

RECOMMENDED SYSTEM SPECIFICATIONS / CURRENT OLYMPUS SUPPLIED

All computer equipment, including the server and clients, should be used as dedicated terminals for the EndoWorks application. If other than Olympus approved software/hardware is installed on the EndoWorks system, malfunction of the application or corruption of EndoWorks data may occur.

Network Server

- IBM® xSeries 3400 M3 server, model number 7379AC1
- Windows 2003 Server R2 SP2 operating system
- Intel® Quad Core E5620 2.40 GHz processor
- 4 GB RAM
- One of the following HDD configurations:
 - 25-user package with (4) 300 GB hard drives (3 utilizing RAID Level 5 plus a hot swap) 600 GB total
 - 25-user package with (6) 300 GB hard drives (5 utilizing RAID Level 5 plus a hot swap) 1200 GB total
 - 25-user package with (8) 300 GB hard drives (7 utilizing RAID Level 5 plus a hot swap) 1800 GB total
- DVD ROM drive
- LTO3 400/800 GB internal tape backup drive
- Tapes, cleaning cartridge (Optional)
- 19" LCD flat panel monitor (Optional)
- Dual 10/100/1000Base-T NIC
- Redundant power supplies
- External power backup (UPS 1000 Watts) (Optional)
- Warranty – 3 yrs, IBM parts warranty
- Additional Specs: H17.3" x D27.5" x W8.7", 88 lbs

IMAGE CAPTURE WORKSTATION

- Lenovo® E31, model number 2552CS4
- Windows 7 Professional 64-bit operating system
- Intel Core i5-3550 3.30 GHz processor
- 4 GB RAM
- 500 GB hard drive (Serial ATA)
- 16X DVD-RW/CD-RW drive
- 19" LCD flat panel monitor
- 10/100/1000Base-T NIC
- Matrox® VIO image capture/video card
- Warranty – 3 yrs, Lenovo parts warranty
- Additional Specs: H16.74" x D16.96" x W6.89", 27.56 lbs
- Washable Keyboard with integrated touchpad (Optional)

NON-IMAGE CAPTURE WORKSTATION (REGISTRATION & SCHEDULING)

- Lenovo E31, model number 2552CS4
- Windows XP Professional SP3 operating system (fax workstation)
- Windows 7 Professional 64-bit operating system
- Windows Internet Explorer® 8 32-bit (for Windows XP)
- Windows Internet Explorer 9 32-bit (for Windows 7)
- Intel Core i5-3550 3.30 GHz processor
- 500 GB hard drive (Serial ATA)
- 16X DVD-RW/CD-RW drive
- 19" LCD flat panel monitor
- 10/100/1000Base-T NIC
- Warranty – 3 yrs, Lenovo parts warranty
- Additional Specs: H16.74" x D16.96" x W6.89", 27.56 lbs
- 4 GB RAM

Note: EndoWorks 7.4 non-image capture workstations are compatible with EndoCapsule® 1.03A Light.

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IT SPECIFICATIONS

RECOMMENDED SYSTEM SPECIFICATIONS / CURRENT OLYMPUS SUPPLIED (CONT'D)

STANDALONE / PEER-TO-PEER SERVER

- Lenovo E31, model number 2552CS4
 - Windows XP Professional SP3 operating system
 - Intel Core i5-3550 3.30 GHz processor
 - 4 GB RAM
 - 500 GB hard drive (Serial ATA)
 - 16X DVD-RW/CD-RW drive
 - Quantum RDX[®] Internal Dock, SATA
 - Quantum RDX Cartridge 500 GB (uncompressed)
 - 19" LCD flat panel monitor
 - 10/100/1000Base-T NIC
 - Matrox VIO image capture/video card
 - Warranty – 3 yrs, Lenovo parts warranty
 - Additional Specs: H16.74" x D16.96" x W6.89", 27.56 lbs
 - Washable Keyboard with integrated touchpad (Optional)
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INTERFACE WORKSTATION

