IntellectandPatient Chart Manager
Hardware and Peripherals
Updated 8/14/2019

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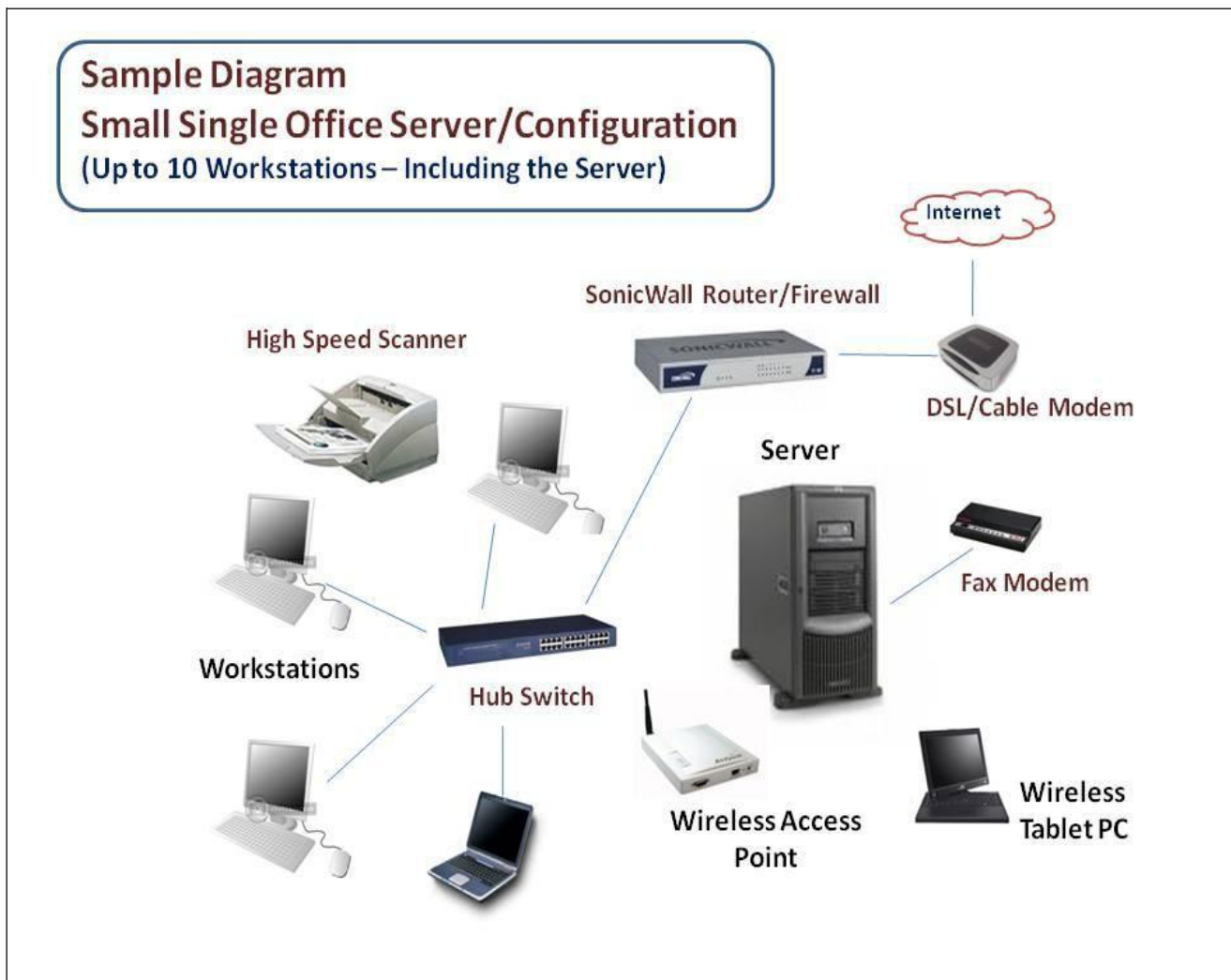## Small Single Office Server (Option 1)

The Practice Share Server for Intellect & Patient Chart Manager

Windows 2019 Server Standard or Enterprise Edition 64-bit Operating System only

- RDS user CAL Licenses for Remote Access (2019 Server allows for flexibility in initial or future terminal services use)
- Intel® Xeon® 4208 series or higher with 32GB+ of memory
- 17-inch+ monitor
- **500 GB SSD or higher (a 2nd or more 500 GB or equal size HD can offer Mirroring Capability w/Raid)
- Tape or RDX Backup Drive that will support the maximum allowable space of the Hard Disk in native format.
- Symantec Backup Recovery and Antivirus Software is recommended for this configuration
- Network Interface Card(s)

Sample Diagram
Small Single Office Server/Configuration
(Up to 10 Workstations – Including the Server)

