



Enterprise Edition System Requirements

EZTeller Enterprise Edition is “bank-centric” in design. You organize your branches into a hierarchy that matches the way your holding company or bank operates in the business world. This exceptionally flexible program enables you to centrally control the day-to-day administration and data-reporting from the holding company, bank, group, or branch level in the manner that best meets your business needs.

EZTeller Enterprise Edition and its components utilize standard PC equipment. The following recommendations apply to EZTeller only. If you run multiple concurrent applications, your system might require additional resources.

Server Hardware Recommendations

EZTeller Enterprise Edition uses an SQL database server and a server directory as follows.

- ❑ **EZTeller SQL Database Server**—An SQL server to house the database.
- ❑ **EZTeller Server Directory**—A directory to house the system files that run on the workstation.

Note: See examples of EZTeller architecture in the section titled “EZTeller Enterprise Architecture.”

EZTeller SQL Database Server Recommendations

IMPORTANT! Harland Financial Solutions requires that you have a Microsoft Certified Database Administrator, either in-house or out-sourced, to support the EZTeller database.

The SQL server houses the EZTeller database. The database contains journals, currency transaction reporting information and special alerts. It also contains any holding company, bank, and branch specific information. This SQL database must be accessible to all workstations that run EZTeller Enterprise Edition.

SQL server requirements vary greatly depending on the number of users and applications that are run. These specifications apply when EZTeller is the *only* database stored on the SQL server. If you store other databases (in addition to EZTeller) on the SQL server, you might need to reassess how you have your server set up and review the EZTeller requirements.

Minimum Specifications

- ❑ For up to 50 Workstations per Server (SQL Standard Edition or SQL Enterprise Edition)
Server Class Machine with a minimum of: Pentium III Xeon, or equivalent 500MHz Processor or greater; L2 Cache of 512KB or greater; 1GB RAM; Hardware RAID Controller with 32-64MB RAM; Two 36GB drives for the OS and software on Raid 1; Two 72GB drives for EZTeller Data on Raid 1.
- ❑ For 50-250 Workstations per Server (SQL Enterprise Edition is Recommended)
Server Class Machine with a minimum of: Dual Pentium III Xeon, or equivalent 1GHz Processors or greater; L2 Cache of 1MB or greater; 2GB RAM; Hardware RAID Controller with 64-128MB RAM; Two 36GB drives for the OS and software on Raid 1; 150GB of available space for EZTeller Data on Raid 5.
- ❑ For 250-500 Workstations per Server (SQL Enterprise Edition is Required)
Server Class Machine with minimum of: Quad Pentium III Xeon, or equivalent 500MHz Processors **or** Dual Pentium III, Xeon, or equivalent 1.4GHz Processors or greater; L2 Cache of 2MB or greater; 4GB RAM (requires SQL Server Enterprise Edition); Hardware RAID Controller with 256MB RAM; Two 36GB drives for the OS and software on Raid 1; 300GB of available space for EZTeller Data on Raid 5.
- ❑ For 500+ Workstations per Server (SQL Enterprise Edition is Required)
Server Class Machine with minimum of: Eight Pentium III Xeon, or equivalent 500MHz Processors **or** Quad Pentium III, Xeon, or equivalent 1.4GHz Processors or greater; L2 Cache of 2MB or greater; 8GB RAM (requires SQL Server Enterprise Edition); Hardware RAID Controller with 256MB RAM; Two 36GB drives for the OS and software on Raid 1; 600GB of available space for EZTeller Data on Raid 5; Two 150GB Drives on Raid 1 for the EZTeller Transaction Log.

- ❑ Microsoft SQL Server, qualified and tested versions:
 - SQL 2000 Enterprise Edition
 - SQL 2005 Enterprise Edition
- ❑ All SQL servers should also have:
 - Windows® 2000 Server or Windows 2003 Server.
 - DLT or similar data device for daily backups.
 - Battery backup (UPS) in case of power failure.
 - Microsoft SQL Server® 2000 with appropriate number of Client Access Licenses (CALs) **or** Microsoft SQL Server 2005 can be used with EZTeller version 4.1 or higher.

Note: Harland Financial Solutions does not provide Microsoft SQL Server software.

EZTeller Server Directory Recommendations

The directory containing the system files is called "EZTeller Server." It contains the .DLL, .EXE, .DAT, and license files that are specific to workstations at a branch or a group of branches. This server directory can be located on a central server (such as the database server) for all branches; or, when license files differ by branch, they can be located in separate folders on the same server. You can also place this directory locally on the branch server.

EZTeller automatically performs all necessary updates. When a user opens EZTeller or *Superview* by clicking on the program icon, *EZStartupENT.EXE* or *EZSuperStartENT.EXE*, it compares the installed version on the file server to that on the workstation to determine if an update is necessary. If an update is not necessary, EZTeller (or *Superview*) opens as requested. That means you need only update the EZTeller Server, not each workstation.

Specifications

- ❑ Server Class machine with a minimum of: One Pentium III, Xeon, or equivalent 500MHz processor; 256MB RAM; and 2GB free hard disk space.
- ❑ Windows 2000 Server or Windows 2003 Server.

EZTeller Enterprise LAN Connectivity

- ❑ EZTeller will work with either 10Mbps or 100 Mbps Ethernet.
- ❑ TCP/IP.

