

*easydental*<sup>®</sup>

easy to use. easy to own.

## System Requirements

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#### EASY DENTAL AND MICROSOFT WORD

Easy Dental data can be used with Microsoft Word. To use Easy Dental with Microsoft Word, you need to license and install Microsoft Word.

# System Requirements

The System Requirements describe minimum and recommended standards for using Easy Dental 11.4.

Exceeding the minimum standards may result in better system performance.

Over time, system requirements change. For the latest system requirements, please visit [www.easydental.com](http://www.easydental.com).

# Server Requirements

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## Minimum (if using existing hardware)

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Intel® Pentium® IV 2.4 GHz processor	Standard CRT/LCD monitor and video card capable of displaying 32-bit color and a resolution of at least 1024 x 768 (see note #11)
4 GB RAM	
7200 RPM Hard Drive	USB chipset with two or more powered USB 2.0 ports
40 GB available disk space	Additional PCI Express, AGP, PCI, or USB 2.0 expansion slots may be required
100 Mbps Ethernet card (see note #6)	

## Recommended (if purchasing new hardware)

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Intel® Core™ i5 processor (2.4 GHz per core)	Standard CRT/LCD monitor and video card capable of displaying 32-bit color and a resolution of at least 1280 x 1024 (see note #11)
8 GB RAM	USB chipset with four or more powered USB 2.0 ports
10000 RPM hard drive or SSD	Additional PCI Express, AGP, PCI, or USB 2.0 expansion slots may be required
40 GB available disk space	
1 Gbps Ethernet card (see note #6)	

## Supported Operating Systems

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Windows Server 2012 Standard/Datacenter (see notes #8 and #9)	Windows® Server 2008 R1 Standard/Enterprise/Datacenter (64-bit) and R2
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**Note:** Windows Vista, Windows 7, Windows 8/8.1 Pro/Enterprise, and Windows 10 Pro/Enterprise can be used as server operating systems but are not recommended due to security and scalability issues that may require special server configuration. Windows Small Business Server 2008/2011 are not supported server operating systems.

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# Workstation Requirements

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## Minimum (if using existing hardware)

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Intel® Pentium® IV 2.4 GHz processor	a resolution of at least 1024 x 768 (see note #11)
4 GB RAM (less than 75% regular usage)	USB chipset with two or more powered USB 2.0 ports
4 GB available disk space	Additional PCI Express, AGP, PCI, or USB 2.0 expansion slots may be required
100 Mbps Ethernet card (see note #6)	
Standard CRT/LCD monitor and video card capable of displaying 32-bit color and	

## Recommended (if purchasing new hardware)

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Intel® Core™ i5 processor (2.4 GHz per core)	Standard CRT/LCD monitor and video card capable of displaying 32-bit color and a resolution of at least 1280 x 1024 (see note #11)
4 GB RAM (less than 75% regular usage)	USB chipset with four or more powered USB 2.0 ports
4 GB available disk space	Additional PCI Express, AGP, PCI, or USB 2.0 expansion slots may be required
DVD drive	
1 Gbps Ethernet card (see note #6)	

## Supported 32/64-Bit Operating Systems

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Windows® Vista Business/Ultimate	Windows® 8/8.1 Pro/Enterprise (see note below)
Windows® 7 Professional/Ultimate	Windows® 10 Pro/Enterprise

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**Note:** Microsoft discontinued support for Windows XP in April 2014. Windows XP is no longer recommended for use with Easy Dental since Windows XP no longer receives security updates, which may affect HIPAA compliance.

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## Other Software Compatibility

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Microsoft Word 2007, 2010, or 2013 32/64-bit are required for full letter merge functionality.

Easy Export is compatible with QuickBooks 2012 or higher.

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**Note:** Over time, system requirements change. For the latest system requirements, please visit [www.easydental.com](http://www.easydental.com).

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# Notes & Additional Recommendations