Larger Single Office Server (Option 2)
The Practice Share File Server for Intellect & Patient Chart Manager

Windows 2019 Server Standard or Enterprise Edition 64-bit Operating System only

- RDS user CAL Licenses for Remote Access (2012 Server allows for flexibility in initial or future terminal services use)
- 2x Intel® Xeon® 5118 series or higher with 32GB**+** of memory
- 17-inch**+** monitor
- **500 GB SSD or higher (a 2nd or more 500GB or equal size HD can offer Mirroring Capability w/Raid)
- Tape or RDX Backup Drive that will support the maximum allowable space of the Hard Disk in native format. Symantec Backup Recovery and Antivirus Software is recommended for this configuration
- UPS Power Backup System
- Network Interface Card(s)
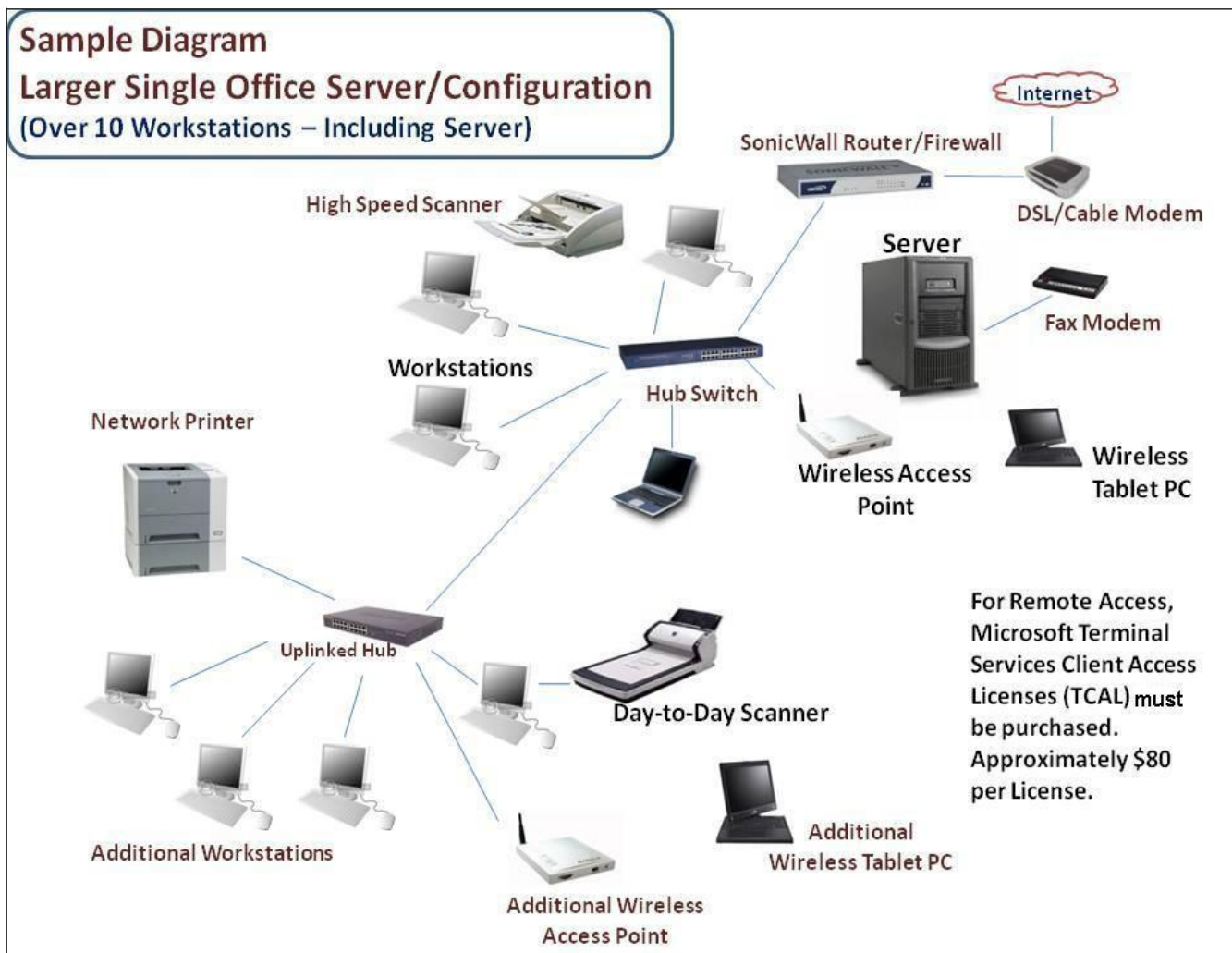
Larger Multiple Office Server(s) (Option 3)

The Practice Share 2 File Server configuration (Windows server for Patient Chart Manager and Windows server for Intellect)

