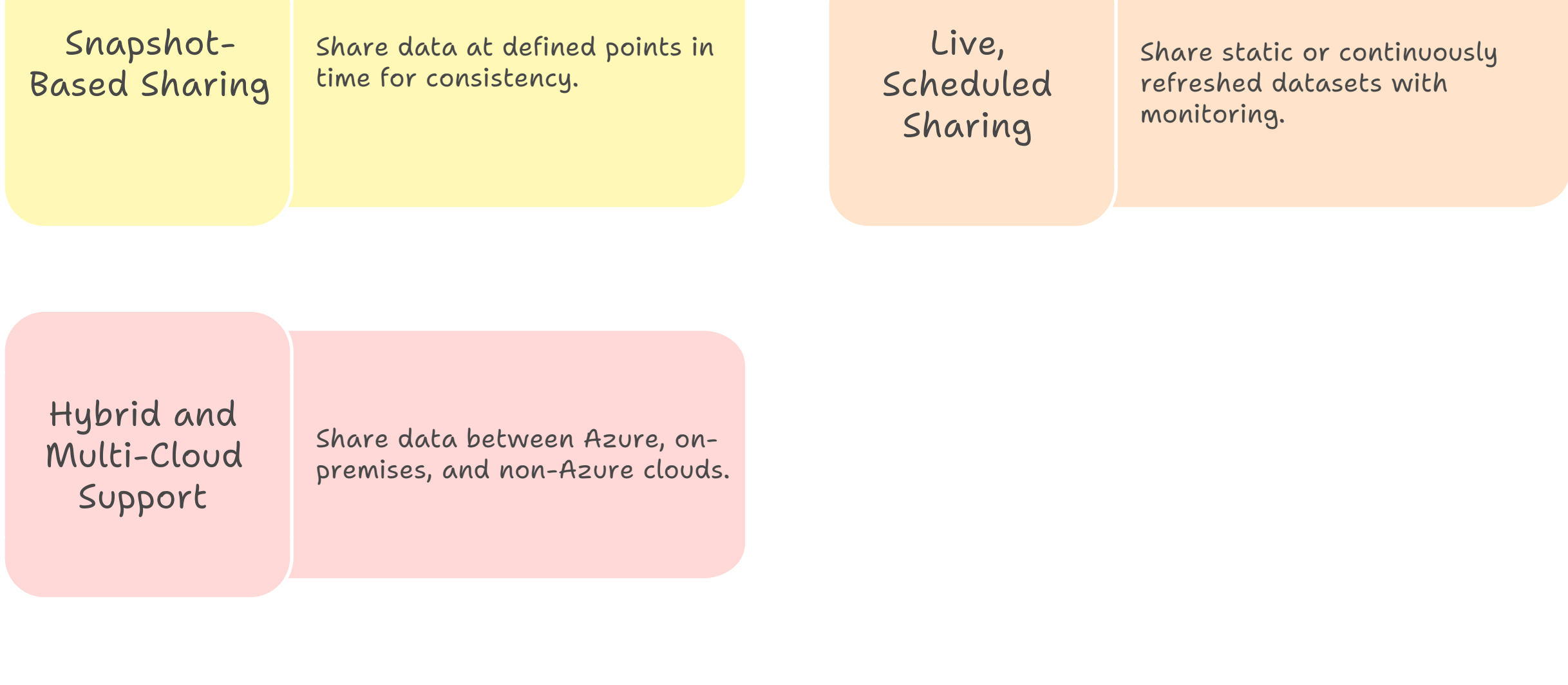


AZURE SERVICES

Azure Data Share

- **Snapshot-Based Sharing:** Share data at defined points in time for consistency, unaffected by later changes.
- **Live, Scheduled, and Incremental Sharing:** Share static or continuously refreshed datasets across departments or with external partners, with detailed monitoring and governance.
- **Hybrid and Multi-Cloud Support:** Easily share data between Azure, on-premises, and even non-Azure clouds, thanks to federated authentication and Azure Arc enhancements.[1][2]

