From the desk of Seymour Fertig
1033 Route 46
Clifton, NJ 07013

Tel. (973) 777- 8050
Fax (973) 777- 3063
sf@tshinc.com

The Systems House, Inc.

Hardware Installation Recommendations

The following policy is intended to guide customers wishing to procure their own equipment and/or wishing to support aspects of their system locally.

System Administrator Requirements

1. Onsite person designated as "System Admin" -- does not need to be extremely technical but someone who we can address fix PC type problems. (i.e. my PC is not connecting).
2. TSH can arrange for on-site PC setup and support thru third party support companies with whom we have developed relationships.

Equipment to be supplied by Customer:

1. A central computer system (Server) appropriate to the number of planned users on the system. (See below for specifications). Cloud/ASP/Timeshare Customers do not require a server.
2. Each end-user is to have access to a Desktop PC or laptop computer. (See below for specifications).
3. All PC's are connected to the server via a network. Printers connected to the back of an individual PC can be used with some limitations. These are typically connected using USB or parallel cables.
4. A central hub with a port for each PC and printer is required. TSH recommends a 1GB TCP/IP network, although the older 10/100 mb speed is adequate for all MDS functions.
5. The network may be setup using a wireless router in which case each PC must have a wireless adapter installed.
6. If a wireless connection is not is use, dedicated wiring is required between each PC and the central hub. Cat 5 cable is required, terminated with an RJ45 connector.
7. One or more HP Laser Printer(s). All MDS forms are designed to work with laser printers, and make use of the PCL programming conventions as implemented on HP printers. Those with integrated network cards will require an HP Jetdirect network interface.
8. TSH recommends that printers be "hard wired", even though they can work over a wireless connection.
9. Dedicated Broadband internet line (DSL,Cable,T1) to allow access to TSH personnel via Internet for software support. It is best if the internet connection is secured with one or more Static IP Addresses.
10. Internet Router – this device attaches the internet line to your internal router.
11. Firewall – this prevents unauthorized access to your system and network from the internet, and at the same time facilitates access for those authorized to access the system.
12. If E-mailing from the MDS system is desired, then an e-mail server or service is required. TSH can assist in providing this capability.

13. Desirable - Backup phone line and modem for emergency support in case the internet connection is down.
14. Fax support – TSH has interfaced extensively with VsiFax, an enterprise fax server. VsiFax requires a dedicated telephone line and modem, or can connect via the Internet with a nominal fee per fax. Cloud/ASP.Timeshare customers do not have to provide fax service, this will be managed by TSH.

Server Specifications:

1. Windows Server running Windows 2008 or later, Linux Servers running RHEL 5.1
2. CPU speed of at least 2.0 Ghz
3. Dual processor configurations recommended for over 20 users
4. Memory – minimum 4 GB RAM. 8 GB over 20 users, and 16GB over 40 users.
5. 2 x 72 GB Disks -mirrored (or equivalent). If a larger database is required, we recommend Raid V, which requires a minimum of 3 disks.
6. Tape drive or removable media backup – with sufficient capacity to back up the entire server and database
7. Network card (1GBit recommended)
8. Modem for Support
9. CD reader recommended
10. Fax Modem (If VsiFax is included with the system).
11. UPS for Power backup with software to recognize a loss of electric power.

Workstation Specifications:
1. Windows PC, AMD, Pentium or Celeron
2. Operating System: Windows 7 , Windows 8.1
3. CPU speed of 1.8 Ghz recommended
4. Memory - 2GB (the more memory the better)
5. Standard disk drive (minimum 100GB)
6. Network card (1GBit recommended)
7. CD Recommended.
8. MDS-Nx software is provided by TSH (via download)

Printer Specifications:
1. HP or HP Compatible Printers only
2. Black and White (color is not supported)
3. Print speed minimum 12PPM Recommended 32PPM
4. Network card (HP Jetdirect interface)
5. HP PCL 5 Compliant