

Server / Hardware Requirements

Revision 11



CLARITY

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Clarity eCommerce & Connect Framework Server Recommendations

Summary

The Evoq CMS / DNN application was architected to handle the myriad physical infrastructure needs each of our Client teams have. As a result, the platform can be physically located in different environments and respectively hardened to allow it to meet the Client team's security and performance requirements.

This document will provide very high-level recommendations for the DNN application's hosting hardware requirements. Many of the recommended configurations and detailed technical specifications are dependent on the frequency and amount of expected traffic to the application. Additional information is also available during the project discovery process, during which a customized network diagram and security analysis can be generated.

Overview of Hardware Recommendations

Please see below for hardware recommendations noting that these recommendations are very high level with the traffic estimate data below as well as general experience with DNN driving the recommendations. This is by no means intended as a final set of recommendations, but is intended to begin the discussions.

In order to optimize the below scenarios, please feel free to gather and send along the below details:

Estimates of current traffic

- Current Analytics / User data, need the following:
 - Total Visits / Logins and Unique Visits in past 12 months
 - Peak month's (if there are 2-3 then let's review those)
 - Peak traffic per day
 - Peak time of day and traffic during that period (total and unique)
 - Location of traffic (%'s by location for 12 month and monthly data).
- Current Hardware usage needed:
 - Current hard drive space used for media or other files
 - CDN service(s) and configuration
 - Security auditing services
 - Specifications for current networking configuration

Scenario 1 – Larger Traffic Load

- 20,000,000 visits for past year, 10,000,000 unique visitors.
- Up to 100,000/day // 1,800,000/month // Vast majority of traffic is US based.

High Level Recommendations for Production Server Hardware – Minimums

NOTE – items with asterisk () may have higher/lower HD space requirements based on actual usage.

Web Heads(s)

- Summary: Load balanced w/3 web-heads (or more).
- Hard Drive: Raid 5/6, at least 100GB for OS, Partition for DB (20GB*), logs (20GB*), db backup (50GB*), Application (50GB*).
- CPU: 12+ cores for each web-head.
- RAM: 32GB+ each.

Recommended Environment: Windows Server 2019, SQL Server 2019, IIS 10, .NET 4.72

Estimated Configuration / Setup Time

Infrastructure team: 12-18 hours

Security team: 6-8 hours

Clarity team: 5-8 hours

Scenario 2 – Very Large Traffic Load

- 100,000,000 visits for past year, 50,000,000 unique visitors.
- Up to 500,000/day // 8,000,000/month // Vast majority of traffic is US based.

High Level Recommendations for Production Server Hardware – Minimums

NOTE – items with asterisk () may have higher/lower HD space requirements based on actual usage.

Web Heads(s)

- Summary: Load balanced w/5 web-heads (or more).
- Hard Drive: Raid 5/6, at least 200GB for OS, Partition for DB (50GB*), logs (50GB*), db backup (100GB*), Application (100GB*).
- CPU: 18+ cores for each web-head.
- RAM: 64GB+ each.

Recommended Environment: Windows Server 2019, SQL Server 2019, IIS 10, .NET 4.72

Estimated Configuration / Setup Time

Infrastructure team: 18-24 hours

Security team: 12-14 hours

Clarity team: 8-10 hours

Scenario 3 – Medium Traffic Load

- 1,000,000 visits for past year, 500,000 unique visitors.
- Up to 10,000/day // 180,000/month // Vast majority of traffic is US based.

High Level Recommendations for Production Server Hardware – Minimums

NOTE – items with asterisk () may have higher/lower HD space requirements based on actual usage.

Web Heads(s)

- Summary: Load balanced w/2 web-heads (or more).
- Hard Drive: Raid 5/6, at least 50GB for OS, Partition for DB (10GB*), logs (10GB*), db backup (20GB*), Application (20GB*).
- CPU: 8+ cores for each web-head.
- RAM: 8GB+ each.

Recommended Environment: Windows Server 2019, SQL Server 2019, IIS 10, .NET 4.72

Estimated Configuration / Setup Time

Infrastructure team: 14-16 hours

Security team: 6-8 hours

Clarity team: 4-6 hours

DNN Server Requirements

In order to setup a DNN application you need to have the following requirements met:

DNN

Recommended Environment

Windows Server 2019 // IIS 10 // SQL Server 2019 // .NET Framework 4.72

Supported Operating Systems

Windows 7 (Local development)
Windows 8 (Local development)
Windows 10 (Local development)
Windows Server 2008 / 2008 R2
Windows Server 2012 / 2012 R2
Windows Server 2016
Windows Server 2019

Supported Web Servers

Microsoft IIS 7.0, 7.5, 8.0, 8.5, 10.0

Supported Database Servers

Microsoft SQL Server 2008 / 2008 Express
Microsoft SQL Server 2012 / 2012 Express
Microsoft SQL Server 2014 / 2014 Express
Microsoft SQL Server 2016 / 2016 Express
Microsoft SQL Server 2017 / 2017 Express
Microsoft SQL Server 2019 / 2019 Express
Microsoft SQL Server Azure

Supported .NET Framework

4.72+