- Lenovo E31, model number 2552CS4
 - Windows XP Professional SP3 operating system
 - Intel Core i5-3550 3.30 GHz processor
 - 4 GB RAM
 - 500 GB hard drive (Serial ATA)
 - 16X DVD-RW/CD-RW drive
 - 19" LCD flat panel monitor
 - 10/100/1000Base-T NIC
 - Secondary NIC 10/100/1000 Base-T
 - Warranty – 3 yrs, Lenovo parts warranty
 - Additional Specs: H16.74" x D16.96" x W6.89", 27.56 lbs
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ADDITIONAL HARDWARE

- HP[®] ProCurve[™] 24-port 10/100/1000 Switch
- HP ProCurve 8-Port 10/100/1000 Switch
- 56 kbps Modem – external USB
- Isolation Transformer

Warning: When ancillary electrical equipment is used (computer, monitor, printer, etc), always connect the equipment to a wall mains outlet via an isolation transformer to decrease the possibility of electric shock due to potentially high leakage currents.

MINIMUM (MIN) SYSTEM SPECIFICATIONS*

All computer equipment, including the server and clients, should be used as dedicated terminals for the EndoWorks application. If other than Olympus approved software/hardware is installed on the EndoWorks system, malfunction of the application or corruption of EndoWorks data may occur.

Note: Any non-image capture computer can be virtual or physical, as long as all system requirements are met and software is used within only one virtual (or otherwise simulated) hardware system on the licensed computer. Olympus technicians cannot support the virtual environment, only the EndoWorks applications running on it.

NETWORK SERVER (Dedicated Server) (system can be customer supplied)

- Windows 2003 Server R2 32 bit SP2 operating system
- Intel Quad Core 2.4 GHz processor
- 4 GB RAM
- 600 GB hard drive (NTFS)
- DVD drive
- Backup system
- 15" VGA monitor (1024x768 resolution)
- NIC 1000Base-T
- Power backup (UPS)

Note: Typically supports an average customer for the life of the hardware. If your facility is a large institution, is capturing video, and/or migrating data from a legacy system, see the Data Storage section for calculating additional storage needs.

Note: Operating system and environment built by customer; Olympus to install application and prerequisites.

IMAGE CAPTURE WORKSTATION (Olympus-Supplied Hardware Only)

- Windows XP Professional SP3 operating system
- Pentium® Core 2 Dual processor 3.0 GHz
- 2 GB RAM
- 160 GB hard drive
- CD-ROM drive/CD R/W (to transfer images)
- 15" VGA monitor (1024x768 resolution) / 19" (Recommended)
- 100Base-T NIC
- Wireless not supported

NON-IMAGE CAPTURE WORKSTATION (REGISTRATION & SCHEDULING) (system can be customer supplied)

- Windows XP Professional SP3 operating system
- Pentium Core 2 Dual processor 3.0 GHz
- Windows Internet Explorer 8 32-bit (for Windows XP)
- Windows Internet Explorer 9 32-bit (for Windows 7)
- 2 GB RAM
- 160 GB hard drive
- CD-ROM drive/CD R/W (to transfer images)
- 15" VGA monitor (1024x768 resolution) / 19" (Recommended)
- 100Base-T NIC
- Wireless not supported

STANDALONE / PEER-TO-PEER SERVER (Olympus-Supplied Hardware Only)

- Windows XP Professional SP3 operating system
- Pentium Core 2 Dual processor 3.0 GHz
- 2 GB RAM
- 500 GB available hard drive space
- DVD-ROM drive
- 15" VGA monitor (1024x768 resolution)
- 100Base-T NIC (Min) / 1000Base-T (Recommended) (2 NICs, if not on backbone)

* Minimum specifications should be carefully considered based on facility size and procedure volume.

Contact your local Field Service Engineer to discuss your individual requirements as specifications are subject to change.

