Notes & Considerations

1. Over time, system requirements change. For the latest system requirements, please visit www.omsvision.com/support/requirements.

2. For those who want to run OMSVision on existing hardware, using hardware that does not meet the recommendations in this document can negatively affect the performance and stability of the software. Please contact us if you have any questions regarding how OMSVision will perform on existing systems or systems you are considering purchasing.

3. When purchasing new hardware, make sure it meets *or exceeds* the recommendations in this document to successfully run OMSVision. *Exceeding the minimum standards may result in better system performance.*

4. Your choice of a technician is at least as important as your choice of hardware and systems. The performance and stability of your software and hardware are tied to how well your systems are configured and installed. Please make sure your technician follows the guidelines below as well as our installation guide. Your hardware technician may contact us for assistance.

5. If you plan to run other software on these systems, please refer to the specifications published by those other software companies. If there appears to be a conflict, contact us and the other company, and let us help you resolve the conflict.

6. Microsoft has discontinued support for Windows XP. Windows XP is no longer be recommended or supported for use with OMSVision.

7. Microsoft has discontinued support for Windows Server 2003. Windows Server 2003 is no longer recommended or supported for use with OMSVision.

Workstation and Server (Up to 4 clients)

Hardware/Software	Minimum Required
CPU	Intel Core i5 – 3 GHz or faster
RAM	8 GB
Storage	Server – 1 TB or larger internal drive
Video	1600 x 900 or higher resolution, with 4 MB or more video memory
Operating System	Windows 7 Professional 64-bit, Windows 8.1, Windows Server 2008 64-bit, Windows Server 2012, or Windows 10 Pro/Enterprise
Media drive	DVD
Audio	Optional
Network Card	1 Gbps
Monitor	20" or larger
SAP SQL Anywhere OMSVision utilizes an OEM version of SAP's SQL Adaptive Server Anywhere for data management.	Version 17 – Highly Recommended Version 16 – Minimum Required

Notes:

- If your office plans on running other software programs at the same time, such as those for digital radiography and/or intra-oral cameras, it is highly recommended that hard drive size be increased. Please consult with your imaging software company and/or hardware provider for additional details and recommendations.

- Antivirus software is strongly recommended.

- Please consult with your hardware specialist on what other software should be installed.

- Please be aware that your hardware specialist is responsible for providing any necessary exclusions for antivirus programs (Windows Defender, DEP, and so forth). Those products running in real time can prevent HSPS software from running properly.

- For requirements regarding i-Cat integration, see "i-Cat Integration" on page 8 of this document.

- When setting up the server, please keep in mind that full read/write permissions are required for the root share and subfolders that the HSPS product is installed on. The same permissions are required for any digital X-ray software folders that may be bridged to OMSVision.

Laptop Computers or Tablet PCs

Hardware/Software	Minimum Required
CPU	Intel Core i5 – 3 GHz
RAM	8 GB
Storage	500 GB or larger
Video	1600 x 900 or higher resolution, with 4 MB or more video memory
Operating System	Windows 7 Professional 64-bit, Windows 8.1, Windows Server 2008 64-bit, Windows Server 2012, or Windows 10 Pro/Enterprise
Media drive	DVD
Audio	Optional
Network Card	1 Gbps
Monitor	15" or larger
SAP SQL Anywhere OMSVision utilizes an OEM version of SAP's SQL Adaptive Server Anywhere for data management.	Version 17 – Highly Recommended Version 16 – Minimum Required

Notes: See previous notes.

Database Server (Dedicated)

Notes:
- Four or more workstations (clients) require a dedicated server.
- You must have a separate database server in conjunction with a Citrix® server or Microsoft® Remote Desktop server. See the "Database Server" section.

Requirement	Minimum Required
CPU	**1-10 clients:** Dual Core Xeon 2.6 GHz or Intel Quad Core Xeon 1.6 GHz (or equivalent) **10-25 clients:** Xeon 3.2 to 3.6 GHz (or equivalent) **25+ clients:** Dual Xeon 3.6 GHz (or equivalent)
RAM	8 GB
Storage	3 TB or larger redundant storage, with a minimum of RAID 1
Video	1600 x 900 or higher resolution, with 4 MB or more video memory
Operating System	Windows Server 2008 64-bit or Windows Server 2012
Network Card	1 Gbps
Monitor	17" or larger
SAP SQL Anywhere OMSVision utilizes an OEM version of SAP's SQL Adaptive Server Anywhere for data management.	Version 17 – Highly Recommended Version 16 – Minimum Required

Notes:

