Aras Innovator 2025 Release

Platform Specifications

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1 Platforms & Standards

Aras is committed to standard Internet protocols and common platforms. The Aras Innovator® platform provides businesses with flexible configuration options to manage based on tomorrow's market requirements, not yesterday's decisions.

1.1 Client Specifications

Operating System	Supported Browsers
Windows 11	• Edge • Firefox 115 ESR, 128 ESR • Chrome 135 (minimum)
Windows 10	• Edge • Firefox 115 ESR, 128 ESR • Chrome 135 (minimum)
macOS 15 Sequoia	• Firefox 115 ESR, 128 ESR • Chrome 135

1.2 Aras Innovator Server Specifications

Operating System	Web Services	Framework
Microsoft Windows Server 2022	IIS 10	• Microsoft .NET 4.7.2 • Microsoft ASP.NET Core /.NET: Runtime and Hosting Bundle 8.0.1 • Microsoft Visual C++ 2015, 2017, 2019 Redistributable
Microsoft Windows Server 2019	IIS 10	• Microsoft .NET 4.7.2 • Microsoft ASP.NET Core /.NET: Runtime and Hosting Bundle 8.0.1 • Microsoft Visual C++ 2015, 2017, 2019 Redistributable
Microsoft Windows Server 2016	IIS 10	• Microsoft .NET 4.7.2 • Microsoft ASP.NET Core /.NET: Runtime and Hosting Bundle 8.0.1 • Microsoft Visual C++ 2015, 2017, 2019 Redistributable
Microsoft Windows Server 2012 R2	IIS 8	• Microsoft .NET 4.7.2 • Microsoft ASP.NET Core /.NET: Runtime and Hosting Bundle 8.0.1

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Operating System	Web Services	Framework
		• Microsoft Visual C++ 2015, 2017, 2019 Redistributable
Microsoft Windows Server 2012	IIS 8	• Microsoft .NET 4.7.2 • Microsoft ASP.NET Core /.NET: Runtime and Hosting Bundle 8.0.1 • Microsoft Visual C++ 2015, 2017, 2019 Redistributable

1.3 Vault Server Specifications

Operating System	Web Services	Framework
Microsoft Windows Server 2022	IIS 10	Microsoft ASP.NET Core/.NET: Runtime and Hosting Bundle 8.0.1
Microsoft Windows Server 2019	IIS 10	Microsoft ASP.NET Core/.NET: Runtime and Hosting Bundle 8.0.1
Microsoft Windows Server 2016	IIS 10	Microsoft ASP.NET Core/.NET: Runtime and Hosting Bundle 8.0.1
Microsoft Windows Server 2012 R2	IIS 8	Microsoft ASP.NET Core/.NET: Runtime and Hosting Bundle 8.0.1
Microsoft Windows Server 2012	IIS 8	Microsoft ASP.NET Core/.NET: Runtime and Hosting Bundle 8.0.1

1.4 Database Specifications

Operating System	Database
Microsoft Windows Server 2022	• Microsoft SQL Server 2022 • Microsoft SQL Server 2019 • Microsoft SQL Server 2017 • Microsoft SQL Server 2016
Microsoft Windows Server 2019	• Microsoft SQL Server 2022 • Microsoft SQL Server 2019 • Microsoft SQL Server 2017 • Microsoft SQL Server 2016
Microsoft Windows Server 2016	• Microsoft SQL Server 2022 • Microsoft SQL Server 2019 • Microsoft SQL Server 2017 • Microsoft SQL Server 2016

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Operating System	Database
Microsoft Windows Server 2012 R2	• Microsoft SQL Server 2022 • Microsoft SQL Server 2019 • Microsoft SQL Server 2017 • Microsoft SQL Server 2016
Microsoft Windows Server 2012	• Microsoft SQL Server 2022 • Microsoft SQL Server 2019 • Microsoft SQL Server 2017 • Microsoft SQL Server 2016

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2 Recommendations and Requirements

To optimize the Aras Innovator® platform performance, Aras Corporation recommends the software and hardware components described in this section.

