



JADE
InvestigatorTM
software

Operational Requirements

VERSION 4.1.0



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JADE Investigator Operational Requirements

This document covers the following topics.

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- [Hardware Requirements](#)
 - [Introduction](#)
 - [General Requirements and Assumptions](#)
 - [Minimum Hardware Requirements for a JADE Investigator Database Server](#)
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 - [Database Server](#)
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Terminology Used in this Document

The following table lists the abbreviations used in this document.

Abbreviation	Description
DB	Database
CPU	Central Processing Unit
ECC	Error Checking and Correcting
IO	Input Output
JAS	JADE Application Server
MDAC	Microsoft Data Access Components
NIC	Network Interface Card
RAID	Redundant Array of Inexpensive Disks
RAM	Random Access Memory

Abbreviation	Description
RPM	Revolutions Per Minute
RPS	Relational Population Service
SP	Service Pack

Hardware Requirements

This section describes the hardware required for running JADE Investigator under a Windows operating system.

Further requirements that must be met to satisfactorily provide for data recoverability are described under “Environmental Considerations for Deploying JADE”, in Chapter 5 of the *JADE Installation and Configuration Guide*, which you can download from <http://www.jadeworld.com/jade/doc.htm>.

Introduction

Every installation of JADE Investigator needs to be individually assessed for hardware requirements, as the size of the organization using the system, the number of concurrent users, and the level of investigation activity varies from one site to another.

This document is designed to help your organization better understand its own hardware needs, based on a specific user scenario. Jade Software Corporation consultants are happy to help your organization determine the best option (or options) for your particular needs.

General Requirements and Assumptions

The following assumptions apply to the general hardware specifications in this section.

- The configuration of JADE Investigator includes running nine background applications.
- Each server is expected to last for five years before being replaced.
- For guarantee of support and parts availability, we recommend that your server is a name brand server; for example, Dell, HP, IBM, and so on.
- The data conversion and annual growth rate assumptions are indicative only. The actual size and growth of data in each system varies, depending on the specific implementation. As a general rule, the database disk drive should be twice the maximum database size and the backup disk drive should be three times the maximum database size. The degree of database logging varies, depending on the how busy the JADE Investigator system is.
- The general hardware specifications set out in this document are designed to run a single instance of the JADE Investigator system.
- The specifications in the following sections do not include any options to cover same-site hardware redundancy, disaster recovery, or replication to other systems. Should additional services be required, we recommend that your account team seek feedback from the [Systems Architect Group](#) on a consultancy basis. Costs will apply.

Minimum Hardware Requirements for a JADE Investigator Database Server

This section covers the minimum hardware requirements for a server running JADE Investigator with different scenarios of multiple users. The requirements listed in the following table are in addition to those listed under “[General Requirements and Assumptions](#)”, in the previous section.

Note All of the user scenarios in the following table require the following.

- Appropriate Gigabit network interfaces.
- A remote management card (for example, an HP Insight Lights Out card), if required by your Information Technology (IT) support staff.

Number of Users	Initial Data Conversion	Annual DB Growth	Hardware Description															
10-20	10G bytes	5G bytes	1 x quad core CPU 6G bytes RAM Disk with the following configuration <table border="1"> <thead> <tr> <th>Drive</th> <th>Use</th> <th>Space Required</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>Operating system</td> <td>40G bytes</td> </tr> <tr> <td>D</td> <td>Database</td> <td>70G bytes</td> </tr> <tr> <td>E</td> <td>Logs</td> <td>20G bytes</td> </tr> <tr> <td>F</td> <td>Backups</td> <td>105G bytes</td> </tr> </tbody> </table>	Drive	Use	Space Required	C	Operating system	40G bytes	D	Database	70G bytes	E	Logs	20G bytes	F	Backups	105G bytes
Drive	Use	Space Required																
C	Operating system	40G bytes																
D	Database	70G bytes																
E	Logs	20G bytes																
F	Backups	105G bytes																
30-60	10G bytes	10G bytes	2 x quad core CPU 8G bytes RAM Disk with the following configuration <table border="1"> <thead> <tr> <th>Drive</th> <th>Use</th> <th>Space Required</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>Operating system</td> <td>40G bytes</td> </tr> <tr> <td>D</td> <td>Database</td> <td>240G bytes</td> </tr> <tr> <td>E</td> <td>Logs</td> <td>50G bytes</td> </tr> <tr> <td>F</td> <td>Backups</td> <td>360G bytes</td> </tr> </tbody> </table>	Drive	Use	Space Required	C	Operating system	40G bytes	D	Database	240G bytes	E	Logs	50G bytes	F	Backups	360G bytes
Drive	Use	Space Required																
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JADE Investigator Operational Requirements