EndoWorks Version 7.4 IT SPECIFICATIONS

MINIMUM (MIN) SYSTEM SPECIFICATIONS* (CONT'D)

INTERFACE WORKSTATION (system can be customer supplied)

- Windows XP Professional SP3 operating system
- Intel Core 2 Duo, 3.0 GHz processor (*Min*)
- 2 GB RAM (*Min*)
- 160 GB available hard drive space (*Min*)
- DVD-ROM drive
- 15" VGA monitor (1024x768 resolution)
- 100Base-T NIC (*Min*) / 1000Base-T (*Recommended*)
(2 NICs, if not on backbone)

- or -

- Windows 2003 Server R2 32-bit SP2 operating system
 - Intel Quad Core E5410 2.33 GHz processor (*Min*)
 - 3 GB RAM (*Min*)
 - 500 GB hard drive (NTFS) (*Min*)
 - DVD-ROM drive
 - 15" VGA monitor (1024x768 resolution)
 - 100Base-T NIC (*Min*) / 1000Base-T (*Recommended*)
(2 NICs, if not on backbone)
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ADDITIONAL HARDWARE

- Switch 100Base-T (*Min*) / 1000Base-T (*Recommended*)
 - 56 kbps modem (for fax capability)
 - Isolation Transformer
Warning: When ancillary electrical equipment is used (computer, monitor, printer, etc), always connect the equipment to a wall mains outlet via an isolation transformer to decrease the possibility of electric shock due to potentially high leakage currents.
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CLINICAL CODES

EndoWorks 7.4 supports the use of the following clinical code sets:

- ICD-9
- ICD-10
- Ambulatory Surgery Center Measure G Codes (Quality Data Codes)
- Third-party procedure codes

Each code set can be individually activated according to the customer's needs by configuring procedure report and document templates. When activated, codes generated from each procedure report can be uploaded to an HIS via an HL7 outbound message, where codes are individually labeled by type.

ICD codes are generated based on the keyword selections made by the physician when creating a procedure report. EndoWorks cannot generate clinical codes from user-specified data (free text) created by the physician in the report.

ARRA

EndoWorks 7.4 has been modular certified for the 2014 Edition EHR certification criteria for Meaningful Use. EndoWorks meets the following certification criteria: Authentication, Access Control and Authorization, Automatic Log-off, Emergency Access, and Integrity.

ENDOINTELLIGENCE

EndoIntelligence™ is an analytical tool for the GI and pulmonary industries, available exclusively through EndoWorks. EndoIntelligence, powered by a proprietary QlikView connection, is the new interactive business intelligence tool for EndoWorks that delivers enhanced reporting functionality. This tool lets you mine your EndoWorks data to create customizable reports using associative search via a graphical interface.

- In an EndoWorks Standalone or Peer-to-Peer environment there are no changes required to the standard specifications.
- In an EndoWorks Network environment there are two supported environments, work with your Olympus personnel to determine your site's server requirements using the Olympus Server Decision Matrix document.
 - In an EndoWorks Network environment, for a facility wanting to install EndoIntelligence on the same server as EndoWorks, the following change to the current minimum specifications is necessary:
 - 4 GB RAM (min)
 - In an EndoWorks Network environment, for a facility wanting to install EndoIntelligence on their own server, separate from EndoWorks, the additional server must meet the following minimum specifications:
 - Windows Server 2008 64-bit
 - 16 GB RAM (min)
- QlikView® 11.0._SR2 must be installed.
- IIS (Default version dependent on OS) must be installed.
- Internet Explorer 8 with the Google Chrome™ Plug-in must be installed (for non-image capture nodes accessing the EndoIntelligence server).

Note: The EndoWorks and/or EndoIntelligence server can be physical or virtual. For assistance in deciding whether installing EndoIntelligence on the same server as EndoWorks or a second server, contact Olympus to discuss your facility's usage requirements.

EndoWorks Version 7.4

IT SPECIFICATIONS

ADDITIONAL REQUIRED SOFTWARE

EndoWorks utilizes the following:

- Java® JRE 1.7*
- Java JAI 1.1.2_01 (for all systems except Windows 7 image capture node)
- Java JAI 1.1.3 (for Windows 7 image capture node)
- Ingres® Version 3 database (a facility DBA is not necessary)
- Apache Tomcat™ 7.0 web server
- CleverPath Reports for analysis reports 4.2
- BrightStor® for tape backups 11.5
(supplied with Olympus standalones and servers; not required for customer systems)
- Windows Media Player Version 9 or 10 (for Windows XP or 2003)
- Windows Media Player Version 12 (for Windows 7)
- Adobe® Reader Version 7.09 (for fax clients on Windows XP, not required for Windows 7 image capture nodes or non-image capture nodes)
- Windows Internet Explorer 8 32-bit (for Windows XP and 2003)
- Windows Internet Explorer 9 32-bit (for Windows 7 non-image capture nodes)
- Windows Internet Explorer 10 in compatibility mode (for Windows 7 image capture nodes)
- QlikView Ver: 11.0.11440.0†