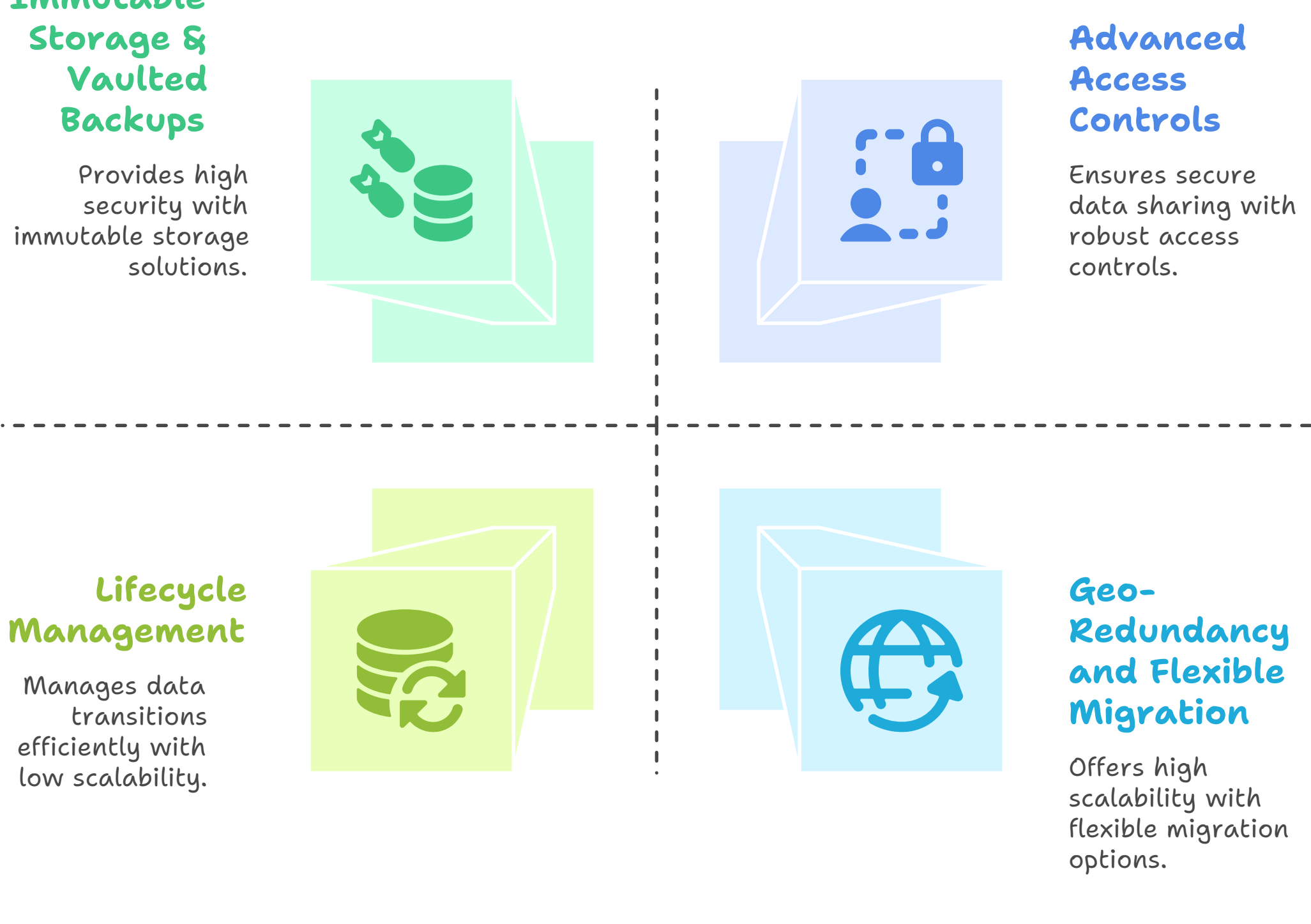
Data Sharing Methods



Azure Blob Storage

- **Highly Scalable, Tiered Storage:** Supports petabyte-scale unstructured data; tiers [Premium, Hot, Cool, Cold, Archive] optimize for cost and performance.
- **Advanced Access Controls:** Set permissions at blob/container level using RBAC, ACLs, Azure Entra ID (formerly Azure AD), and OAuth for secure sharing.
- **Immutable Storage & Vaulted Backups:** Helps meet compliance and ransomware recovery needs with WORM and new backup vault features (up to 10-year retention).[3]
- **Lifecycle Management:** Apply automated policies to manage data transitions between storage tiers or schedule data deletion based on usage—cut storage costs with zero manual work.[4]
- **REST API & NFS Support:** Broadened integration for Linux/UNIX workloads and third-party tools—now with native REST API access and enterprise-grade encryption in transit for NFS.[3]
- **Geo-Redundancy and Flexible Migration:** Effortlessly manage geo/zone redundancy, and transitions from LRS to ZRS, to align with global access needs.