Number of Users	Initial Data Conversion	Annual DB Growth	Hardware Description															
70-100	30G bytes	30G bytes	2 x quad core CPU 12G bytes RAM Disk with the following configuration <table border="1"><thead><tr><th>Drive</th><th>Use</th><th>Space Required</th></tr></thead><tbody><tr><td>C</td><td>Operating system</td><td>40G bytes</td></tr><tr><td>D</td><td>Database</td><td>360G bytes</td></tr><tr><td>E</td><td>Logs</td><td>50G bytes</td></tr><tr><td>F</td><td>Backups</td><td>540G bytes</td></tr></tbody></table>	Drive	Use	Space Required	C	Operating system	40G bytes	D	Database	360G bytes	E	Logs	50G bytes	F	Backups	540G bytes
Drive	Use	Space Required																
C	Operating system	40G bytes																
D	Database	360G bytes																
E	Logs	50G bytes																
F	Backups	540G bytes																
150	50G bytes	50G bytes	4 x CPU sockets with quad core CPUs 16G bytes RAM Disk with the following configuration <table border="1"><thead><tr><th>Drive</th><th>Use</th><th>Space Required</th></tr></thead><tbody><tr><td>C</td><td>Operating system</td><td>40G bytes</td></tr><tr><td>D</td><td>Database</td><td>600G bytes</td></tr><tr><td>E</td><td>Logs</td><td>75G bytes</td></tr><tr><td>F</td><td>Backups</td><td>900G bytes</td></tr></tbody></table>	Drive	Use	Space Required	C	Operating system	40G bytes	D	Database	600G bytes	E	Logs	75G bytes	F	Backups	900G bytes
Drive	Use	Space Required																
C	Operating system	40G bytes																
D	Database	600G bytes																
E	Logs	75G bytes																
F	Backups	900G bytes																

The following notes apply to the recommended drive configurations for multiple-user systems listed in the previous table.

- The recommended disk size for:
 - Drive D includes sufficient space for database reorganizations
 - Drive E includes sufficient space for two backups and the ability to write a third backup before removing the oldest
- The database (D) and logs (E) drives should be configured for a relatively high IO throughput. We recommend RAID10 as the appropriate RAID level for these two drives. In addition, disk performance is further improved by distributing these drives across a larger number of disk spindles.

Minimum Hardware Requirements for Running Presentation Clients

The following list contains the recommended minimum hardware required to deploy JADE Investigator on a presentation (or *thin*) client node.

Processor

For a presentation client, you require an Intel CPU (Pentium, AMD, or compatible), 1 GHz or faster.

Memory

For a presentation client, you require 512M bytes RAM (recommended) or 256M bytes (minimum, depending on the operating system).

Storage

When calculating disk space requirements for presentation clients, allow for software installation size, presentation client forms cache, and application external file requirements.

Other

The following are also required for presentation clients:

- TCP/IP network environment.
- Network Interface Card (NIC) or a dial-up adaptor and modem.
- Screen resolution of 800x600 or higher.

Notebook for Stand-Alone Use

You can run a stand-alone copy of JADE Investigator on a notebook computer. The following is a list of the minimum requirements to run JADE Investigator on a notebook computer.

Processor

A stand-alone notebook computer requires 1 x dual core CPU.

Memory

A stand-alone notebook computer requires 4G bytes RAM.

Storage

A stand-alone notebook computer requires a 7200 RPM hard disk drive.

Other

The following are also required for a stand-alone notebook:

- Microsoft Windows XP Professional with SP3.
- Full disk encryption facility.

Note Some notebooks from the Lenovo T61 range provide full disk encryption as an option.

Software Requirements

This section describes the software required for JADE Investigator implementations.

JADE Investigator runs under JADE version 6.2, which requires you to download and install the Microsoft Visual C++ 2005 Redistributable Package (x86) from the JADE Web site at http://www.jadeworld.com/downloads/jade/vcredist_x86.exe. This will be done as part of the normal installation or upgrade process. (This executable is supplied on the JADE distribution media.) Installing this Microsoft redistributable package requires administration privileges. If possible, deploy this package to all workstations *before* installing or upgrading to JADE version 6.2, using the appropriate techniques that allow for privileged installations.

JADE encodes Unicode characters using the wide-character encoding routines provided by Windows 2003 Server, Windows Vista, Windows XP, Windows 2000, Windows CE, or UNIX.

Although minimum Service Pack (SP) levels are specified, we recommend that you keep up-to-date with Service Packs and security updates for the operating system that you are running.

The **Diagramming** tool in JADE Investigator uses a .NET Framework v2.0 control to render diagrams. If your implementation of JADE Investigator is to use the **Diagramming** tool, ensure that presentation clients have the .NET Framework Version 2.0 Redistributable Package (x86) installed.

Database Server

A JADE Investigator database server requires one of the following.

- Microsoft Windows 2008 Server R2 (recommended) with SP2 and the latest security updates
- Microsoft Windows 2003 Server R2 (recommended) with SP2 and the latest security updates
- Microsoft Windows 2000 Server (minimum) with SP4 and the latest security updates

Presentation Clients

Presentation clients require one of:

- Windows XP Professional (recommended) with SP3
- Windows Vista Home Premium with SP1 (recommended) or higher
- Windows 2000 Professional (minimum) with the latest Service Packs and security updates
- Any database server or application server operating system

Requirements for RPS Nodes

With the Relational Population Service (RPS) that provides automatic replication of objects from a JADE database to one or more relational databases when running an RPS node, we support the Microsoft SQL Server 2005 RPS relational target database only.

Note We do *not* support Microsoft SQL Server 2000.

The Microsoft Data Access Components (MDAC) installed with the Microsoft Windows 2003 Server, Windows Vista, Windows XP, or Windows 2000 operating system are required for RPS nodes to access an SQL Server database.

The MDAC components installed with the Windows 2000 operating system may not be sufficient for running an RPS node to access an SQL Server database unless you are running under the latest version of MDAC.