SYSTEM REQUIREMENTS FOR CENTAUR APPLICATIONS IN THE CLOUD

Revised: 04/05/2018   (Valid for 60 Days from Last Revision)

BASE SPECIFICATION FOR HOSTED TERMINAL SERVER

The following document outlines the basic System Requirements for your Dental4Windows^{sql} / Practice Studio^{sql} / Mediasuite^{sql} hosted in our Cloud environment. For more information about your exact setup please contact Centaur Support to discuss.

● CLIENT – DENTAL4WINDOWS^{SQL} / PRACTICE STUDIO^{SQL} / MEDIASUITE^{SQL}

COMPONENT	MINIMUM/RECOMMENDED REQUIREMENTS		
CPU	Dual Core 2.0GHz +	RAM	2 GB / 4 GB
HDD^	80 GB 7200 RPM	Optical Drive	DVD +/- RW
Network Card	100/1000 Onboard	Graphics Adaptor	Capable of 1024x768 or higher resolution
Operating System	Windows 10 ® (32/64 Bit) ———————— Windows 8/8.1 ® (32/64 Bit) Windows 7 ® (32/64 Bit)	Web Browser	Internet Explorer 11 (while other browsers will work only IE11 has full compatibility with Microsoft Terminal Services)

 # For more information on supported Operating Systems refer to section 2.9 below.

^ For information on the HDD recommendations please refer to section 2.3 below.

OPERATING SYSTEMS AND DEVICE DRIVERS
Please note that each imaging device has its own Hardware Driver which needs to be certified by the hardware manufacturer to work with each Operating System. Unless such certification is obtained your Device may not work.

64-BIT
Please be aware that not all dental imaging acquisition devices currently have 64-bit drivers. This means hardware devices that do not have 64-bit drivers cannot be used with 64-bit Operating Systems. Please check carefully with each devices vendor/seller and also your IT Technician prior to changing to a 64-bit Operating System.

● MODULE REQUIREMENTS – DENTAL4WINDOWS^{SQL} / PRACTICE STUDIO^{SQL}

MODULE	REQUIREMENTS
SMS	Internet Connection
HICAPS	HICAPS Terminals can connect via either an onboard USB pprt or onboard COM port (depending on the cable you receive from HICAPS). Ensure you have the appropriate port on your computer(s) where the terminal will be connected. Contact HICAPS for more information.
Email	Internet Connection
Xray link	Only Centaur Media Suite integrates with Dental4windows in the Cloud. Other imaging software will need to run locally on the local PC without being linked to Centaur Application

BEST PRACTICES GUIDE FOR CENTAUR APPLICATIONS

BEST PRACTICES FOR i5 (PREVIOUS VERSIONS ARE NOT SUPPORTED ON THE CENTAUR CLOUD)

Dental4Windows^sql, Practice Studio^sql and Mediasuite^sql will be referred to as Centaur Applications in the following document.

1. PRACTICE REQUIREMENTS

ITEM	STRONGLY RECOMMENDED	MINIMUM REQUIREMENTS
Remote Access	Fibre Based Broadband Internet Connection with ▪ 120 Kbps (Download/Upload) per concurrent user (*Dental4Windows^sql* only) ▪ 8Mbps (Download/Upload) if linked to *Mediasuite^sql* or scanning very large files	Fibre/ADSL2+ Based Broadband Internet Connection with: ▪ 120 Kbps (Download/Upload) per concurrent user (*Dental4Windows^sql* only) ▪ 2 Mbps (Download/Upload) if linked to *Mediasuite^sql* or scanning very large files
	NOTE: Poor speeds/bandwidth may result in reduction of application performance.	
Printer	Modern Printer with Support from Manufacturer NOTE: Some printing problems can be resolved by installing the latest printer drivers. Ensure that your technician installs the latest drivers for your particular printer, now and in the future.	
Network	Fast Ethernet or Gigabit Switch with 1 port per computer (additional ports may be needed for other Network Devices (ie. Network Printer, ADSL2 Modem/Router and future expandability).	

2. ADDITIONAL NOTES

2.1. MOTHERBOARD/CPU

▪ While *Centaur Applications* should work on non-Intel processors, they are not tested or certified.
▪ Ensure that your computer is certified for your operating system (refer to the Operating System section 2.9 for details).
▪ We recommend the use of Desktop and Server grade CPU's. While Netbook/Mobile grade CPU's (ie: Intel's Atom CPU) will run *Centaur Applications* you may notice slow performance using Netbook/Mobile grade CPU's.

2.2. DISPLAY ADAPTOR

▪ *Centaur Applications* require a 1024*768 or higher resolution.

2.3. HARD DRIVE

▪ The hard drive is the most commonly overlooked specification, but is a very important component of a computer (particularly the speed of the hard drive).
▪ Note that the specified free space is only for *Centaur Utility Files* and any files you need to copy from *Centaur Applications* in Cloud environment, such as exported report files (CSV, XLSX, PDF), scanned document files, etc. If you intend to install digital x-ray software (or any other software) you should contact the respective software vendor for their requirements.

