

VERNON CMS

Technical Specifications

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HARDWARE

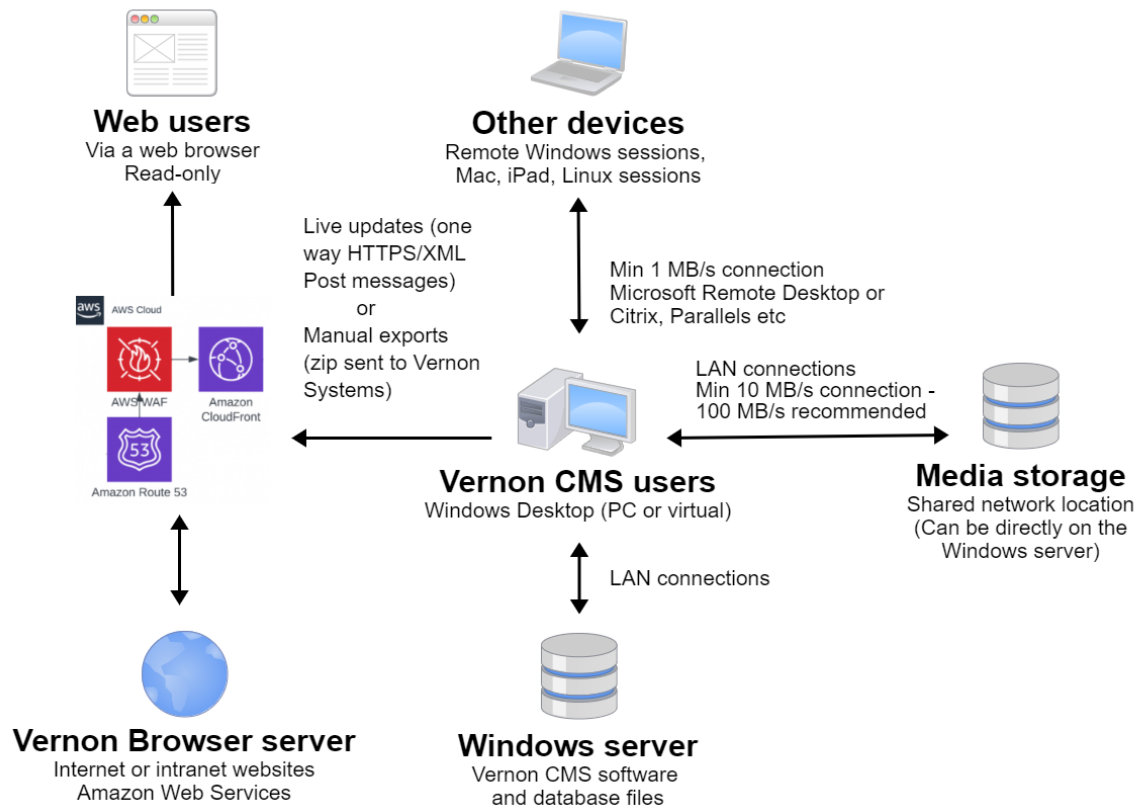


Diagram of Vernon CMS components.

ADDITIONAL NOTES

- Vernon CMS users – Server software accessed from shared drive. Thick client setup.
- Vernon Browser server – Ubuntu, MySQL, Java, Scala, Play Framework.
- Windows server – Revelation OpenInsight. Interface and database software.
- Universal Driver - Windows service only required for multi-user access.
- Media Storage – Access across network by Vernon CMS sessions.

INTRODUCTION

Vernon CMS is a fully integrated desktop application. It may only be installed once at one location. This can be a local PC for single-user systems. For single-user systems, Vernon CMS can be stored on a local PC. For access from different workstations, Vernon CMS should be installed on a file server.

Vernon CMS uses Revelation Software's OpenInsight (Linear Hash DBMS) as its database. Programs and data are stored in a single folder structure, known as Wincoll (default folder name). All users will access this one copy of Vernon CMS.

- Recommended backup unit: Standard disk backup.
- Recommended redundancy: Raid Redundancy.
- Network Protocol: TCP/IP or Named Pipes.