Note: Use of a single LAN protocol is recommended, either IP or IPX (but not both), due to frequent queries and calls in EZTeller.

EZTeller Enterprise Wide Area Network (WAN) Connectivity

- ❑ Recommended minimum is 56Kbps for data throughput to the host systems from the EZTeller workstations.
- ❑ Recommended minimum for data throughput to the database server is 256Kbps. For T1 circuits, this means that at least two 64Kbps channels must be dedicated to data. For Frame Relay connections, this means that the connection speed must be at least 128Kbps with a Committed Information Rate (CIR) of 128Kbps. Additional application traffic (other than EZTeller) on the WAN might require more throughput for improved performance.

Note: It is possible to use a 128Kbps minimum, however EZTeller startup and installation of updates will be slow.

Note: A guideline for solid WAN performance is 40Kbps per user. For example, the 128Kbps minimum connection speed will adequately perform for three concurrent users.

EZTeller Enterprise Workstation Requirements and Recommendations

EZTeller Enterprise uses standard PC equipment. The following recommendations apply.

Workstation Operating System

Windows 2000 (requires *Power User* authority) or
Windows XP (requires *Local Administrator* authority)
Citrix/Thin Client terminals must be Windows' based.

Note: Contact Client Services for a list of supported terminals.

Transaction Printer (the serial port models)

Epson TM-U375, TM-U675, TM-U370, TM-U325, TM-J7100
Inkjet, TM-H6000II/III.

Addmaster IJ6000, IJ6080, or IJ2040 with 8K RAM buffer.

Pertech (formerly Axiohm) A721, A470, 4771.

Ithaca 93 Plus.

Ithaca BANKjet 1500 (for information, call Client Services).

Unisys EFP 9840, 9841, 9524.

Note: Serial port printers are strongly recommended. All listed impact printers accommodate only left-bound official checks.

PC Configuration

Pentium 200MHz (minimum).

128MB RAM (minimum).

200MB free hard disk space.

Standard monitor and keyboard.

Serial and parallel ports (USB ports are not currently supported).

Passbook Printer

Craden DP6, DP7, DP8, or DP9.

Note: EZTeller supports passbook printing only from PCs that are physically connected to the printer by serial cable.

Other Recommendations

Network Printers

- Laser Printer.
- Duplex Capacity (preferred).

Cash Dispensers

EZTeller ACD and Compuflex™* Dispenser Upgrade Package both support bill dispensers made by:

- Glory.
- Diebold.
- DeLarue (formerly LeFebure).
- NCR.
- Technitrol.
- ArcaCash.

At this time, there is no recycler interface.

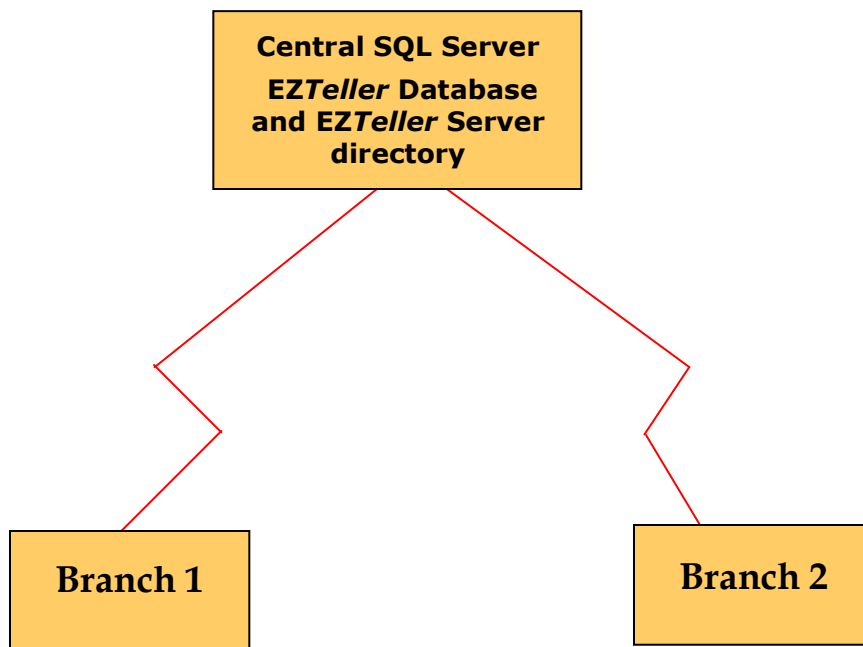
* Compuflex 32-bit software is required. Harland Financial Solutions supplies Compuflex for use with EZTeller ACD at an additional cost.

Additional Help

Harland Technology Services offers flexible maintenance programs to help you with additional hardware, maintenance, and implementation support. For more information, contact Harland Technology Services at 1-800-228-3628 (www.harlandtechnologyservices.com).

EZTeller Enterprise Architecture

The following diagram outlines the logical setup of the SQL EZTeller database and EZTeller file server directory in relation to the branches. This example shows the way a bank might choose to designate the EZTeller file server while maintaining one SQL server for the entire bank.



EZTeller Layout

Example of customary deployment. The design can vary depending on WAN connectivity and server configuration in relation to resource demands. An adjustment in design might include a separate SQL Server device to service the entire bank and an EZTeller Server directory at each branch.

EZTeller Server directory and SQL Server location can be on one file server.

