

CS Orthodontic Imaging Software 11.16
CS OMS Imaging Software 11.16

*Minimum System Requirements: Lists the lowest functional specifications for our hardware and software. To assure optimal performance and future upgrade capability more system RAM, higher end graphics cards, and faster CPUs are suggested.

Carestream Dental strongly adheres to compliance with Microsoft Windows operating systems and hardware compatibility. Only non-emulated Windows operating systems and hardware listed in this document have been fully tested and certified with CS Orthodontic/OMS Imaging Software.			
Product	Recommended	Minimum Required *	Notes
Imaging Server	<ul style="list-style-type: none"> Intel® Xeon® E31220 Processor or better 16 GB RAM 1 TB or larger hard drive for data storage At least 20 GB for software installation on the on the C-Drive 32-bit 1280x1024 resolution capable video card Monitor supporting 1280 x1024 resolution, 32-bit color (See note 10 on Pg. 4) 100/1000 NIC using a Gigabit Ethernet switched network <p style="text-align: center;"><u>64-bit Only</u> Windows Server 2019 Windows Server 2016 Windows Server 2012 R2 (see note below)</p>	<ul style="list-style-type: none"> Intel Core2 Duo Processor 3.0 GHz or faster CPU 8 GB RAM 500 GB or larger hard drive for data storage At least 20 GB for software installation on the on the C-Drive 32-bit 1280x1024 resolution capable video card Monitor supporting 1280 x1024 resolution, 32-bit color (See note 10 on Pg. 4) Ethernet 100/1000 NIC <p style="text-align: center;"><u>64-bit Only</u> Windows Server 2019 Windows Server 2016 Windows Server 2012 R2 Windows 10 Professional</p>	<p>Dedicated Image Server requirement is for a computer where the software will not be used by office staff.</p> <p>If the server computer will also be used as a workstation the requirements for Imaging Server and Imaging Workstation should be reviewed. Use whichever is better for each component.</p> <p>If the server will be used to view 3D Volumes, it must also meet the requirements for the CS 3D Imaging Viewing Workstation</p> <p>Windows 10 is limited to 20 concurrent connections when used as a server. Concurrent connections refer to the number of devices connected. A workstation or device can have more than one connection. You may experience the concurrent connections limit with less than 20 workstations actually connected.</p> <p>Microsoft does not recommend installing SQL Server on a Domain Controller.</p>
Imaging Workstation	<ul style="list-style-type: none"> Intel® Xeon® E31220 Processor or better 16 GB system RAM 80 GB hard drive with at least 20 GB for software installation on the on the C-Drive Ethernet 100/1000 NIC Available high-speed USB 2.0 port VGA/HDMI-compatible video card with 1,024MB dedicated video memory Supporting DirectX 9.0c or better Monitor supporting 1280 x1024 resolution, 32-bit color (See note 10 on Pg 4) <p style="text-align: center;"><u>64-bit Only</u> Windows 10 Professional Windows 11 Professional</p>	<ul style="list-style-type: none"> Pentium 4, 3.2 GHz or faster 8 GB system RAM 80 GB hard drive with at least 20 GB for software installation on the on the C-Drive Ethernet 100/1000 NIC Available high-speed USB 2.0 port VGA/HDMI-compatible video card with 512MB dedicated video memory Supporting DirectX 9.0c Monitor supporting 1280 x1024 resolution, 32-bit color (See note on 10 Pg 4) <p style="text-align: center;"><u>64-bit Only</u> Windows 10 Professional Windows 11 Professional</p>	<p>Video card and image size:</p> <ul style="list-style-type: none"> For 512 MB installation, images should be limited to 5 Megapixel or less For 1,024 MB installation, images should be limited to 7 Megapixel or less For images larger than 7 Megapixel, more RAM and higher end graphics card are required. <p><i>For RVG 6500 see Install Guide (SM728)</i></p>

