





## laas vs Managed Instance

One student asked me question about difference between laas vs Managed instance. I find that question interesting so adding comparison below.

This slide I have taken from PASS submit. I'll create video on this slide later, meanwhile you can refer this.

Main differences			
SQL Server on VM	Managed instance in SQL Database	Single database / elastic pool in SQL Database	
<ul> <li>You have full control over the SQL Server engine</li> <li>Up to 99.95% availability</li> <li>Full parity with the matching version of on-premises SQL Server</li> <li>Fixed, well-known database engine version</li> <li>Previous engine versions support</li> <li>Easy migration from SQL Server on-premises</li> <li>Private IP address within Azure Vnet</li> <li>You have ability to deploy application or services on the host where SQL Server is placed.</li> </ul>	<ul> <li>Built-in backups, patching, recovery</li> <li>Latest stable Database Engine version (lower comp. level supported)</li> <li>Easy migration from SQL Server. Private IP address within Azure Vnet</li> <li>Built-in advanced intelligence and security</li> <li>Online change of resources (CPU/storage)</li> <li>Automatic tuning available</li> </ul>	<ul> <li>The most commonly used SQL Server features are available</li> <li>99.99% availability guaranteed</li> <li>Built-in backups, patching, recovery</li> <li>Latest stable Database Engine version (lower comp. level supported)</li> <li>Ability to assign necessary resources (CPU/storage) to individual databases</li> <li>Built-in advanced intelligence and security</li> <li>Online change of resources (CPU/storage).</li> <li>Automatic tuning available</li> </ul>	

## Comparison of Limitations

SQL Server on VM	Managed instance in SQL Database	Single database / elastic pool in SQL Database
• SQL Server instances with up to 64 TB of storage	• Up to 8 TB storage	• Databases of up to 100 TB
• 32,767 databases per instance	• Up to 100 databases per instance	• Up to 5000 databases per server
Supports Cross-database queries	• Supports Cross-database queries	• Does not support Cross- database queries