APRIMA 2015
System Requirements

APRIMA PRM CLIENT

REQUIRED SOFTWARE

The following software is required on all client PCs.

- ⚠ Microsoft Windows™

  - Recommended: Microsoft Windows™ 8.1 or 10, Pro or Enterprise (32 or 64 bit)

  - Minimum: Microsoft Windows 7 SP1 Professional, Ultimate or Enterprise (32 or 64 bit)

  - **Not supported: Windows XP (see the section titled Windows XP is Not Supported for more information.)**

- ⚠ Microsoft .NET Framework 3.5 with SP1 and Microsoft .NET Framework 4.5.2
- ⚠ All Windows updates, including security updates, for the operating system, .NET, and Office versions installed
- ⚠ Adobe® Reader™ 8 or compatible PDF reader
- ⚠ Microsoft Excel 2010 or greater
- ⚠ Microsoft Internet Explorer™ 11 or greater

OPTIONAL SOFTWARE

- ⚠ Microsoft Office, 2007, 2010 or 2013
- ⚠ Aprima PRM 2014 is compatible with Microsoft Internet Explorer™ 8, 9 and 10
- ⚠ Nuance® Dragon® Medical version 8 or higher

WINDOWS XP

APRIMA 2014 WILL NOT RUN ON WINDOWS XP COMPUTERS

Microsoft has announced that it ended support of its Windows XP operating system on April 8, 2014. This means that Microsoft will not provide security updates, hotfixes, or support to end users or to software developers after this date.

REQUIRED HARDWARE

Note: If you are installing other software, such as Dragon® Medical, or scanner software on the same client PC as Aprima PRM, then you must purchase hardware that will meet the highest recommended specifications.

DESKTOP CLIENT

The following specifications are recommended when selecting a desktop computer.

CPU	Intel Core i3/i5/i7 2.0 Gz or faster or AMD 2.0 GHz or better Recommended: Dual core or better Intel Core 2 Duo's are not supported
Memory	Minimum: 8 GB Recommended: 16 GB
Hard Drive	128 GB or larger 7200 RPM drive or faster Recommended: Solid State or Flash
NIC	100/1000 Mbps Ethernet
Screen Resolution	1024x768 or larger
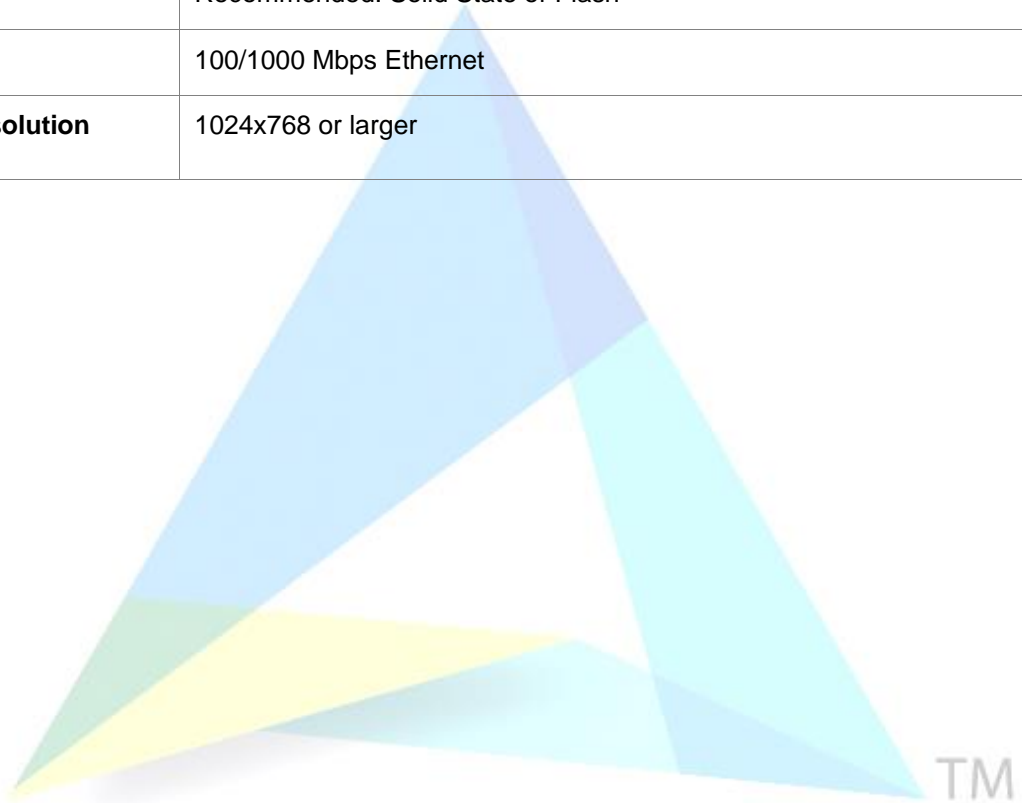
TABLET OR LAPTOP CLIENT

