

Hardware & Network Requirements

The Progress OpenEdge V10 32-Bit RecTrac, MainTrac, GolfTrac, FinTrac, TeleTrac, WebTrac, and Access Control

Windows software applications are available for customers using Windows 2000/2003, Linux, and Unix servers with Windows 2000/XP/Vista client operating systems and the required TCP/IP network protocol. Please refer to VSI's Progress OpenEdge 10 Certified Operating Systems and Progress OpenEdge 10 Platform Availability dated November 10, 2009. (see last page in Certified Operating Systems document for Windows 2008R2 Server and Windows 7 status)

The following guidelines should assist VSI users in planning for future hardware and network purchases. As you configure your hardware and networks, please use the following minimums, and expand as desired:

Windows 2000/XP/Vista Single User or Client PC - 32-bit (GUI). If Windows XP/Vista, minimum Pentium 4 / 2GHz (or equivalent) with 1GB memory. If purchasing new hardware, suggest minimum Intel Core 2 Duo 3GHz /1333MHz or PentiumM 1.5GHz or Dual-Core 1.6GHz or greater (or equivalent) with 2GB memory or greater. It is important to consider requirements for other applications, along with VSI software, as you determine your memory and other configuration requirements. Please note that a client computer with less processor speed and memory might still operate, but just more slowly.

Windows 2000/2003 Network Server – VSI recommends a minimum Pentium 4 / 2.0GHz (or equivalent) with minimum 1GB memory or more, depending on number of client users; Windows XP/Vista client software includes built-in TCP/IP client networking software. If purchasing new server, VSI recommends a minimum Intel Xeon 3040 Quad Core/ Xeon 2.5GHz 1333MHz or greater (or equivalent) or Core 2 Duo with 2/4/8GB memory or more, depending on the number of client PCs, and a second processor option. Normally, 256MB memory will be required to manage Progress software functions, which includes VSI applications, so allocate this memory in addition to the operating system and other software requirements. It is important to consider all functions utilizing server resources; if extensive, add second processor for other applications. If additional memory is available, it can be reserved for the database cache. This can substantially improve record read performance. Allocating 100MB–400MB of memory, depending on the database size, should be sufficient. Further, it is recommended that the server have a minimum of 1GB disk space available initially, plus adequate space for database growth or another 1 – 5GB.

Windows Resource Kit – If you plan to implement RecTrac AppServer services such as credit card auto-settle and WebTrac WebWacker, you must also install the Windows Resource Kit, which enables these AppServers to operate as Windows services.

Citrix MetaFrame Server & Citrix Presentation Server 3.0 – Progress V10.1B & Windows 2000/2003 recommend minimum Pentium 4 / 3GHz/Dual-Core 1.6GHz or greater (or equivalent) with 32MB memory per local or remote workstation, plus 256MB or more for the network operating system. If new, see server specs above.

UNIX Network Server – for SCO Unixware, VSI recommends a minimum Pentium 4 / 2.0GHz or greater (or equivalent) with 1GB memory or more, depending on the number of client users. Windows 2000/XP/Vista client software includes built-in TCP/IP client networking software. If purchasing new server, VSI recommends a minimum Intel Xeon 3040 Quad Core/ Xeon 2.5GHz 1333MHz or greater (or equivalent) or Core 2 Duo with 2/4GB memory or more, depending on the number of clients. For other UNIX servers, such as IBM, HP, and SUN, use above guidelines to discuss with hardware vendors and network consultants. Other applications operating concurrently will impact the server resources needed.

Linux x86 Server – Red Hat Enterprise & SuSE Enterprise requirements similar to SCO Unixware.

Progress WebSpeed Transaction Server – if you are planning to install the VSI **WebTrac** software, the minimum recommended server configuration is a Intel Dual-Core 1.6GHz or Xeon 3040 Quad Core or greater (or equivalent), 256MB memory for the OS plus 20MB per Agent (25 Agents X 20=500MB) for a minimum of 1GB of memory to start and 500MB free disk space. Although the hardware must be capable of operating Windows 2000 & 2003, SCO UnixWare, Linux, and UNIX, VSI currently supports **Windows 2000 & 2003** for the WebSpeed Transaction Server. Please refer to VSI WebTrac Installation Planning Guide for more details.