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- 1 Server:** In an Easy Dental system, the Easy Dental server is the computer that will act as an Easy Dental database server for all of the Easy Dental computer workstations. It can also provide other server related functions like DHCP, Internet connectivity, or file sharing services. An Easy Dental workstation can be installed and run on an Easy Dental server, but disk space, memory, and networking throughput requirements should be evaluated and optimized to ensure that the overall response to the workstations is acceptable. Non-dedicated servers (servers that are also used as workstations) will require an additional 2 GB of memory above the server requirements and preferably have a faster processor than the one listed to help reduce any latency/performance issues.
- 2 Hardware Certification:** Make sure that all servers and workstations are Microsoft Certified for their respective operating systems. Each operating system should have the latest service packs and critical updates installed. Hardware requirements can vary significantly depending on several factors including: the size and configuration of the network; make, model, configuration and speed of the workstations; size and complexity of the practice; and software from other vendors, such as Dexis Imaging, that competes for server resources. It is recommended that dental offices contact Henry Schein TechCentral (1-877-483-0382) or other qualified integration specialists who offer help with installation and ongoing service and support.
- 3 RAM:** The amount of memory (RAM) needed on a particular workstation can depend on several factors, including but not limited to the number of Easy Dental modules being used at one time, other programs and processes that are running simultaneously on the computer (such as Dexis Imaging), and the type and speed of the memory being used. For example, if you are running imaging software on the same workstation, you should have 8 GB of RAM instead of 4. As a general rule, Henry Schein recommends that systems have memory amounts much higher than those listed in the system requirements to allow for variability from computer to computer, to better position each computer for a successful Easy Dental upgrade, and to minimize the number of times the computer hardware needs to be upgraded.

- 4 Hard Drive:** The disk space needed for Easy Dental depends on the size of the practice and the amount of data that will be stored. For a dedicated Easy Dental server, 40 GB is listed as an estimate for the space that might be needed for patient images or patient records that are stored in the Easy Dental Document Center. Systems being upgraded from previous versions of Easy Dental should have at least 10 GB of free space. Customers should continually evaluate their disk space needs and plan accordingly. Henry Schein only recommends hardware RAID 0, 1, 5, or 10 for additional fault tolerance and does not recommend software RAID or dynamic drives. For 10 or fewer workstations, RAID 5 is recommended; for greater than 10 workstations, RAID 10 is recommended. RAID is not a backup solution. Disk compression utilities should not be used.
- 5 CD-ROM or DVD Drive:** Easy Dental 11.4 is available for software download only from the Internet or using Update Manager. However, a CD-ROM or DVD drive is needed to install Easy Dental 11.2 which is needed before you can upgrade.
- 6 Networks:** Industry standard Ethernet network cards should be used that support the TCP/IP protocol. Wireless networks are to be used at your own risk due to the inherent nature of interference in dental offices from X-ray machines and other devices. Wireless networks require professional installation to ensure appropriate security and to provide a reliable signal in order for the Easy Dental system to operate correctly. Wireless networks must still meet the minimum Ethernet network speed to be in compliance with system requirements. If a router is being used on the network, it is recommended that all computers be on a single subnet to ensure that all computer workstations receive the server broadcast. Any network hardware (such as routers, switches, hubs, and cabling) needs to support a 1 Gbps Ethernet card.
- 7 Performance Requirements:** For best performance, your Easy Dental environment should be able to pass the following performance tests:
- |                              |   |
|------------------------------|---|
| Ping to Router               | 98% of pings not > 2 ms (with no packet loss) |
| Ping between Workstations    | 98% of pings not > 1 ms (with no packet loss) |
| Ping to Server               | 98% of pings not > 1 ms (with no packet loss) |
| Ping to Google (ESRV)        | <40 ms  |
| Local Write Test             | 0.15 seconds                                  |
| Local Read Test              | 5.1 seconds                                   |
| Network Write Speed (250 MB) | 3.2 seconds                                   |
| Network Read Speed           | 3.4 seconds                                   |

- 8 Operating Systems:** Only the operating systems listed in the system requirements are supported with Easy Dental. For current information regarding Windows 8/8.1 and Windows 10 compatibility, visit [www.easydental.com/support/software-updates](http://www.easydental.com/support/software-updates). Easy Dental is compatible with the following 64-bit operating systems: Windows Vista (Business and Ultimate), Windows 7, Windows 8/8.1 (Pro/Enterprise), Windows 10 (Pro/Enterprise), Windows Server 2008, and Windows Server 2012. Third-party hardware and software may not be compatible with Windows Server 2012. Before installing Easy Dental on Windows Server 2012, please seek technical advice from your IT provider and verify compatibility of all hardware and software. Terminal Services is not supported. For questions regarding Easy Dental compatibility with Windows 64-bit operating systems, please contact Easy Dental Customer Support at 1-800-824-6375. Please be aware that some software products and third-party hardware drivers you may be using with Easy Dental may not be 64-bit compatible. Some devices, such as printers, scanners, digital X-ray equipment, and intra-oral cameras, may not be 64-bit ready. We strongly recommend that you verify that all software and hardware you use with Easy Dental is 64-bit compatible if you install Easy Dental in a 64-bit environment. The following eServices components have already been tested and found to be compatible with the Windows 7 64-bit operating system: eCentral, eTrans 5.1 and later, QuickBill 3.0 and later, and PowerPay 5.0 and later. Ongoing testing and development is underway to ensure that other eServices products are 64-bit compatible. For questions, and the most up-to-date information regarding eServices compatibility with Windows 64-bit operating systems, please contact eServices Support at 1-800-734-5561. The Link Local Multicast Name Resolution (LLMNR) is a protocol based on the Domain Name System (DNS) packet format that allows computers to perform name resolution for other computers on the same local network. It is included in Windows Vista, Windows Server 2008, Windows 7, Windows 8/8.1, and Windows 10. According to Microsoft's license agreement for Windows Server operating systems, a Client Access License (CAL) is required for each workstation. Make sure you have an adequate number of CALs for your office. See Microsoft's Product Use Rights for details.
- 9 Windows Server 2012 Roles and Features:** Enabling the Server Essentials Role on Windows 2012 Standard is currently not supported due to port conflicts caused by the services that this role enables. (The Server Essentials Role makes Windows Server 2012 Standard run in a Windows Server 2012 Essentials role. Windows Server 2012 Essentials is not supported, so this configuration currently is not supported as well.)
- 10 User Accounts:** In order to use the Easy Dental modules properly, all Easy Dental users should have a Windows user account with local administrator rights. For more information, see the Windows Help.

