



System Requirements

This guide is not intended to replace the knowledge and expertise of a qualified IT professional, but to assist them in acquiring and configuring the necessary hardware for a successful implementation.

Professional Data Services
1632 E. 23rd
Hutchinson, KS 67502
(620) 663-5282
www.pdsmed.com

Server Requirements:

PDS has developed the following general system requirements for your server(s). Please be sure to adhere to PDS supported operating systems and specifications. Deviation from approved server requirements may result in system instability.

It is recommended to have a separate server for both PDS Cortex and EMR, but not entirely necessary. Please speak with your sales rep or PDS technical support if you have questions. In all instances, the Practice Partner EMR server must be a domain member.

The below recommendations are for the PDS Cortex and Practice Partner EMR software only. If you decide to run additional services (i.e. DNS or Active Directory on your application server, or Microsoft Office on your thin client server) you will need to add additional CPUs and/or RAM.

Recommended Operation Systems:

- Windows Server 2003 R2 (64-bit Strongly Recommended)
- Windows Server 2008 R2

Supported Operating Systems:

- Windows Server 2003 SP2, R2 (64-bit Strongly Recommended)
- Windows Server 2008 SP2, R2 (64-bit Strongly Recommended)

Small Practice – 1 to 50 Users

Database Server

	Minimum
Processor:	Intel Dual Core Xeon 2.0GHz
Memory:	4 GB
System Drive:	80 GB
Data Drive:	RAID-5 or SAN
*Highly recommend using 15k Hard Disk Drives to boost speed and performance	
Network Card:	1 GB
Optical Drive (CD/DVD)	DVD-ROM

For larger practices, please consult with your PDS Sales Representative.

Thin Client Server (Terminal Services or Citrix)

Thin client servers are designed to support up to 25 concurrent sessions. For each additional 25 sessions, add 4GB of RAM and 2 more CPU cores.

	Minimum
Processor:	Intel Dual Core Xeon 2.5GHz
Memory:	4 GB
System Drive:	120 GB
Network Card:	1 GB
Optical Drive (CD/DVD)	DVD-ROM

Thin Client Server

A thin client server is required if you will be using PDS applications in a wireless environment or when using a wide-area network/VPN. A thin client server can be Windows Terminal Services or Citrix MetaFrame.

All printers that will be accessed through the Terminal Server must have their drivers added as local printers on the Terminal Server(s).

Webview Server

If you are using the Web View product, you must also have a separate server to run the web services. This must be its own server and cannot have patient data on it as the server must be configured to reside in the network's DMZ or have an encrypted tunnel to the internet to facilitate web traffic.

	Minimum
Processor:	Intel Dual Core 2.0 GHz
Memory:	2 GB
System Drive:	40 GB
Network Card:	1 GB
Optical Drive (CD/DVD):	DVD-ROM
Operating System:	Windows Web Server 2008 R2

Disk Storage Requirements

Separate O/S and data partitions are required. PDS recommends an 80GB O/S partition with the remaining space allocated to the data partition. For Cortex, UNC paths are acceptable. For EMR the data partition should have a physical drive letter of M.

Planning for hard drive space is one of the most important decisions to make when purchasing a new server(s). You want to make sure that you have enough space so you won't have to install any additional hard drives right away.

Cortex/EMR

- | | |
|--|---------------------------|
| - Practice Partner Software Installation | 10GB |
| - ePrescribing (formulary files) | 150GB |
| - Black and white Imaging | 2GB per provider per year |
| - Color Imaging | 5GB per provider per year |
| - Database Growth | 2GB per provider per year |

Notes:

- For large multi-provider/specialty single-database installations, more and more data becomes shared between providers so the total amount of space is not linear. **For 50+ providers in a single database, please allocate 1GB per provider per year for black and white imaging and 1GB per provider per year for database growth.**
- No single formula can account for every circumstance. If you will be doing an extraordinary amount of scanning (for example, full patient charts for every patient in your clinic), please discuss your storage needs with our support team.
- SQL database types need additional storage for transaction logs, archive logs, and /or multiplexed redo logs. This section only covers storage needed for Practice Partner application data. If you are going to run SQL databases please contact the support team for information about these requirements.
- ePrescribing formulary files can be relocated to a less expensive drive configuration. Please contact your implementation technician or PDS technical support for information regarding this configuration option.

Storage of scanned images does not have to reside on the same server as the software application. File storage can reside on a separate server, NAS or SAN if your organization already has a storage solution in place.

Workstation Requirements

PDS has developed the following requirements for your workstation(s). A workstation can be a desktop, notebook, laptop, or Tablet PC. Please be sure to adhere to PDS supported operating systems and specifications. Deviation from approved workstation requirements may result in system instability.

