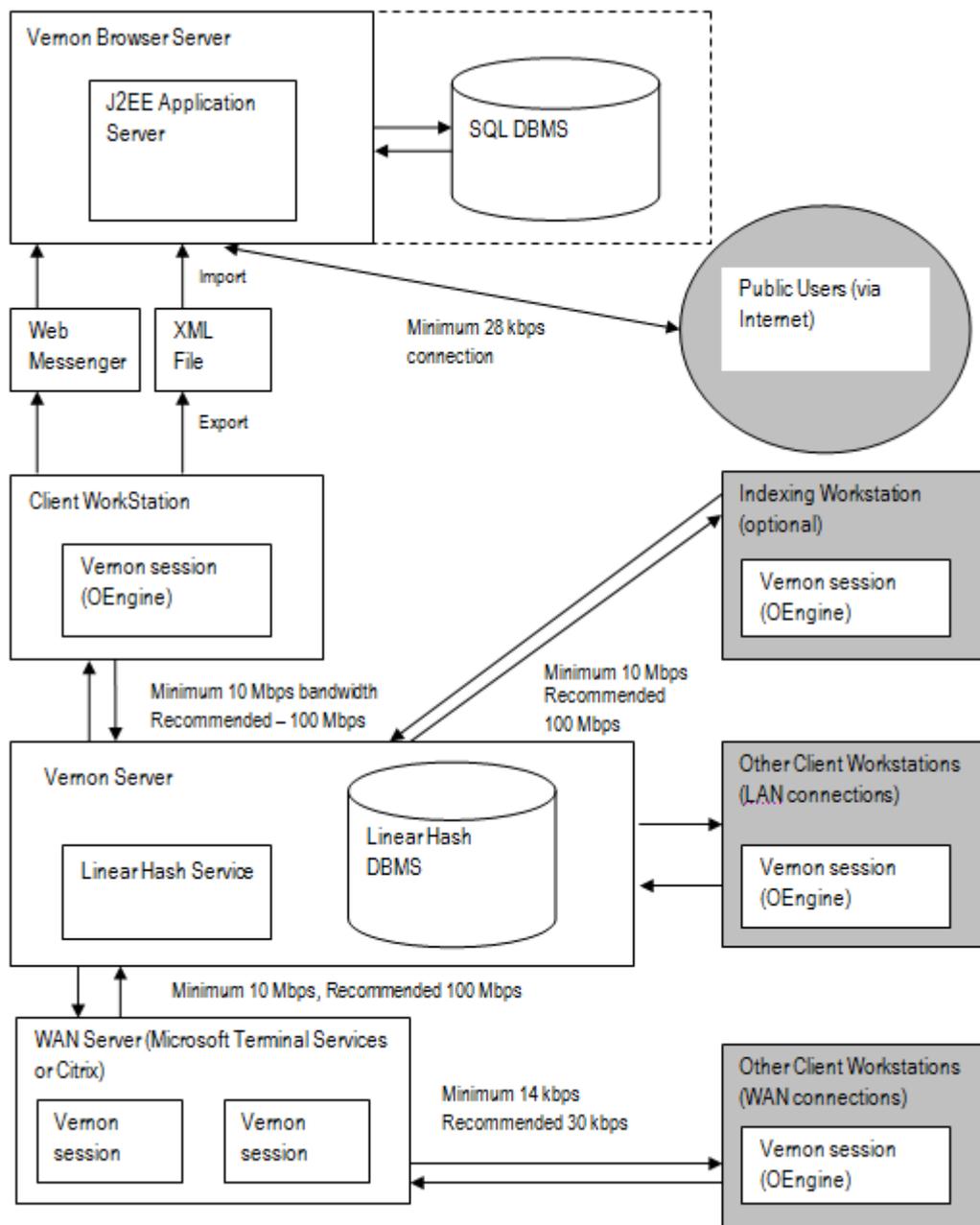


Vernon CMS and Vernon Browser Logical Architecture



Technical Details

Vernon CMS Database

Vernon CMS uses Revelation Software's OpenInsight (Linear Hash DBMS) as its database. Programs and data are stored in a single folder structure, usually referred to as Wincoll.

Vernon CMS is executed completely on the workstations, but the workstations only have core DLLs installed. These are installed and registered by the Vernon Client install.

Server

Vernon CMS can run on Windows 2008, 2012 and 2016 servers. It can also run on a Windows virtual server hosted by VMWare.

Vernon CMS can be run on mirrored servers or servers supporting RAID technology to improve availability.

The Revelation Universal Driver, a network product from Revelation Software, is to be installed on the server. This runs as a Windows Service. This Linear Hash Service reduces network traffic, increases performance and ensures data integrity.

Minimum server specification:

- Pentium III or 4 (or AMD Equivalent)
- 1 GB RAM
- 50 GB Hard Drive
- Backup
- Windows 2008, 2012 or 2016 Server

Storage requirement:

Hard disk space required by the application is approximately 400 Mb plus whatever storage is needed for the data. For indicative disk sizing we suggest allowing between 2500 and 4000 bytes per object. This depends on the level of detail to be recorded but is inclusive of indexing and authority file overheads. This does not include storage requirements for multimedia files.

Web Server (Vernon Browser)

Our web access module, Vernon Browser, is an n-tier application, with an SQL database backend, Enterprise Java Beans for the business logic, and Play Scala templates for the front end. It can run on most web servers, including Windows, Sun and Linux. Our preferred backend database is MySQL.

Vernon Browser can be run on multiple servers or on servers with multiple processors to improve availability and performance.

Most clients host their Vernon Browser website through VSL.

Wide Area Network

Wide Area Networks are supported using either Windows Remote Desktop or Citrix. A number of Vernon CMS implementations are spread across several geographical locations.

Application execution takes place on the server and only the keyboard, mouse and display information are transmitted over the network.

Workstations

Vernon CMS clients can run on Windows Vista or above workstations, or on other operating systems such as Mac OS via Microsoft Remote Desktop or Citrix.

Vernon Client software is installed on all workstations that use Vernon CMS.

Minimum workstation specification:

- Pentium III
- 1 GB RAM
- 10 GB Hard Drive
- CD ROM Drive

Windows Vista, 7, 8 or 10.

Indexing Workstation

Changes to indexes are posted to an index transaction file. These can either be updated by choosing an option on the Vernon CMS menu periodically, or by running an indexing workstation which continuously processes index updates as they occur.

Vernon WAN workstations

Workstations (including Mac or Linux) can use Remote Desktop to access a Windows server with MS Terminal Services or a Windows workstation with Remote Desktop enabled. Alternatively, Windows workstations can use Citrix client software to access a Citrix server.

Application Integration

Integration with existing applications can be achieved in several ways:

- XML and MARC import and XML export in standard formats
- Support of additional XML formats via XSLT translation
- Export of CMS data in any text delimited form
- XML sent via Web Messenger (web service)
- RESTful JSON API via Vernon Browser

General Architecture

Recommended backup unit: Any standard tape or disk backup (DLT acceptable).

Recommended redundancy: Raid Redundancy

Network Protocol: TCP/IP

Dependencies on other systems

End users require MS Office Word and Excel for reporting and XML import function. An email client (e.g. Outlook) that has MAPI support is required for any emails generated from the system.

MS Office Word & Excel need the main folder that Vernon CMS is installed in (usually \Wincoll) set as a Trusted Location to allow Vernon CMS specific macros to run.