Azure NoSQL Offerings

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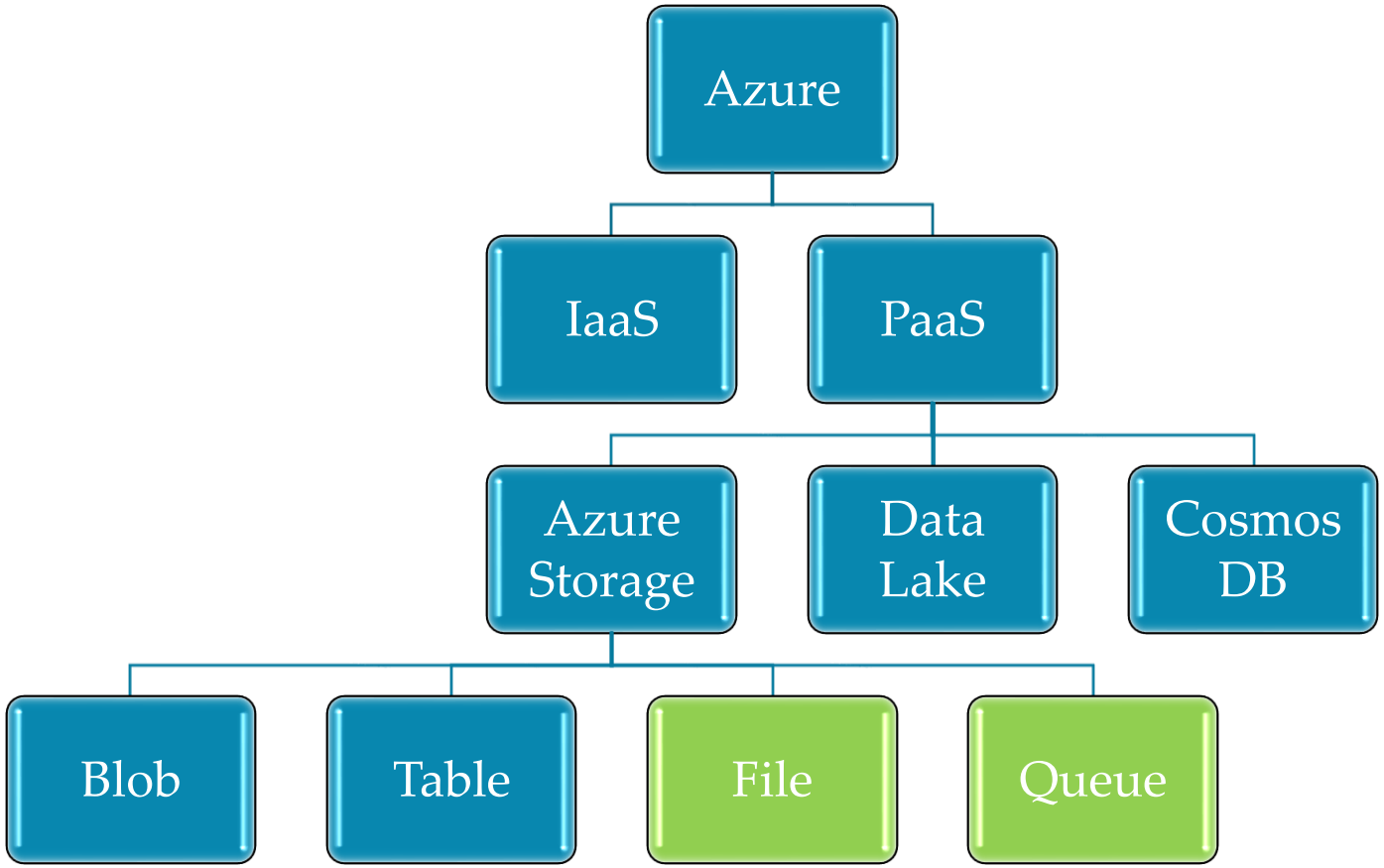
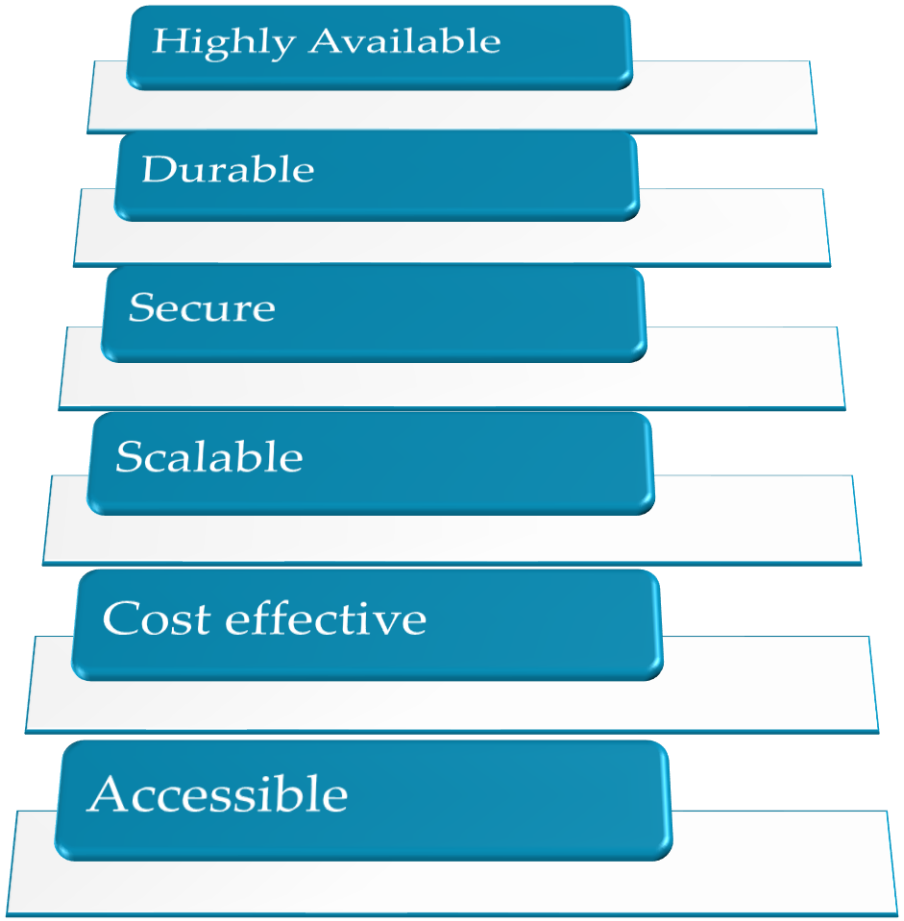
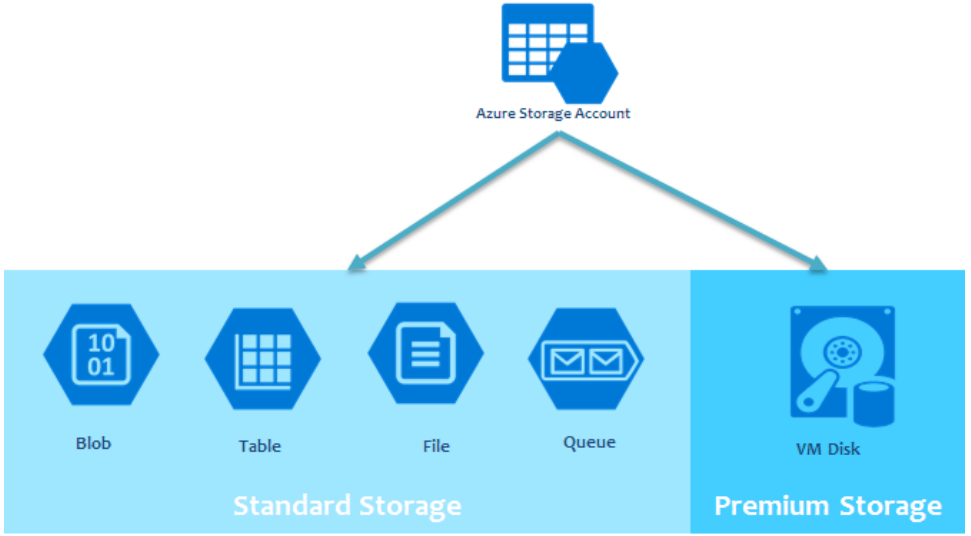
NoSQL Offerings by Microsoft Azure

