IO Informatics Sentient Suite System Requirements
Openlink Virtuoso v6 SDB

**Sentient Server**

*High Performance System Requirements, hosting 20 Web Query users and 10 Knowledge Explorer import users:*

- Windows Server 2008 64-bit (32-bit compatible)
  - IIS 7.0 or later
  - .NET Framework 4.0
- 4 Xeon Quad Core processors (or performant Intel or AMD x86-64)
  - 2 core minimum, (> 4 core recommended)
- 24 GB RAM (> 48 GB RAM recommended, 16 GB and lower compatible)
- 500 GB drive, 7200rpm, (>1500rpm, > 1TB recommended)
- Openlink Virtuoso + Oracle, Microsoft SQL Server, or MySQL

The maximum performance is achieved on a 64 bit platform allowing users to take advantage of the larger memory model to work in the Knowledge Explorer on data sets larger than the approximately 1.5 GB limit imposed by 32-bit .NET. This system will have to perform significant disk IO as users will be loading large files (> 2 GB) form a file server or from local drive depending on client IT best practices.

*Standard System Requirements, hosting 20 Web Query users and + 10 Knowledge Explorer import users:*

*(3 of the below systems required)*

- Windows Server 2003 or 2008 32-bit
- IIS 7.0 or later
- .NET Framework 4.0
- 2 Dual Core Xeon Processors (4 Processors or Quad Core recommended)
- 8 GB RAM
- 500 GB Hard Drive Space
- Oracle, Microsoft SQL Server, or MySQL

This configuration is designed to conform to common virtualization configurations. One server can be shared by the Sentient Web Query and up to two instances of the Sentient Knowledge Explorer. The other two servers can accommodate up to 4 instances of the Sentient Knowledge Explorer. Individual data sets up to approximately 1.5 GB can be work with in-memory, larger data sets can be constructed, queried, browsed and modified utilizing a dedicated Semantic Database (*triple store*) as a backend, such as Virtuoso.
Sentient Knowledge Explorer

Client Workstation Minimum Requirements:

- Windows XP, Vista, or Windows 7
- Pentium 4, 2.1 GHz Processor
- 2 GB RAM
- NET Framework 4.0
- 100 MB Hard Drive Space for program, data files require additional drive space
- 1024x768 Display

In addition to its server installation for import automation (specifications are above), Sentient Knowledge Explorer may be installed on a client with a connection to the (Virtuoso v6) database via web services. It may be deployed in client-server configurations for shared database environments and also as a stand-alone client for in-memory data processing or for processing in smaller semantic databases installed on the client.

Virtuoso v6 linked data server (database)

Minimum System Requirements:
(Database Server)

- Windows 2008 (x86-64)OS
  - Windows Server 2008 64-bit (32-bit compatible)
  - IIS 7.0 or later
  - .NET Framework 4.0
  - 4 Xeon Quad Core processors (or performant Intel or AMD x86-64)
    - 2 core minimum, 4 core recommended
  - 24 GB RAM (> 48 GB RAM recommended, 16 GB and lower compatible)
  - 500 GB drive, 7200rpm, (>1500rpm, > 1TB recommended)

Openlink Virtuoso

The Virtuoso v6 Server can run natively on the Windows OS. Additional OS compatibility will be coming soon.

An ideal system would include 8 CPU cores, 64 GB of RAM, and fast hard drives (15K RPM, arranged in RAID arrays employing striping). This type of system will optimize query performance as well providing rapid ingest speeds for 2-3 billion triples. We also work with smaller hardware in our development and release testing and receive very satisfactory results.


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