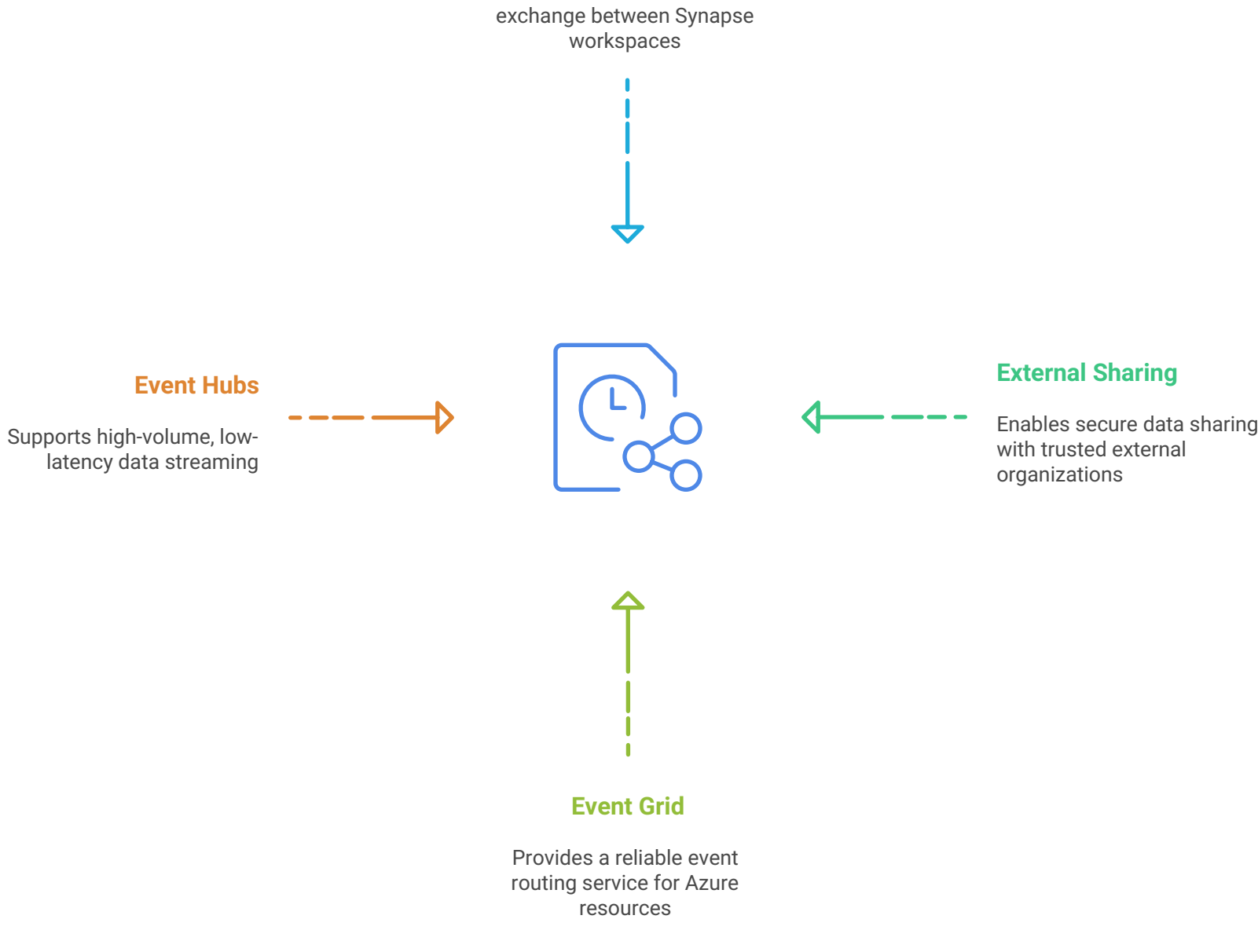
Azure Blob Storage Features Prioritization



Azure Synapse & Event-driven Services

- **Cross-Workspace and External Sharing:** Effortlessly share datasets between Synapse workspaces or with trusted external organizations—leveraging enhanced identity management and audit logging.
- **Event Grid & Event Hubs:** Publish/subscribe to events from diverse Azure resources for real-time workloads powering data pipelines, alerts, and automation. Supports high-volume, low-latency streaming, critical for IoT and edge use cases as data sources multiply in 2025.[5][6]