<p align="center">Imaging Workstation With 3D Preview</p>	<ul style="list-style-type: none"> • Intel® Xeon® E31220 Processor or better • 16 GB system RAM • 80 GB hard drive with at least 20 GB for software installation on the on the C-Drive • Ethernet 100/1000 NIC • Available high-speed USB 2.0 port • NVIDIA Dedicated graphics card with 1 GB supporting OpenGL v3.3 • Monitor supporting 1280 x1024 resolution, 32-bit color (See note 10 on Pg 4) <p align="center"><u>64-bit Only</u> Windows 10 Professional Windows 11 Professional</p>	<ul style="list-style-type: none"> • Pentium 4, 3.2 GHz or faster • 8 GB system RAM • 80 GB hard drive with at least 20 GB for software installation on the on the C-Drive • Ethernet 100/1000 NIC • Available high-speed USB 2.0 port • Monitor supporting 1280 x1024 resolution, 32-bit color (See note on 10 Pg 4) • NVIDIA based graphics card with 512 MB of RAM supporting OpenGL v3.3 <p align="center"><u>64-bit Only</u> Windows 10 Professional Windows 11 Professional</p>	<p>Video card and image size:</p> <ul style="list-style-type: none"> • For 512 MB installation, images should be limited to 5 Megapixel or less • For 1,024 MB installation, images should be limited to 7 Megapixel or less • For images larger than 7 Megapixel, more RAM and higher end graphics card are required.
<p align="center">CS Cloud Sender Server</p>	<p>The CS Cloud Sender Server PC should meet the Imaging Workstation minimum requirements plus these additional requirements:</p> <p>1 TB or larger hard drive for data storage</p> <p align="center"><u>64-bit Only</u></p> <ul style="list-style-type: none"> • Windows Server 2019 • Windows Server 2016 • Windows 10 Professional 	<p>The CS Cloud Sender Server PC should meet the Imaging Workstation minimum requirements plus these additional requirements:</p> <p>500 GB or larger hard drive for data storage</p> <p align="center"><u>64-bit Only</u></p> <ul style="list-style-type: none"> • Windows Server 2019 • Windows Server 2016 • Windows 10 Professional 	<p>If the Sender Server computer will also be used as a workstation the requirements for Imaging Server and Imaging Workstation should be reviewed. Use whichever is better for each component.</p> <p>If the Sender Server will be used to view 3D Volumes, it must also meet the requirements for the CS 3D Imaging Viewing Workstation</p> <p>Windows 10 is limited to 20 concurrent connections when used as a server. Concurrent connections refer to the number of devices connected. A workstation or device can have more than one connection. You may experience the concurrent connections limit with less than 20 workstations actually connected.</p>
<p align="center">CS Cloud Local Imaging Computer</p>	<p>CS Cloud workstation PCs that will be used to run CS Ortho/OMS Imaging should meet the Imaging Workstation recommended requirements</p>	<p>CS Cloud workstation PCs that will be used to run CS Ortho/OMS Imaging should meet the Imaging Workstation minimum requirements</p>	<p>CS Cloud workstation computers that will use CS Orthodontic/OMS Imaging for downloading photos or for X-ray image acquisition must meet the requirements for <i>Imaging Workstation</i> and <i>CS 3D Imaging Viewing Workstation</i> if appropriate</p>

<p>CS 3D Imaging Software Viewing Workstation</p>	<ul style="list-style-type: none"> • CPU: Intel Core i7-2600 (2nd Generation) processor • 16 GB System RAM (32 GB if using MAR) • 7200 RPM hard drive with SATA interface storage • NVIDIA Dedicated graphics card with 1 GB supporting OpenGL v3.3 • 17" Display able to support minimum 32-bit 1280x1024 resolution • based graphics card <p style="text-align: center;"><u>64-bit Only</u></p> <p>Windows 10 Professional Windows 11 Professional</p>	<ul style="list-style-type: none"> • CPU: 2.4 GHz Core Duo • 8 GB System RAM (16 GB if using MAR) • 300 MB hard drive space available on the system disk. • 1.5 GB hard drive space available on system disk for implants • NVIDIA based graphics card with 512 MB of RAM supporting OpenGL v3.3 <p style="text-align: center;"><u>CS 3D Imaging – PDIP Module</u></p> <ul style="list-style-type: none"> • CPU: Intel Core i7-2600 (2nd Generation) processor • 8 GB System RAM • 7200 RPM hard drive with SATA interface storage • NVIDIA Dedicated graphics card with 1 GB supporting OpenGL v3.3 • 17" Display able to support minimum 32-bit 1280x1024 resolution <p style="text-align: center;"><u>64-bit Only</u></p> <p>Windows 10 Professional Windows 11 Professional</p>	<p>The listed requirements are for CS 3D Imaging software. When used with CS OMS\Orthodontic Imaging use the Imaging Workstation entry when better</p> <p>Storage space varies depending on imaging device</p> <p>The minimum recommended video card is the nVidia GeForce 450GTS or higher. If this or any other higher quality video board is unable to be used it may be substituted with a 512MB Glide 1.2 compatible video card with reduced performance.</p>
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Imaging Multi Location Solution (Non-Cloud, see note 14 below)