2.4. HARDWARE FIREWALL

▪ Internet sharing software (or any other software) that causes interference with the TCP/IP protocol that affects *Centaur Applications* will have limited support.

2.5. ANTI-VIRUS/FIREWALL SOFTWARE

▪ Anti-Virus/Firewall software should be installed on all computers. If you are a network user then you should look at an antivirus software solution that will "push" the virus updates out to all computers on the network via the computer that has the internet connection.

2.6. NETWORKING

▪ Centaur Software supports its products running over both wired and/or wireless networks. If there is an issue with your network affecting the use of our products you may be required to seek the services of an IT Technician to assist in resolving the issue.
▪ Centaur Software strongly recommends that wired networks are used over wireless networks due to the inherent issues that may affect a wireless network. Common issues that occur when wireless networks are used include: application dropouts, poor performance issues, network interference, etc. If a customer decides to use a wireless network then it is recommended they talk to their IT Technician to setup a secure, stable and fast network. In order to troubleshoot issues with running our products over a wireless connection we may require the user to recreate the issue after making a physical (LAN) connection. If the issue cannot be created with a physical connection we cannot guarantee a fix.
▪ The performance of *Centaur Applications* may vary based on any number of conditions outside of our control such as: Wireless Interference of other devices, other Wi-Fi broadcasts, building infrastructure, Wi-Fi Hardware, etc. For ways to improve the performance of your Wireless Network we recommend you obtain the services of an IT Technician.

Centaur Software Development Company Pty. Ltd.
Suite 502, 410 Elizabeth Street Surry Hills NSW 2010 Australia
PO Box 2313 Strawberry Hills NSW 2012 Australia

ABN	18 057 620 390
PHONE	(61 2) 9213 5000
FAX	(61 2) 9213 5093
EMAIL	support@centaursoftware.com.au
WEB	www.centaursoftware.com.au

- We recommend the use of Enterprise grade Routers
- Network users should consider the purchase of a network printer (ie. a printer that is not physically connected to a computer).

2.7. RDC/VIRTUALISATION

- *Centaur Applications* in the Cloud do work with Windows OS virtualisation on Mac OS X using virtualisation applications such as Parallels or Boot Camp.
- SAP does not explicitly test or certify products running on any virtualised environment such as VMWare, Xen and MS Virtual Server. However SAP supports SQL Anywhere products running on these environments as long as the OS running in the virtual machine is certified by SAP.
  http://dcx.sap.com/index.html#1201/en/saintro/aboutasa-s-5186144.html
  http://scn.sap.com/community/sql-anywhere/blog/2014/12/02/licensing-sap-sql-anywhere-in-virtual-environments

2.8. HICAPS

- The HICAPS Terminals are normally provided with either a Serial Cable or USB Cable connection. If you wish to use a particular method please contact HICAPS to request the appropriate Terminal.

- HICAPS Link

  Centaur Applications communicate with the HICAPS Terminal via HICAPS software called 'HICAPSConnect'. The current version of "HICAPSConnect" (1.0.3.32) is supported by HICAPS on the following operating systems (both 32 Bit and 64 Bit):

  Windows 7 ®, Windows 8.1 ®, Windows 10 ®
  Windows Server 2003 ®, Windows Server 2008 R1 & R2 ®, Server 2012 R1 & R2 ®
  (Home versions of these Operating Systems are not supported)
  http://www.hicaps.com.au/forms-and-support/practice-management-system-interface.html

  Contact HICAPS on 1300 650 852 for further information on their products.

2.9. OPERATING SYSTEM

- The following Microsoft Operating Systems are supported:

  - Windows 10 ® (32/64 Bit)   - Windows Server 2016 ® (64 Bit) ^
  - Windows 8/8.1 ® (32/64 Bit) *   - Windows Server 2012 Release 1, 2 ® & Essentials (32/64 Bit)
  - Windows 7 ® (32/64 Bit) *   - Windows Server and SBS 2011 ® (32/64 Bit) *
  - Windows Vista ® *   - Windows Server 2008 R1/R2 ® (32/64 Bit) *
  - Windows XP ® *   - Windows Server 2003 ® *

    *   *Centaur will continue to provide Support to our customers running these discontinued Operating Systems, however we are unable to guarantee a resolution where the Operating System is the root cause of the issue.*
    ^   *Refer to "2.9.3 – Compatibility Issues".*
- The latest Service Packs must be installed on all supported Operating Systems and any Windows updates may be required when appropriate (now and in the future).

2.9.1. Other Operating Systems

- Examples: Non-Microsoft Operating Systems or Emulated versions of the above Microsoft Operating Systems (e.g. Running Windows 7 within Parallels Desktop under Mac OS X).
- It is possible to run *Centaur Applications* in the Cloud on Mac OS X using Microsoft Remote Desktop for Mac. However please note that there are limitations using this method as follows:
  - HICAPS terminal does not connect with Mac OS X.
  - Imaging devices do not work with Mac OS X as CMScan application required for imaging devices to communicate with Mediasuite^{sql} does not work with Mac OS X. In addition, most Imaging devices driver has limited support in Mac OS X.
  - TS Scan - required for document scanning into Dental4Windows^{SQL} Documents Manager has limited document scanning functionality on Mac OS X.
- Centaur will continue to provide Support to our customers, however we are unable to guarantee a resolution where *Centaur Applications* are running on any Operating System other than those listed in 2.14 and that Operating System/Environment is the root cause of the issue.