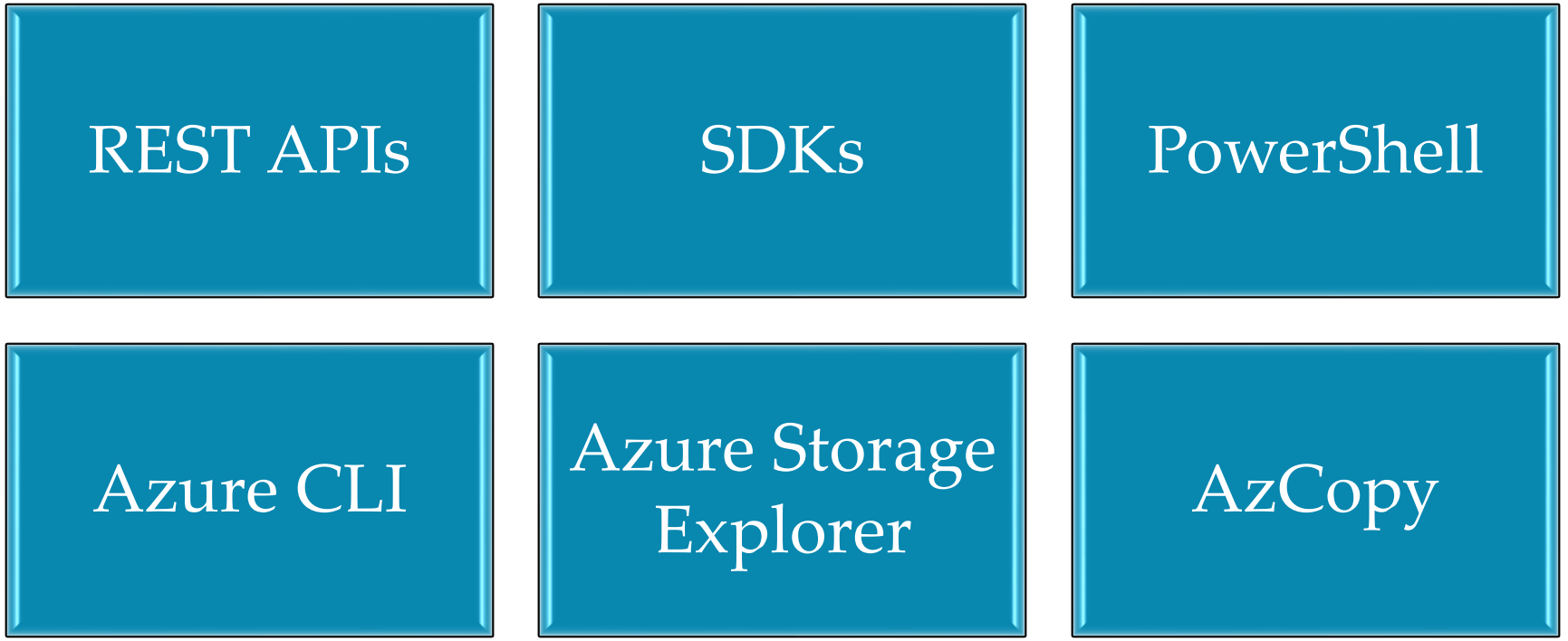


Microsoft Azure Storage

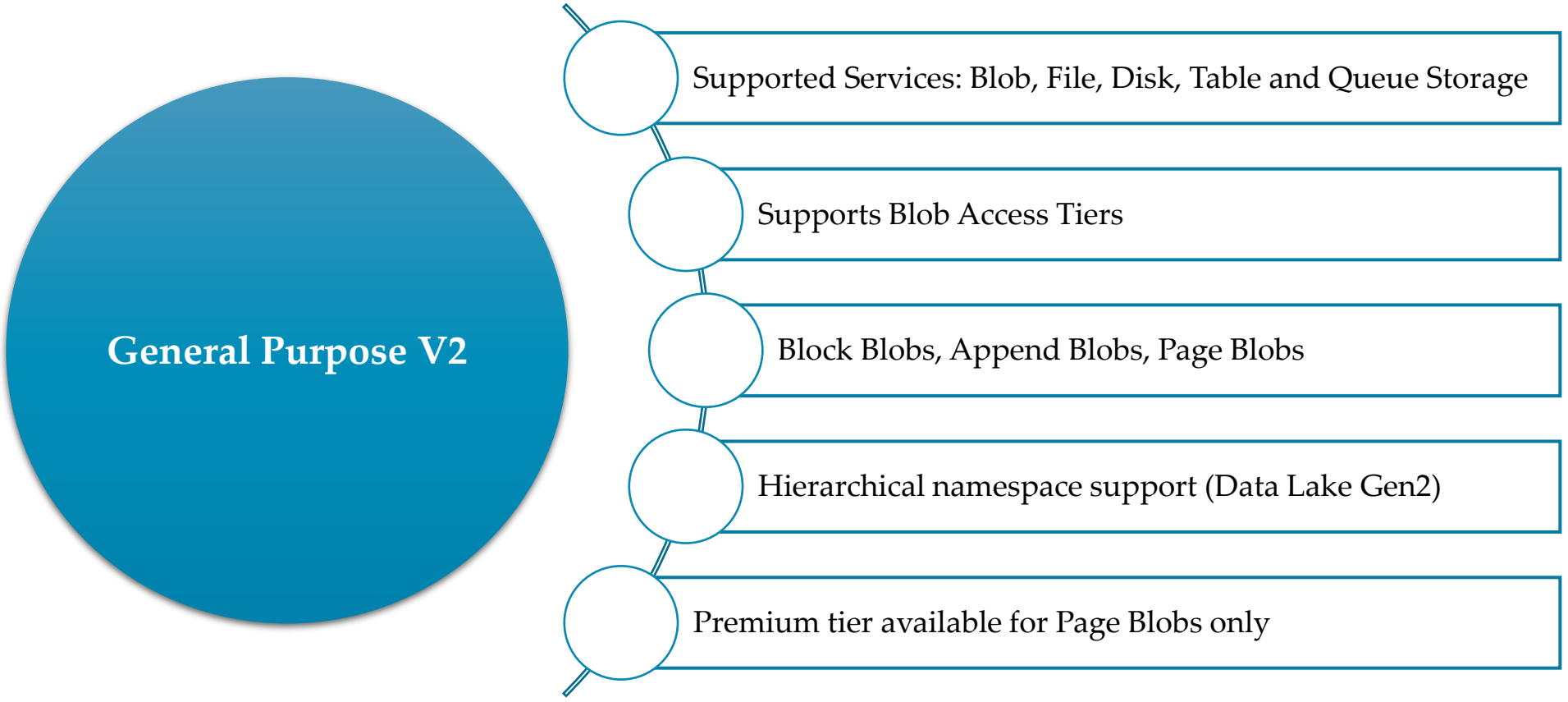




