



PS PracticeStudioX20[®]
HARDWARE REQUIREMENTS & RECOMMENDATIONS



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IN-HOUSE SERVER SPECIFICATIONS

SERVER MINIMUM REQUIREMENTS

- Quad-Core Processor, 16 GB RAM, 64-bit Windows Server OS (2019 or later)
- SQL Server 2019 or Later, Standard Edition
- Must be a member server (cannot be a domain controller)
- 1 TB HD Space
- Keyboard, Mouse, and Monitor connected to server
- 100Mbps PCI or onboard Network Interface Card capable of supporting full-duplex operation

RECOMMENDED SERVER SPECIFICATIONS

- 32 GB RAM or more
- RAID 5, RAID 1 or other redundant RAID configuration **strongly** recommended
- 1000 Mbps network card
- Uninterruptible power supply

RUNNING GUIDELINES

- If running a local PracticeStudio server, the network **must** operate in a Domain environment
- All workstations must have Full Control permissions to both the shared PracticeStudio Data Folder and the local client folder on the individual workstation
- The PracticeStudio server should **not** perform tasks incompatible with Microsoft SQL Server (e.g. Exchange Server)
- The PracticeStudio server should **not** be used as a server for 3rd party applications that may impede PracticeStudio Server performance
- The PracticeStudio server should **not** have active virus scanning running (scheduled scans can be used)
- All non-PracticeStudio data must be backed up using a local backup process.

WORKSTATION SPECIFICATIONS

These specifications apply to computers that will run PracticeStudio daily and are not used as the file server.

Note: Windows XP, Windows Vista, and Windows Server 2003 are **not** supported for use with PracticeStudio workstations.

WORKSTATION REQUIREMENTS

- Supported Operating Systems:
 - Microsoft Windows 10 or later*

** When running in a domain environment, Home and core editions will not be supported. Only Business/Pro or better will be supported.*

- Intel Pentium Dual-Core processor or AMD equivalent
- 4 GB RAM
- 20GB available HD space
- Video card capable of supporting 1280x1024 resolution
- Monitor capable of supporting 1280x1024 resolution
 - * - The “size of all items” should be set to 100% or “Smaller” depending on windows version
- 100Mbps PCI or onboard Network Interface Card capable of supporting full-duplex operation required, 1000Mbps card recommended
- Read/write access to local registry, primary hard drive, and PracticeStudio local and shared folders

RECOMMENDATIONS

- 6+ GB RAM
- 64-bit Operating System
- Modern DirectX 10 Capable video card
- 17” or larger monitor capable of supporting 1280x1024 resolution – 1280x1024 can be difficult to read on a monitor smaller than 17”
- Touch Screen Monitor if the workstation will be used primarily with PracticeStudio EMR (charts)

OPERATING PRACTICESTUDIO FROM A TABLET

In many installations, the use of Tablets is preferable to having a workstation in each exam room. PracticeStudio operates properly in a wireless tablet environment but has additional requirements.

Recommended Tablets

- **Samsung Galaxy Book** – The Galaxy book is our recommended solution for a true tablet solution. It comes in various sizes from 10.6” to 12” as well as various processors. PracticeStudio has been well tested on this device with the minimum processor requirement set at the Intel m3 processor or greater.
 - **Landscape and Portrait** – This solution operates very well in clinical settings where you may have the need to run in both landscape or portrait mode. PracticeStudio X20 is designed to run in both modes well. When working in Medical Records, the portrait mode can be a very comfortable mode in which to capture notes.
 - **Supports Hand Straps** – Another benefit is the ability to support hand straps, which improves the handling of the device during operation.
 - **Mobile Network Integration** - One benefit of the Samsung Galaxy Book over other 2-in-1 solutions at the time of this writing, is that this is one of the few that supports a fully integrated mobile data network through certain mobile carriers such as Verizon. If running PracticeStudio on our cloud solution, this allows the device to connect to your PracticeStudio environment from anywhere as long as mobile service is available.

- **Microsoft Surface Pro** – The Surface Pro is a good solution but does not function quite as well in a portrait mode as other 2-in-1 solutions.
 - **Requires “Pro”** – Be sure to choose the “Surface Pro”, “Surface Pro 2”, “Surface Pro 3”, etc. options when purchasing a Microsoft tablet. As per the Workstation Requirements, PracticeStudio requires a full version of Windows and cannot be natively run on Windows RT or Windows 10 S based tablets.

NATIVE REQUIREMENTS

- If choosing a tablet or comparable 2-in-1 device to run PracticeStudio natively, please ensure the following minimum requirements are available:
 - Ability to run full Windows 10 or later (*not* the “RT” or “S” variants)
 - Core i3 Processor or Equivalent (Core i5 or equivalent recommended)
 - 3GB RAM (6+ GB RAM recommended)
 - 1152x864 resolution
 - 10 GB available HD space
 - 802.11n or greater wireless network card
 - Extended runtime battery (if available)
 - Attachable keyboard recommended

- Wireless Access Point

NETWORK SPECIFICATIONS

SOFTWARE REQUIREMENTS

- When using a wireless network, the network must be configured to encrypt network traffic using a HIPAA compliant encryption protocol

