DR Scenario 1

RPO= 1 hr, RTO= 8 hrs, High Availability Required

HA Cluster

Primary Data Center

Automatic Failover → Secondary Data Center
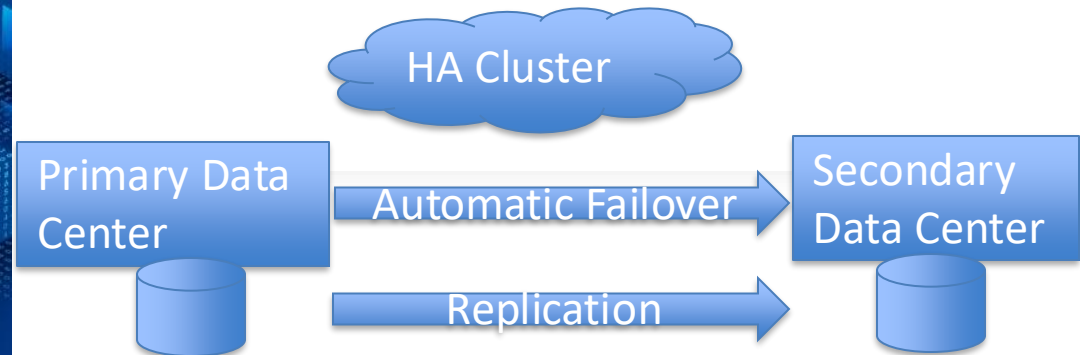
Replication →

Design: Active-Active Data Centers with Replication

Description:

- Two data centers in Active-Active configuration.
- Synchronous replication between data centers to achieve RPO of 1 hour.
- Automatic failover to secondary data center in case of failure.
- High availability ensured with minimal downtime (RTO = 8 hours).

DR Scenario 2

RPO= 24 hrs, RTO= 72 hrs, High Availability Not Required

| Primary Data Center | Manual Failover → | Secondary Data Center |

Design: Active-Passive Data Centers with Daily Backup

Description:

- Primary data center actively serving applications.
- Asynchronous backups taken every 24 hours.
- Manual failover to passive data center in the event of failure.
- Higher RTO of 72 hours, no high availability required.

DR Scenario 3

RPO= 5 mins, RTO= 1 hr, High Availability Required

HA Cluster

Primary Data Center → Automatic Failover → Secondary Data Center
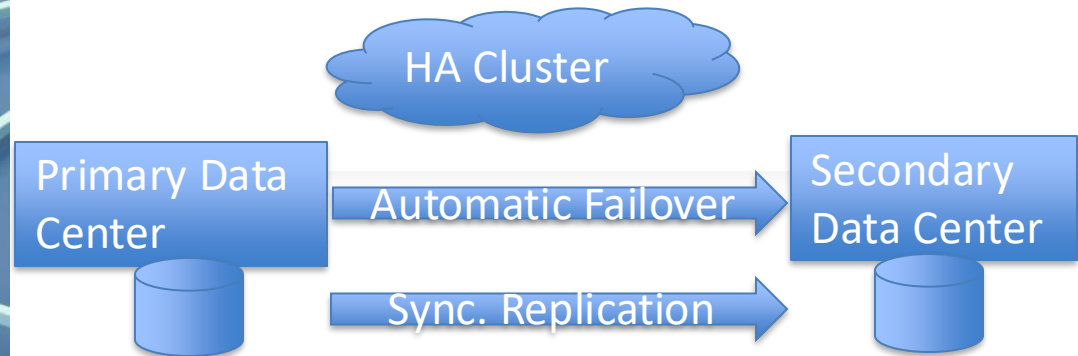
Sync. Replication →

Design: Active-Active Data Centers with Synchronous Replication

Description:

- Two data centers in Active-Active configuration.
- Synchronous replication ensures RPO of 5 minutes.
- Automatic failover within 1 hour to meet RTO requirement.
- High availability is provided with near-zero downtime.