Product	Hardware	Supported Operating Systems
<p>Application Server</p>	<ul style="list-style-type: none"> • Intel Core2 Duo Processor 2.0 GHz or faster CPU • 4 GB RAM (8 GB or higher recommended) • 200 GB hard drive with at least 20 GB for software installation on the on the C-Drive • Ethernet 100/1000 network card • VGA/HDMI-compatible Graphics card with 512 MB or higher video memory and a minimum resolution of 1280x1024 • Standard CRT/LCD monitor with a minimum of 1280x1024 screen resolution 	<p style="text-align: center;"><u>64-bit Only</u></p> <p>Windows Server 2012 R2 – with SQL 2008</p>
<p>Remote PC Based</p>	<p>Remote PC's that will be used to run CS Ortho/OMS Imaging should meet the Imaging Workstation requirements</p>	<p>For systems that will view 3D volumes, see requirements for 3D Software Viewing Workstations.</p>
<p>Thin Clients</p>	<p>Any device capable of running Microsoft RDP software and supports network connectivity using TCP/IP. The device should be capable of generating a display with at least 1280x1024 resolution.</p>	

<p style="text-align: center;">Wide Area Network</p>	<p>Carestream Dental Recommends using a high speed, dedicated, point to point connection between offices such as a T1 circuit.</p>	<p>Transferring of data between offices is limited to the amount of bandwidth dedicated to the connection between offices and the amount of traffic on your network. Low bandwidth connections or large amounts of traffic can greatly affect the speed of viewing and saving images between offices.</p>
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Notes and functional requirements:

1. Microsoft Word 2000-2016 (32-bit), Outlook installed and configured
2. Installed and up to date Antivirus (some configuration may be needed for optimal performance: Heuristic and real time or office hours scanning disabled)
3. High speed Internet connection for remote support
4. Photo quality printer and/or flatbed scanner with transparency adapter recommended
5. Document scanning requires a TWAIN complaint scanner.
6. Backups and restore system in place: We suggest that you perform a nightly backup on removable media and keep that media in a fireproof safe off-site.
7. An Uninterruptable Power Supply with shutdown software installed at the server machine is recommended.
8. Consult a qualified IT professional about a RAID system installation for your image server.
9. Acquisition PCs are single purpose built and must not have any additional software or peripherals such as a printer or other IO equipment installed or attached.
10. OrthoTrac v14 requires a video card and monitor supporting 1920 x 1080 resolution, 32-bit color. If you are using this software you must use a monitor of this resolution or higher, regardless of any lower resolution monitor requirements listed above.
11. When comparing minimum system requirements between Carestream Dental hardware, Carestream Dental software or Windows, use the superior hardware specification.
12. Carestream Dental does not certify our software on Virtual Machines or an Emulated OS, however the client may choose to use either at their own risk
13. Importing of STL or PLY images is not supported in a Virtual Environment. (This includes Remote Desktop, Hyper-V, Citrix, VMWare, or etc.)
14. Carestream Dental DOES NOT support or assist clients or their IT with any type of Data Synchronization or Data Replication involving data associated with CS Orthodontic Imaging, CS OMS Imaging or CS 3D Imaging. If a client wishes to explore this option, their IT company will need to configure and maintain the data configuration. The practice assumes all responsibility for any data issues that result from the use of Data Synchronization or Data Replication.

Windows compatibility notes:

- Windows Server 2012 is reaching end of life October 10, 2023, and it will no longer be supported in our next release. If you use this operating system, it is strongly recommended that you upgrade.
- No Home versions of Microsoft Windows are tested or supported. The software will not install or update on computers running Windows Home versions of Windows.
- Microsoft Small Business Server and Server Essentials are not supported operating systems.
- Server and workstations should be kept current with all Windows service packs and critical updates.
- Microsoft Windows 10: Microsoft Edge browser is now currently supported by our online training products (Carestream Dental Institute).
- **Microsoft Windows Note:** Microsoft has discontinued support for Windows XP and Windows Server 2003. For this reason, as of March 31, 2016, Carestream Dental no longer supports Windows XP or Windows Server 2003. The software will not install or update on computers running Windows XP or Windows Server 2003
- Microsoft has discontinued support for Windows 7 and Windows Server 2008 as of January 14, 2020. If Windows 7 or Windows Server 2008 is being used, Microsoft is strongly recommending that you upgrade your OS. These operating systems are no longer supported by CS Orthodontic Imaging or CS OMS Imaging software. The software will not install or update on computers running Windows 7 or Windows Server 2008
- x86 (32-Bit) versions of Windows are not supported. Software will not install or update on computers running x86 (32-Bit) Windows
- When using Windows 10 as a Server, concurrent connections refer to the number of devices connected. A workstation or device can have more than one connection. You may experience the concurrent connections limit with less than 20 workstations actually connected.