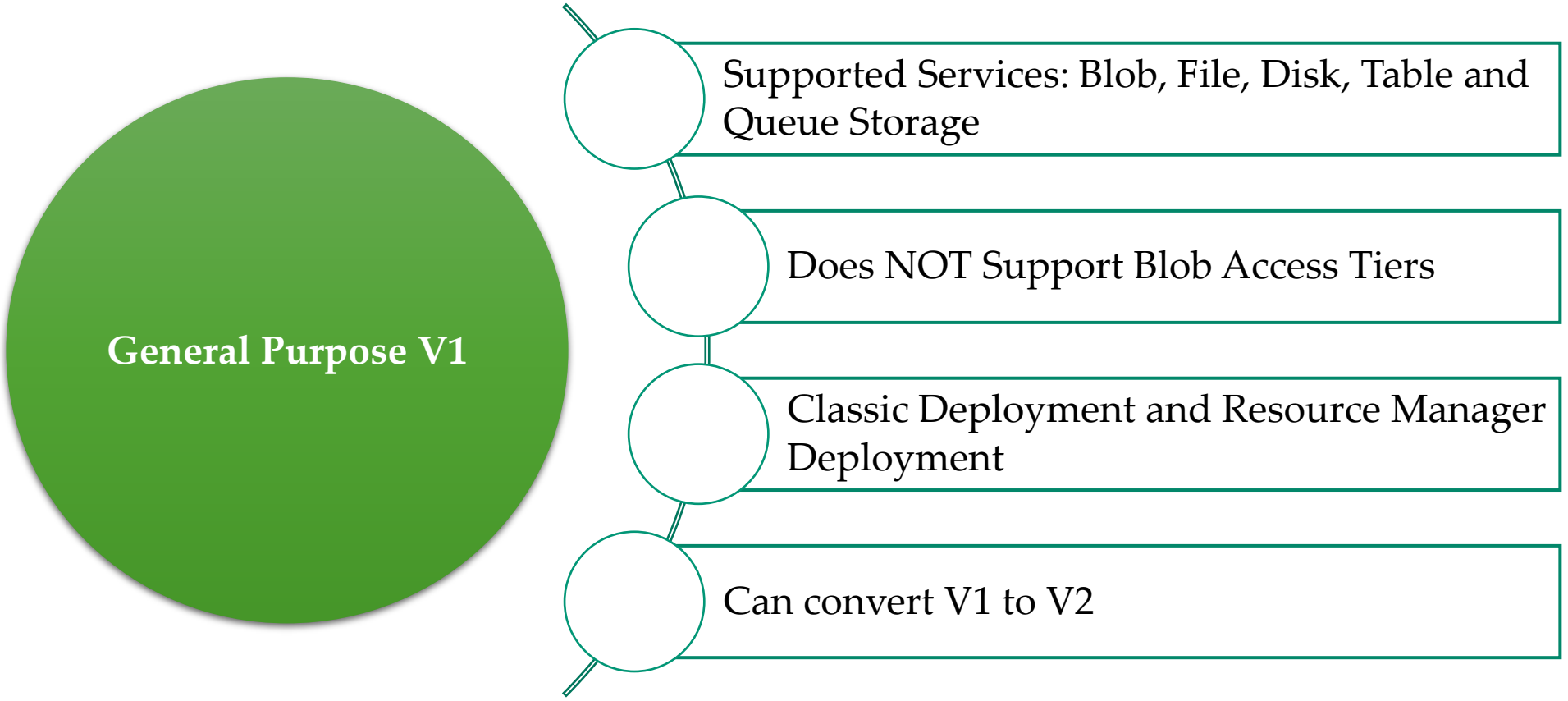
Programmatic Access to Storage Accounts



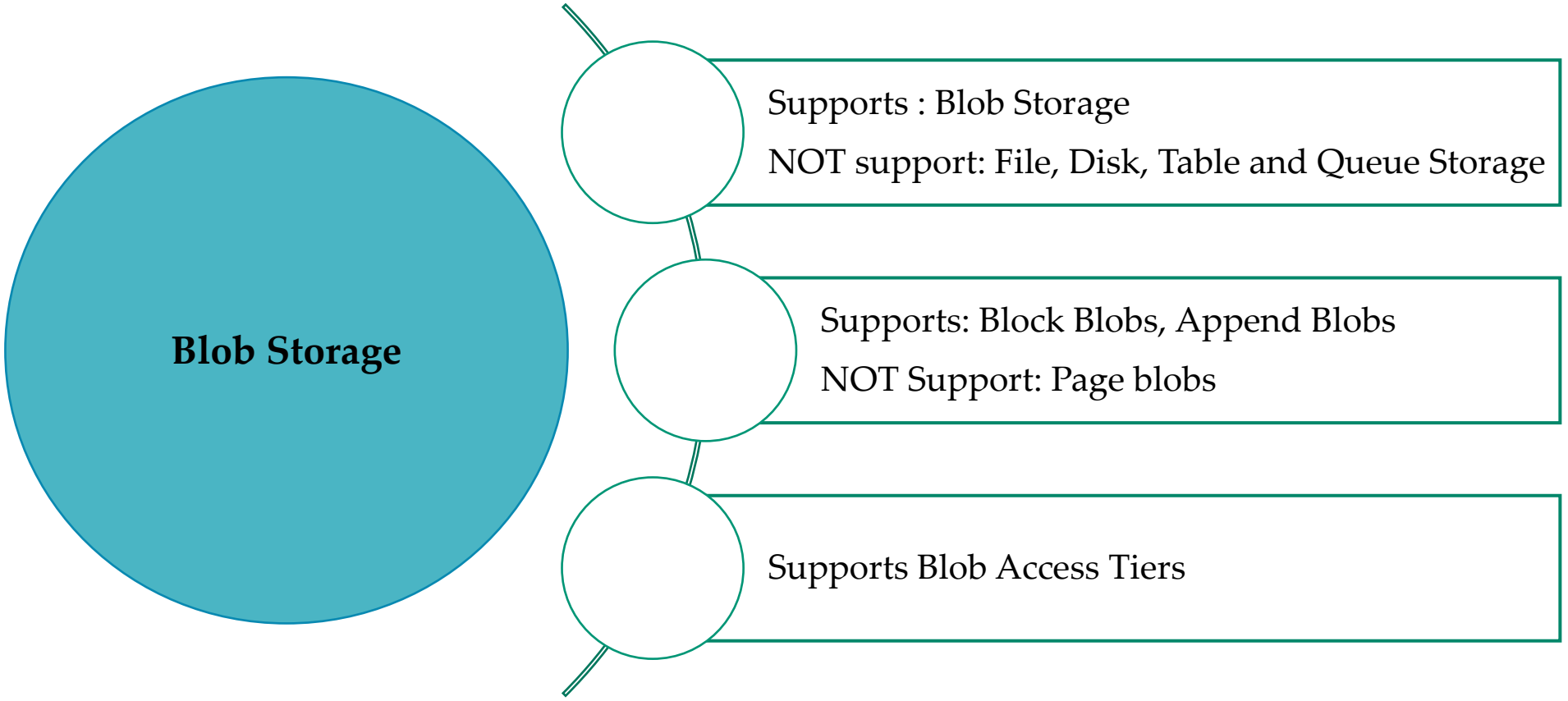
