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|  | **SQL Server on Azure VMs** | **Azure SQL Managed Instance** | **Azure SQL Database** |
| Type of cloud service | IaaS | PaaS | Paas |
| SQL Server compatibility | Fully compatible with on-premises physical and virtualized installations. Applications and databases can easily be "lift and shift" migrated without change. | Near-100% compatibility with SQL Server. Most on-premises databases can be migrated with minimal code changes by using the [Azure Database Migration service](https://learn.microsoft.com/en-us/azure/dms) | Supports most core database-level capabilities of SQL Server. Some features depended on by an on-premises application may not be available. |
| Architecture | SQL Server instances are installed in a virtual machine. Each instance can support multiple databases. | Each managed instance can support multiple databases. Additionally, instance pools can be used to share resources efficiently across smaller instances. | You can provision a single database in a dedicated, managed (logical) server; or you can use an elastic pool to share resources across multiple databases and take advantage of on-demand scalability. |
| Management | You must manage all aspects of the server, including operating system and SQL Server updates, configuration, backups, and other maintenance tasks. | Fully automated updates, backups, and recovery. | Fully automated updates, backups, and recovery. |
| Use cases | Use this option when you need to migrate or extend an on-premises SQL Server solution and retain full control over all aspects of server and database configuration. | Use this option for most cloud migration scenarios, particularly when you need minimal changes to existing applications. | Use this option for new cloud solutions, or to migrate applications that have minimal instance-level dependencies. |

# Azure SQL service