- These recommendations assume that the server is running the Sybase SQL database engine exclusively. If the server is used to run any other programs (this is strongly discouraged), the CPU, hard drive size, RAM, and operating system may need to be changed. Degraded performance will result if other large programs, such as Microsoft Exchange Server, are installed on the same server machine. The server software should not be installed on a domain controller or on the same server where Terminal Services is installed for user connections. If you install other products, performance will be degraded. Please consult with your hardware provider for additional specifications.
- The server should never be configured to run screen savers or programs in the background.
- Do not install this product on Windows Small Business Server, as performance problems will result.
- Network printers should not be attached or shared through the file server. Consult your hardware technician on the proper use of network print servers.
- When setting up the server, please keep in mind full read/write permissions are required for the root share and subfolders that OMSVision is installed on. The same permissions are required for any digital X-ray software folders that may be bridged to OMSVision.
- Please be aware that your hardware specialist is responsible for providing any necessary exclusions for antivirus programs (Windows Defender, DEP, and so forth). Those products running in real time can prevent OMSVision from running properly.
- Sybase Sql Anywhere is 64-bit compliant, so running the database on a 64-bit dedicated server is supported.
- Multiple hard drives set up for RAID 10 is suggested.

Citrix Server / Microsoft Remote Desktop Server

Requirement	Minimum Required
CPU	Intel Quad Core Xeon 3.0 GHz or faster
RAM	12 GB
Storage	500 GB or larger internal drive
Video	1600 x 900 or higher resolution, with 4 MB or more video memory
Operating System	Windows Server 2008 64-bit or Windows Server 2012
Network Card	1 Gbps
Monitor	17" or larger
SAP SQL Anywhere OMSVision utilizes an OEM version of SAP's SQL Adaptive Server Anywhere for data management.	Version 17 – Highly Recommended Version 16 – Minimum Required

Notes:

- Each server should hold 30 – 35 users if running OMSVision alone. Running additional products may reduce the number of users per server.
- Bandwidth should be 78kb per Citrix/Terminal Server client at the server location and 78kb per user at remote locations.
- Local – static-print queues, using built in Microsoft services, are highly recommended for thin client environments.

Wide Area Networking (for Multiple Office Connections)

You and your computer technician(s) are responsible for the setup and maintenance of your WAN. The following recommendation for WANs covers OMSVision not the WAN administration:

- Broadband connection with VPN-secured tunnels

WARNING: Many technicians who are experts at installing personal computers and local networks do *not* have the required skill set to install and maintain a Wide Area Network (WAN). Use a computer technician that has expertise with WANs, VPNs, Citrix and Microsoft® Remote Desktop Server.

Notes:

- Citrix or Microsoft Remote Desktop Server are the recommended solutions for WANs but require a Citrix server / Windows Terminal Services server certified technician to install and configure. See the "Citrix Metaframe Server / Microsoft Terminal Services Server" section.
- DSL is NOT recommended. DSL is often not able to guarantee consistent throughout depending on location and delivery quality. Check with your DSL service provider to confirm that:
  - Service is reliable. In some areas, DSL can fail several times a day, requiring restarting of the network and resulting in significant downtime.
  - Performance is consistently at 1.1 megabits per second or higher. Most DSL providers supply DSL quality that varies widely. In these cases, performance may occasionally meet the 1.1 megabit per second specification as its "peak" but often or usually will not. In fact, performance can degrade to 10 percent or less of the specification.

Remote Access

- Microsoft Remote Desktop (recommended)
- LogMeIn.com
- GoToMyPC.com

Notes:

- Use only secure remote access to OMSVision through the Internet. Options include Remote Desktop or Citrix.
- Have your hardware technician consult with HSPS on which of the above options you should use.

DataBackup

Any backup program that meets your needs and is compatible with Windows 7, Windows 8.1, Windows 2008 Server, Windows Server 2012, or Windows 10 Pro/Enterprise is acceptable.

Backing up your data daily is critical and is the responsibility of the individual customer. A 5-day rotation of your backup media is strongly recommended.

Notes:

- Your system should be capable of executing a backup script. The amount of additional information you need to back up, such as images, will affect your selection of a backup system.
- The Sybase database service must be stopped before backup, and then restarted after backing up. Running incremental backups is not recommend. (Incremental backups generally use modified date to determine what to back up, and the database modified date is not updated unless the Sybase service is stopped).
- Recommended Backup Systems:
  - Off-site backup
  - Online backup

ClinicalVision

- 1600 x 900 or higher monitor resolution is recommended
- USB Voice Recognition Headset for the Voice Activated Charting

Microsoft Outlook

OMSVision only integrates with 32-bit Outlook. 64-bit Outlook is not supported.