HARDWARE REQUIREMENTS

- 100Mbps switched network required, 1000Mbps recommended
- Up to 20 workstations – 1 x 24-port switch (100Mbps required, 1000Mbps recommended) or
 - 2 x 16-port switches (100Mbps required, 1000Mbps recommended)
- More than 20 workstations
 - 1 x 48-port switch (100Mbps required, 1000Mbps recommended) or
 - 2 x 24-port switches (100Mbps required, 1000Mbps recommended)
- Cabling that meets or exceeds Category 5e specifications
- Wireless Networking
 - 802.11n or greater
 - HIPAA compliant encryption (WPA or WPA2 encryption or better recommended)

CABLING RECOMMENDATIONS

- If the number of workstations exceeds 25, response times to the server can be improved using 1Gbps uplinks to the server and between the network switches
- Have cable installed by a certified network professional who can verify and guarantee their work
- If cabling is already installed, have it tested by a certified network professional

CLOUD CONSIDERATIONS AND REQUIREMENTS

There are several things to consider when preparing to move to the PracticeStudio Cloud. Internet is most definitely not the same for everybody and in some parts of the world Internet is better than others. So it is good to calculate the connection speeds to see if your ISP (Internet Service Provider) can accommodate your needs. Additionally, there are some tests that you can run to determine if the Cloud is a good fit.

CLOUD REQUIREMENTS

- 128 kbps UP / DOWN per active user (this is for concurrent, not total)
- For clinics that will do a high volume of scanning or image markups, it is recommended to increase this to 256 kbps UP / DOWN
- Workstation requirements are same as in-house solutions

DOMAIN NETWORK CONSIDERATIONS

- While a domain network is *not* required for PracticeStudio to function, depending on the size of your network and your IT professional's preferences, it may still be desirable to operate in a "domain" environment. This would require a small, relatively inexpensive domain server and Professional level operating systems on the workstations. Again, this *is not required* for PracticeStudio to function when using cloud hosting, but it may make normal office processes like sharing printers, transferring files, etc. more reliable and easier to maintain.

OTHER SPECIFICATIONS

TOUCH SCREEN MONITORS

Touch Screen Monitors are recommended for computers that will run PracticeStudio EMR regularly.

REQUIREMENTS

- Support for at least 1280x1024 resolution at a 16-bit color depth

RECOMMENDATIONS

- 17" Touch Screen Monitor

OFFICE PRINTERS

Most documents printed from PracticeStudio use a regular office printer.

REQUIREMENTS

- Minimum 6- to 8-page-per-minute laser printer
- A duty cycle of at least 30,000 pages per month
- Printer drivers that are included with Windows
 - Printers with drivers that are not included with Windows or that have not passed the Windows Hardware Quality Lab (WHQL) will not be supported

RECOMMENDATIONS

- Laser Printers are recommended over InkJet Printers for many reasons, including speed and duty cycle

PRESCRIPTION OR LAB ORDER PRINTERS

Prescriptions and Lab Orders can be printed from PracticeStudio but require a special printer.

REQUIREMENTS

- Printer drivers that are included with Windows
 - Printers with drivers that are not included with Windows or that have not passed the Windows Hardware Quality Lab (WHQL) will not be supported

RECOMMENDATIONS

- "Auto-Cut" feature included with printer •
- 10 Rolls of paper minimum •
- Recommended models:
 - Star Micronics 800 Series Printer (Thermal Printer)
 - Ithaca POSjet 1000 Printer (Ink Jet)

LABEL OR APPOINTMENT CARD PRINTERS

Address labels and appointment cards may be printed individually using specialized printers.

RECOMMENDED MODELS

- Dymo Labelwriter Twin Turbo
 - Allows both appointment cards and labels to be printed without swapping paper.

- Dymo Labelwriter Turbo – Same functionality as Twin Turbo, but requires changing paper to switch between appointment cards and patient labels

SCANNERS

A scanner is needed to scan documents into the system using the Patient Media module.

REQUIREMENTS

- TWAIN compliant drivers
- Transparency adapter if scanning x-rays

RECOMMENDATIONS

- Brother ADS 1000W (USB or WiFi)
- Brother ADS 1500W (USB or WiFi)
- Canon image FORMULA DR-M140
- TWAIN compliant 30+ ppm high-speed scanner

DIGITAL CAMERAS

A Digital Camera allows a picture to easily be added to a patient's file.

REQUIREMENTS

- Non-proprietary image file format
 - The camera must use a standard file format (JPEG, TIFF, BMP, PNG, etc.)

RECOMMENDATIONS

- Cameras that allow Windows to see the storage as a drive
- Cameras that can wirelessly transmit files to a network location

ANTIVIRUS SOFTWARE

Because of virus signature mismatches, special consideration must be taken with antivirus software.

REQUIREMENTS

- Antivirus software that can exclude the PracticeStudio directories (both server and client) and the temp directory
- Antivirus can **NOT** be run in an active mode on the PracticeStudio server or on PracticeStudio workstations
- Scheduled scanning is supported
- Active email scanning is also supported, provided the email server is independent of PracticeStudio (it is not used as a PracticeStudio workstation or server)
- Using bundled Antivirus / Antimalware / Intrusion Detection software that is designed for a business environment **is** recommended rather than obtaining separate products for each purpose
- **Note:** The only personal-level (i.e. non-corporate) antivirus software supported for use with PracticeStudio is Microsoft Security Essentials.