Note: It is not recommended to install EndoWorks on a machine running Windows 2003 Web edition or Windows 2003 Datacenter Edition.

* Other versions of Java will interfere with the operation of EndoWorks, if not managed properly.

† QlikView is only required for EndoIntelligence users.

Contact your local Field Service Engineer to discuss your individual requirements as specifications are subject to change.

KNOWN SOFTWARE COMPATIBILITY ISSUES

The applications listed have known issues with EndoWorks. If you have questions regarding compatibility of any additional applications, please contact your Olympus field representative.

- Microsoft® Active Directory® – If you intend to connect your EndoWorks machine(s) to a domain, please consult your field service representative for implementation guidelines and for information about EndoWorks Advanced Security module
- GoToMyPC® (not compatible)
- pcAnywhere™ (not compatible)
- Any version of Java, other than Olympus-supplied version (not compatible)
- Microsoft Systems Management Server
- Microsoft Operations Manager (not compatible)
- Microsoft System Center Operations Manager (not compatible)
- SAI. Server (not compatible)
- Microsoft SharePoint® (not compatible)
- Microsoft Remote Desktop Client (Versions prior to RSS-R6 only)
- Trend Micro® Antivirus
- Email client software on image capture nodes

Caution: All computer equipment, including the server and clients, should be used as dedicated terminals for the EndoWorks application. If other than Olympus approved software/hardware is installed on the EndoWorks system, malfunction of the application or corruption of EndoWorks data may occur.

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IT SPECIFICATIONS

CONNECTIVITY/DATA TRANSFER

- Olympus recommends:
 - **Important:** When connecting an EndoWorks server or client to a domain, connect to an Organizational Unit (OU) that does not contain group policies. The EndoWorks system is a medical device and, as such, applying policies from the domain may impact functionality.
 - The use of VLANs for the EndoWorks machines, to better help manage this environment.
- Static/Reserved IP needed for: server, remote support, HL7, and printer. IP address and name may be changed, but should conform to Olympus Security recommendations.
- EndoWorks is a browser-based application using Java applets.
- EndoWorks utilizes TCP/IP and HTTP for communication.
- DHCP may be utilized for non-server hardware (not applicable for server, gateway, and printers).
- EndoWorks images transmit across the network upon capture and can be as large as 4 MB each, if compression is set to None.
- EndoWorks video clips transmit across the network upon saving an exam and can be as large as 2 GB each for Windows XP image nodes, or 4 GB each for Windows 7, if limits are not set.
- EndoWorks supports faxing of reports (from Windows XP fax client workstations).
- EndoWorks requires a minimum 100 Mbps network interface; however, it is recommended that a 1000 Mbps network interface be employed throughout the EndoWorks environment. This includes hubs and switches where EndoWorks data travels. These devices should be configured to AUTO or FULL Duplex. Note some switches will only provide 1000 Mbps speed when set to Auto.
- Data cables should be terminated correctly and show no obvious signs of abuse or wear. Olympus recommends shielded CAT5E or CAT6 cabling be used.
- If the MAC address of the network component of an EndoWorks server changes, this can impact Licensing and HL7 implementations. Consult your Olympus Field Representative if this situation occurs.

ENDOWORKS PORT REQUIREMENTS

The following is a breakdown of known ports the EndoWorks application requires (taken from endoworks.ini):

- HL7SocketListenerPort=1599 (TCP Port). Configurable
- DicomSocketListenerPort=1598 (TCP Port). Configurable
- SocketServerPort=0. Any port between 1025 – 65535. Configuration to a specific port in that range.
- If Active Directory is used, LDAP – TCP Port 389
- Tomcat 7.0 – TCP Port 80
- UDP Ports 137, 138

If EndoIntelligence is used, TCP Ports 1600, 1601, 1602, and 4780

DATA STORAGE

The values listed below are an approximation and are dependent on your scope model and mask settings.