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**Note:** Roaming profiles are not supported with Easy Dental.

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- 11 **Display:** For Easy Dental to display dialog boxes properly, the Windows screen resolution option for text size must be set to **Smaller - 100% (default)**. If you change this option for Windows to use a larger text size, the screen will not display the entire contents of some Easy Dental dialog boxes.
- 12 **Printers:** For the typical dental office, Henry Schein recommends installation of two printers on the network: a laser printer for all insurance forms, letters, cards, coupons, envelopes, statements, reports; and a color printer for tooth and perio chart printouts. Henry Schein does not recommend using an inkjet printer as your primary printer. Choose a printer based on your practice needs. Every printer has a “page-per-minute” speed and an approximate number of pages per month which should be evaluated, according to your practice’s needs. Henry Schein has successfully tested the Dell C3760dn, Dell B2375dnf, HP OfficeJet Pro X451dn, HP OfficeJet Pro X476dn, Okidata MC562w, DYMO LabelWriter 450 Turbo, and Seiko SLP 620. Henry Schein cannot guarantee that all printers will be compatible with Easy Dental. We recommend that you use PCL5 printer drivers with all printing equipment. For printing customer and merchant receipts in PowerPay, Henry Schein has successfully tested the Bixolon Samsung POS Printer SRP-350.
- 13 **Backup:** Henry Schein offers eBackUp, an online product and service that automates the process of backing up data. For information on backing up your Easy Dental system, refer to the eBackUp for Easy Dental Recommendations document in the Easy Dental Resource Center at [www.easydental.com/resourcecenter](http://www.easydental.com/resourcecenter) or call Easy Dental Customer Support at 1-800-824-6375.
- 14 **Antivirus Software:** Antivirus software is recommended on all computers. Easy Dental is compatible with most anti-virus programs; however, Henry Schein does not recommend one anti-virus provider over another. Testing has revealed that performance can be affected regardless of the type of anti-virus used. When configuring anti-virus software, consider the needs of your office and the inherent risks in excluding certain items from the protection afforded by anti-virus software. Before deciding on a definite course of action, you may want to contact Henry Schein TechCentral (877-483-0382) or consult your hardware technician or an anti-virus specialist (such as your vendor). For recommended configuration options to ensure that the Easy Dental program directory is correctly excluded, contact Henry Schein TechCentral.

- 15 **Cameras & Scanners:** The Documents module supports cameras and scanners that use TWAIN and WIA drivers. Cameras and scanners using DirectShow must use Import from File in the Documents module. Some scanners that claim to be 32-bit TWAIN-compliant are not. Henry Schein has successfully tested the HP ScanJet 5590 and Cannon DR-3010C scanners. Other scanners that claim to be TWAIN/WIA compliant will probably work also, but Henry Schein cannot guarantee that all cameras and scanners claiming to be TWAIN/WIA compliant will be completely compatible with Easy Dental. Multi-function print/scan/copy machines are not recommended for scanning; you will need to use the Import from File in the Documents module with this type of scanner. Recommended resolution for scanning documents into the Documents module should be kept to 600 DPI or less.

Please visit [www.easydental.com](http://www.easydental.com) for the latest updates.

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**Note:** For help planning, purchasing and supporting computer and network systems, it is recommended that dental offices contact Henry Schein TechCentral (1-877-483-0382) or other qualified integration specialists who offer help with installation and ongoing service and support.

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[www.EasyDental.com](http://www.EasyDental.com)

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