Windows 2019 Server R2 Standard or Enterprise Edition 64-bit Operating System only

- RDS user CAL Licenses for Remote Access (2012 Server allows for flexibility in initial or future terminal services use)
- 2x Intel® Xeon® 4116 series with 64GB**+** of memory
- 17-inch**+** monitor
- **1 TB SSD or larger HD (a 2nd or more, 1 TB HD can offer Mirroring Capability w/Raid)
- Tape or RDX Backup Drive that will support the maximum allowable space of the Hard Disk in native format.
- [Symantec Backup Recovery](#) and Antivirus Software is recommended for this configuration
- UPS Power Backup System
- Network Interface Card(s)

Windows 2019 Server Standard or Enterprise Edition 64-bit Operating System only (Oracle Database Server)

- Intel® Xeon® 4116 series with 32GB of memory or higher
- 17-inch monitor or higher
- **300 GB SSD or larger (a 2nd or more 300 GB or equal size HD can offer Mirroring Capability w/Raid)
- Tape or RDX Backup Drive that will support the maximum allowable space of the Hard Disk in native format
- [Symantec Backup Recovery](#) and Antivirus Software is recommended for this configuration
- UPS Power Backup System
- Network Interface Card(s)

IMPORTANT NOTES:

- HD/Tape Backup Drive(s) size can vary depending on the size of the practice.

- Backup and Verification of your FILES (Patient Chart Manager and Intellect) are extremely critical

- Windows 2019 Server with Remote Desktop Service Configuration can also provide the ability to have the server act as an Application Server. Thus the EMR program (installed on the server as well) can be ran by connecting to the server by way of a RDS Client application such as RDP (Remote Desktop Connection) installed on any Network PC or even remotely via Internet (this requires a static internet address assigned to the server and a highly recommended secure VPN connection/setup)
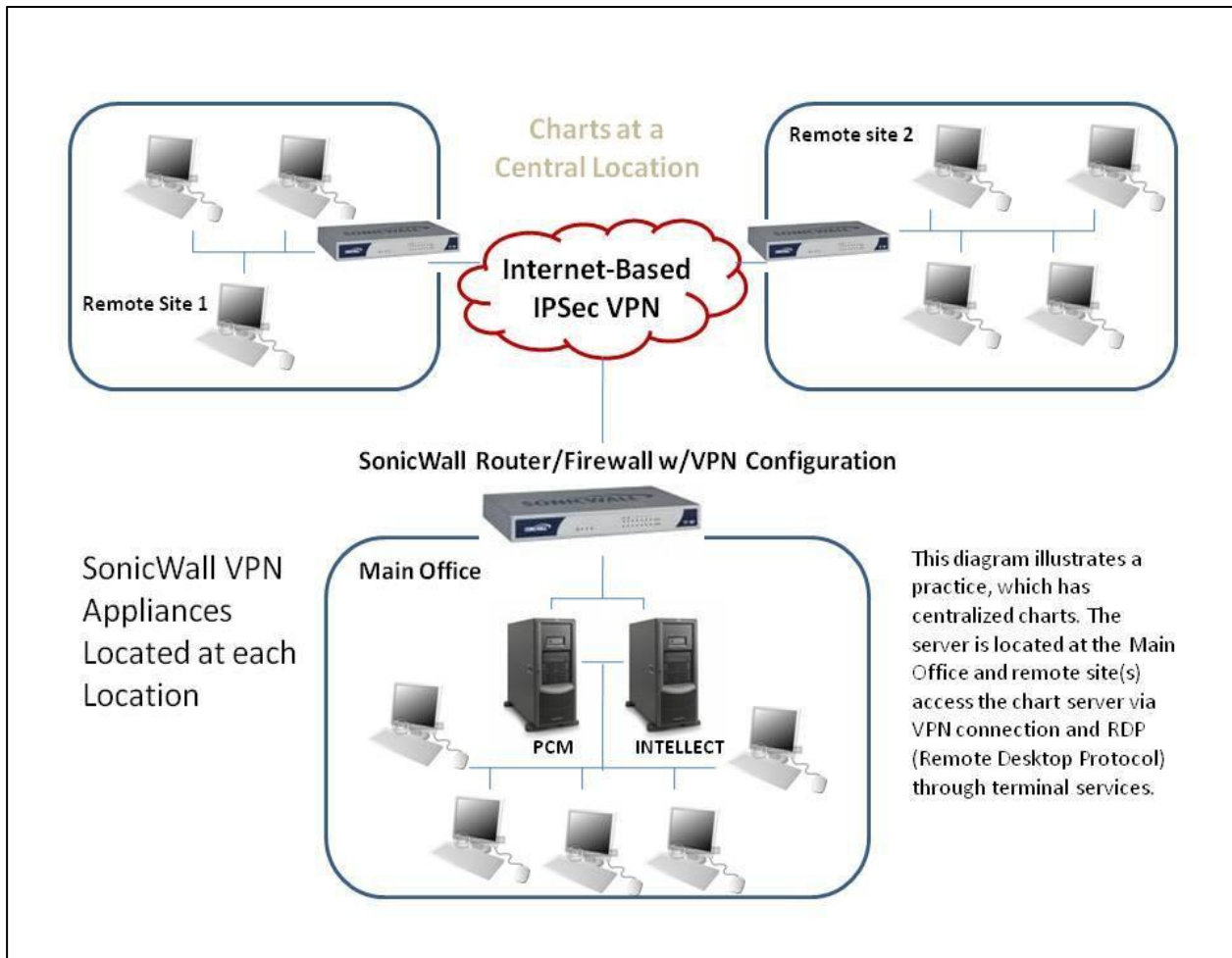
With a configuration like the above illustrations (server options 2 or 3 can be used), the Main office **only** will have complete Patient Chart Manager Functionality. Each workstation at the Main Office would have the full PCM program installed. The Remote Sites would be using RDP (Remote Desktop Protocol) Sessions to the Main Office and running Patient Chart Manager on that Application Server through Terminal Services **(The Appropriate Number of RDS Client Access Licenses must be purchased).**