The following specifications are recommended when selecting a touch-screen mobile computer, laptop or tablet PC. Please note that the ARM CPU architecture, and "Netbook" style PCs (Intel Atom CPU) are not supported as client PCs.

CPU	Intel Core i3/i5/i7 2.0 Gz or faster or AMD 2.0 GHz or faster Recommended: Dual core or better Intel Core 2 Duo's are not supported.
Memory	Minimum: 8 GB Recommended: 16 GB
Hard Drive	128 GB or larger 7200 RPM Recommended: Solid State or Flash
NIC	100/1000 Mbps Ethernet
Wi-Fi	802.11n
Screen Resolution	1024x768 or larger

ENVIRONMENT RECOMMENDATIONS

PHYSICAL ENVIRONMENT

Aprima recommends that you refer to the documentation provided with your hardware or contact your hardware manufacturer regarding any expected or required physical environment (such as electrical and HVAC requirements) necessary for reliable operations.

UNINTERRUPTIBLE POWER SUPPLY

All Firewalls, Routers, and Desktop PC's without a built-in power supply should be connected to an uninterruptible power supply (UPS). A UPS provides immediate emergency power to the network hardware and PC's in the event of an electrical outage or disruption. A UPS can generally provide power for 5 to 15 minutes. This will ensure the integrity of the data written to the database.

VIRUS AND MALWARE SCANNING

Virus scanning using a recognized and well regarded anti-virus/anti-malware application is highly recommended. Scanning should be performed on a frequent and regular schedule but not during normal business hours. Virus scanning will be scheduled through the anti-virus application or through the operating system, not through Aprima PRM.

Some anti-virus programs may conflict with the Aprima software and cause system performance issues. While determining anti-virus software is the responsibility of the client, Microsoft Security Essentials (MSE), and Windows Defender are antivirus applications which are known to have only minimal performance impact on the Aprima software. Both are available for free from Microsoft.

FIREWALL & SECURITY

A business class router, such as sold by Cisco® or Dell SonicWALL®, is required for ASP installations in order to handle the increased load of network traffic that will occur when you are remotely connected. Recommended brands include: Sonicwall TZ21 (1-10 users per site) or Cisco ASA 5505 (11+ Users per site). Routers and firewalls provided by ISP carriers are known to cause latency issues and are not permitted.

All internal communication is automatically encrypted using a process that is transparent to the user.

WIRELESS RECOMMENDATIONS

The following is a recommended specification for a Wireless LAN Access Point.

Standard	802.11 n/ac
Bandwidth (up to)	54 Mbps
WEP Encryption	Not recommended
Wi-Fi Protected Access (WPA or WPA2)	Yes
Block SSID Broadcast	Yes
MAC address filtering	Yes

NETWORK CONNECTIVITY

AVERAGE BANDWIDTH REQUIREMENTS

Bandwidth requirements depend on the connections that have a high download speed but a low upload speed are not permitted unless the upload number of users, and the tasks they perform over the network. (For example, copying scanned files from a remote site to the main site is a bandwidth intensive task.) This bandwidth must be bi-directional. Asynchronous speed meets all specifications. Most "home" DSL and cable connections are asynchronous, with a large download speed but smaller upload speed. Please select a "business connection", which typically will have equivalent upload and download speeds.

Below is a table with the average requirements for network bandwidth at remote sites. Please note that these numbers are estimates based upon average product usage and a provider-to- user ratio of approximately 3 to 1. Extensive use of scanned documents or a provider-to-user ratio that is higher than 3 to 1 may require higher bandwidth speeds. Actual network usage is determined by the load on the network based upon the usage patterns in Aprima PRM and any other applications utilizing the network. Streaming audio or streaming video running on the same network will cause service degradation and latency and are therefore strongly discouraged.

