Microsoft

Azure Data Academy

Azure Database for MySQL – Flexible Server

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Azure Database for MySQL
Live Roadmap and Q&A Session

- Join us for a LIVE Roadmap and Q&A session on July 14, 2022 1pm ET
- Inside look at the Azure Database for MySQL Roadmap and schedule
- Ask questions
- Other sessions in the series: https://aka.ms/ada
- Register at https://aka.ms/mysqlroadmap

This session is intended for Microsoft Partners under NDA. When registering, be sure to use your company e-mail address and we can only authorize attendance from partners under NDA. This session will not be recorded.

Microsoft

HA/DR Overview

Azure Database for MySQL – Flexible Server

May 2022

Azure Database for MySQL deployment options

Flexible Server

Maximum control for your databases with more cost optimization controls

Example use cases

- Application developments requiring more control and customizations
- Mission-critical apps needing high availability and fine-grained maintenance scheduling
- Applications requiring variable compute capacity to optimize costs

Single Server

Fully-managed, MySQL database service with built-in HA

Example use cases

- Cloud native applications designed to handle automated patching
- Online web applications with minimal requirements for database customizations
- Applications without zonal redundancy requirements

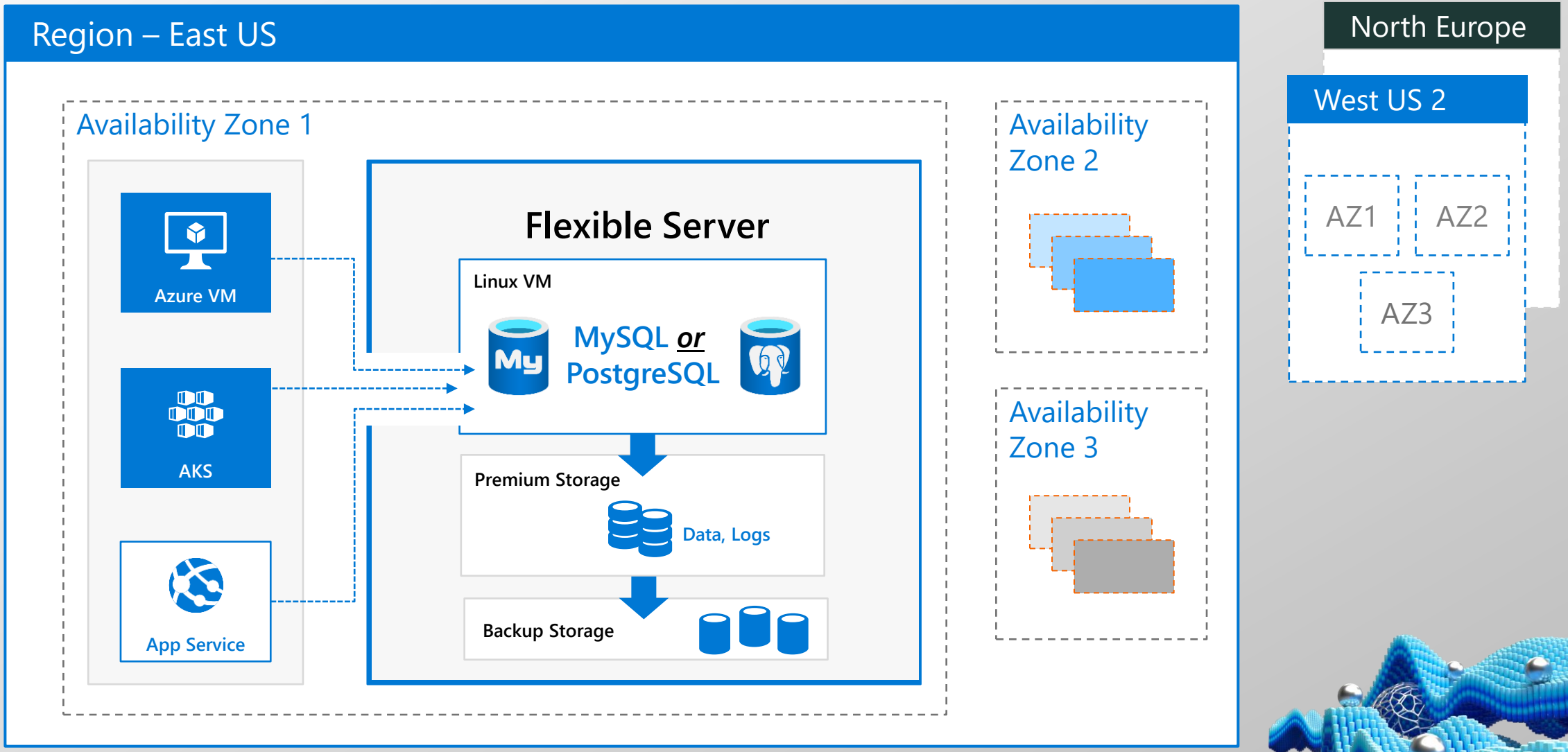
Performance tiers

Compute Tier	Burstable	General Purpose	Memory Optimized
Target Workloads	Best for workloads that don't continuously need the full CPU. **Example**: An office check-in/out application, which only needs CPU bursts during business hours.	Best for most business workloads that require balanced compute and memory with scalable I/O throughput. **Example**: Hosting web and mobile apps and other enterprise applications.	Best for high-performance database workloads that require in-memory performance for faster transaction processing and higher concurrency. **Example**: Processing real-time data and high-performance transactional or analytical apps.
VM series	B-series	Ddsv4-series	Edsv4-series
vCores	1, 2	2, 4, 8, 16, 32, 48, 64	2, 4, 8, 16, 32, 48, 64
Memory per vCore	Variable	4 GiB	8 GiB
Storage size	20 GiB to 16 TiB	20 GiB to 16 TiB	20 GiB to 16 TiB

