Management Group

Subcription

AZURE SQL DATABASE

Reesource Group

viritual network

Frontend Subnet

VM VM

Backend

VM VM

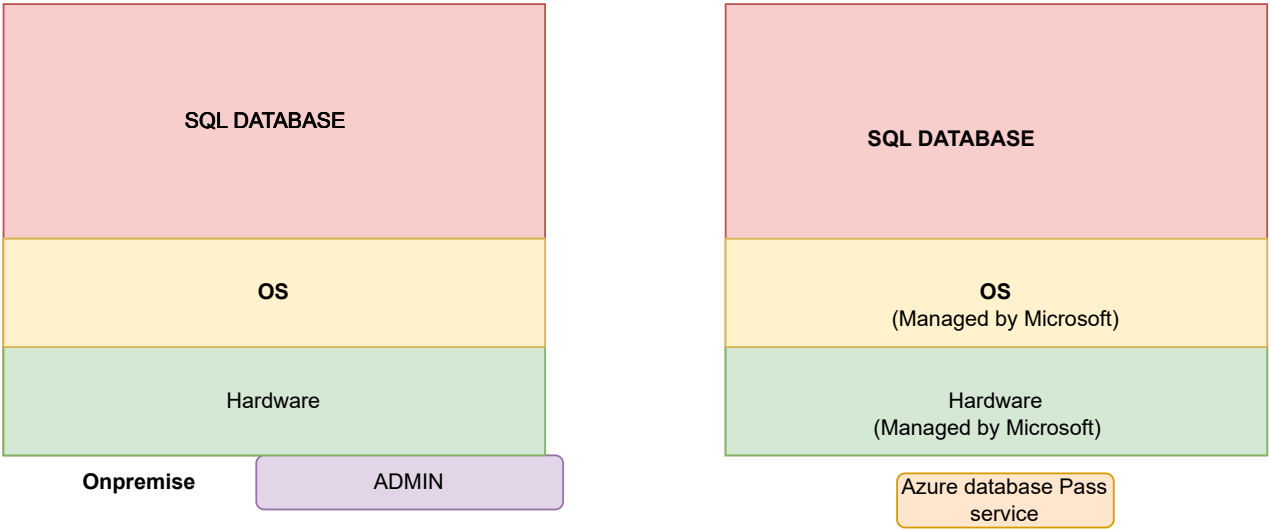AzureBastion

Bastion

Azure SQL Database

why we use azure sql database paas service for database

Azure SQL Database PaaS (Platform as a Service) is used for databases because it provides a fully managed, scalable, and secure environment with minimal administrative overhead. Here's why organizations prefer it:

- **Fully Managed: Microsoft handles database patching, backups, monitoring, and maintenance, reducing the administrative burden.**
- **Scalability: Supports dynamic scaling of resources, allowing businesses to adjust performance as needed without downtime.**
- **High Availability: Built-in high availability (99.99% SLA) with automatic failover and geo-replication options.**
- **Security: Offers advanced security features like Transparent Data Encryption (TDE), Advanced Threat Protection, and built-in compliance.**
- **Backup & Restore: Automated backup with point-in-time restore, long-term retention, and geo-redundant backups.**
- **Performance Optimization: Uses AI-driven performance tuning, indexing, and query optimization.**
- **Integration with Azure Services: Seamlessly integrates with Azure services like Power BI, Azure Functions, and Logic Apps.**
- **Cost-Effective: Pay-as-you-go pricing model with options like serverless computing, reducing costs based on actual usage.**
- **No Infrastructure Management: No need to worry about hardware, OS upgrades, or software patches.**
- **Global Availability: Deploy databases in multiple regions to support worldwide applications.**

This makes Azure SQL Database an ideal choice for modern applications, SaaS solutions, and businesses looking for a hassle-free cloud database solution.

SQL DATABASE
OS
Hardware

Onpremise   ADMIN

SQL DATABASE
OS (Managed by Microsoft)
Hardware (Managed by Microsoft)

Azure database Pass service

Step1-Database workload ko assigment

Assignment ke lie azure SQL Database DTU Calculator use karenge

Note:--Working day-- 48 hours Script run karenge