features & Stateful Apps

Azure Container Storage works with Kubernetes for scalable storage, keeping data safe even when containers restart.

Kubernetes Integration

Provides automatic, scalable storage with K8s.

Data Persistence

Keeps data safe during container restarts or moves.

Stateful Applications

Ideal for apps that save data and remember progress.

Examples of Stateful Apps:

- Databases (MySQL, MongoDB) – store user data
- Messaging apps – save chat history
- Streaming apps – remember watch history

Why Azure Container Storage?

Simplifies storage management, reducing manual effort and errors.

Simplifies Complexity

Replaces complex CSI drivers for storage connection.

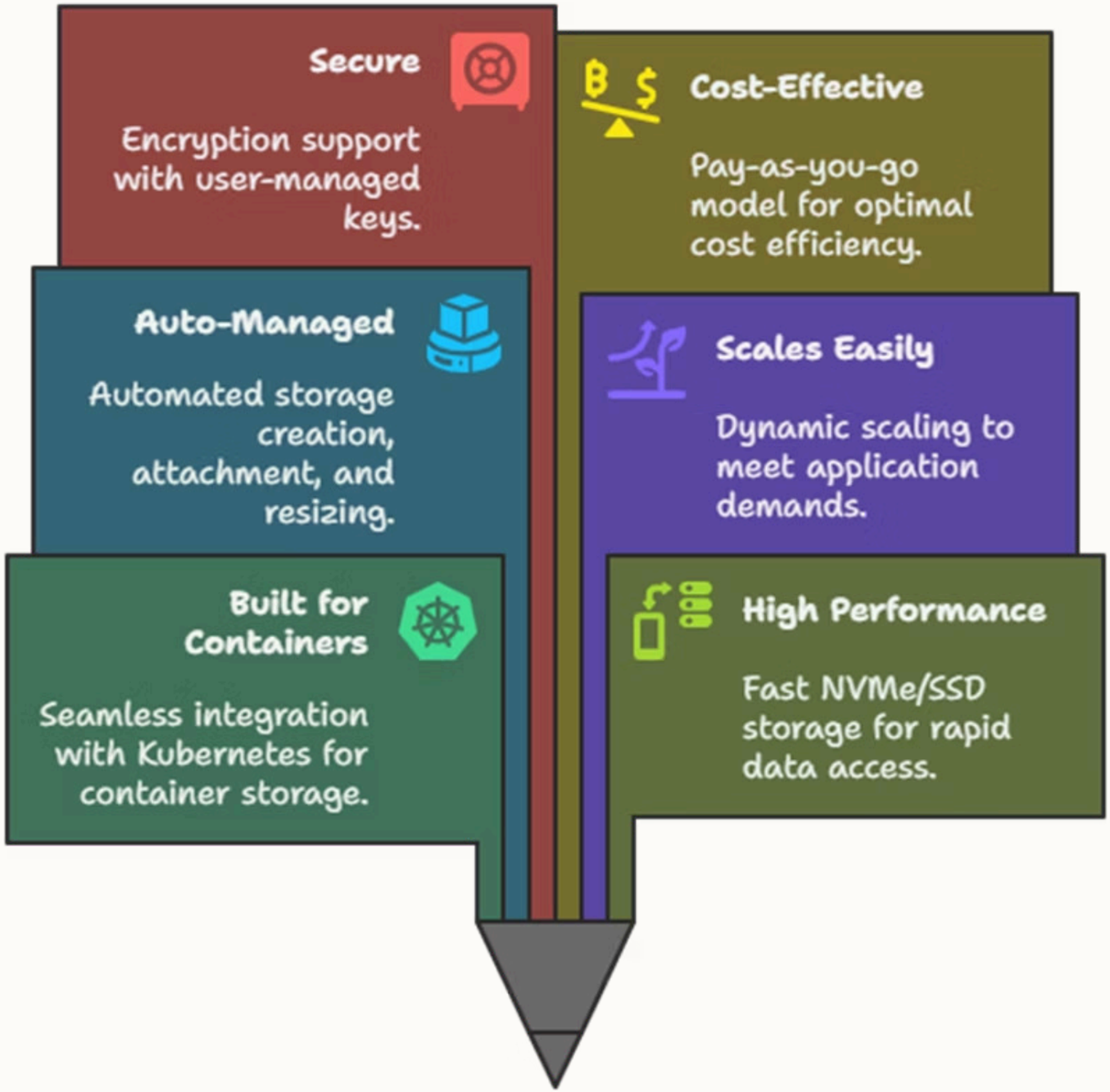
Fast & Built for Containers

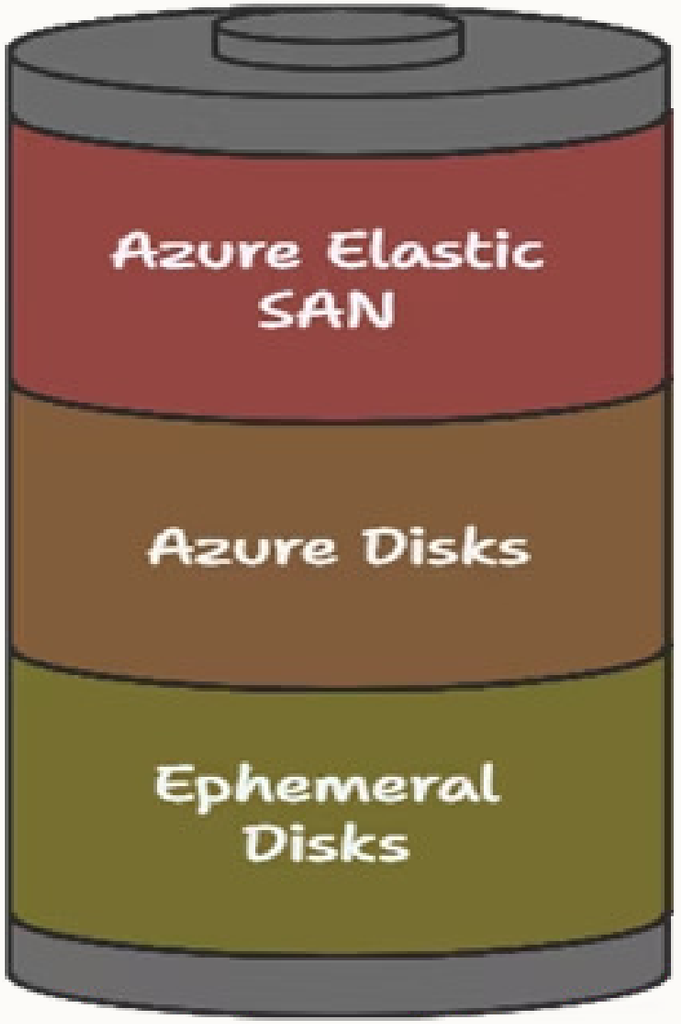
Designed specifically for container environments.

Reduces Manual Effort

Automates storage management, minimizing errors.

Key Benefits





Storage Type	Best For	Durability	Speed
Elastic SAN	Shared high-performance workloads	✅ Persistent	⚡ Fast
Azure Disks	Databases, general workloads	✅ Persistent	⚡ Fast
Ephemeral Disks	Apps with built-in data replication	❌ Temporary	🚀 Super Fast

Pod with Volume

A Pod is a group of containers, and a Volume is shared storage attached to the pod, enabling data sharing and saving.

- **Pod:** A logical grouping of containers.
- **Volume:** Shared storage for the Pod.
- **Benefit:** Allows containers to share and save data persistently.