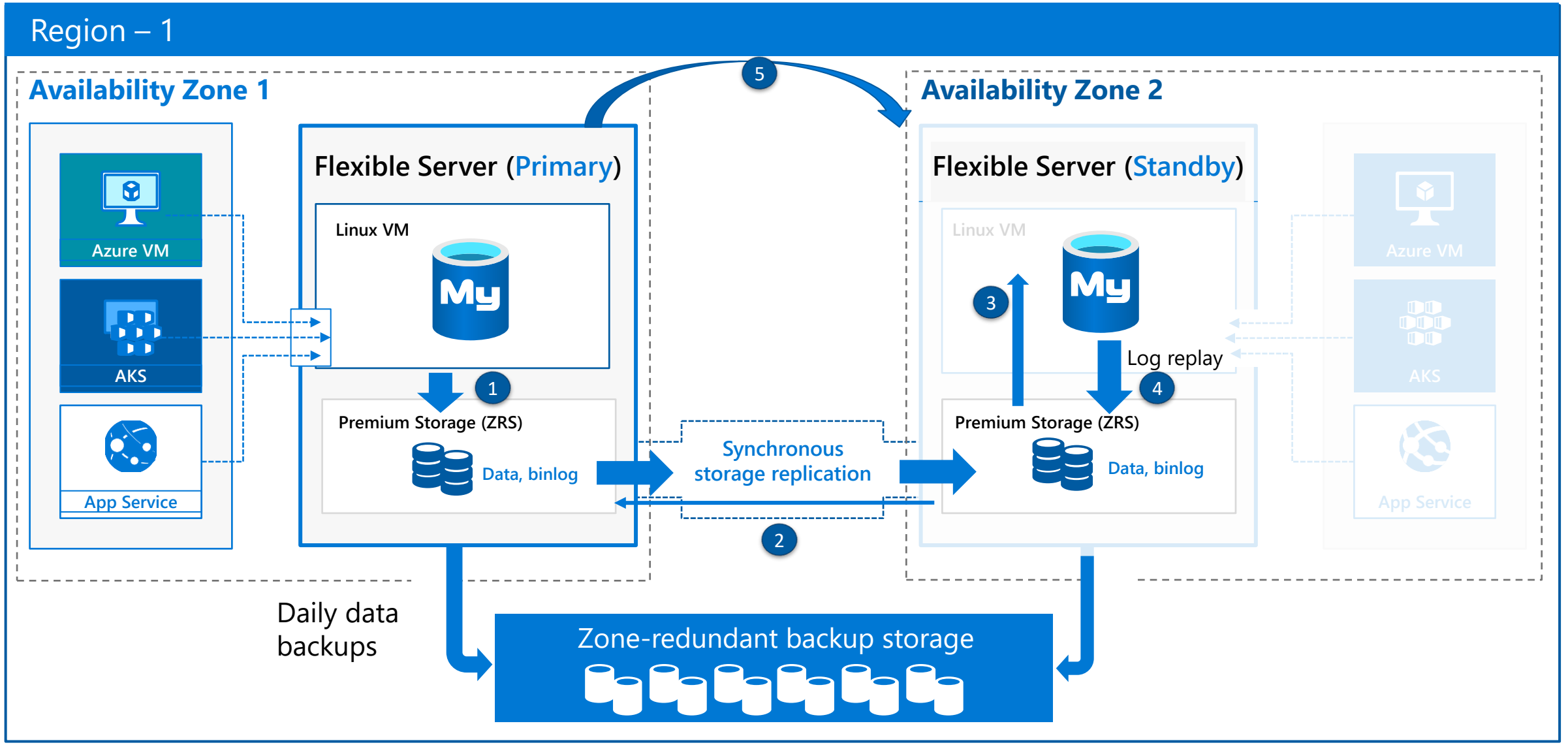
Overview of Business Continuity Options

HA/DR Option	Description	Restrictions	Up-time SLA
Backup & Restore	Auto backups with an option to retain backups 1-35 days.	Backups remain within the region.	99.9%
Local Redundant Backup	Backups are automatically and securely stored in a local redundant storage within a region and in same availability zone.	Applicable in all regions.	NA
Geo-Redundant Backup	Backups are copied in the paired region of the primary region where Azure DB for MySQL Flexible Server is provisioned.	Available in all Azure paired regions	NA
Zone-Redundant HA	Primary and Standby Flexible Server instances are deployed in two different availability zones within a region.	Available only in regions where multiple zones are available.	99.99%