Web Server – since each active browser accessing the web server uses up to 2MB memory of which 700KB is required for the WebSpeed Messenger, please ensure that you have sufficient memory available to accommodate the maximum number of expected concurrent browser requests. **Please discuss your web server configuration with VSI to ensure that it will not become overloaded.**

Sample RecTrac Database Server Configurations:

1. Small Server 2–10 workstations: Minimum 2GB memory; server can be used for multiple applications.
2. Medium Server 10 – 39 workstations: Minimum 2GB memory, Recommend 4GB memory, dedicated database server.
3. Large Server 40 & over workstations: Minimum 4GB memory, Recommend 8GB, dedicated database server, dedicated transaction server with 1GB memory, if installing WebTrac.

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4. Small LAN Networks – If only 2–5 workstations in a small LAN network, you can optionally install the VSI software and database on a Windows 2000/XP/Vista PRO workstation, and then share the database using PTP (Peer-To-Peer) networking with the other workstations.

Important: if you plan to install the Progress WebSpeed Transaction Server software on the RecTrac & Progress Program & Database Server, then also combine the memory requirements.

VSI & Progress V10 Software DISK SPACE REQUIREMENTS:

- 1 **RecTrac** – Currently, RecTrac, which includes the VSI programs, empty embedded “live” RDBMS database, training database, and Progress OpenEdge Version 10 Application Server software requires about **1GB** (gigabytes) of disk space, plus sufficient allowance for transaction history database growth.
- 2 **MainTrac** – Currently, MainTrac, which includes the VSI programs, empty embedded “live” RDBMS database, training database, and Progress OpenEdge Version 10 Application Server software requires about **500MB** initially, if installed alone, or **200MB**, if installed with RecTrac, GolfTrac, or MainTrac. Allow ample capacity for storing transaction history for the desired number of years.
- 3 **FinTrac** – Currently, FinTrac, which includes the VSI programs, empty embedded “live” RDBMS database, training database, and Progress OpenEdge Version 10 Application Server software requires nearly **500MB** (million bytes) of disk space, if installed alone, or **200MB**, if installed with RecTrac, GolfTrac, or MainTrac. Allow ample capacity for storing transaction history for the desired number of years.
- 4 **GolfTrac** – Currently, GolfTrac, which includes the VSI programs, empty embedded “live” RDBMS database, training database, Progress Open Edge Version 10 Application Server software requires about **1GB** (gigabytes) of disk space, if installed alone, or **50MB** if RecTrac is already installed. In addition, allow ample capacity for storing transactions for the number of years desired.
- 5 **WebTrac** – Progress OpenEdge V10 minimum **500MB** free disk space, plus space for transaction growth.
- 6 **TeleTrac** – Requires no additional disk space.
- 7 **Access Control** – Requires no additional disk space.

Important Configuration Issues:

Disk Format – VSI recommends formatting disk drives as NTFS rather than FAT32 because of file handle limitations of FAT32.

Screen Resolution Requirements – the minimum screen resolution for RecTrac is 800 X 600.

RAID – If you expect high transaction volume with extensive reads/writes to disk, Progress recommends RAID 1 or 1+0 (Mirroring & Striping) for best database performance. However, if light volume read/writes to disk, but high volume read only for inquiries and reports, RAID 5 works well.

Database Backups - Be sure to include the appropriate databases in the automated backups that should include Progress online backup and daily magnetic media backup, and can optionally include LiveVault online backup.

Networking Requirements:

VSI recommends a minimum 128k bandwidth for each remote client workstation if using T1, Fractional T1, Frame Relay, and Cable. If DSL, ensure that upload bandwidth is minimum 768k for 1–3 remote clients (preferred over 1mps). More importantly, the network **latency** factor should not exceed **10ms**. Avoiding multiple hops from the remote site to the network server and database is one way to reduce latency. If latency is unavoidable, then consider a thin-client solution (e.g., Citrix or Terminal Service) for remote client connectivity. You can also consider the “in process” eRecTrac, eGolfTrac, eMainTrac, and eFinTrac software, as another method to address remote access to your databases using a browser. Be sure to check with VSI for available functions.

Printer Requirements:

VSI provides several print options to accommodate Windows and the various application print functions. Users can print to parallel, serial, or USB ports, or to any network shared printer. Support for USB printers is only supported in Windows 2000 and XP. Some hardware configurations might require a USB-To-Parallel Converter. VSI has tested two models, both of which had Centronics parallel adapters and were hardwired as LPT2 ports. While this converter will work with a Centronics parallel printer, it will NOT work with a printer that uses a DB25 pin adapter instead of Centronics adapter. Examples of this type of printer include the Ithaca 80Plus 40-column receipt printer and the Eltron TLP2742/2844 pass/ID card printer.