Server Hosting Requirements:

- High speed, stable Internet Service with Static IP address

- Minimum of 10Mbps upload/download speed.

- Windows 10 Professional desktop OS with at least 8GB of RAM and I CORE 5 Processor for the workstations.

- For Scanning and Voice Recognition workstations, at least 12GB of RAM.

- Wireless Access Points for Tablets (if applicable). Cisco WAP preferred.

- Hewlett Packard Laserjet Network TCP/IP Printers (PCL 6 compatible) Model M604N or higher.

- Twain compliant Scanner. Canon DR-M160 ver2 recommended

- Sonicwall Firewall Router Model TZ 300 or above to establish a VPN (Virtual Private Networking) connection between the Client's office and the Hosting site. A change of IP scheme within the client's office may be necessary to successfully configure the VPN Tunnel.

- All Electronic Claims must be processed using a Clearing House (i.e. Gateway EDI, OptumInsight, Zirmed or Capario for Conversion clients only)

- **CALLSTAFF** is our automated Patient Appointment Reminder call system.

- To use **CALLSTAFF**, you must sign up with TWILLIO, a third party cloud communications company (which replaces the need for a phoneline!). Minimal charges apply. To activate, visit www.twilio.com

- TS Scan Software for Remote Scanning must be purchase prior to installation for all remote scanning workstations. (Additional information on page 13)

- Faxing is thru Faxage.com. An account with faxage is required.

Workstations

Scanning Station (Option A)
Physically connected to a High Speed Scanner such as the Canon DR series or other **TWAIN** compliant scanner

- Windows 10 Professional
- Intel® Pentium® I Core 5 or higher processor with minimum 12GB of RAM (Scanning station can also serve as a "Voice Recognition Station")
- 240GB SSD or higher
- 20" monitor or higher
- 2 (4 preferred) USB Ports to connect USB peripherals.

Standard Station (Option B)
For Front Desk, Billing & Nurse access

- Windows 10 Professional
- Intel® Pentium® I Core 5 or higher processor or higher with minimum 8GB of RAM 240GB SSD or higher
- 20" monitor or higher.
- 2 (4 preferred) USB Ports to connect USB peripherals. Network Interface Card
- 2 or more USB Ports Sound Card (If needed)

**Note: Workstations can be equipped with a Wacom Cintiq 15x Pen Tablet Monitor in order to use "Pen Based" EMR Documents

COMPATIBLE TABLETS

ThinkPad X1 Yoga Gen 4 (14")

Lenovo ThinkPad X1 Yoga (4th Gen) 20QF - Flip design - Core i7 8665U / 1.9 GHz - Win 10 Pro 64-bit - 16 GB RAM - 256 GB SSD TCG Opal Encryption 2, NVMe - 14" IPS touchscreen 1920 x 1080 (Full HD) - UHD Graphics 620 - Wi-Fi, Bluetooth - iron gray

Lenovo ThinkPad X1 Yoga (4th Gen) 20QF - Flip design - Core i7 8565U / 1.8 GHz - Win 10 Pro 64-bit - 8 GB RAM - 256 GB SSD TCG Opal Encryption 2, NVMe - 14" IPS touchscreen 1920 x 1080 (Full HD) - UHD Graphics 620 - Wi-Fi, Bluetooth - iron gray

NETWORK PRINTERS

The following printers are highly recommended for both **OnStaff-Intellect** and **PCM** applications.