Please keep in mind that the minimum requirements are listed as a baseline, and the following recommendations ensure system performance. The recommendations also assume that Aras Innovator will be running with minimum additional network activity. Other active applications on the network or on the PCs will affect performance and must be considered when selecting hardware.

2.1 Database Server

Database Engine:	Microsoft SQL Server 2016, 2017, 2019, or 2022.
Network OS:	Any supported OS platform for a selected database.
CPU:	Recommended 32 logical cores for up to 1000 users.
	Minimum 16 logical cores for up to 250 users.
Memory:	Recommended 64 GB RAM for up to 1000 users.
	Minimum 32 GB RAM for up to 250 users.
HDD:	Recommended RAID using 4 to 6 physically separate disks (RAID 0/1). Striping data across disks improves performance.

Note: NEVER use OS-based mirroring of the database—an OS should be on a separate disk from a database.

It is recommended that the operating system and virtual memory file should be separated from SQL server data and log files. Optimal SQL server performance is achieved when the SQL server log files also reside on a separate physical disk. The following recommended guideline is a good price and performance compromise:

- Operating System disks: could be RAID 1.
- SQL Server data files: RAID 5 array, minimum of 3 drives.
- SQL Server log files: RAID 1 array, 2 drives.
- There should be 1 temp database per physical core up to but not more than 8 temp databases.
- Disks for data and log files should be higher than 1000 IOPS. Disk speed impacts the performance of concurrent users.

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2.2 Application Server

Network OS:	Windows Server 2012, 2012 R2, 2016, 2019, or 2022.
Web Server:	IIS version 8 or higher.
.NET:	Microsoft .NET 4.7.2 and Microsoft ASP.NET 8.0.1 Runtime with Hosting Bundle.
CPU:	Recommended 8 physical cores and 16 logical cores for up to 1000 users.
	Minimum 4 physical cores and 8 logical cores for up to 250 users.
Memory:	Recommended 32 GB RAM for up to 1000 users.
	Minimum 16 GB RAM for up to 250 users.
HDD:	Recommended 2.0 GB free disk space.
	Aras Innovator will use approximately 400 MB for the production instance.
Redistributable:	Microsoft Visual C++ 2015, 2017, 2019 Redistributable.
Connectivity:	Internet connection suggested for online support and update downloading.
	Recommended VPN to support remote access.
Server Clustering:	Recommended introducing additional app servers in high availability cluster if more than 1000 users.

2.3 Vault Server

Network OS:	Windows Server 2012, 2012 R2, 2016, 2019, or 2022.
Web Server:	IIS version 8 or higher.
.NET:	Microsoft .NET 4.7.2 and Microsoft ASP.NET 8.0.1 Runtime with Hosting Bundle.
CPU:	Recommended 4 physical cores and 8 logical cores for up to 1000 users.
	Minimum 2 physical cores and 4 logical cores for up to 250 users.
Memory	Recommended 16 GB RAM for up to 1000 users.
	Minimum 8 GB RAM for up to 250 users.
HDD	Recommended RAID array.
	Vault disk capacity planning should consider 2-year growth of total file space consumption.

Note: End-user predictions of Vault Server data volume are typically underestimated and quickly surpassed.

	Recommended 1.0 GB free disk space for the OS and software, Aras Innovator will use 50MB.
	Disks for storing vaulted files should be higher than 500 IOPS.
	Disk speed impacts the performance of concurrent users.
Redistributable	Microsoft Visual C++ 2015, 2017, 2019 Redistributable.

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2.4 Conversion Server

Network OS:	Windows Server 2012, 2012 R2, 2016, 2019, or 2022.
Web Server:	IIS version 8 or higher.
.NET:	Microsoft .NET 8.0.1.
CPU:	Recommended 8 physical cores and 16 logical cores.
	Minimum 4 physical cores and 8 logical cores.
Memory:	Recommended 32 GB RAM.
	Minimum 16 GB RAM.
HDD:	Disks for checking out files to be converted should be higher than 500 IOPS.
	Disk speed impacts conversion throughput.
Application:	The Conversion Server recommendations are subject to change based on the converter application requirements being executed on the server.
Redistributable:	Microsoft Visual C++ 2015, 2017, 2019 Redistributable.

