Web Services and Applications Deployment Guide

Initialize Microsoft SQL Server

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This article describes the initialization steps for Microsoft SQL Server (MS SQL) and the hardware requirements for different deployment setups.

> **Important**
>
> Microsoft SQL Server is only required if Web Services and Applications stores persistent data such as:
>
> - Custom Contacts
> - Custom Settings

The initialization step for MS SQL Server involves creating a database name. Use the following script to create the database name:

```
CREATE DATABASE [gws_gws]
```

This script creates database name for any deployment environment such as development setup, single-node or two-node data centers.

> **Important**
>
> For MS SQL Server, database schema creation is not a mandatory step.

Review the following tables to understand the hardware requirements of MS SQL server for different environments.

Development environment

Requirements	Description
MS SQL version	2019 Developer edition
AOAG Required	Optional
Nodes	Minimum 1 Nodes
Memory	At least 4 GB per Node and should be increased as database size increases to ensure optimal performance.
Processor	2 cores

Requirements	Description
Hard Disk / Storage Disk	10 GB
Networking	Localhost or internal network access.
Persistence	Database backup mechanism for data persistence.

Single data center

Requirements	Description
MS SQL version	2019 Enterprise edition (with latest CU / Service Pack)
FailOver Cluster	Windows Server Failover Clustering (WSFC)
AOAG Required	Enabled
Nodes	Minimum 2 Nodes
Memory	At least 8 GB per Node and should be increased as database size increases to ensure optimal performance.
Processor	minimum 2 cores per node
Hard Disk / Storage Disk	4 drives (Data, Log, Backup, TempDB), 100GB per drive
Networking	Optimized network configuration for intra-data center communication.
Persistence	Always On Availability Groups or similar technology for synchronous or asynchronous replication between data centers.

Two data centers

Requirements	Description
MS SQL version	2019 Enterprise edition (with latest CU / Service Pack)
FailOver Cluster	Windows Server Failover Clustering (WSFC)
AOAG Required	Enabled
Nodes	Minimum 4 Nodes
Memory	At least 16 GB per Node and should be increased as database size increases to ensure optimal performance.
Processor	Minimum 2 cores per node
Hard Disk / Storage Disk	4 drives(Data, Log, Backup, TempDB), 150 GB per drive
Networking	High-speed, low-latency connections between data

Requirements	Description
	centers
Persistence	Always On Availability Groups or similar technology for synchronous or asynchronous replication between data centers.