HP LaserJet Enterprise M604n –
Printer - monochrome - optional - laser - A4/Legal – 1200 x 1200 dpi - up to 52 ppm - capacity: 600 sheets – USB 2.0, Gigabit LAN, USB 2.0 host

HP LaserJet Enterprise M604dn –
Printer - monochrome - Duplex - laser - A4/Legal – 1200 x 1200 dpi - up to 50 ppm - capacity: 600 sheets – USB 2.0, Gigabit LAN, USB 2.0 host

HP LaserJet Enterprise M605n –
Printer - monochrome - optional - laser – A4/Legal – 1200 x 1200 dpi - up to 58 ppm - capacity: 600 sheets – USB 2.0, Gigabit LAN, USB 2.0 host

HP LaserJet Enterprise M605dn –
Printer - monochrome - Duplex - laser - A4/Legal – 1200 x 1200 dpi - up to 58 ppm - capacity: 600 sheets – USB 2.0, Gigabit LAN, USB 2.0 host

HP LaserJet Enterprise M605x –
Printer – monochrome - Duplex - laser - A4/Legal – 1200 x 1200 dpi - up to 58 ppm - capacity: 1100 sheets – USB 2.0, Gigabit LAN, Wi-Fi(n), NFC, USB 2.0 host

SCANNERS (Day to Day Scanners)

Canon imageFORMULA DR-M260 –
Document scanner - Duplex - 8.5 in x 220 in –
600 dpi - up to 60 ppm (mono) /
up to 60 ppm (color) – ADF (60 sheets) –
USB 2.0

*Any TWAIN Compliant scanners will work with Patient Chart Manager

Remote Desktop Scanning

TSSCAN

TERMINAL SERVER SCANNING

Fully TWAIN standard compliant scanner mapping for remote desktop, terminal services, VDI or Citrix servers. TSScan lists all your local imaging devices and makes them accessible on your remote desktop server. Through advanced compression methods and Microsoft Virtual Channel technology, TSScan can be used on any kind of network. There is no loss in image quality, making our RDP scanning software an ideal solution even for enterprise environments.

https://www.terminalworks.com/remote-desktop-scanning

TSWebcam

is a rdp webcam mapping tool which maps your local DirectShow web cam to your remote desktop or citrix server. Now you will be able to use Skype, VLC and remote conference meeting software on your remote desktop server.

DIRECTSHOW COMPATIBLE
TSWebcam comes with a DirectX compatible image source thus supporting a wide range of applications and hardware. By being fully DirectShow compatible TSWebcam will be also able to map video capture cards, ID scanners and other DirectShow compatible hardware.

RDP AND CITRIX SUPPORT
Works on any Windows remote desktop or terminal services server. Citrix servers are also fully supported. TSWebcam requires no special client and utilizes the built in Virtual Channel technology to tunnel the video stream through your existing connection. Because of that it requires no network changes on your side.

DRIVERLESS INSTALLATION
There is no need to install drivers on the server side. TSWebcam will register itself as a camera on the server side as a user mode driver. User mode drivers are running inside a users session and can't impact the stability of your server.

CUSTOM RESOLUTION AND COMPRESSION
TSWebcam allows you to configure its resolution and compression. This way you can set it up to suite your network bandwidth and avoid stuttering streams or frame drops.
240P 480P 1080P

http://www.terminalworks.com/remote-desktop-webcam

Hewlett Packard Magnetic Stripe Card Reader FK186AT

- The HP USB mini magnetic stripe reader (MSR) is a fully intelligent swipe reader that can be programmed to divide, rearrange, edit and validate fields of magnetic card data.

- The HP USB MSR reads up to three tracks of information with a single swipe of a magnetic stripe card in any direction. The beeper and LED signal a successful read. It automatically distinguishes between formats.

- MSR is just 3.5 inches long. It can be used as a freestanding unit or can be mounted using screws, Velcro, or mounting brackets.

Features

- Ideal for retail environments where counter space is limited, only 3.5 inches long

- Automatically distinguishes between magnetic data formats

- Reads up to three tracks of information with a single swipe of a magnetic card

- Quick and easy card scanning with bi-directional read capabilities

- Can be used as a free-standing unit, mounted to a surface [1] or attached to an HP touch screen or flat panel monitor with accessory rails

Wireless Networking Options

AIR-SAP2602E-A-K9
Cisco Aironet 2602e Autonomous - Wireless access point - 802.11 a/b/g/n

AIR-ANT2524DB-R=
Cisco Aironet Dual-Band Dipole Antenna – antenna - indoor - 2 dBi, 4 dBi - black - for Aironet 3602E

AIR-PWRINJ4=
Cisco - Power injector - AC 100-240 V - for Aironet 1041, 1042, 1141, 1142, 1250, 1252, 1260, 3500, 3501, 3502, 3602

Hardwired Networking Options

Network Switches

These Fast Ethernet switches provide a cost-effective way to instantaneously boost network center performance while preserving most of your network investment, including installed cabling and end users' software and hardware. These switches are ideal for delivering large amount of multimedia, image, and video information to end users at speeds comparable to their
hard drives.