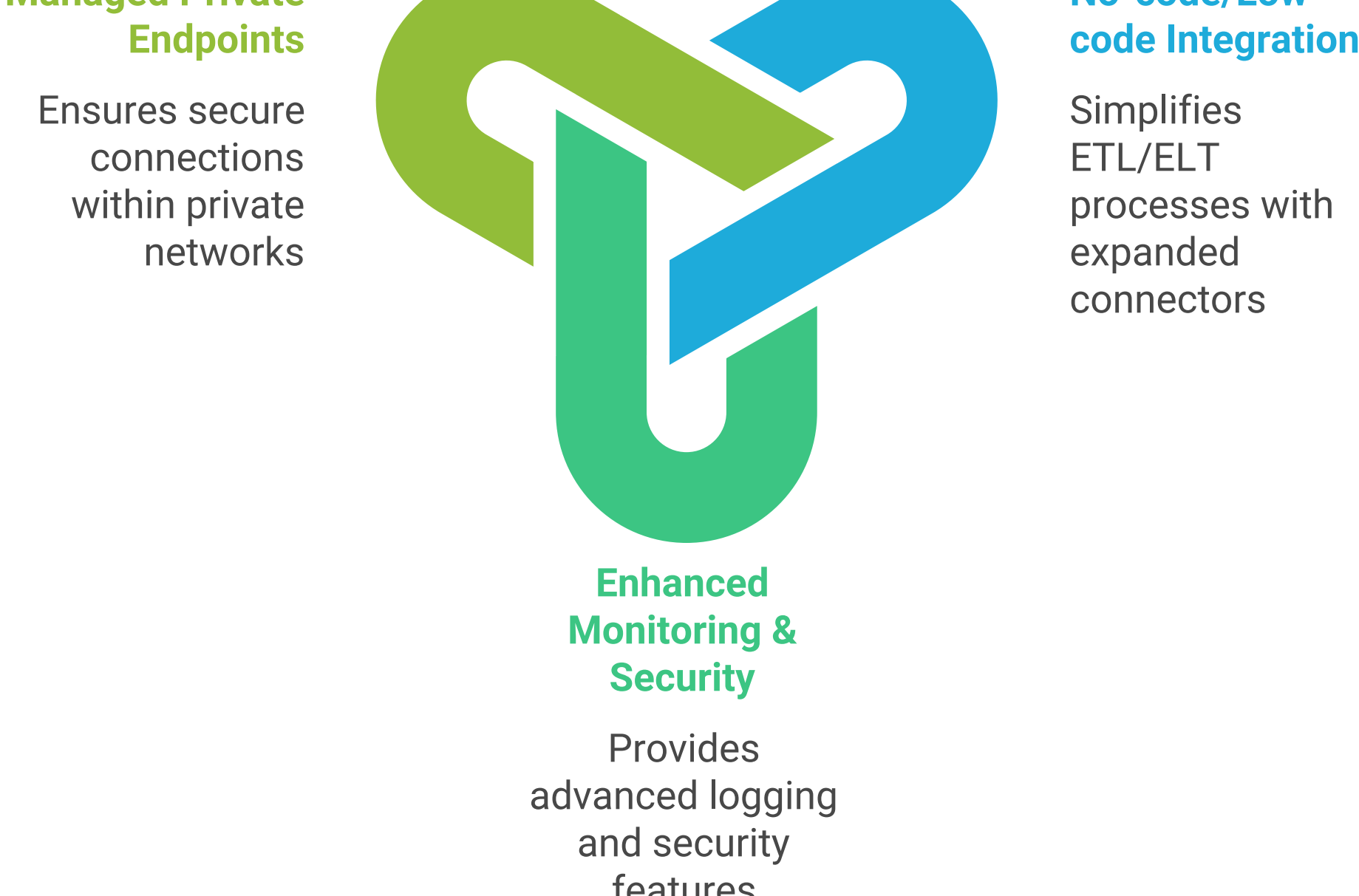
Enhancing Data Management and Real-Time Workloads



Azure Data Factory

- **No-code/Low-code Integration:** Design and automate ETL/ELT workflows, data transformations, and copy activities, now with expanded connectors and support for all Blob Storage tiers.[7]
- **Enhanced Monitoring & Security:** CI/CD, VNet integration, managed identities for authentication, plus advanced logging/lineage for end-to-end traceability.[8]
- **Managed Private Endpoints:** Securely connect to storage accounts within private networks, ensuring compliance and zero-trust readiness.

