

# aras INNOVATOR®

## Technology Specifications: Platforms & Standards

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

### Aras Innovator Specifications

<b>Standards</b>	HTML HTTP / HTTPS	XML SOAP	SQL JavaScript
<b>Databases</b>	Microsoft SQL Server 2008 Microsoft SQL Server 2005		
<b>Servers</b>	Microsoft .NET [2.0, 3.0, or 3.5]	IIS	
<b>Clients</b>	Microsoft Internet Explorer [6, 7, or 8] Microsoft .NET [2.0, 3.0, or 3.5]		
	<b>Server</b>	<b>Client</b>	
<b>Operating Systems</b>	MS Windows 2008 or 2003	Windows 7, Vista or XP	



300 Brickstone Square  
Andover, MA 01810  
[978] 691-8900 - Phone  
[978] 794-9826 - Fax  
sales@aras.com  
www.aras.com

<b>aras INNOVATOR®</b>	<b>Additional Info</b>
Microsoft® Enterprise Solutions with Unlimited Users	<ul style="list-style-type: none"> <li>▶ <a href="#">Documentation</a></li> <li>▶ <a href="#">Training</a></li> <li>▶ <a href="#">Support</a></li> </ul>
<b>Download Now</b>	



MODEL-BASED SOA  
technology

### Technology Specifications: Recommendations & Requirements

To optimize Aras Innovator® performance Aras® Corporation recommends the following software and hardware components. Please keep in mind that the **minimum requirements** are listed as a baseline and following recommendations ensures system performance. 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 taken into account when selecting hardware.

#### Database Server

Database Engine	Microsoft SQL Server 2008 or Microsoft SQL Server 2005 – Recommend Enterprise Edition
Network OS	Any supported O/S platform for the selected database
CPU	Recommend dual CPU 2.0 GHz or higher – Configure 2.0 GHz of CPU for each 50 concurrent users Minimum requirement CPU 1.0 GHz – Supports 25 concurrent users
Memory	Minimum requirement 1 GB RAM up to 50 concurrent users – Recommend increasing 10 MB per concurrent user
HDD	Recommend 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 – The OS should be on a separate disk from the Database It is recommended that the Operating system and virtual memory file be separated from the SQL server data and log files. Optimal SQL server performance is achieved when SQL server log files also reside on a s separate physical disk. The following recommended guideline is a good price/performance compromise: <ul style="list-style-type: none"> <li>• Operating System disk(s) – could be RAID 1</li> <li>• SQL Server data files (RAID 5 array, minimum of 3 drives)</li> <li>• SQL Server log files (RAID 1 array, 2 drives)</li> </ul> Recommend > 10,000 RPM SCSI Drives – Disk speed impacts performance

#### Application Server

Network OS	Windows 2008 or 2003 Server – Recommend Enterprise Edition
Web Server	IIS version 6 or higher
.NET	Recommend .NET Framework 2.0, 3.0, 3.5
CPU	Recommend 2.0 GHz or higher – Configure 2.0 GHz of CPU for each 50 concurrent users
Memory	Recommend 1.0 GB RAM – Minimum requirement 512MB for each 25 concurrent users
HDD	Recommend 1.0 GB free disk space – Aras Innovator will use approximately 100 MB for each environment (Production, Development, Test, Training)
Connectivity	Internet connection suggested for online support and update downloading – recommend VPN to support remote access

#### Vault Server

Network OS	Windows 2008 or 2003 Server – Recommend Enterprise Edition
Web Server	IIS version 6 or higher
CPU	Recommend 500 MHz or higher – Minimum requirement single CPU 500 MHz for every 200 concurrent users
Memory	Recommend 1.0 GB RAM – Minimum requirement 512MB for each 250 concurrent users
HDD	Recommend RAID array – Vault disk capacity planning should consider 2-year growth of total file. NOTE: End-user predictions of Vault Server data volume are typically under estimated and quickly surpassed Recommend 1.0 GB free disk space for the OS and software – Aras Innovator will use 50MB Recommend > 10,000 RPM SCSI Drives – Disk speed impacts performance