16 or 24 switched 1000 Mbps ports

Provide private 1000 Mbps (megabits per second) bandwidth for PCs, servers, or hubs and hence no need to share and compete with other users for bandwidth. They enable an individual user or subnet to upgrade from 10 to 100 Mbps without affecting other users.

24 Port Switch Shown

Small Network Switches

Hubs connect multiple PCs to share printers, files, Internet access, and e-mail communications. One can mix and match 10 and 1000 Mbps PCs, servers, and peripherals with these switches, all without any configuration required.

8 Port Network Switch Shown

Network Cable:
- **Connect CAT6 cable from Server to Switch(s).**
- **Connect CAT6 cable from Switch(s) to Workstations.**
- **Connect CAT6 cable from Switch(s) to Wireless Access Point(s) – (only if used).**

Please visit Netgear's Website for further information. **http://www.netgear.com/**

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Networking & Remote Connection Needs

The Internet has indeed "revolutionized" the way we communicate and disseminate information. The Internet, as we know it, provides a wide array of informational databases. The speed in which we connect to the Internet has become a concern, which is why most businesses opted to subscribe to a Internet Service Provider.

Prime Clinical Systems has developed the utilization of High Speed internet as a means of establishing connection between two or more offices. There are other point-to-point connections available (i.e. 56K Digital line, Frame Relay, T1, etc.); however, High Speed business internet is still the most cost effective way to link multiple offices. Although business internet vary in speed, depending upon the service requested, it could reach speeds of up to 100 Mb of bandwidth. In comparison with a normal 56K analog modem connection, high speed business internet is still 5x faster at its slowest speed. Routers installed (at each location) contain Network Address Translation (NAT) which will enable all Windows based workstation attached to the Local Area Network (LAN) to share one Static IP address.

Prime Clinical Systems is also committed to protect our client's database from all Internet intruders. Although our Windows 2012 Servers are equipped with password protection, our goal is to provide the utmost security available in today's ever changing technology. This is why we have implemented the use of a firewall appliance called Sonic Wall. This device is attached between your high speed internet modem and Windows 2012 Server. It offers a high level of security from IP filtering to total blackout. The addition of this device to your current Internet configuration will further enhance patient confidentiality.

The following are the system requirements for High Speed connectivity:

- High speed **MODEM** with at least 1 Static IP address in every site.

- SonicWall TZ 300 Security Appliance

Please Visit SonicWall's Website for further information. http://www.sonicwall.com/index.html

Internet Options for Office Connectivity

Choose from a choice of speeds and connection method from different high speed internet providers in your area that best suit your office needs. When your office grows and needs more bandwidth, most ISPs allow simple upgrades to a higher speed for a minimal one-time charge. (All speeds may not be available in all areas – Check with your ISP for further information and pricing.)

Fiber Internet - Business
Even at peak hours, 100% fiber optic network offers you the incredible speeds that enable your business to reach its full potential.

A Sample High Speed Internet Enhanced Package may include:
- 75 Mbps Download/35 Mbps Upload; Static IP
- 1-4 users or devices; great for cloud connecting
- Cloud backups, heavy web browsing

Cable High Speed Internet – Business Edition
A digital data server that provides dedicated connectivity to the internet.

A Sample Max Turbo package may include:
- 50 Mbps Download/5 Mbps Upload; Static IP
- Wireless networking within your office to share internet access, files, servers, printers, and other devices.
- Powerful security of services with anti-spy, anti-virus, pop-up blocker, content control, SpamGuard Plus, and more.

> *****Note:*** *Internet Access is also a requirement for Prime Support.*

Video Capture Device

Canopus ADVC55 A/D Converter

ADVC55 - High-quality Analog-to-Digital Video Conversion – Use ADVC55 to connect VHS, Hi8 and other analog video equipment to a DV camera, deck or editing system. ADVC55 is a compact and easy to use digital video converter compatible with Windows computers.

FEATURES:

- Connects to all widely used DV and analog video equipment
- Compatible with Windows and Mac OS DV editing systems
- Compatible with leading editing and DVD authoring applications including Canopus EDIUS, Canopus Let's EDIT, Sonic, Foundry®, Vegas®, Final Cut Pro®, Avid Xpress® DV, Adobe® Premiere® Pro, Pinnacle Edition, Ulead Media Studio® Pro, and Windows Movie Maker
- No need to install drivers or any software applications
- Powered by IEEE 1394 (FireWire) connector*
- NTSC and PAL compatible

**Note: a video capture card or OHCI FireWire connection is required to capture DV

USB Delcom Foot Switch w/5M Cable for Video Capture

- This device is a USB compliant footswitch, which uses the Delcom USB driver.

