

## Platform Requirements for ABELDent v9 Clinical and Practice Management Software

**Important Note:** ABELDent will not perform at optimum levels on systems that meet only the minimum requirements. The minimum requirements are posted for those trying to re-use existing hardware. If you are purchasing new hardware it is recommended that you buy hardware that meets or exceeds the recommended specifications. **64 bit platforms are supported from ABELDent version 9.2.11 and above.**

Component	Recommended	Minimum	Details
<b>File Server for 2-8 workstations</b>	Intel Core 2 Duo 3.0 GHz or better (or AMD equivalent), 4.0 GB RAM, 320GB Hard disk, DVD.  Windows 7 Professional or Ultimate  <b>See Details column.</b>	Pentium 4 2.4 GHz,  1 GB RAM, 8GB hard Disk, 4X CD ROM  Windows XP Pro with Service Pack 2 is required for .Net 3.5  Windows 2000 is not supported by ABELDent version 9	<b>Note that Windows 7 Home, Vista Home and Windows XP Home are NOT supported.</b>  Faster processors generally give better performance. Faster models are released every few months. The fastest processors are usually disproportionately higher priced. The best performance for the dollar is usually found a couple steps down from the fastest processors available. Dual or Quad core processors will perform well. These include Core 2 Duo and Core 2 Quad from Intel and Athelon 64 X2 from AMD  Larger hard drives are released every few months and in general the more space the better. Although even a 40GB may be sufficient for those who use their system primarily for ABEL software, 250GB will soon become the smallest drive that is readily available for purchase. If you are loading several software packages, or are storing digital images or radiographs on the system, a 500GB hard drive or better is recommended  Windows Server 2003/8 /8R2 Terminal Services is recommended if remote sites are to connect to a common server. Although this approach is straightforward for administrative users please talk to ABEL technical support staff if image capture or radiographic applications are needed at remote sites. Thin client appliances that only support 8 bit color are not supported for use as imaging workstations.
<b>File Server for Greater than 8 workstations</b>	Intel Core 2 Duo 3.0 GHz or better (or AMD equivalent), 4GB RAM, 500 GB Hard disk, DVD.  Windows 2008 R2 Server with client access licenses for each workstation <b>See Details column.</b>	Pentium 4 2.4 GHz, 2.0 GB RAM, 20 GB Hard disk, 4X CD ROM  Windows 2003 Server SP2 with client access licenses for each workstation	See above. <b>Note that Windows 7 Home, Vista Home and Windows XP Home are NOT supported.</b>  Intel Xeon or AMD Opteron are both excellent and appropriate processors for larger servers. Windows 2000 Server is not supported by ABELDent version 9
<b>Client machines or Stand Alone System</b>	Pentium 4 3.2 GHz or better (including Core 2 Duo or AMD equivalent), 2GB RAM, 250GB Hard disk, 52X CD ROM or DVD  Windows 7 Pro or Ultimate or Vista Business or Ultimate with Service Pack 1 or Windows XP Pro with Service Pack 3 <b>See Details column.</b>	Pentium 4 2.4 GHz or better (or AMD equivalent), 1 GB RAM, 4GB Hard disk, 4X CD ROM, Windows XP Pro SP2	<b>Note that Windows 7 Home, Vista Home and Windows XP Home are NOT supported.</b>  ** ABELDent v9 is designed for use with MS Windows XP Pro, Vista Business, Windows 7 Pro or Windows 2003/8 Server. It will not function on a client computer running Windows 2000, Windows ME, Windows 98 SE, Windows NT4 or earlier operating systems. Windows 7 Pro and ultimate and Vista business and ultimate supported. Dual or Quad core processors will perform well. These include Core 2 Duo and Core 2 Quad from Intel and Athelon 64 X2 from AMD
<b>Database (on server)</b>	MS SQL Server 2008 or 2005 (SP2) will be required for customers <b>implementing the SQL version of ABELDent</b> . Smaller offices often run the Jet/Access database version of ABELDent.  MS-SQL Server 2008/5 Standard Edition, or Workgroup Edition, is appropriate for larger offices with more than 6 workstations. You will also require client access licenses (CALs) for each workstation. SQL server Standard Edition requires the Server version of the Windows Operating system (Windows Server 2008 (R2 current), or Windows 2003 Server). You can purchase this from your hardware vendor, or ABEL can bundle the Workgroup Edition Runtime with ABELDent-SQL.  MS SQL Server 2000 MSDE version (the desktop edition) is NOT SUPPORTED. This free (re-distributable) version has significant performance limitations and lacks some of the management and backup utilities included with the workgroup and standard editions.  ABELDent configurations where the SQL Server is on a different computer than the ABELDent Server, or named instances within an SQL Server, currently require manual adjustments by ABEL. For example, SERVER\DENTALSQL.		
<b>Browser</b>	Internet Explorer (IE) 7	IE 5.5 or better	
<b>.NET Framework</b>	MS .NET Framework 3.5 (See Details column)	MS .NET Framework 3.5 (See Details column)	Microsoft .NET Framework 3.5 requires XP Pro SP2 or Windows 2003 Server SP1.
<b>Java</b>	See Details column.	See Details column.	Java is not required for current versions. Java 2 Runtime Environment ver. 1.3 only was required for ABELDent ver 5.xx.
<b>IIS</b>	See Details column.	See Details column.	As a minimum Windows XP Pro or Windows Server 2003 with Internet Information Services is required for all PC's that will be running ABEL's Case Presentation Manager and/or ABELHealthNet Integration Services. IIS is included with Windows XP/Vista/Windows 7/Windows Server 2003/8 but is not installed by default.
<b>Display</b>	19" LCD with 1280x1024x16 bit color	15" SVGA with 1024 x 768 16 bit color 60 Hz	<b>ABELDent ver 9 requires a minimum resolution of 1024 x 768</b>