Supported Operating Systems:

- Windows XP Professional SP3
- Windows XP Tablet Edition
- Windows 7 Professional
- Windows Vista Business

Standard Workstations

A standard workstation is one that does not typically use a Terminal Services client or Citrix client to run PDS applications. Actual data processing (such as report calculations) takes place using the resources of this computer. Recommended hardware specifications will typically be higher than that of a thin client workstation.

	Minimum
Processor:	Intel Core 2 Duo 1.6 GHz
Memory:	2 GB/ XP, 4 GB Vista/Windows 7
Network Card:	100 MB
Optical Drive (CD/DVD)	DVD-ROM
Monitor:	LCD 1024x768 – 1200x800

Thin Client Workstations / Laptops / Tablets

Since thin client workstations, laptops and tablets do not run any Practice Partner software, any operating system capable of running the appropriate thin client software is acceptable. Some thin client devices come with a limited amount of on-device storage. Practice Partner has not been tested to run in this configuration and there will very likely be problems. Thin client devices that will be accessing Practice Partner must do so through a thin client server.

Peripherals

Printers:

PDS recommends networked HP LaserJet printers.

NOTE: PDS does not support All-in-one Multifunction Devices

Labelwriters: Dymo Labelwriter 450 Turbo Series

Signature Capture Devices: Topaz Signature Gem 1x5 LCD Series

Scanners:

TWAIN compatibility is required.

Card Scanners BizCard Reader Series: BCR 900C; DuplexScan 1200
Scanshell: 800N/800NR; 800DXN

Scanners Fujitsu 6130 is specifically recommended.

Faxing:

A fax server allows you to fax prescriptions and other electronic documents directly from your pc. It also allows you to receive faxes electronically and print only those necessary or attach them to your electronic medical record as linked files (instead of scanning then linking). The fax server cannot be virtual.

For small clinics, the fax board can be installed in the application server or a thin client server. For customers that do a larger amount of faxing, a dedicated fax server is recommended. The recommended fax board is the Brooktrout TR1034 series.

Due to the increasing difficulty in finding non voice capable serial fax modems and servers that have serial ports, traditional serial faxmodems are no longer recommended. USB faxmodems are not recommended or supported.

Security:

You must have Internet access to access PDS Technical Support resources and to communicate with clearinghouses and laboratories. This will require that you maintain HIPAA compliancy and provide a secure connection to the Internet. VPN's and Firewalls are specialized security tools typically used with a WAN, ASP and Internet connections. We strongly recommend that you consult your IT professional for the design of this component.

REQUIRED

- Separate partitions for Data (TTG, PPART) and Operating System.
 - We recommend P:\ for TTG and M:\ for PPART
- Backups are not optional, they are required!
 - An online solution or tape rotation with periodic offsite backup and open-file option is recommended.
- Antivirus
 - PDS and Practice Partner folders excluded from real-time/on-access scanning.
 - Application Folders (PPART, TTG), Client Folders (PRWIN, PDS Cortex).
 - Scheduled scans when users are not in the system are recommended.
 - Trend Micro and CA eTrust are unapproved anti-virus solutions that may cause application instability.
- Practice Partner requires a domain/Active Directory infrastructure. With each user having a unique login for HIPAA compliance and accurate auditing functionality.
- All servers attached to a battery backup.
- Data Execution Prevention (DEP) must be set to: “Turn on DEP for essential Windows programs and services only”
- The following Microsoft security features and software **MUST BE DISABLED:**
 - User Account Control (UAC)
 - Windows Firewall

RECOMMENDED

- Hardware from experienced and trusted vendors (HP, Dell, IBM) is highly recommended.
 - Hardware/Network support from a local reputable professional or organization.
- PDS recommends a minimum 40GB operating system partition. This allows for growth and software additions.
- Windows set to automatically download updates (do not install as automatic reboots can cause issues with CTree Server).
- Customers should have a hardware-level firewall protecting their network. Software-level firewalls are not supported by PDS.
 - All Internet Security Software should be disabled.
 - Software firewalls and Internet Security software are known to cause issues with PDS and Practice Partner software.
- Have a disaster recovery plan in place.
- All computers and peripherals plugged in through Surge Suppressors.
- Printers installed on Terminal Server(s)

Copyright © Professional Data Services. All rights reserved
PDS Cortex® is a registered trademark of Professional Data Services. All rights reserved.
Practice Partner ® is a registered trademark of McKesson Information Solutions, LLC. All rights reserved.
This publication, or any part thereof, may not be reproduced or transmitted in any form or by any means,
electronic or mechanical, including photocopying, recording, storage in an information retrieval system, or otherwise, without
the prior written permission of Professional Data Services.
The information in this guide is believed to be accurate. Professional Data Services assumes
no responsibility for any inaccuracies, errors, or omissions.
Professional Data Services reserves the right to revise this publication and to change its content
without obligation to notify any person of the revision or changes.

Microsoft and Windows are registered trademarks of Microsoft Corporation. Other
brands and their products may be registered or unregistered trademarks of their respective owners