

aras INNOVATOR® VERSION 9.3

Technology Specifications: Platforms & Standards

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

Aras Innovator Specifications

| | | | |
|--------------------------|--|--|-------------------|
| Standards | HTML HTTP / HTTPS | XML SOAP | SQL JavaScript |
| Databases | Microsoft SQL Server 2008 R2 Microsoft SQL Server 2008 Microsoft SQL Server 2005 | | |
| Servers | Microsoft .NET [4.0 or 3.5] | IIS | |
| Clients | Microsoft Internet Explorer [9, 8, or 7] Microsoft .NET [3.5] | | |
| | Server | Client | |
| Operating Systems | MS Windows Server 2008 R2 MS Windows Server 2008 MS Windows Server 2003 | Windows 7 Windows Vista Windows XP SP3 | |



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

| | |
|--|--|
| | Additional Info |
| Microsoft Enterprise Solutions with Unlimited Users | <ul style="list-style-type: none"> ▶ Documentation ▶ Training ▶ Support |
| Download Now | |



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 2005, Microsoft SQL Server 2008, or Microsoft SQL Server 2008 R2 – Recommend Enterprise Edition |
| Network OS | Any supported O/S platform for the selected database |
| CPU | Recommend quad CPU 2.4 GHz or higher Minimum requirement dual CPU 2.0 GHz – Supports 25 concurrent users |
| Memory | Minimum requirement 2 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"> • Operating System disk(s) – could be RAID 1 • SQL Server data files (RAID 5 array, minimum of 3 drives) • SQL Server log files (RAID 1 array, 2 drives) Recommend > 10,000 RPM SCSI Drives – Disk speed impacts performance |

Application Server

| | |
|--------------|--|
| Network OS | Windows Server 2003, Windows Server 2008, or Windows Server 2008 R2 – Recommend Enterprise Edition |
| Web Server | IIS version 6 or higher |
| .NET | Microsoft .NET Framework 3.5, 4.0 |
| CPU | Recommend quad CPU 2.4 GHz or higher – Minimum requirement dual CPU 2.0 GHz |
| Memory | Recommend 8.0 GB RAM – Minimum requirement 2 GB Ram |
| 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 Server 2003, Windows Server 2008, or Windows Server 2008 R2 – Recommend Enterprise Edition |
| Web Server | IIS version 6 or higher |
| .NET | Microsoft .NET Framework 3.5, 4.0 |
| CPU | Recommend quad CPU 2.4 GHz or higher – Minimum requirement dual CPU 2.0 GHz |
| Memory | Recommend 4.0 GB RAM – Minimum requirement 2 GB Ram |
| 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 XP SP3, Windows Vista or Windows 7 |
| Browser | Internet Explorer 7, Internet Explorer 8, or Internet Explorer 9 |
| .NET | Microsoft .NET Framework 3.5 SP1 |
| MSXML | MSXML4 SP3 |
| CPU | Minimum requirement CPU 2.0 GHz or higher |
| Memory | Minimum requirement 2 GB 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 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

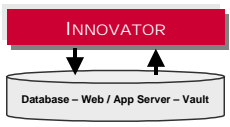
Aras Corporation recommends investment in a reliable backup system.

aras INNOVATOR[®] VERSION 9.3

Technology Specifications: Hardware by Configuration

Aras Innovator[®] 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.

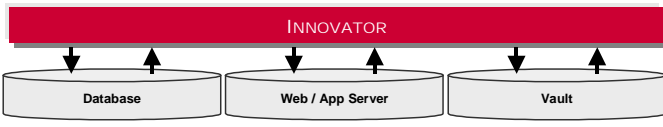
Option 1: Single Server
250 Users
Combined Database, File Vault,
and Web / App Servers



| | CPU | RAM | HDD ^{1,2} |
|-------------------------------|--------------------|--------|---------------------------------------|
| Single Combined Server | Quad CPU @ 2.4 GHz | 8.0 GB | RAID 100 GB Vault SCSI/IDE 2 GB OS |

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 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.

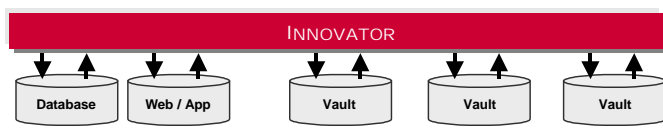
Option 2: Separate Servers
500 Users
Separate Database, File Vault,
and Web / App Servers



| | CPU | RAM | HDD |
|-------------------------------------|--------------------|--------|---------------------------------------|
| Database Server ² | Quad CPU @ 2.4 GHz | 4.0 GB | See note 2 |
| Web / App Server | Quad CPU @ 2.4 GHz | 8.0 GB | 20 GB |
| Vault Server ¹ | Quad CPU @ 2.4 GHz | 4.0 GB | RAID 200 GB Vault SCSI/IDE 2 GB OS |

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 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.

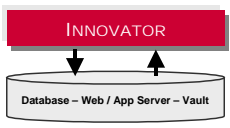
Option 3: Distributed Servers
Over 1000 Users
Multiple Vault and Web / App
Servers, Single Database Server



| | CPU | RAM | HDD |
|-------------------------------------|--------------------|--------|---------------------------------------|
| Database Server ² | Quad CPU @ 2.4 GHz | 4.0 GB | See Note 2 |
| AppServer Servers | Quad CPU @ 2.4 GHz | 8.0 GB | 20 GB |
| Vault Servers ¹ | Quad CPU @ 2.4 GHz | 4.0 GB | RAID 500 GB Vault SCSI/IDE 2 GB OS |

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 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.

Option 4: Development Server
Used for Customization, Testing,
or Training Environments



| | CPU | RAM | HDD |
|----------------------------------|--------------------|--------|------|
| Single Development Server | Dual CPU @ 2.8 GHz | 4.0 GB | 4 GB |