#### Clients

Client OS	Windows 7, Windows Vista or Windows XP SP3
Browser	Internet Explorer 8, Internet Explorer 7, or Internet Explorer 6
.NET	Recommend .NET Framework 2.0, 3.0, 3.5
CPU	Minimum requirement CPU Pentium 4 or equivalent, 1 GHz or higher
Memory	Minimum requirement 512 MB RAM
HDD	Minimum requirement 80 MB free disk space for Internet temporary folders
Monitor	Recommend 1280 x1024 monitor and adapter – Minimum requirement 1024 X 768

#### Network

Recommend 100 mbps network – Minimum 256 k (fractional T1) between Application Server and Clients  
Recommend dedicated sub-LAN of 100 mbs or 1.0 GB copper between the Application Servers and Database Server

#### Backup Equipment

Aras Corporation recommends investment in a reliable backup system.

# aras INNOVATOR<sup>®</sup> VERSION 9.2

## Technology Specifications: Hardware by Configuration

Aras Innovator<sup>®</sup> offers numerous configuration options designed to fit 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.

<b>Option 1: Single Server</b> 250 Users Combined Database, File Vault, and Web / App Servers			
	<b>CPU</b>	<b>RAM</b>	<b>HDD</b> <sup>1,2</sup>
<b>Single Combined Server</b>	Dual CPU @ 2 GHz	2.0 GB	RAID 100 GB Vault SCSI/IDE 2 GB OS
<sup>1</sup> HDD capacity requirements depend directly on the CAD, EDA and document formats employed in conjunction with the aggregate file count and total size. <sup>2</sup> Preferred configuration for SQL Server database: Operating System disk(S), RAID 5 array for SQL server data files, RAID 1 array for SQL Server log files. Using three sets of physical disks and separating the log files and data files minimizes contention for physical disks. The Innovator application and vault can also reside on the RAID 5 array.			

<b>Option 2: Separate Servers</b> 500 Users Separate Database, File Vault, and Web / App Servers			
	<b>CPU</b>	<b>RAM</b>	<b>HDD</b>
<b>Database Server</b> <sup>2</sup>	Dual CPU @ 2 GHz	1.0 GB	See note 2
<b>Web / App Server</b>	Dual CPU @ 2 GHz	1.0 GB	20 GB
<b>Vault Server</b> <sup>1</sup>	Single CPU >= 500 MHz	512 MB	RAID 200 GB Vault SCSI/IDE 2 GB OS
<sup>1</sup> HDD capacity requirements depend directly on the CAD, EDA and document formats employed in conjunction with the aggregate file count and total size. <sup>2</sup> Preferred configuration for SQL Server database: Operating System disk(S), RAID 5 array for SQL server data files, RAID 1 array for SQL Server log files. Using three sets of physical disks and separating the log files and data files minimizes contention for physical disks. The Innovator application and vault can also reside on the RAID 5 array.			

<b>Option 3: Distributed Servers</b> Over 1000 Users Multiple Vault and Web / App Servers, Single Database Server			
	<b>CPU</b>	<b>RAM</b>	<b>HDD</b>
<b>Database Server</b> <sup>2</sup>	Quad CPU @ 2 GHz	2.0 GB	See Note 2
<b>AppServer Servers</b>	Dual CPU @ 2 GHz	1.0 GB	20 GB
<b>Vault Servers</b> <sup>1</sup>	Single CPU >= 500 MHz	512 MB	RAID 500 GB Vault SCSI/IDE 2 GB OS
<sup>1</sup> HDD capacity requirements depend directly on the CAD, EDA and document formats employed in conjunction with the aggregate file count and total size. <sup>2</sup> Preferred configuration for SQL Server database: Operating System disk(S), RAID 5 array for SQL server data files, RAID 1 array for SQL Server log files. Using three sets of physical disks and separating the log files and data files minimizes contention for physical disks. The Innovator application and vault can also reside on the RAID 5 array.			

<b>Option 4: Development Server</b> Used for Customization, Testing, or Training Environments			
	<b>CPU</b>	<b>RAM</b>	<b>HDD</b>
<b>Single Development Server</b>	Single CPU @ 500 MHz	512 MB	2 GB