Web Services and Applications Deployment Guide

Initialize Postgres

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Initialize Postgres

This article describes the initialization steps for Postgres and the hardware requirements for different deployment setups.

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

To initialize Postgres,

1. Create database using the following script:

```
CREATE DATABASE env
    WITH
    OWNER = env
    TABLESPACE = pg_default
    CONNECTION LIMIT = -1
    IS_TEMPLATE = False;
```

2. Once the database is created, create the schema using the following script:

```
CREATE SCHEMA IF NOT EXISTS gws
    AUTHORIZATION env;
```

> **Important**
>
> Creating database schema is essential for all deployment scenarios, including development environments, single-node, and two-node data centers.

Review the following tables to understand the hardware requirements of Postgres for different environments.

Development environment

Requirements	Description
Postgres Version	13 or 14

Requirements	Description
OS	There is no specific constraints for OS.
Processor Speed	2 cores
Memory	2 GB of RAM
Hard Disk / Storage Disk	512 MB of HDD
Volumes	Additional disk space is required for data or supporting components.
Networking	Localhost or internal network access.
Persistence	Database backup mechanism for data persistence.

Single data center

Requirements	Descriptions
Postgres Version	13 or 14
OS	There is no specific constraints for OS.
Processor Speed	4 cores
Memory	8 GB of RAM
Hard Disk / Storage Disk	10 GB
Volumes	Fast storage subsystem (SSD/NVMe) for database files, separate storage for transaction logs and backups.
Networking	Optimized network configuration for intra-data center communication
Persistence	Periodic database backups for point-in-time recovery.

Two data centers

Requirements	Descriptions
Postgres Version	13 or 14
OS	There is no specific constraints for OS.
Processor Speed	4 cores
Memory	8 GB RAM
Hard Disk / Storage Disk	10 GB
Volumes	Distributed storage solution with redundancy across data centers, fast storage for database files.
Networking	High-speed, low-latency connections between data centers.
Persistence	Streaming Replication or logical replication for

Requirements	Descriptions
	synchronous or asynchronous replication between data centers.