Number of users per remote site:	1 to 4	5 to 12	13+
Bidirectional speed required:	5MB	10MB	10MB plus 120KB per user over 12 users.
Minimum Average Ping / 120 Seconds	<50ms*	<50ms*	<50ms*

* Ping rates 51-70 may be acceptable

VOICE OVER IP PHONES (VOIP) AND KNOWN NETWORK CONFLICTS

DAS Does not support networks where the VOIP Phone System and Data networks share the same hardware unless professionally configured (not by the ISP provider) to separate the voice and data traffic.
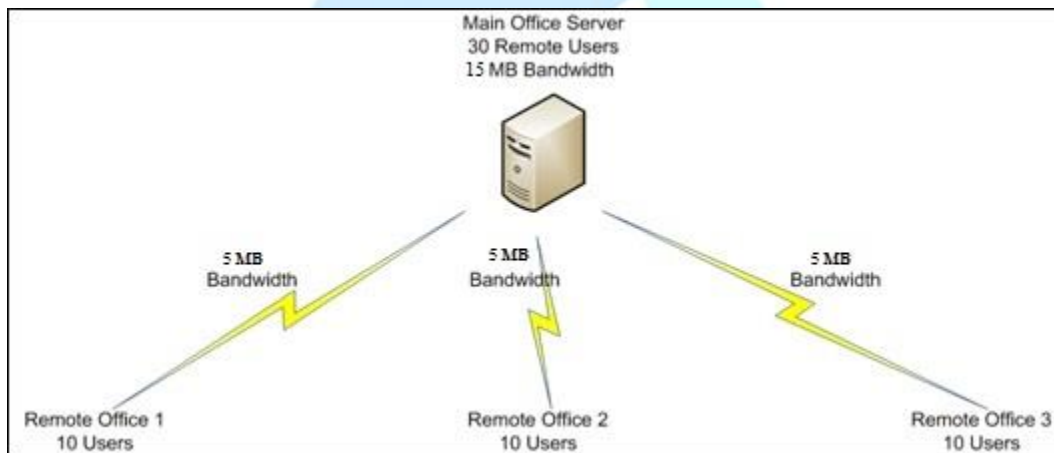
Unlike circuit-switched voice networks that have dedicated paths and fixed bandwidth for every call, VoIP networks can share the same resources for data and voice traffic, with voice traffic receiving priority routing. In addition, link overutilization or poor media characteristics (noise on RF links) can result in dropped or delayed packets which can lead to errors and disruptions to your Aprima service.

CLIENT SERVERS / THIN CLIENTS (THIS SECTION DOES NOT APPLY TO MOST CLIENTS)

Client servers using thin client applications such as MS Terminal Services or Citrix may work, but are not recommended and are not supported by DAS. In the event they are used, the client must have a third-party professional IT management company that is fully responsible for all hardware, networking, and resulting application issues. Software updates (including Aprima updates) for thin clients must be performed by Client's third-party IT management company pursuant to instructions provided by DAS. All scanners must be attached to machines running "fat". In addition, two functions of the EHR are not available over a Terminal Services or Citrix connection: Ink strokes, such as for hand-drawn images, cannot be saved, and voice dictation cannot be used.

If running thin clients at remote sites, additional bandwidth consideration apply (most clients will run ASP directly to DAS, and so this does not apply). This will double your bandwidth requirements and cause system latency. If running thin client with remote locations (against recommendations), you must consider both the bandwidth needed at a remote site and the bandwidth needed at the main site (if running a local server). The bandwidth needed at a remote site is a function of the number of users at the site. The bandwidth needed at the main site is a function of the sum of the remote sites and the number of users at each site.

Main Office Server
30 Remote Users
15 MB Bandwidth

5 MB Bandwidth

5 MB Bandwidth

5 MB Bandwidth

Remote Office 1
10 Users

Remote Office 2
10 Users

Remote Office 3
10 Users

You should determine the bandwidth needed at each remote site using the table above. Then total the bandwidth needed at each remote site to determine the bandwidth needed at the main site. This is illustrated in the graphic below

Please note that the Aprima PRM client requires a consistent and reliable network connection. Any network outages that occur while the client is connected to the server will cause application issues, which are the sole responsibility of the client.