Azure Storage Account Type



Azure Storage Account Type



Azure Storage Account Type



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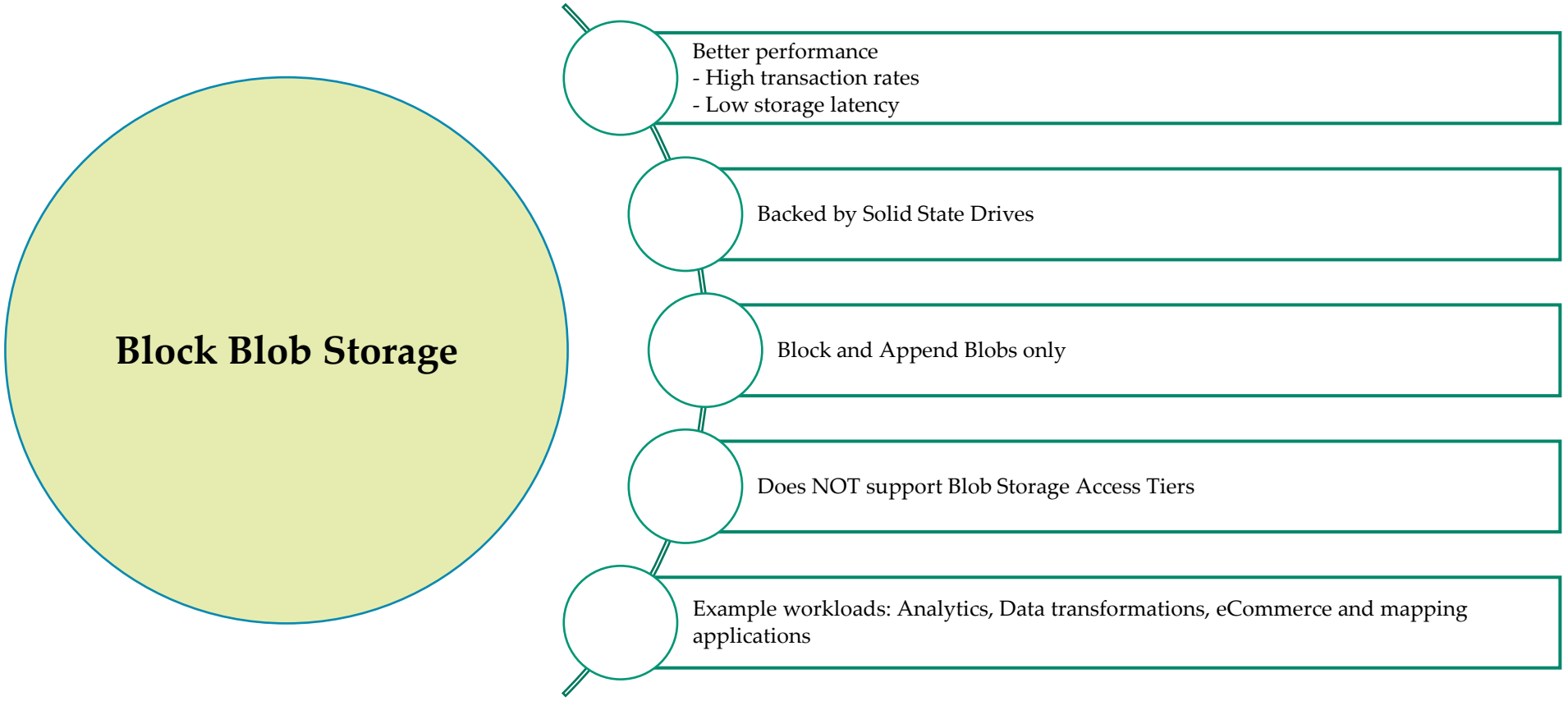
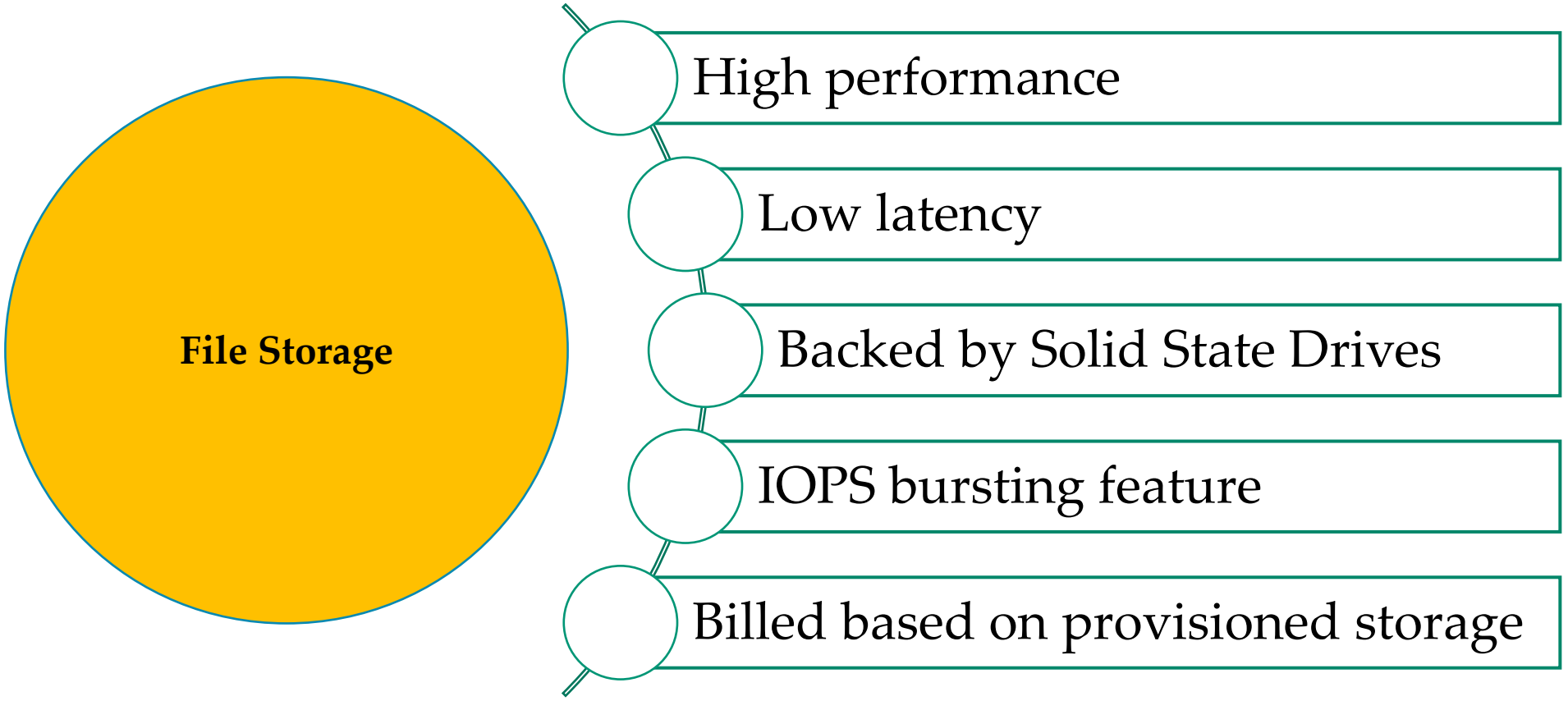
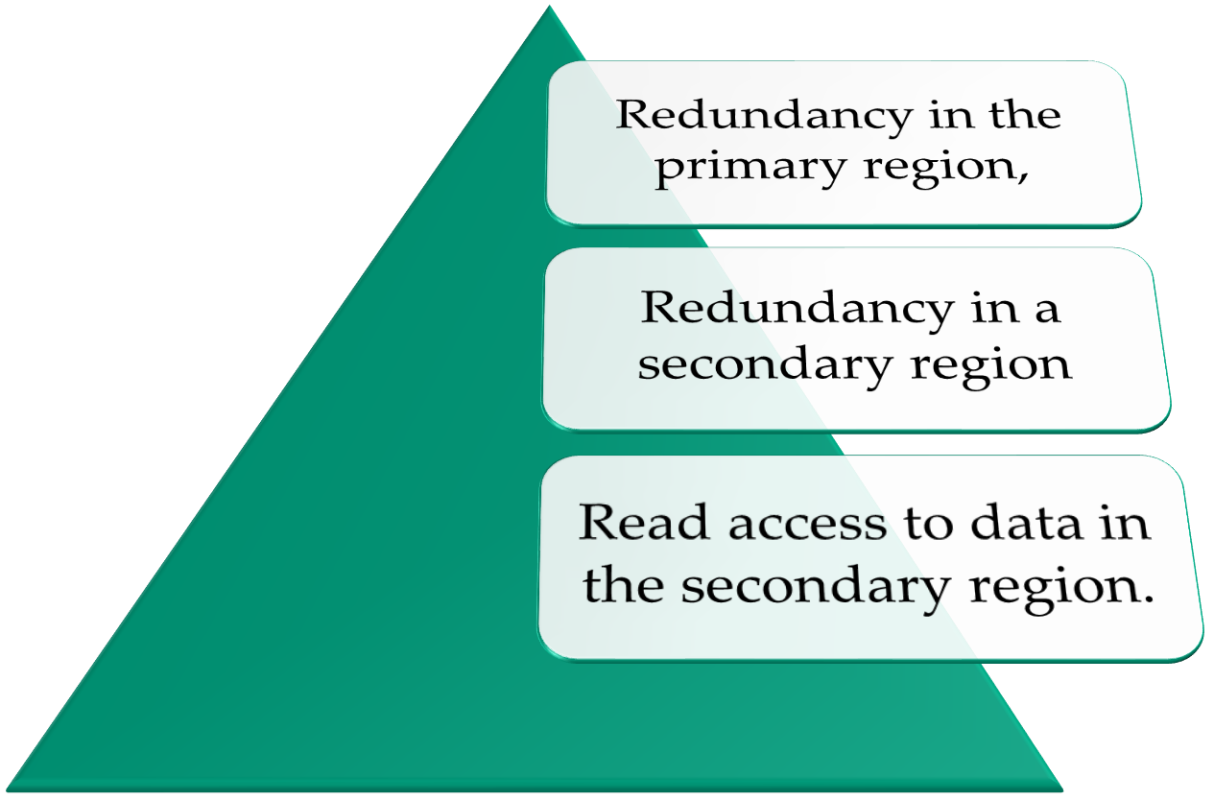