SERVER

Vernon CMS can run on Windows Server 2012, 2016 and 2019. It can also run on a Windows virtual server hosted by VMWare.

For improved availability Vernon CMS can be run on mirrored servers or servers supporting RAID technology.

The Revelation Universal Driver, a network product from Revelation Software, is also 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 4 (or AMD Equivalent)
- 2 GB RAM
- 50 GB Hard Drive
- Backup
- Windows 2012, 2016, 2019, or 2022 Server

STORAGE

Vernon CMS requires approximately 400MB hard disk space. Additional space is required for the data. For indicative disk sizing we suggest allowing between 2500 and 4000 bytes per object. This does not include storage requirements for multimedia.

Vernon CMS requires:

- Application: 400MB approximately
- Data: between 2500-4000 bytes per object
- Multimedia: these files often require the largest portion of the storage space

WORKSTATION

The Vernon CMS Client can run on Windows or on other operating systems such as Mac OS via Microsoft Remote Desktop or Citrix.

All workstations that use Vernon CMS require the installation of the Vernon CMS Client software.

Minimum workstation specification

- Pentium 4
- 1 GB RAM
- 10 GB Hard Drive
- Windows 8, 10, or 11 (Professional)

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.

CONNECTIVITY

Linear Hash server

Multi-user implementations of Vernon CMS require the Revelation Universal Driver to be installed and running on the server where the WINCOLL folder is stored. It will be shown in the server's Services window as the 'Linear Hash' Service.

Wide Area Network

Wide Area Networks are supported using either Windows Remote Desktop or Citrix.

When using Remote Desktop or Citrix application, execution takes place on the remote windows session and only the keyboard, mouse, and display information are transmitted over the network.

Vernon CMS WAN workstations

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

INTEGRATION

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 data in any text delimited form.
- XML sent via Web Messenger (web service).
- RESTful JSON API via Vernon Browser or Vernon CMS.

Dependencies

End users require Microsoft Word and Excel for reporting and XML import function. An email client (e.g. Outlook) required if emails are to be generated from the system.

The Wincoll folder (or the folder that Vernon CMS is installed in) needs to be set as a Trusted Location in Microsoft Word or Excel.

ONLINE COLLECTION

Web server (Vernon Browser)

Our web publication module, Vernon Browser, publishes selected collection data online. Live updates can be sent via HTTPS/XML, while manual exports are transferred via HTTPS/XML and SFTP. We usually upload manual exports on behalf of the client as this is normally only needed during the initial site setup.

The client has access to administration and upload options. The collection data can be published via an API, or on our Browser Template pages.

Vernon Browser is an n-tier application using:

- Ubuntu and MySQL for the database backend.
- Java Beans for the business logic.
- Play templates using the Scala language for the front end.
- Amazon Route 53, Web Application Firewall (WAF), and Cloudfront

Clients use hosting provided by Vernon Systems for the Vernon Browser web server.

BACKUP

Introduction

It is essential to maintain a regular backup schedule for your Vernon CMS system. In the event of hardware failure or natural disaster your backup may be required to restore the most recent working copy of the system. Backing up, storing and testing your system should all form part of your institution's Disaster Preparedness plan.

Creating your backup copy

Vernon CMS can be backed up using the same method you use for other types of data backup. Standard methods include copying the Wincoll folder to external portable hard drives, tape drives or web-based cloud file storage.

Backup schedule

We recommend that the entire system (i.e. the entire Wincoll folder) is backed up daily. We do not recommend partial backups.

Ideally, performing a backup should be an automatic nightly process, with each copy saved on a separate storage device. If the cost of storage is a consideration, daily copies could be overwritten and reused according to a backup schedule.

Note: All users must be logged out in order to copy the Wincoll folder.

LICENSING

Vernon Systems offers a Support and Upgrade Agreement (including software maintenance). This is charged annually on the anniversary of the date of implementation. This price is 20% of the current value of the Vernon CMS licenses held.

The Support and Upgrade Agreement is mandatory for the first year.

While the Support and Upgrade Agreement is optional after the first year of installation, we encourage client sites to subscribe to ensure that they receive the benefits from the latest version of Vernon CMS and continue to have access to support.