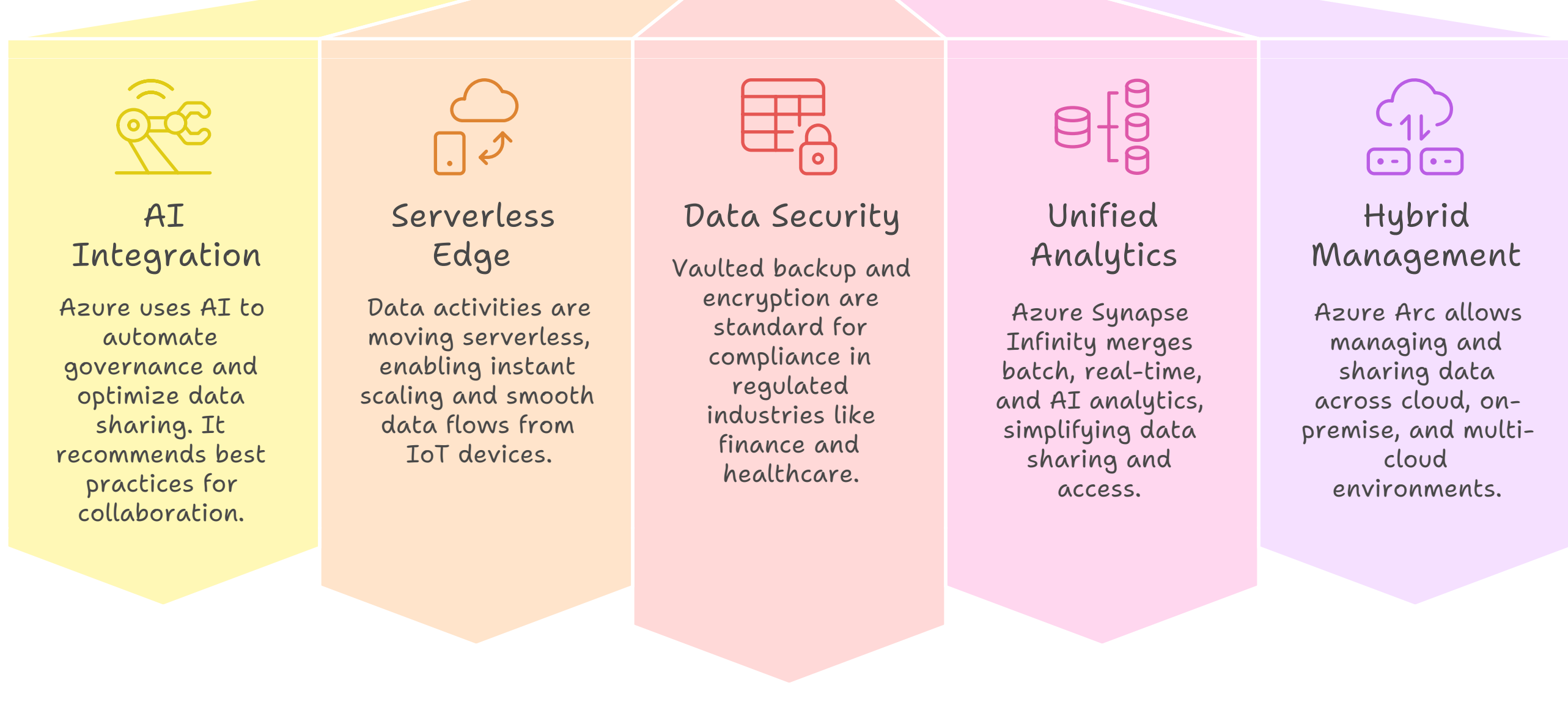
Azure Data Factory Capabilities Overview



Latest 2025 Trends Driving Innovation

- **AI-Integrated Data Platforms:** Azure leverages Copilot & OpenAI integration to automate governance, optimize sharing, and recommend best practices for data collaboration.[9][2]
- **Serverless & Intelligent Edge:** Many sharing and data movement activities are moving serverless, providing instantaneous scaling and seamless IoT/edge-to-cloud data flows.[6][5]
- **Stronger Data Security:** Vaulted backup, encryption in transit, and managed identities are now standard for compliance in highly regulated sectors (finance, healthcare).[10][3]
- **Unified Analytics Experience:** Services like Azure Synapse Infinity and Data Lake Gen3 merge batch, real-time, and AI-powered analytics with one view—simplifying data sharing, access controls, and cost management.[9]
- **Hybrid & Multi-Cloud Data Management:** Azure Arc and expanded protocol/API support mean you manage and share data wherever it lives [cloud, on-prem, multi-cloud], all from a unified fabric.[2][1]

Azure Data Platform Features



Modern Azure Data Sharing Workflow

1. **Define Data:** Identify files, databases, or real-time streams for sharing.
2. **Set Permissions:** Use RBAC, ACLs, managed identities, and Azure policies for access control.
3. **Share Data Securely:** Use services like Data Share for snapshots, Data Factory for pipelines, or Event Grid for real-time events—with automated lifecycle, backup, and monitoring tools baked in.

Azure Data Sharing Hierarchy

