Hardware and operating system guidelines

Based on IDEXX testing and the typical suite of other applications that your hardware needs to support, IDEXX recommends that your system meet or exceed the specifications in this document. More resources may be necessary depending on any additional software and/or services installed on your computers. Contact your IT consultant to determine whether your system meets these requirements or whether additional resources are needed. Refer to the configurations and recommendations below for on-premises Cornerstone* Software ▤ or Cornerstone* Cloud Software ☁.

Cornerstone versions 9.1 and later (on-premises or cloud)

Supported operating systems:

- Windows* Server 2019 (Cornerstone 9.2 or later)
- Windows* Server 2016 (Standard and Datacenter)

- Windows* Server 2012/2012 R2 (Standard and Datacenter)
- Windows* 10 (Professional and Enterprise)

- ▤ Windows* 8/8.1 (Professional and Enterprise, on-premises Cornerstone only)

Monitor setting: Monitor screen resolution of 1280 x 1024 or higher recommended.

Recommended configuration for optimal experience with on-premises Cornerstone ▤

Hardware type	OS	Processor	Hard drive	Memory
Dedicated server	Windows Server 2016 Windows Server 2019 (for Cornerstone 9.2 or later)	Intel* Xeon	500 GB[c]	16 GB[d] or more +1 GB per thin client
Peer-to-peer[a] server	Windows 10 Professional	Intel* Core[b]	500 GB[c]	16 GB[d]
Thick-client workstation	Windows 10 Professional	Intel Core[b]	256 GB	8 GB
Thin-client workstation	Windows 10 IoT Windows 10		Minimum supported by operating system	

Recommended configuration for optimal experience with Cornerstone Cloud[†] ☁

Hardware type	OS	Processor	Hard drive	Memory	Browser	ISP/WAN bandwidth[‡]	Email
Workstation or device	Windows 10	Intel* Core i3, i5, or i7 (6th generation) or newer[b]	256 GB	8 GB	Chrome	**Recommended:** 2Mb/s DOWN per workstation; 10Mb/s UP clinic-wide Backup/redundant/failover internet connectivity (available/reliable when primary internet is down) **Minimum:** 1Mb/s DOWN per workstation; 10Mb/s UP clinic-wide	SMTP email with supported email provider Contact Cornerstone support for details.

†A router with a built-in firewall or a hardware firewall must be in place at the practice.

‡ Bandwidth requirements for Cornerstone Cloud only. Consult with your IT/ISP provider to ensure your practice's internet speeds are adequate for all applications and services you use.
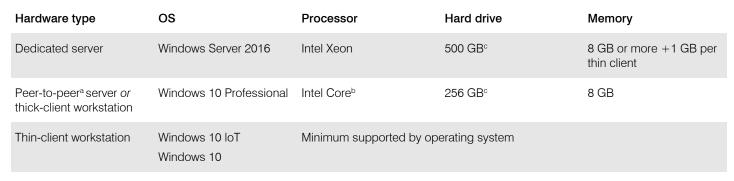
Cornerstone* versions 8.5 NEXT – 8.7 NEXT

Supported operating systems:

- Windows Server 2016
  (Standard and Datacenter)
- Windows Server 2012/2012 R2
  (Standard and Datacenter)

- Windows 10
  (Professional and Enterprise)
- Windows 8/8.1
  (Professional and Enterprise

Monitor setting: Monitor screen resolution of 1280 x 1024 or higher recommended.

Recommended configuration for optimal experience with on-premises Cornerstone

Hardware type	OS	Processor	Hard drive	Memory
Dedicated server	Windows Server 2016	Intel Xeon	500 GB[c]	8 GB or more +1 GB per thin client
Peer-to-peer[a] server *or* thick-client workstation	Windows 10 Professional	Intel Core[b]	256 GB[c]	8 GB
Thin-client workstation	Windows 10 IoT Windows 10	Minimum supported by operating system		

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a. For a peer-to-peer network, IDEXX recommends no more than nine thick-client workstations (applies to on-premises Cornerstone only).

b. Excludes Intel* Celeron*, Intel* Pentium*, and Intel* Atom* processors.

c. Servers that store digital images will require more hard drive and backup space.

d. For servers, Cornerstone versions 9.1 **and later** have been tested successfully on a server with 8 GB of memory, but 16 GB or more improves database performance applies to on-premises Cornerstone only. Performance depends on server load. For an optimal experience, follow the recommended configuration.

Microsoft End of Support Life notifications

End of Support Life refers to the date when Microsoft* no longer provides security updates or online technical assistance.

Without security updates your computer system will be more susceptible to harmful viruses and other malicious software. Also, using an unsupported operating system is not Payment Card Industry (PCI) compliant.

IMPORTANT: Cornerstone does not support Windows operating systems that have reached Microsoft End of Support Life. Cornerstone recommends upgrading systems that have reached Microsoft End of Support Life because of potential compatibility concerns and certain security risks. It is always best to confirm the compatibility of your software before any operating system upgrade. Call your IDEXX representative at
1-800-283-8386 for information on transitioning to a newer operating system.

Be mindful of the end of support life notifications below and ensure that you are using a supported operating system to better protect your computer system and, in turn, your business and customers.

Current End of Support Life notifications

Windows* XP, Windows* XP Embedded, Windows Server* 2003, Windows Vista*, Windows* Embedded Standard 2009, Windows* 7, Windows* Server 2008, and Windows Server* 2008 R2 have all reached their Microsoft End of Support Life.

IMPORTANT: For digital imaging customers with IDEXX Care Plus, no action is required. IDEXX Diagnostic Imaging is ensuring continued security support of Windows 7 image-capture PCs. If you do not have IDEXX Care Plus and are currently using Windows 7 on your image-capture PC, options are available. For more information, contact IDEXX Diagnostic Imaging Support at 1-877-433-9948.

General recommendations

Business-class computers, printers, and peripherals

Cornerstone recommends you use business-class computers, printers, and peripherals to ensure the best performance, reliability, and warranty. Business-class devices are available from manufacturers like Dell* and include components, configuration options, and a warranty designed to meet the needs of a demanding business environment.

Gigabit-speed, wired networks

Cornerstone recommends you use computers and switches capable of gigabit speed with a wired connection. Gigabit network speeds require CAT5e or better cabling. A wired connection will always provide a faster and more stable Cornerstone experience. A wireless connection should be used only for mobile computers.

Firewall and antivirus (malware) protection

Cornerstone recommends the use of a hardware firewall for both on-premises and Cornerstone Cloud and the Trend Micro* Worry-Free* Business Security Services antivirus solution for on premises-based Cornerstone which includes a software firewall. Cornerstone supports only configuration of the Trend Micro software firewall for proper operation of Cornerstone products and services. For general firewall configuration details specific to Cornerstone, see the *Firewall Configuration Guide*. (To find the *Firewall Configuration Guide* on idexx.com, search for Cornerstone Resources, and then locate the guide under "Hardware & computer systems.")

For more information, call your IDEXX representative at **1-800-283-8386**.