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<b>Backup Unit (on server)</b>	Online offsite backup services or External hard disks (USB or SATA).	Any TBU supported with appropriate drivers, or DVD burner.	Remote backups via the Internet are recommended. External hard drives can also be used, but we recommend a drive for each day of the week so recent backups are not overwritten. At least some backups should be stored offsite. Although CD burners work for data backups, they are not ideal as backup units since their capacity (700MB) does not allow full disk backups to be done easily on a single volume. DVD's would have sufficient capacity for a typical practice, but ease of use of the software and the knowledge required of the backup operator should also be taken into consideration.
<b>Modem (on server)</b>	US Robotics / 3COM Sportster 56 Kbps (External models are recommended)	US Robotics / 3COM Sportster 28 Kbps	We recommend a dedicated modem line. Do not select your main business line or any line that will interfere with regular office calls when the modem is in use. Customer's who have a high speed Internet connection, AND will be using ITRANS™ for EDI transmissions do not need a modem.
<b>Network Interface Card</b>	1 Gbps NIC	100 Mbps NIC	In all situations where computers share information on a network, each PC will require a network card or built in network interface.
<b>Switch or Hub</b>	1Gbps switch	100 Mbps switch	In a typical small business network the cables converge at an Ethernet switch. Gigabit speed switches are recommended. A port is required for each PC.
<b>Cable</b>	Cat 6 or 5e Ethernet (See Details column)	Ethernet (See Details column)	Ethernet cable will be required in your office running from each computer to a switch or hub. The switch is normally located centrally in your office, possibly in a wiring closet.
<b>Communication software (on server)</b>	A high speed Internet connection is strongly recommended for support purposes.	PCAnywhere and a modem	A high speed Internet connection is strongly recommended for support purposes. ABEL provides support via the Internet using ABEL provided tools, the customer just requires high speed Internet access and the Internet Explorer browser.
<b>Laser Printer</b>	Any printer with appropriate Windows Drivers (32MB RAM recommended)	Any printer with appropriate Windows Drivers (min 8MB RAM)	All recent revisions of ABELDent support Windows GDI printing. HP 2000, 2015, 3005, and 4000 series printers are known to work with ABELDent.
<b>Optional Color Inkjet Printer</b>	Any color inkjet with appropriate Windows Drivers	Any color inkjet with appropriate Windows Drivers	For printing Charts & Images. Check the number of pages per minute the printer will print. Some are quite slow.
<b>Uninterruptible Power Supply (UPS)</b>	Any UPS matching the power required by your system.	Any UPS matching the power required by your system.	A good UPS is strongly recommended on your server to keep it running through short power outages, and allow time for a proper shutdown in the event of longer outages. Look for a UPS with good surge suppression and power regulation to protect your server from spikes and fluctuations in the power.
<b>Imaging</b>	Windows Driver Model (WDM) Video capture cards or USB cameras.	Windows Driver Model (WDM) Video capture cards or USB cameras.	Some camera's plug into a USB port and do not require Video capture cards. Cameras with only an RCA or S-Video connector typically connect via a video capture card. We have successfully tested the ATI Radion All-In-Wonder (the Value Edition VE does NOT work with foot pedals)
<b>Optional Scanner</b>	Twain	Twain	Any Twain compliant scanner will work with ABELDent
<b>Sound Card &amp; Speakers</b>	See Details column.	See Details column.	A sound card and speakers or headphones are required for the ABELDent training videos, Optio Patient Education, and to view demo videos.
<b>Antivirus Software</b>	See Details column.	See Details column.	AntiVirus Software, configured to automatically check for definition updates daily, is Strongly recommended for every PC connected to the Internet.
<b>Firewall / Router</b>	See Details column.	See Details column.	A router or security appliance is strongly recommended for all Networks with a high speed Internet connection and when running ABELHealthNet Integration Services. A software Firewall would be adequate for computers with a dialup Internet connection.
<b>Internet Connection</b>	High-speed cable connection	High-speed internet	A high speed Internet connection is required when running ABELHealthNet Integration Services.