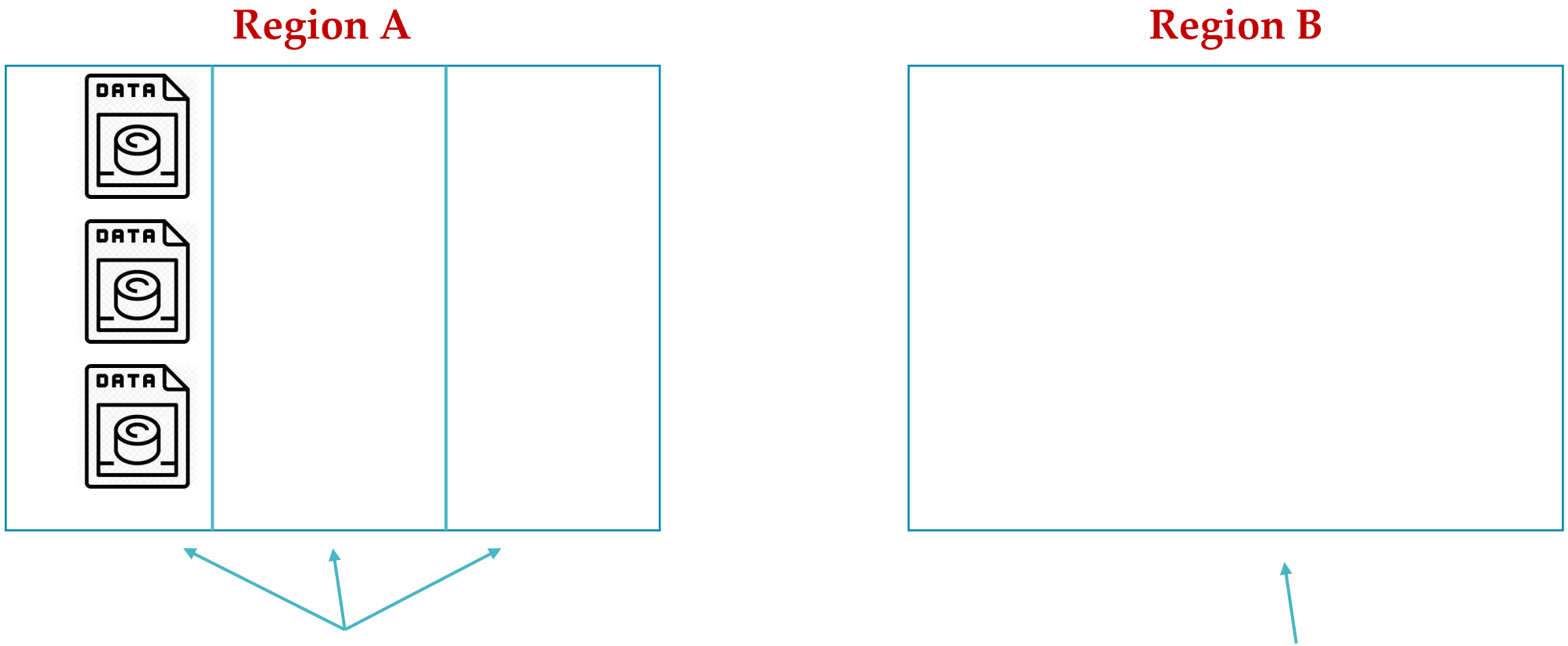
Azure Storage Account Type



Three categories of replication options



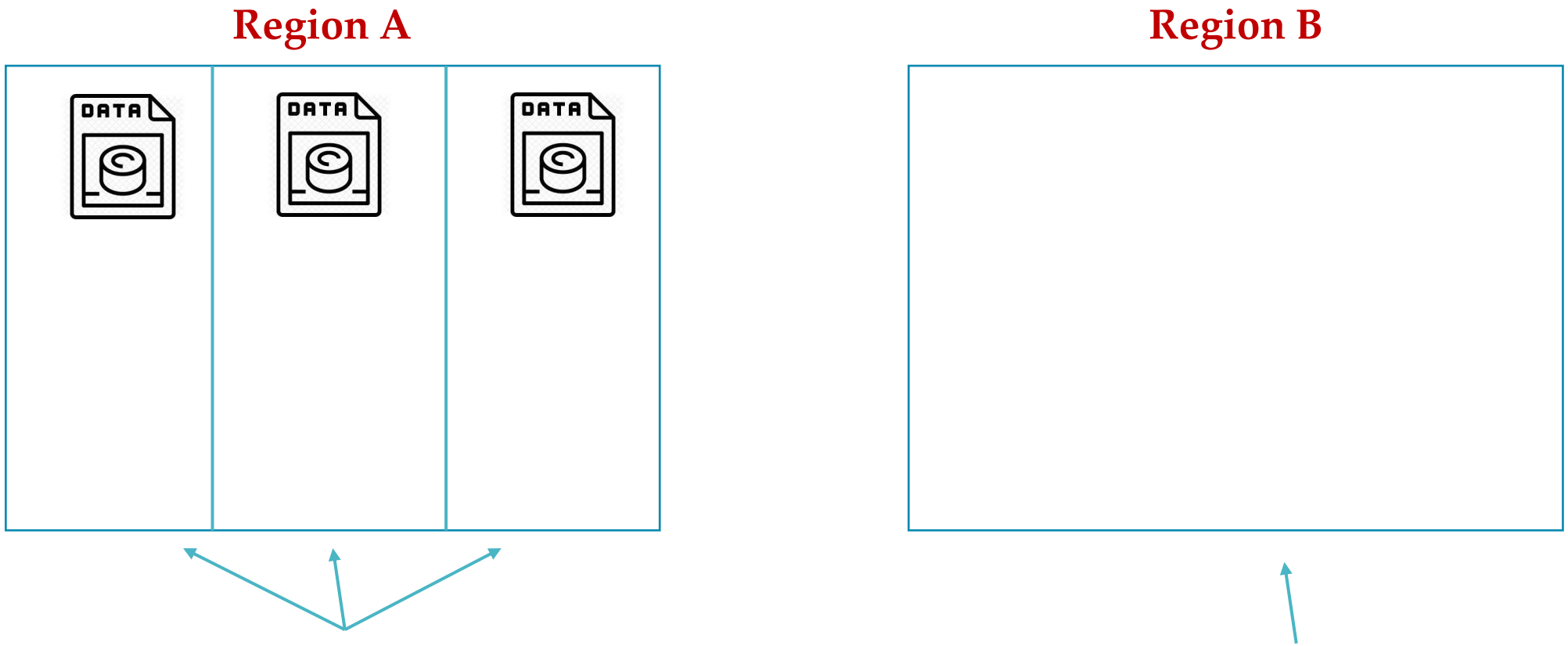
Locally Redundant Storage (LRS)



Storage Clusters
Each cluster is physically separate in what's called an availability zone, with its own separate utilities and networking.

Region B
Hundreds of miles away from the primary region to prevent data loss in the event of a natural disaster.

Zone Redundant Storage (ZRS)



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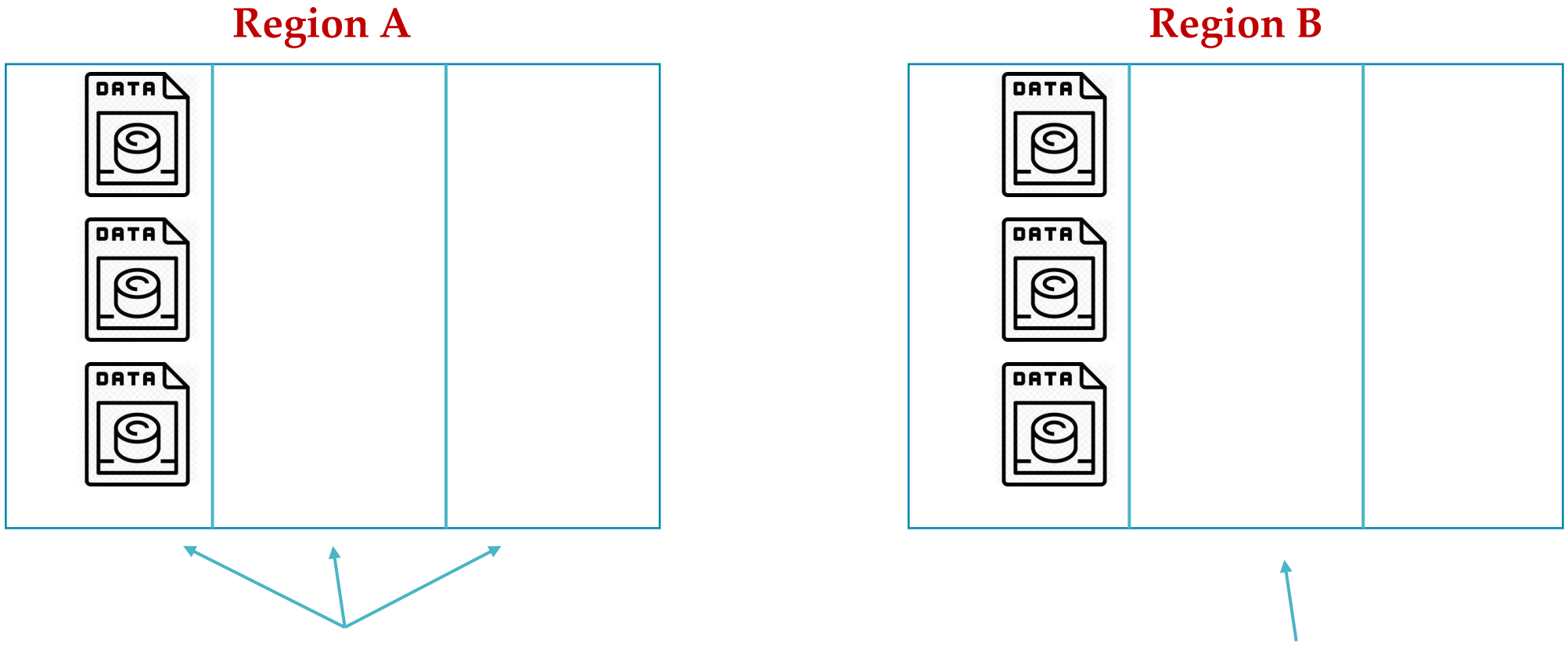
Geo Redundant Storage (GRS)