2.9.2. Expiry of Free Support for Microsoft Operating Systems

Windows Server 2016 ®	11/01/2022
Windows 10 ®	13/10/2020
Windows Server 2012 ® Essentials & Foundation	09/10/2018
Windows Server 2012 ® R1/R2	09/10/2018
Windows 8/8.1 ®	Already discontinued*

Windows Server 2003 ®, 2008 ® R1/R2 & SBS 2008/2011	Already discontinued*
Windows XP ®, Vista ®, 7 ®	Already discontinued*

*Please see 2.9

For a complete list see: http://support.microsoft.com/gp/lifeselectindex

2.9.3. Compatibility Issues
- Windows Server 2016 ® is only supported on *Centaur Applications i4* build 4146 or higher.
- Not all of our X-Ray link partners have released Windows 10 ® compatible versions of their software and therefore issues may result.

2.10. MICROSOFT OFFICE
- Centaur's Cloud environment does not offer Microsoft Office as a product, and *Centaur Applications* running in the Cloud will not link to Microsoft Office installed locally on your computers.
- Dental4Wndows^sql and Practice Studio^sql comes with a built-in word processor/document editor.

2.11. COMPUTER SYSTEMS
When purchasing computer systems the variance in pricing and components can be overwhelming. Be assured that you do get what you pay for. Some lower priced systems may be lacking in the following areas:

Proprietary	Only the manufacturer or specified service centre can make repairs or expand the system. This can be more expensive in the longer term.
Expandability	Some systems don't have adequate expansion slots/and or other connection ports for any extra components you may require in the future.
All-in-One	Some "all-in-one" motherboards will not allow you to disable the onboard components. With these motherboards if one onboard component fails you may need to replace the entire motherboard to fix the problem.

Practices should be aware that good computer consultants tend to offer high-end systems. They work on the principle that reliable systems will produce fewer problems, promoting repeat business.

2.12. TABLETS
- The base specifications listed on Page 1 are sufficient to run *Centaur Applications.*
- Mobile grade CPU's are not supported or recommended.
- We strongly advise the use of a stylus if you plan on using screens smaller than 13" and want to use the Charting and Perio modules.

2.13. EQUIPMENT REPLACEMENT
All practices should be aware of the "reliable business life" of computer systems. Due to the following factors you can expect between 2.5 – 3 years reliable use of a computer system:

(a) Component failure   (b) Inability to meet future software & Operating System requirements

Network users should consider a structured equipment replacement plan so that costs of computing equipment can be absorbed into the business effectively and maximum tax advantages are achieved.

2.14. WARRANTIES
All practices should understand the implications of any warranties offered and judge them on how they impact the business:

Response Times	Are the response times adequate for your business?
Support Types	Is the warranty on-site or phone support?
System Restoration	- Is the warranty only for the replacement of the hardware component? - Will the Windows operating system be reinstalled if the replaced component requires it? - Will your system be reinstalled to its current state (i.e. all business software reinstalled, networked, printers reinstalled and other configuration restored)?
Loaner Systems	Are "loaner systems" on offer if the problem is critical?

Considering the above services you can clearly see that **some** lower-end system providers will not be able to provide these types of guarantees.

2.15. HARDWARE & WINDOWS SUPPORT
All practices at some stage will need the services of an on-site computer technician. Larger users should consider the following services that some computer consultants can provide:

Maintenance Programs – ensure that your computing environment is maintained before problems arise.

Block Support – some companies offer the choice of purchasing "block hours" of support (normally cheaper than ad-hoc on-site rates).

2.16. TRAINING

Practices should consider some sort of training in the Windows Operating System and the management of related peripherals (e.g. Printers).

Over time your original investment should pay off in the fact that having staff that can solve minor problems will help avoid having to pay on-site technicians. Trained computer users also solve issues faster so it will ensure that your staff will have more time to spend on tasks that are relevant to the practice generating income.

2.17. LETTERHEAD/LOGO FILES

The maximum height for a Letterhead/Logo file is 5cm from top of the page (RE: Accounts, Receipts and Treatment Plans). If your printer enforces a gutter (can be called margin or padding), this will reduce the maximum height of the logo by that amount (e.g. a gutter of 5mm means the Letterhead/Logo can be no more than 4.5cm in height). This is a fixed size and cannot be changed.

Accepted Letterhead/Logo File Types: BMP, GIF, JPG.

2.17.1. Pre-Printed Footer

If your pre-printed stationary has a footer section and you want to use a Return Payment Slip on your Account, the final page of the Account will take up 4.7cm, overriding anything on the stationary. This is a fixed size and cannot be changed.

For more information, email **support@centaursoftware.com.au** or call **+61 2 9213 5000 | 1300 855 312 (within Australia).**