Same Zone HA	Primary and Standby Flexible Server instances are deployed in the same zone within a region. Preferred for infrastructure redundancy with lower network latency	Same-zone HA is available in all Azure regions	99.95%
Cross-Region Read-replica	Fail-over to a cross-region read-replica in the event of a primary database outage due to a zone-level or a region-level fault.	Coming Soon	NA

Flexible Server Architecture



Flexible Server Zone-redundant HA architecture



1 Log flush on commit

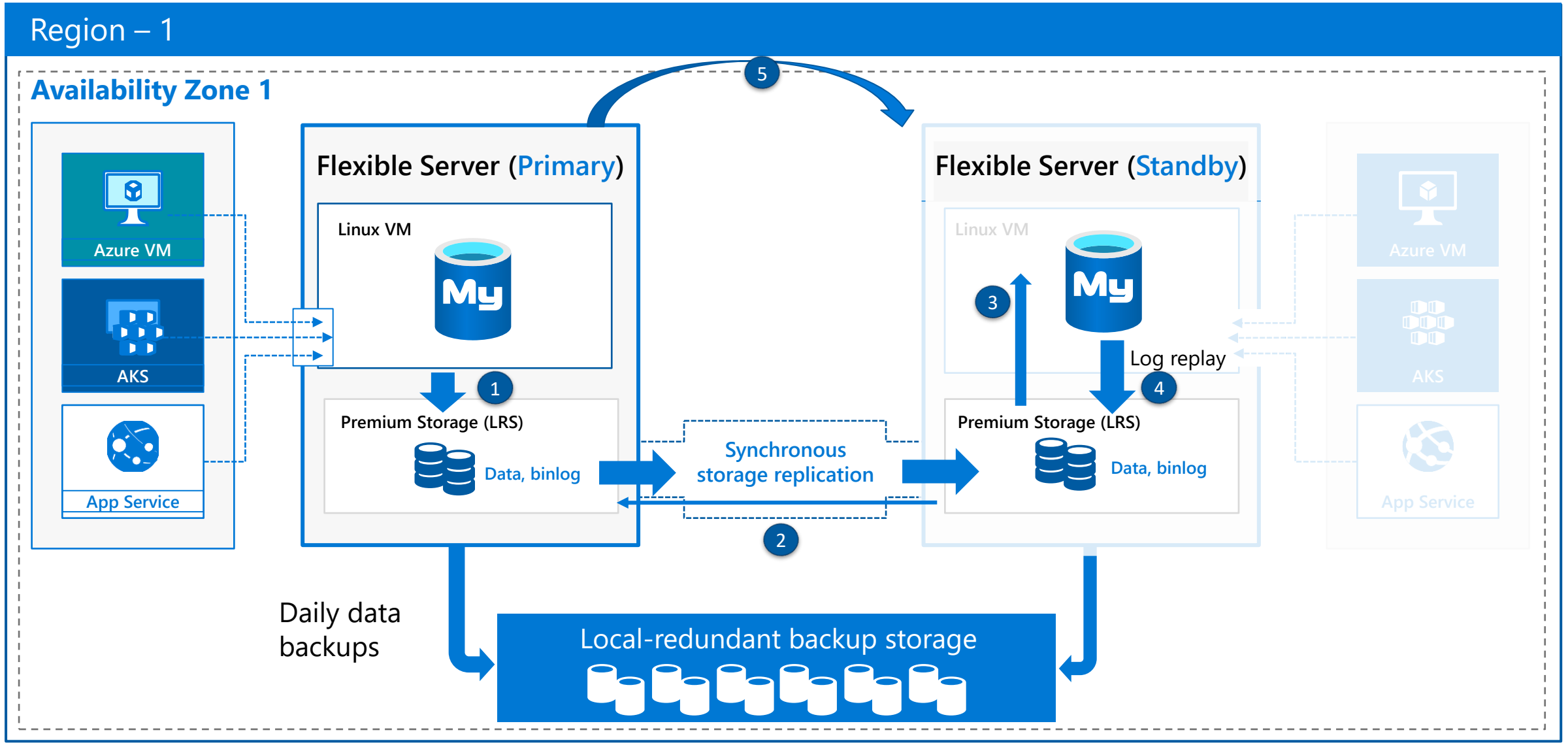
2 Synchronous storage replication

3 Read binlog

4 Log replay

5 Automatic failover

Flexible Server Same-zone HA architecture



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