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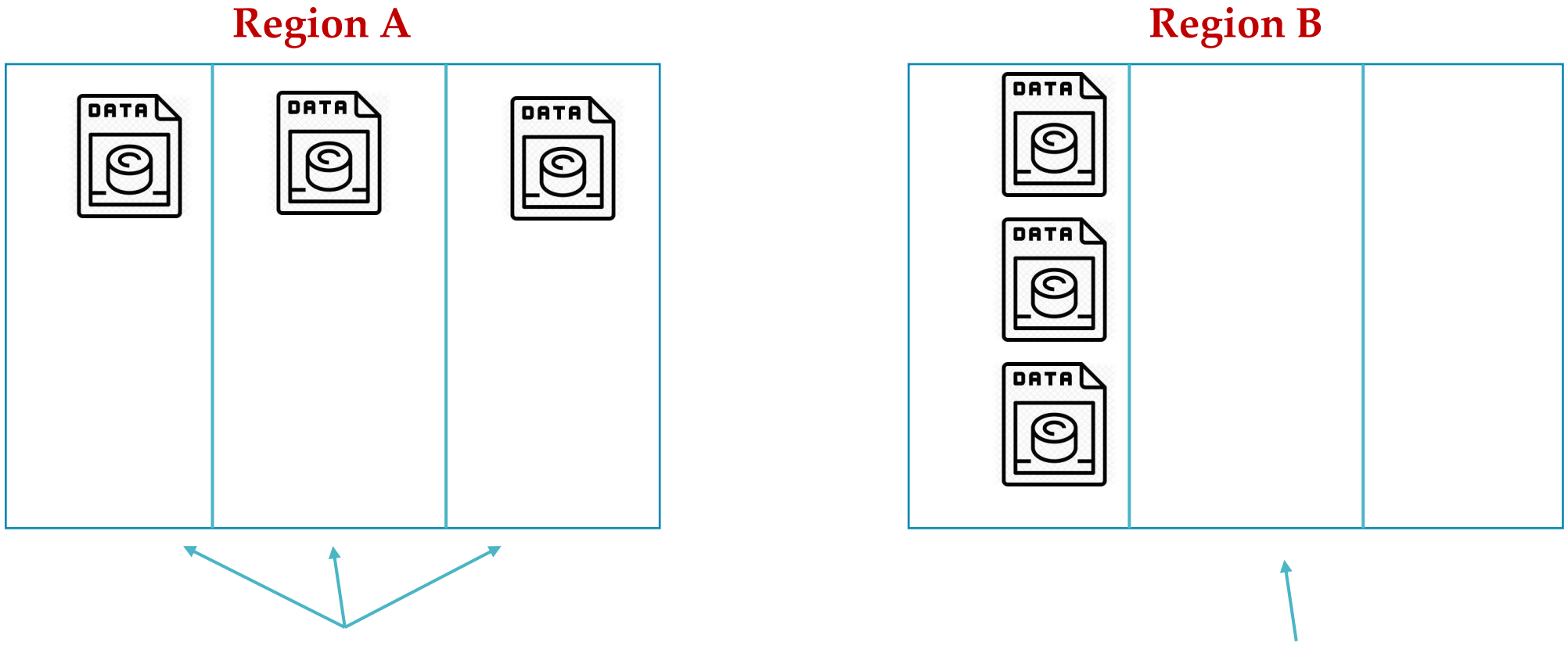
Geo Zone Redundant Storage (GZRS)



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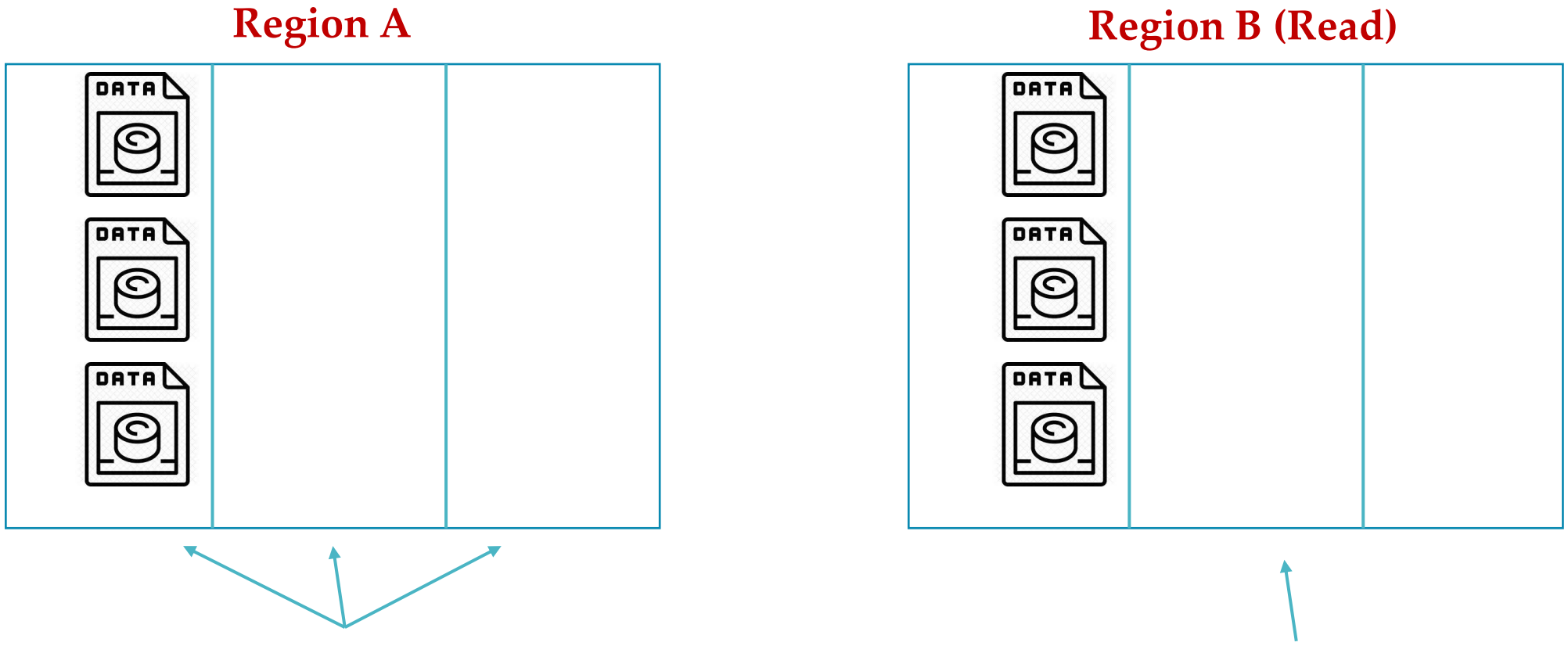
Read access geo Redundant Storage (RA-GRS)