For thin client applications, it is recommended that you utilize a third-party VPN (virtual private network), WPA2 (wi-fi protected access), or SSL (secure sockets layer) software to provide communication from remote sites to the main office or to the location of the server. Your third party IT vender would then be responsible for providing data security and management to ensure that the quality of the communicated data was not degraded as a result of its communication.

EXTERNAL HARDWARE RECOMMENDATIONS

The Aprima PRM application can be installed on both 32-bit and 64 bit systems, but it will run as a 32-bit application. Please verify that any external hardware drivers are compatible with the 32 bit .NET runtime.

DIGITAL CAMERAS

- USB 2.0
- Capable of saving .jpg, .gif, or .tiff format

SIGNATURE PADS

The application supports Topaz signature pads for capturing patient and responsible party signatures in generated documents. The signature pad models supported are:

- Topaz T-LBK766 (BHSB-R)
- Topaz T-S460 (HSB-R)

SCANNERS / PRINTERS

- Any TWAIN-compatible scanner capable of saving .pdf format. (i.e., Fujitsu 6130, Panasonic s1026)
- Scanners should be set to scan .pdf only at 150 dpi in black & white except for specific documents requiring color (use only 8 or 16 bit) and/or higher resolution (never higher than 600 dpi). Clients scanning substantial numbers of documents in formats other than .pdf or .jpg (under certain circumstances), in color, or at resolutions higher than 150 dpi will result in significantly higher storage requirements, slower upload and download speeds, and may incur Additional Charges as a result.

- Aprima PRM does not support scanning over Terminal Services or Citrix. While there may be third-party tools that enable scanning in these configurations, Aprima cannot support them.
- Multi-functional scanners / printers may work with the Aprima application, but are specifically not supported. Independent, stand-alone printers should always be used.
- There are reported known issues with Brother brand printers; printing problems with these printers will not be supported.

- ▲ There are instances in which a particular driver for printer results in distorted documents printed from the application. This can usually be addressed by installing a different version of the print driver for the same printer or for a similar printer, or by installing a print driver from another manufacturer may resolve the problem. For example, the generic HP LaserJet 4 driver works with many laser printers.
- ▲ All Printer & Scanner maintenance is the sole responsibility of the client, and is not supported by DAS.

CARD SCANNING REQUIREMENTS

The optional Acuant and Panasonic card scanning application scans in an image and extracts certain data items from the image of a driver's license or insurance card.

The scanning application and the card scanner are not network available. The scanning application and the scanner must both be installed on the same desktop or laptop machine on which the Aprima PRM client application is installed, and all scanning must done from that machine. If you move your scanner to another computer, please allow 1-2 business days for the scanner key to be released from the old computer and applied to the new computer.

All users of the desktop or laptop on which the scanner is installed must be given local administrative rights in order to use the scanner.

Software	Acuant scanning software
Hardware	☐ ScanShell 800DX, ScanShell3100D, ScanShell3000D, Echo Scan i6D, Echo Scan i4D, or Docketport 687 Document and ID Scanner (Other card scanners are not supported) ☐ Panasonic s1026 ID document and ID Scanner ☐ Scanner Calibration Sheet ☐ Scanner Cleaning Sheet

APRIMA PORTAL

A desktop or laptop connected to the LAN is required for patient access to the patient self- service portal. Refer to the Desktop Client requirements above for minimum specification for the kiosk computer.

APRIMA PATIENT PORTAL DATA SECURITY

The communication between your server and the Aprima Patient Portal server is encrypted. The Aprima Patient Portal server has an Authentication Certificate to verify credentials. SSL in the protocol prevents eavesdropping by any intermediate actors. The application also sends a tag for disabling local cache of the pages, which prevents the browser from writing the data out to files on the local disk.

APRIMA MOBILE

ANDROID DEVICE

- Android OS 2.1 or above
- Internet connectivity to access the Aprima PRM service (GPRS, 3G, Wi-Fi, etc.)

IPHONE DEVICE

- iPhone 4S or above
- Internet connectivity to access the Aprima PRM service (GPRS, 3G, Wi-Fi, etc.)

APRIMA MOBILE DATA SECURITY

The communication between your server and the Aprima Mobile server is encrypted. The Aprima Mobile server has an Authentication Certificate to verify credentials. SSL in the protocol prevents eavesdropping by any intermediate actors. The application also sends a tag for disabling local cache of the pages, which prevents the browser from writing the data out to files on the local disk.