- It is self powered and is read via the USB port.

- Simple plug and play technology.

- Dimensions are 3" by 3".

- Includes 5 Meter USB Cable.

Voice Recognition Software

Nuance Dragon Medical Practice Edition 4

by [Dragon NaturallySpeaking](#)

- 20% more accurate than the previous version and - and over 60% more accurate than Dragon Professional 12 when used in clinical settings.
- Improves recognition response time significantly
- Navigate and dictate inside EHR software: History of Present Illness, Review of Systems, and Assessment and Plan.
- Covers nearly 90 specialties and subspecialties.
- Accented speakers get higher out-of-the-box recognition with advanced adaptation techniques and accent-specific acoustic models.

Install and Runs on Microsoft Windows 10 64-bit; Windows Server 2008 R2 & 2012 R2 & 2016
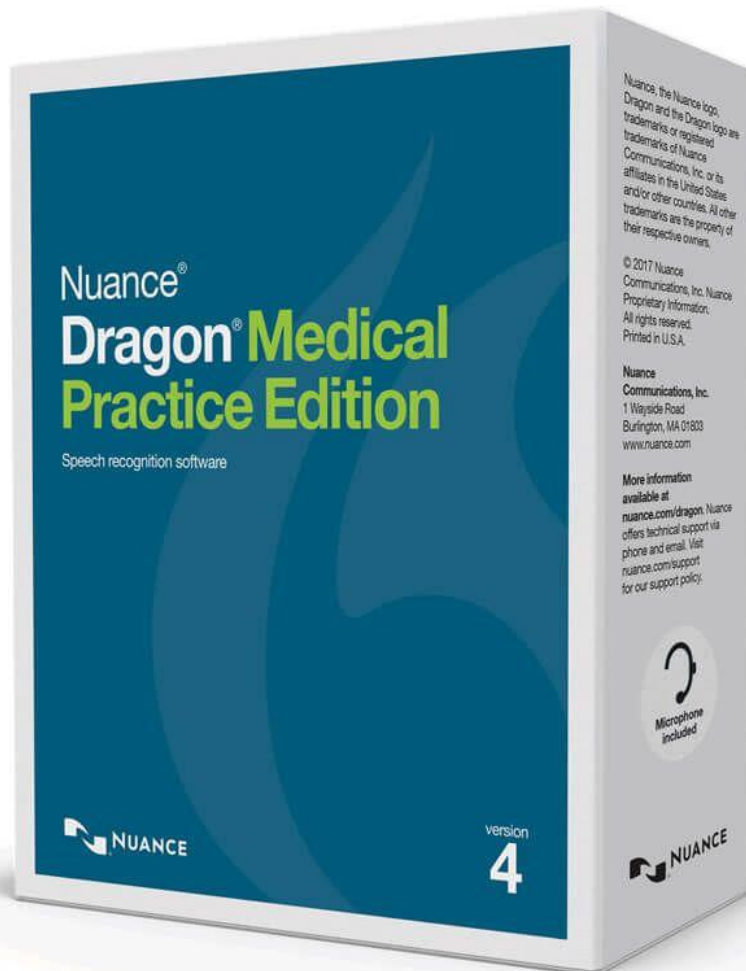
BACKUP POWER SUPPLY (Smart UPS)
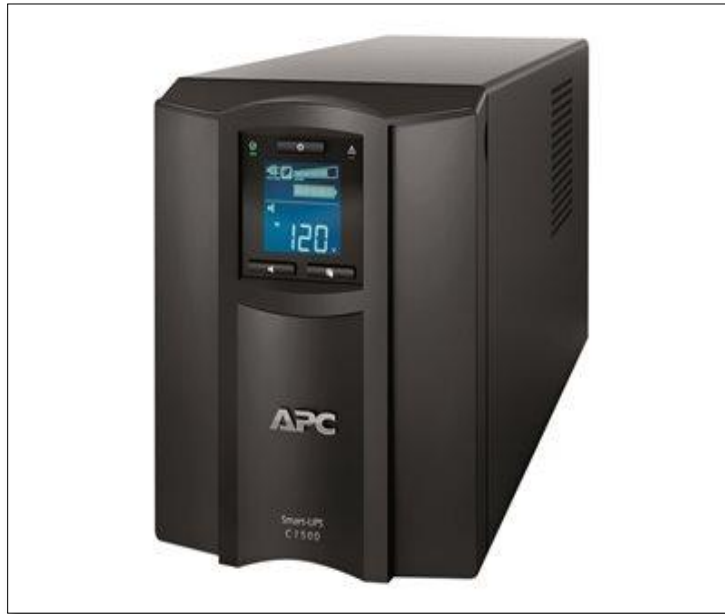
APC Smart-UPS C 1500VA LCD - UPS - AC 120 V - 900 Watt – 1500 VA - USB – 8 output connector(s)