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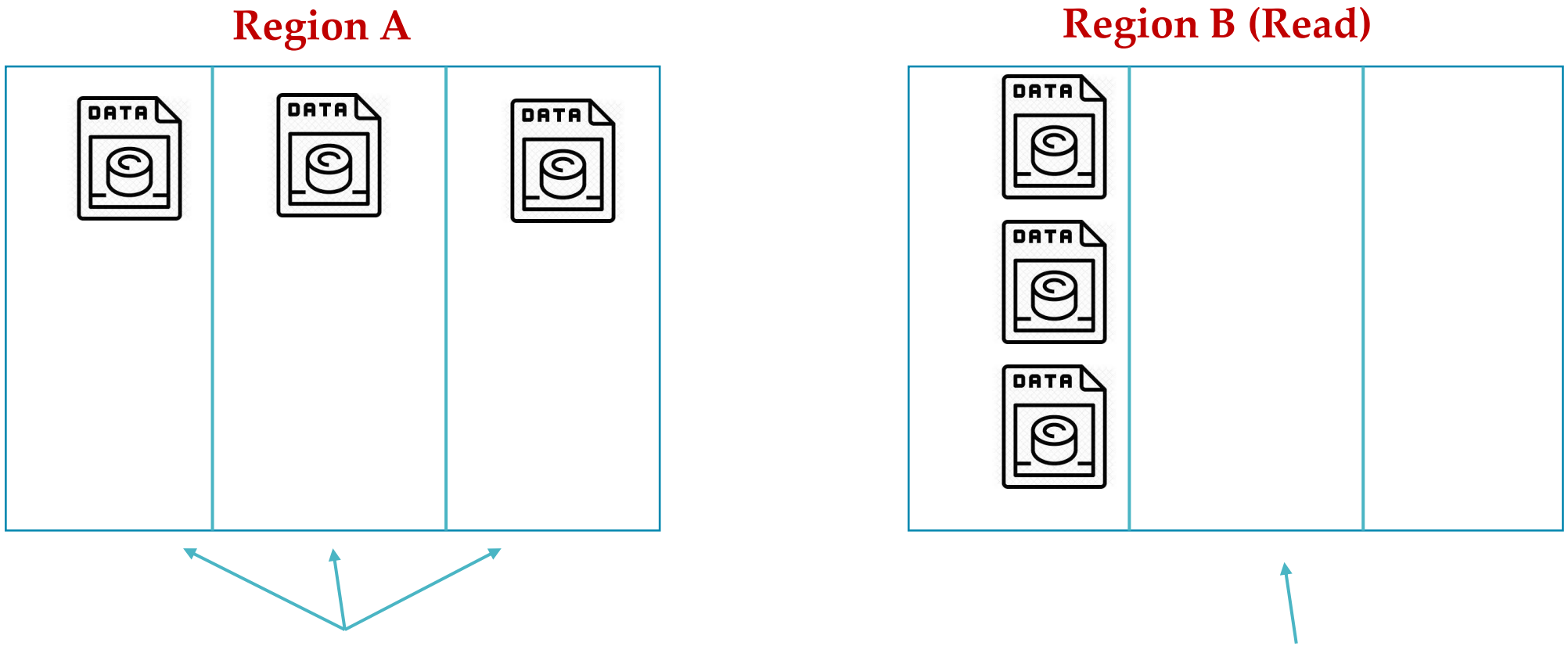

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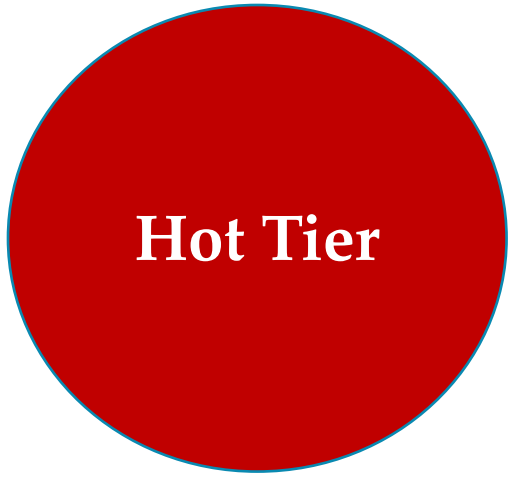
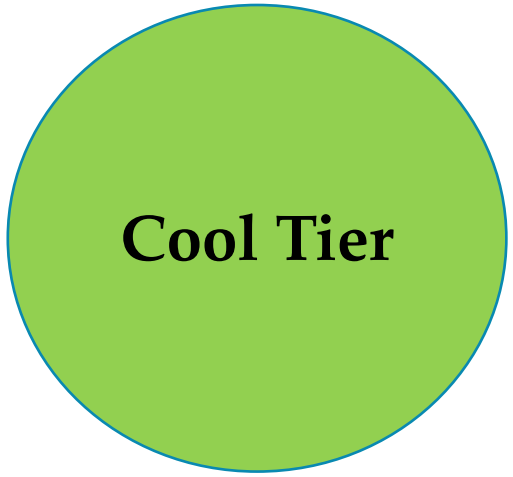
Blob Access Tiers



Highest storage cost
Lowest data access cost



Lowest storage cost
Higher data access cost

Lowest storage cost
Highest data retrieval cost
Data is offline

Azure Blob Storage

- Designed for images and unstructured Data
  - Store Documents and access in browser
  - Database backup
  - Store audio and video files and stream them
  - Store data for analysis
  - Log files
- Scalability
- Cheapest way to store data in azure
- Simple design and easy to use
- HDFS and blob storage REST APIs

Blob Types

- **Block Blog**
  - Composed for Blocks
- **Append Blob**
  - Can only append blocks
  - Ideal for logs
- **Page Blob**
  - VM disks and databases
  - Frequent random read/write applications

Use cases

- Only basic storage is needed
- Data is unstructured
- Data that is older or not used as much
- Money is an issue

Advantages of Blob storage

- Extremely cheap
- Simple to setup
- No configuration
- Doesn't require powerful computing to manage

Limitations of Blob storage

- No Indexes
- No Search Tools
- Not optimized for performance
- You are responsible for replication and synchronization
- Requires external compute to process