DENTRIX G6

System Requirements

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System Requirements

The System Requirements describe minimum and recommended standards for using Dentrix G6.5.

Exceeding the minimum standards may result in better system performance.

Over time, system requirements change. For the latest system requirements, please visit www.dentrix.com.

Server Requirements

Intel® Core™ i5 processor (2.4 GHz per core)

8 GB RAM (if ≤ 10 workstations); 16 GB RAM (if >10 workstations)

10000 RPM SATA hard drive or SSD (if ≤ 10 workstations); nearline SAS hard drive (if >10 workstations)

40 GB available disk space

1 Gbps Ethernet card (see note #7)

DVD drive (if you will be installing from DVD and not downloading from the Internet or using Dentrix Update Manager)

Standard CRT/LCD monitor and video card capable of displaying 32-bit color and a resolution of at least 1280 x 1024 (see note #13)

USB chipset with four or more powered USB 2.0 ports

Additional PCI Express, AGP, PCI, or USB 2.0 expansion slots may be required.

Supported Operating Systems

Windows® Server 2016 Standard/Data-center

Windows® Server 2012 Standard/Data-center R1 and R2 (see notes #10 and #11)

Windows® Server 2008 R2 SP1 (see note #10)

Note: Windows 7 SP1 and Windows 8.1 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 Server 2003 is not supported by Microsoft after July 2015, so it is not supported by Dentrix G6.5. Windows Small Business Server 2008/2011 are not supported server operating systems.

Workstation Requirements

Intel® Core™ 2 Duo processor (2.4 GHz per core)

4 GB RAM (less than 75% regular usage)

4 GB available disk space

1 Gbps Ethernet card (see note #7)

Standard CRT/LCD monitor and video card capable of displaying 32-bit color and a resolution of at least 1280 x 1024 (see note #13)

3D capable DirectX10 compatible graphics card with 128 MB video memory (needed for advanced 3D modeling)

USB chipset with four or more powered USB 2.0 ports

Additional PCI Express, AGP, PCI, or USB 2.0 expansion slots may be required

Supported 32-Bit and 64-Bit Operating Systems

Windows® 7 Professional with SP1

Windows® 7 Ultimate with SP1

Windows® 8.1 Pro/Enterprise (see note below)

Windows 10 Pro/Enterprise

Note: Dentrix G6.5 is compatible with Windows 10 Pro/Enterprise. Before installing Dentrix G6.5 on a Windows 10 computer, however, please be aware of the following:
• **If you use or plan to use PowerPay** – Dentrix customers currently using PowerPay can upgrade to Windows 10 at any time. PowerPay can also be installed as a client on any computer that is already running Windows 10. However, PowerPay will not install as a server on a computer that is already running Windows 10. Customers considering PowerPay for a Windows 10 system would need to have their PowerPay Server installed on a non-Windows 10 computer, or could consider PowerPay LE as a temporary solution instead.

Windows 8.1 does not support Microsoft SQL Server 2005 Express, which may be needed to run some software programs that integrate with Dentrix.

Other Software Compatibility

Microsoft Word 2007, 2010, 2013, or 2016 32/64-bit are required for full letter merge functionality. However, using Microsoft Word 2016 with letter merge will require the following manual security changes (these steps may vary slightly depending on your Windows version):

1   In Microsoft Word, from the **File** menu, click **Options**.

2   Click **Trust Center**.

3   Click **Trust Center Settings**.

4   Click **Trusted Locations**.

5   Select **Allow Trusted Locations on my network**.

6   Click **Add new Location**, and specify the path to your merge letter templates (such as C:\Program Files\ Dentrix\Doc), and then click **OK**.

7   Back in the the Trust Center dialog box, click **File Block Settings**.

8   Clear the check box for Word 95 Binary Documents and Templates. (You may want to clear all Word related documents in this screen.)

9   Click OK, OK.

Viewing some documents stored in the Dentrix Document Center may require additional software designed for viewing those file types. For example, Adobe Acrobat is needed for viewing .pdf files, Microsoft Word for viewing .doc files, Microsoft Excel for viewing .xls files, and so forth). For best results with storing and viewing documents in the Dentrix Document Center, we recommend that you use the most current version of these third-party products and from these specific software vendors.

Dentrix G6.5 is compatible with VoicePro 5.0. Earlier versions of Dentrix Voice are not supported.

DXPort is compatible with QuickBooks 2012 or higher.

Note: Over time, system requirements change. For the latest system requirements, please visit www.dentrix.com.

Notes & Additional Recommendations

1   **Server:** In a Dentrix system, the Dentrix server is the computer that will act as a Dentrix database server for all of the Dentrix computer workstations. It can also provide other server related functions like DHCP, Internet connectivity, or file sharing services. The Dentrix server can be used as a Dentrix workstation, 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 beyond 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 Dentrix 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 Dentrix upgrade, and to minimize the number of times the computer hardware needs to be upgraded.

4   **Hard Drive:** The disk space needed for Dentrix depends on the size of the practice and the amount of data that will be stored. For a dedicated Dentrix 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 Dentrix Document Center. Systems being upgraded from previous versions of Dentrix 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, or 10 for additional fault tolerance and does not recommend software RAID or dynamic drives. RAID 10 is recommended. RAID is not a backup solution. Disk compression utilities should not be used.