Smart-UPS are trusted by millions of IT professionals throughout the world to protect equipment and critical data from costly interruptions by supplying reliable, network-grade power reliably and efficiently. Available in a variety of forms factors and classes (entry level, standard and extended run), there is a model for nearly every application and budget. Standard models are the most popular UPS in the world for business servers, storage and network devices and have long been considered the benchmark for reliability and manageability. Entry level Smart-UPS models are an economical choice for small and medium businesses looking to protect small networking devices, point-of-sale (POS) equipment and entry level servers. The extended run models accept external battery packs for long runtime to power critical servers, security and communication systems through outages that could last hours.

FAXING

Prime Clinical Systems offers electronic faxing thru a third party company. We have designed their Internet Fax service to work with Patient Chart Manager.

http://www.faxage.com/

About FAXAGE

FAXAGE is the value leader in the Internet Fax service space. Ideal for small to medium business or home office use, FAXAGE frees you from the complexity of managing physical fax machines and phone lines as well as offers you the independence to receive and send faxes from any location.

Services

FAXAGE primarily serves small and medium business markets by offering Internet fax services designed for multiple users with multiple fax numbers on a single account.

Our email fax, web fax, and API fax interfaces are available to any account, regardless of size. This makes FAXAGE a flexible electronic fax solution that can be tailored to business process requirements. FAXAGE also features industry-leading secure faxing options including SSL/TLS transport, PGP security and password-based security for faxes.

Backup Software

VERITAS™

Veritas System Recovery Server Edition – License - 1 server - corporate - CLP – Win

Product Description	Veritas System Recovery Server Edition - license
Product Type	License
Category	Utilities - data recovery
License Qty	1 server
License Pricing	Volume, corporate
Licensing Program	Veritas Corporate Licensing Program (CLP)
Platform	Windows

Antivirus Software
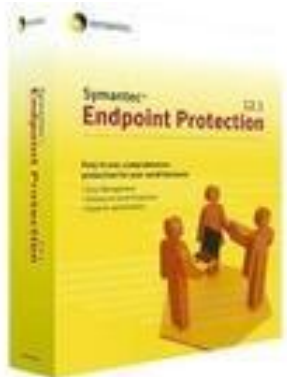
Symantec Endpoint Protection goes beyond antivirus to deliver faster, more advanced protection against today's sophisticated and targeted attacks.

Protection layers include firewall, intrusion prevention and anti-virus in addition to Insight and SONAR.

Symantec's unique Insight reputation technology facilitates faster scan times, while SONAR delivers powerful protection against zero-day attacks by monitoring file behavior.

This industry leading solution features a single high- powered agent with advanced management capabilities and support for multiple operating systems.

Notes:

Other Anti-Virus/Security programs (i.e. AVAST, AVG and ESET) were found to have caused program delays.

DYMO LABEL WRITER 450 TURBO

Label faster.   Mail smarter. Look sharp.

Take the hassles out of label printing with the DYMO® LabelWriter® 450 Turbo label printer.

Label, mail, and file smarter with proprietary DYMO® Productivity Software, featuring the new DYMO Label version 8, DYMO File TM and Address Fixer TM.

DYMO Label version 8 software enables you to create and print address, shipping, file, folder and barcode labels, plus name badges and more – all without the extra work and hassles of printing sheet labels on a standard desktop printer.

Signature Pad

> ## NEW FEATURE

With PCM Version 6.0.1323, you can now capture patient signatures digitally.

Equipment to consider purchasing:

Topaz Systems Siglite Color 4.3 T-LBK43LC-HSB-R Model Series

SigLite® Color 4.3 is an advanced biometric electronic signature pad with full-color 480x272 widescreen backlit TFT display. Port-powered in both HID and virtual-serial USB versions, the SigLite Color 4.3 sports a thin, small, and attractive footprint, optimized large hand rest, dual vertical pen holders, snap-in travel pen-and-tether storage, and sloped ergonomic signing surface with easy slide-in screen protector.

- Where to buy: http://www.topazsystems.com/wheretobuy-resellers.html
- What is it: LCD touchpad with attached pen to capture signature.
- How is it used: Go paperless! Capture the patient signatures and attach the signature to consent forms or financial agreements in the patient's chart.
- This feature also works with Tablet PCs.

*Currently available in Pen Docs. Feature coming soon for Text Docs and PDFs!
Note: This option does not work remotely; via RDP OR TS Client, this is only supported locally or over a VPN connection.