2.5 Clients

Client OS:	Windows 10, Windows 11, or macOS 15 (Sequoia).
Browser:	Edge, Firefox 115 ESR, 128 ESR, or Chrome 135 or higher.
CPU:	Minimum CPU 2.0 GHz or higher.
Memory:	Recommended 8 GB RAM.
	Minimum 4 GB RAM.
HDD:	Minimum 80 MB free disk space for temporary Internet folders.
Monitor:	Recommended 1280 x1024 monitor and adapter.
	Minimum 1024 X 768.

2.6 Network

Recommended 100 Mbps network between Application Server and Clients.

Recommended dedicated sub-LAN of minimum 1.0 GB between the Application Servers and Database Server.

2.7 Backup Equipment

Aras Corporation recommends investment in a reliable backup system.

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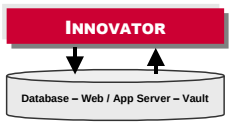
3 Hardware Configuration

The Aras Innovator® platform offers several configuration options designed to meet your business requirements and technology environment with the ability to scale to meet future needs. Migrating from one configuration to the next is designed to be straightforward.

Option 1: Single Server

250 Users
Combined Database, File Vault, and Web / App Servers



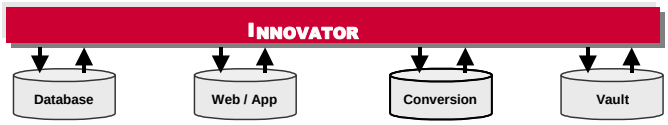
	CPU	RAM	HDD [1,2]
Single Combined Server	16 Logical Cores	32 GB	1000 IOPS

[1] HDD capacity requirements depend directly on the CAD, EDA and document formats employed in conjunction with the aggregate file count and total size.

[2] Disk speed is recommended for the Database Server Tier. Please see Section 2 "Recommendations and Requirements" for more details

Option 2: Separate Servers

1000 Users
Separate Database, File Vault, and Web / App Servers



	CPU	RAM	HDD
Database Server [2]	32 Logical Cores	64 GB	1000 IOPS
Web / App Server	4 Physical Cores with 8 Logical Cores	32 GB	
Vault Server [1]	4 Physical Cores with 8 Logical Cores	16 GB	500 IOPS
Conversion Server	8 Physical Cores with 16 Logical Cores	32 GB	500 IOPS

[1] HDD capacity requirements depend directly on the CAD, EDA and document formats employed in conjunction with the aggregate file count and total size.

[2] Please see Section 2 "Recommendations and Requirements" for more details

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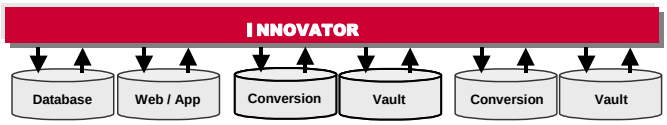
Option 3: Distributed Servers

1000 Multi-site Users
Multiple Vault and Conversion,
Single App and Database Server



	CPU	RAM	HDD
Database Server [2]	32 Logical Cores	64 GB	1000 IOPS
Web / App Server	4 Physical Cores with 8 Logical Cores	32 GB	
Vault Server [1]	4 Physical Cores with 8 Logical Cores	16 GB	500 IOPS
Conversion Server	8 Physical Cores with 16 Logical Cores	32 GB	500 IOPS

[1] HDD capacity requirements depend directly on the CAD, EDA and document formats employed in conjunction with the aggregate file count and total size.

[2] Please see Section 2 "Recommendations and Requirements" for more details

Option 4: Development Server

Used for Customization, Testing,
or Training Environments



	CPU	RAM	HDD
Single Development Server [1]	4 Logical Cores	8.0 GB	4 GB

[1] A development server is not meant to be an environment for a large number of concurrent users, but rather is meant to be an all-in-one, self-contained environment for developing and testing new applications before deploying them to the production environment.

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