5   **DVD Drive:** Dentrix G6.5 is available for download using Dentrix Update Manager. It is also available on DVD for those without Internet access. If you install from

DVD in a network environment, only one computer (preferably the server) needs to have a DVD drive. The software can then be shared with other workstations.

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 Dentrix 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. (Cat 5e cabling or better should be used.)

To avoid possible disconnect error messages on computers that will be left inactive for an extended period of time, disable the Power Management options on each of those computer's Network Interface Card (NIC) or close Dentrix on those computers when you are not using them. (Some network cards will go into "sleep mode" even though Dentrix is open and has an active network connection. If this happens while Dentrix is open, Dentrix will not be able to use the same network connection after the network card "wakes" and will not be able to communicate with the Dentrix server. If this happens, Dentrix will have to be completely closed and reopened on the client to re-establish a new network connection with the Dentrix server.)

7   Performance Requirements: For best performance, your Dentrix 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   Graphics Card: In order to use the 3D modeling capabilities of Dentrix, a 3D graphics adapter card capable of running DirectX 9 with at least 128 MB of RAM on the card is required. Cards with less memory might work, but can cause issues with graphic related performance. Computers will also require a good monitor capable of supporting 1280x1024 high-color resolution settings. Henry Schein has tested graphics cards from multiple vendors and has noticed a wide range of

variability. Some on-board graphics cards use shared memory and might not work well (or at all) with the Dentrix 3D modeling features.

9　**USB:** Dentrix VoicePro requires a USB port. Henry Schein recommends a motherboard with built-in USB 2.0 ports. The USB ports need to be powered so as to provide adequate power to the devices being plugged into them.

10　**Operating Systems:** Only the operating systems listed in the system requirements are supported with Dentrix G6.5 and later. For current information regarding Windows 8/8.1 compatibility, visit www.dentrix.com/support/software-updates/g5.aspx. A 64-bit operating system is recommend for Dentrix environments with greater than 10 workstations. Dentrix G6.5 and later is compatible with the following 64-bit operating systems: Windows 7 with SP1 (with all updates), Windows 8/8.1 Pro/ Enterprise, Windows 10, Windows Server 2008 R2, Windows Server 2012, and Windows Server 2016.

Third-party hardware and software may not be compatible with Windows Server 2016. Before installing Dentrix on Windows Server 2016, please seek technical advice from your IT provider and verify compatibility of all hardware and software. Terminal Services is not supported. For questions regarding Dentrix compatibility with Windows 64-bit operating systems, please contact Dentrix Support at 1-800-DENTRIX.

Please be aware that some software products and third-party hardware drivers you may be using with Dentrix 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 Dentrix is 64-bit compatible if you install Dentrix in a 64-bit environment. The following eServices components have already been tested and found to be compatible with the Windows 7 SP1 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.

To use Dentrix Questionnaires, you must be using one of the latest two versions of Internet Explorer.

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 Server 2008 R2, Windows 7 SP1 and Windows 8/8.1.

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.

11 **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 currently not supported, so this configuration currently is not supported as well.)

12 **User Accounts:** In order to use the Dentrix modules properly, all Dentrix users should have a Windows user account with local administrator rights and additional read/write access to the Dentrix Common folder. For more information, see the Windows Help.

Note: Roaming profiles are not supported with Dentrix.

13 **Display:** For Dentrix 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 Dentrix dialog boxes.

14 **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, Epson FX 2190 (supported in Windows 7 and later; can be used for printing tractor-fed paper, such as some paper claims and a coupon book with Future Due Payment Plans), 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 completely compatible with Dentrix. We recommend that you use PCL5 printer drivers with all printing equipment. For printing customer and merchant receipts in PowerPay 5.0 and later, Henry Schein has successfully tested the Bixolon Samsung POS Printer SRP-350.

15 **Backup:** Henry Schein offers eBackUp, an online product and service that automates the process of backing up data. For information on backing up your Dentrix system, refer to the eBackUp for Dentrix Recommendations document in the Dentrix Resource Center at www.dentrix.com/resourcecenter or call Dentrix Customer Support at 1-800-DENTRIX.

16 **Antivirus Software:** Antivirus software is recommended on all computers. Henry Schein software products are compatible with most anti-virus programs; however,

Dentrix 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 Dentrix program directory is correctly excluded, refer to Article 56877 in the Dentrix Resource Center or contact Henry Schein TechCentral.

17 **Cameras & Scanners:** The Dentrix Document Center supports cameras and scanners that use TWAIN and WIA drivers. 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 Dentrix. Recommended resolution for scanning documents into the Document Center module should be kept to 600 DPI or less.

18 **Electronic Signature Capture Terminals:** Dentrix G6.5 supports the ePAD II and ePAD Vision signature devices for signing consents in the Treatment Planner and Questionnaires modules and clinical notes in the Patient Chart. Dentrix does not support the use of the Ingenico signature terminals for signatures inside of Dentrix.

Please visit www.dentrix.com for the latest updates.

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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