



WHITE PAPER - TRIMIT PORTALS HARDWARE REQUIREMENTS

This document contains information about the Hardware requirements for an installation of TRIMIT Portals and TRIMIT Business Central.

The requirements are made from the experience of numerous installations and should be considered as a minimum requirement for any installation.

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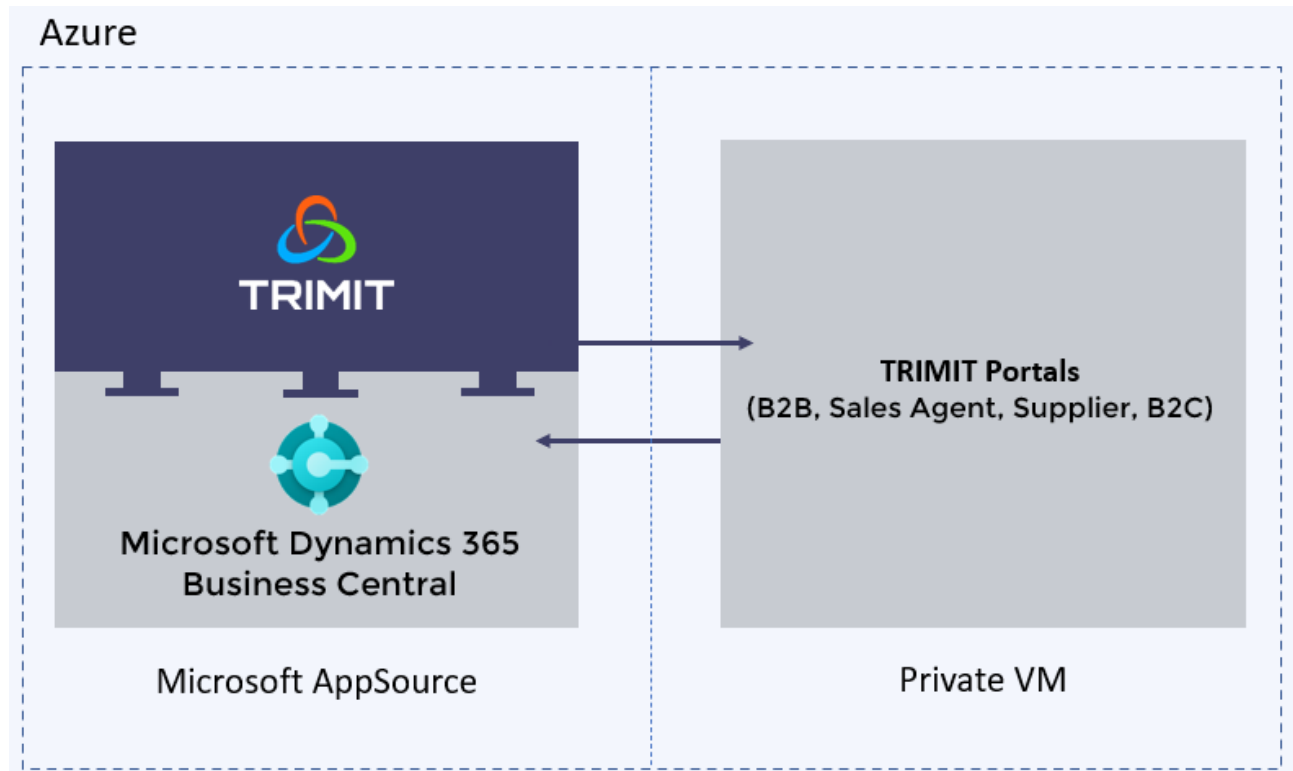
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GENERAL RECOMMENDATIONS

- In hosted environments, make sure that the specifications are dedicated and not shared.
(Sharing will dramatically reduce performance)
- For all recommendations it is assumed to use the latest generation of hardware.
- It is commonly recommended that CPUs are between 1-2 years and not older than 3.
- In some cases, placing portals database and portals website on the same server is a good idea as this can lead to a better communication speed. Data should not pass through any kind of firewall or DMZ zone. But this is not a requirement.
- It is recommended to have as high CPU frequency as possible
- It is better to have low core but high frequency CPUs.
- Also, be aware of Marketing efforts. i.e. an ad on Facebook, can create thousands of hits within short time. It is recommended to scale up for those events.
- Sending emails requires access to SMTP-server. For office 365 anonymous SMTP connector is to be preferred.
- During restart of SQL server, make sure that Web server and Service Tier servers are also restarted, but only after the SQL server is up and running again and is ready for connection.