Electronic Claims

- Henry Schein E-Services for Dental Claims
- PayerPath (Allscripts) for Medical Claims

Notes:

- Sending attachments requires a separate sign up.
- A high-speed Internet connection is required.

Modem (Canada Only)

- For CDANet customers, an external 56k modem is required along with a dedicated phone line.
- Itrans is available and requires Internet access not modems.

Notes:

- Modems are not network shareable devices. Therefore, if you want to communicate from more than one workstation, you will need more than one modem.

Touchscreens

Touchscreen displays/monitors are not recommended (unless all touchscreen drivers have been disabled). For more information, speak with a Henry Schein representative.

Printers – General Use

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.

Notes:

- Whenever possible, load only Windows native drivers. Where this isn't possible, load only the manufacturer's drivers and not all of the applets that are often part of the device installation disk.
- Inkjet printers are not recommended as the office's only printer.

Printers – Labels (Optional)

Dymo® LabelWriter™ 450

Note: If the office plans to print single address or chart labels, a label printer is recommended.

Scanners

Any 32-bit fully TWAIN-compatible scanner.

Important: Scanner must be 32-bit TWAIN compliant.

Check Printing

Only PBHS checks, which are field-matched checks, are compatible. They are laser, 2-voucher checks that have been pre-printed by PBHS with the check number in the upper-right corner and with the routing number, account number, and check number at the bottom.

Note: The margins for checks cannot be adjusted in the system. If you use checks from other vendors, you do so at your own risk and expense. From some vendors (such as Intuit, Quickbooks, Peachtree or Office Depot) you may request samples to test printing with.

Signature Pads

Topaz:

- Serial Ringing1!Model No. T-S460-B-R
- USB Model No. T-S460-HSB-R

Notes:

- Wireless Topaz signature pads are not supported.
- If you are running Citrix or Microsoft Remote Desktop servers, they require serial Topaz signature pads and will not work with the USB models.

i-Cat Integration

i-CAT Model	Serial Number Series	OMSVision to DEXIS to i-CAT Integration Option	Direct Patient Scheduling via OMSVision iCATPoller	Imaging Viewing Platform
Classic **Important**: The i-CAT is scheduled for end of life/support 2016. This will include Classic/OMSVision integration. Contact regional i-CAT sales representative for upgrade options.	ICU07XXXX	No	To Xoran (Classic-based software)	2-step process then studies can be viewed through iCATVision, Invivo or TxStudio (No viewing option with Xoran)
17–19 (also known as Platinum or Next Generation)	ICU08XXXX	Yes	iCATVisionQ	iCATVision, Invivo, or TxStudio
9–17 (also known as CB500 or i-CAT Precise)	NU01XXXX	Yes	iCATVisionQ	iCATVision, Invivo, or TxStudio
FLX	ICU09XXXX	Yes	Smartscan Studio Manager	TxStudio
FLXmv	NU02XXXX	Yes	Smartscan Studio Manager	TxStudio

i-CAT minimum software requirements:

- i-CATVision 1.8.1
- i-CATTransfer 2.0.0.1
- Xoran 3.1.62

Note: Please make sure your i-Cat acquisition computer has the latest i-Cat software. Please contact Imaging Sciences support at 215-997-5666 ext. 5 for more information.

Vital Signs Monitors

- Mortara Surveyor S12/S19
- Criticare:
  - ComfortCuff
  - Poet line
  - Scholar line
  - nGenuity*
- Welch Allyn:
  - Spot LXi
  - Spot Vital Signs
  - VSM 5200
  - VSM 300
- Datascope: Any monitor that supports DIAP
- Phillips VS Series:
  - Network
  - Serial
- GE: Dash 2000
- Edan (or rebranded versions of the same monitor):
  - iM50*
  - iM60*
  - iM70*
  - iM80*

* Offers integrated CO_2 monitoring.

Notes:

- RS-232 (serial port) is the only supported connection for the Mortara Surveyor (Ethernet is not supported).
- Most Criticare monitors that are capable of transmitting a CSV formatted file through a serial port will work with the Henry Schein Practice Solutions bridge.
- Criticare Model 506N3 will not work with the HSPS bridge and is not supported.
- Criticare now supports Bluetooth adapters. Please contact Criticare support at 800-453-2697 for more information.
- A certified null modem cable of no more than 18 feet is required for communication with all devices (with the exception of Criticare nGenuity using Bluetooth adapters).

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