

Hardware & Network Requirements

The Progress V9 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 32 Intel 2000 Pro, & XP Pro client operating systems and the required TCP/IP network protocol. Please refer to VSI's Progress V9 and WebSpeed V3 Certified Operating Systems Guide dated November 1, 2006.

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 Pro & XP Pro Single User or Client PC - 32-bit (GUI). If Windows 2000/XP, minimum Pentium 3 / 1GHz (or equivalent) with 512MB memory. If purchasing new hardware, suggest minimum Pentium 4 / 2.4 GHz or greater (or equivalent) with 512MB 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. Thus, 1GB or more might be desirable. Please note that a PC with less processor speed and memory will 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 2000/XP client software includes built-in TCP/IP client networking software. If purchasing new server, VSI recommends a minimum Pentium 4 / 2.8 GHz or greater (or equivalent) with 1GB 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 (1GB or more).

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 V9.1D/V9.1E & Windows 2000/2003 recommend minimum Pentium 4 / 2.8Ghz or greater (or equivalent) with 32MB memory per local or remote workstation, plus 256MB or more for the network operating system.

UNIX Network Server – for SCO Open Server/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 and XP client software includes built-in TCP/IP client networking software. If purchasing new server, VSI recommends a minimum Pentium 4 / 3.0GHz or greater (or equivalent) with 1GB memory or more, depending on the number of clients. For other UNIX servers, such as IBM, HP, SUN, NCR, Unisys, and Compaq, use above guidelines to discuss with hardware vendors, network consultants. Other applications operating concurrently will impact the server resources needed.

Linux Intel Server – Red Hat, SuSE, & Turbo 7 requirements similar to SCO Unix.

Progress WebSpeed Transaction Server – if you are planning to install the VSI WebTrac software, the minimum recommended server configuration is a Pentium 4 / 2.0GHz 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 is currently only supporting **Windows 2000 or 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 call VSI to discuss how you plan to implement your web server so that we can be sure that it does not get overloaded.**

Sample RecTrac Database Server Configurations:

1. Small Server 2–10 workstations: Minimum 1GB memory; server can be used for multiple applications.
2. Medium Server 10 – 39 workstations: Minimum 1GB memory, Recommend 2-4GB memory, dedicated database server.
3. Large Server 40 & over workstations: Minimum 2GB memory, Recommend 4-8GB, dedicated database server, dedicated transaction server with 1GB memory, if installing WebTrac.
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 or XP PRO workstation, and then share the database using PTP (Peer-To-Peer) networking with the other workstations.



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

VSI & Progress V9 Software DISK SPACE REQUIREMENTS:

- 1 **RecTrac** – Currently, RecTrac, which includes the VSI programs, empty embedded “live” database, training database, and Progress Version 9 server software and client networking software, Merant ODBC driver, and Crystal Reports Viewer, 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” database, training database, and Progress Version 9 server software and client networking software, Merant ODBC driver, and Crystal Reports Viewer, 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” database, training database, and Progress Version 9 server software and client networking software, Merant ODBC driver, and Crystal Reports Viewer, 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” database, training database, Progress Version 9 server software and client networking software, Merant ODBC driver, Crystal Reports Viewer, 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 V9 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 800X600.

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. 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.

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.