REQUIREMENTS FOR TRIMIT PORTALS IN CONNECTION TO CLOUD BUSINESS CENTRAL

The following are the minimum requirements for an installation, where the Business Central part is in the Microsoft Cloud. Scaling of webserver resources depends on the load on the portal solutions.



WEB SERVER

- Virtual Machine: Azure E4 V4 (4 core 32Gb RAM).
- Same region as the BC Cloud.

SQL SERVER

- Virtual Machine: Azure E4 V4 (4 core 32Gb RAM).
- Same region as the BC Cloud.

It is highly recommended that both Web and SQL servers are on the same cluster. We also recommend adding a separate Premium SSD disk for data. The disk must be sized according to load.

Please note that these are minimum requirements. The load on the Portals may require additional resource depending on actual load.

REQUIREMENTS FOR TRIMIT PORTALS

The requirements are made from the experience of numerous installations and should be considered as a minimum requirement for any installation. Scaling of webserver resources depends on the load on the portal solutions.

WEB SERVER

Minimum requirement:

- CPU – 4 cores
- RAM – min. 16 GB
- Storage – 60 GB for OS and separate disc system for data
- OS – Windows Server 2016 Standard Edition

We recommend that the web server is placed in DMZ zone.

Port 80 and 443 should be opened from the outside towards the webserver.

Port 8047 and 8147 should be opened from the server towards all service tier servers.

SQL SERVER

If the webserver is placed in the DMZ then it is recommended that the SQL server for TRIMIT Portals is also placed in the DMZ. If the webserver is not placed in the DMZ then NAV SQL server can be used instead.

Minimum requirement:

- CPU – min. 4 cores
- RAM – min. 12 GB
- Storage – SSD is highly recommended, alternatively many fast discs (SAS 15k)
- OS – Windows Server 2016 Standard Edition
- SQL Server – SQL Server 2017 Web Edition

Recommendation for disk configuration (if not SSD):

- RAID1 for OS
- RAID1 or 10 for TempDB database
- RAID1 for production database logfiles
- RAID10 for production database datafiles

SERVICE TIER SERVER

The Service Tier server handles the application layer for the webserver which should access TRIMIT.

Minimum requirement:

- CPU – 4 cores
- RAM – 12 GB (No Dynamic Allocated Memory)
- Storage – min. 60 GB
- OS – Windows Server 2016 Standard Edition

This server should not reside in DMZ.

If there is an antivirus installed on the server, then it is required to confirm that it does not shut the .NET compiler down, when the webserver sends request towards NAV web services.

Furthermore, the following folder should be excluded in the antivirus software:

C:\ProgramData\Microsoft\Microsoft Dynamics NAV

REQUIREMENTS FOR TRIMIT BC

SQL SERVER

Scaling of the SQL server resources depends on complexity of the solution and the number of users.

Minimum requirement:

- CPO – min 4-6 cores
- RAM – min 16 GB
- Storage - SSD is highly recommended, alternatively many fast discs (SAS 15k)
- OS – Windows Server 2016 Standard Edition
- SQL Server – SQL Server 2017 Standard Edition

Recommendation for disk configuration (if not SSD)

- RAID1 for OS
- RAID1 or 10 for TempDB database
- RAID1 for production database logfile
- RAID10 for production database datafiles

SERVICE TIER SERVER

The Service Tier server handles the application layer for all clients, who must have access to TRIMIT. There should be created one service tier server per 25 users.

Minimum requirement:

- CPU – 4 cores
- RAM – 12 GB
- Storage – min. 60 GB
- OS – Windows Server 2016 Standard Edition

There should be opened the following ports in the firewall on the server: 7045, 7046, 7047, 7048.

WINDOWS CLIENTS

Windows clients can be deployed on terminal server on local PCs, depending on network and/or desired setup. Windows client requires minimum Windows 10 or Windows Server 2012 R2.