

## ***MedInformatix System Requirements***

A MedInformatix installation requires a workstation for each user who will access the system and a central server to store and process the data. A large installation may require more than one server. The MedInformatix database will be managed by Microsoft SQL Server, which is a software package that will run solely on the server machine. At least one backup storage device is needed to protect the data in case of system failure such as a network storage device, file share or tape drive. Printers also need to be available to print reports, forms and documents. The following topics will give a more detailed explanation of the equipment and software requirements.

The hardware configurations listed below can be used as a guide to server and workstation requirements for MedInformatix Systems. This should be used as a guide only. The final configuration will depend upon the actual use of the system including tolerated down time in the event of hard drive or server failure.

### **REMOTE ACCESS**

The Customer will provide the Acentec Implementation Project and Support Team appropriate remote access to the system for installation, updates and customer support. Remote access using LogMeIn is required. If access is not available or configured using the specified connection types, this will result in a delay in the implementation timeline and support responsiveness.

### **SERVERS**

Each Server is unique to its site. The specifications will vary greatly depending upon the environment. For instance, a site having 50 users may be able to function with a single server whereas a site with 1000 users will require more. If you have questions regarding a server that you already have, call Acentec to see if it will be sufficient.

An installation requires at least one server computer that will store the centralized data and program files for the network. A server machine will provide two functions for the MedInformatix software. It will store the system files and thus act as a file server. It will also run a database management application that will manage the MedInformatix SQL database. A server that runs SQL database software is called a "database server". On a small site a single server machine will handle both server functions. In larger sites, separate server machines will handle each function. Acentec currently recommends Dell servers for the technical support service, value and reliability.

## Notes:

- For a fail-safe environment in the event of a hard disk and or software failure, a Raid 5 installation (for hard disk failures) is recommended.
- Other methods of protection such as mirrored drives, SQL server replication, etc. can be installed. The user should review all options and implement accordingly.
- For Database hard drive configuration assume 1 GB per Physician per year for systems using EMR and Practice Management
- Please review the discussion at the end of this document regarding SQL Server capacity and performance.

## 150+ Users – Server Configuration

### Qty 1 – Network Server – Operating System/Apps

- O/S – O/S – Microsoft Windows Server 2008 64Bit (Enterprise Edition)
- Processor – Dual Intel X5570, 2.93Ghz, 8M Cache, Turbo, HT, 1333MHz
- Memory – 16 GB RAM
- Drives – 2 Hard Drives of 146 GB each for OS swap (RAID 1) and 4 Hard Drives a of 1TB each (RAID 10)
- Backup Device / Network Drive Backup / Others

### Qty 1 – Data Server – Network Data/File Storage

- O/S – Microsoft Windows Server 2008 64Bit (Enterprise Edition)
- Processor – Dual Intel X5570, 2.93Ghz, 8M Cache, Turbo, HT, 1333MHz
- Memory – 16 GB RAM
- Drives – 2 Hard Drives of 146 GB each for OS swap (RAID 1) and 6 Hard Drives a of 1TB each (RAID 10)
- Backup Device / Network Drive Backup / Others

### Qty 1 – SQL Database Server

- O/S – Microsoft Windows Server 2008 64Bit (Enterprise Edition)
- SQL Database – Microsoft SQL Server 2008 64Bit (Enterprise Edition)
- Processor – Dual Intel X5570, 2.93Ghz, 8M Cache, Turbo, HT, 1333MHz
- Memory – 64 GB of RAM
- Drives – 2 Hard Drives of 73 GB each for OS swap and 4 Hard Drives a of 300GB each for Database, Backups, Transaction Logs (RAID 10)
- Optical Drive: 1 DVD Drive

Note: Hard disk spaces at varies at this point by number of users using the system and also existing database size.

### Network Server Backup Device

Clients with 150 users who are utilizing EMR should consider installing a Server for Storage of the Records and RW Directory. Particularly, if the site stores a large number of scanned documents and/or large imaging files.

## TERMINAL SERVER

Microsoft suggests using remote terminal servers for front end and backup server topology, which means based on the number of remote users accessing your applications, you need calculate the number of terminal servers that you need to load balance your traffic.

### Qty 1 – Terminal Server

- O/S – Microsoft Windows Server 2008 64Bit (Standard Edition)
- Processor – Dual Intel X5550, 2.66Ghz, 8M Cache, Turbo, HT, 1333MHz
- Memory – 8 GB RAM
- Drives – 2 Hard Drives of 73 GB each (RAID 1)

Note: Hard disk spaces at varies at this point by number of users using the system.

## FAX SERVER

### ActiveFax

- O/S – Microsoft Windows Server 2008
- Processor – Intel X5520, 2.26Ghz, 8M Cache, Turbo, HT, 1066MHz
- Memory – 4 GB of RAM
- Drives – 1 Hard Drive of 146 GB
- BrookTrout 4 – 8 Port Modem Card

Note: This component may also be tied to Application Server

## NETWORK

Microsoft and Acentec recommend maximizing network hardware to optimize server and workstation performance. Therein, gigabit LAN cards, routers, and switches provide seamless network and SQL application connectivity. In addition, utilizing wireless-G technologies for wireless network components provides ample connectivity performance for Tablet PCs, handheld devices, and all other wireless tools.

## WORKSTATIONS

Each user that will access the MedInformatix system will need a workstation. While workstation configurations will vary according to each user's needs and duties, the following can be used as a general guideline for end-user utilization of the MedInformatix system.

### Processor

- Single Processor – Pentium IV (Minimum)
- Single Processor – Pentium Core 2Duo (Recommended)

**Memory**

512 MB RAM (Minimum)  
2 GB RAM (Recommended)

**Drives**

1 Hard Drive – 80 GB (Minimum)  
1 Hard Drive – 160 GB (Recommended)  
1 CD Drive (Minimum)  
1 CDRW/DVD Drive (Recommended)  
Floppy Drive (Optional)

**Network Card**

LAN 10/100 Mbps (Minimum)  
Gigabit LAN 10/100/1000 Mbps (Recommended)

**O/S & Software**

Microsoft XP Professional SP3  
Internet Explorer 6.0 or higher  
Adobe Acrobat Reader

**TABLETS (Stylistic/Tablet PC)**

**Processor**

Single Processor—Intel Core Solo (Minimum)  
Single Processor—Intel Core2Duo (Recommended)

**Memory**

512 MB RAM (Minimum)  
2GB RAM (Recommended)

**Drives**

1 Hard Drive – 80 GB (Minimum)  
1 Hard Drive – 160 GB (Recommended)  
1 CD Drive

**Network Card**

LAN 10/100 Mbps (Minimum)  
Gigabit LAN 10/100/1000 Mbps (Recommended)

**O/S & Software**

Windows XP Professional, Tablet PC 2005  
Internet Explorer 6.0 or higher  
Adobe Acrobat Reader  
Microsoft Office One Note

If there are any questions regarding the particular configuration for workstations for your site, please contact Acentec.

## **Hardware and Accessories**

### Tablets

<http://solutions.us.fujitsu.com/www/solutions.shtml?solutions/healthcare>

### Scanners

<http://www.fujitsu.com/us/services/computing/peripherals/scanners/medical.html>

### Label Makers

[http://global.dymo.com/enUS/Segments/Office\\_Solutions.html](http://global.dymo.com/enUS/Segments/Office_Solutions.html)

### Signature Devices

<http://www.wacom.com/industries/medical.php>