Note: Olympus recommends using the 'Lossless' compression setting.

Still-Image File Size

VIO (Digital)	Compression				
	None	Lossless	High	Medium	Low
HD Image	4-mb	2-mb	336-kb	560-kb	985-kb
SD Image	611-kb	378-kb	62-kb	90-kb	175-kb
CV-190 Full Resolution	6-mb	2-mb	400-kb	600-kb	1-mb
File Type	TIF	PNG	JPG	JPG	JPG

*Compression default setting is 'none'.

VIO (Analog)	Compression				
	None	Lossless	High	Medium	Low
SD Image	613-kb	345-kb	70-kb	105-kb	190-kb
File Type	TIF	PNG	JPG	JPG	JPG

*Compression default setting is 'none'.

Video Clip File Size

Vio (Digital)	Video Clip (60 seconds)*
	20 frames/sec.
HD-Scope	110 MB
SD-Scope	23 MB
File Type	AVI

*Maximum video clip time can be set by administrator (up to 30 minutes); clips automatically end at 2 GB for Windows XP image capture nodes. There is no file size limit for Windows 7 image capture nodes.

Note: When the compression setting value is 'None' or 'Lossless' the EndoWorks application also creates a reduced size image (PNG 400KB) which will be used when printing the image.

BACKUP

- List of Olympus recommended files to back up are provided in the EndoWorks 7.4 Service Manual.
- LTO Tapes can be purchased for Olympus-supplied servers, standalones, and peer-to-peer servers.
- RDX cartridges can be purchased for Olympus-supplied standalones and peer-to-peer servers.
- Customer-supplied server can use its own network storage backup solution.

Contact your local Field Service Engineer to discuss your individual requirements as specifications are subject to change.

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IT SPECIFICATIONS

PRINTING

- EndoWorks workstations utilize direct IP printing for a network environment or a USB connection for single computer systems.
- When selecting a printer, refer to the following recommended specifications to avoid incompatibility or performance concerns with EndoWorks:
 - Color laser printer

Note: Specifications are based on the HP LaserJet 4525 (not sold by Olympus but tested for compatibility with EndoWorks)

 - Connectivity: Hi-Speed USB 2.0, Gigabit Ethernet 10/100/1000T
 - Memory: 512 MB
 - Print quality: 4800 x 1200 dpi (best model)
 - Print speed: 42 ppm
 - Print languages: PCL6
 - Driver compatibility: Windows XP x32 and Windows 7 x64
 - Deskjet/Officejet/Inkjet printer
 - The HP OfficeJet 6100 is sold by Olympus
 - Size and weight: (W x D x H) 18.4 x 15.28 x 7.05in. 10.6 lbs.
 - Connectivity: Hi-Speed USB 2.0, ethernet
 - Print speed: 16 ppm black, 9 ppm color
 - Print quality: 1200 x 1200 dpi
 - Driver compatibility: Windows XP x32 and Windows 7 x64
 - Labelwriter
 - Specifications are based on the Dymo LabelWriter 450 (not sold by Olympus, but tested for compatibility with EndoWorks)
 - Connectivity: USB
 - Print Speed: 51 labels per minute
 - Print Quality: 600x300 dpi
 - Driver compatibility: Windows XP x32 and Windows 7 x64

Note: When preparing to purchase a new printer, consider the location and ensure that the new printer is compatible with the available space and required cabling.

INTERFACES

- EndoWorks supports HL7 (ADT, Scheduling, Orders, Results, Billing Codes, PDF).
 - EndoWorks supports DICOM (Modality work list, Images outbound).
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SECURITY

- EndoWorks Advanced Security is implemented by CA[®] eTrust[™] Embedded Identity and Access Management application.
 - EndoWorks supports Lightweight Directory Access Protocol (LDAP) and Active Directory interfaces.
 - EndoWorks supports strong password rules (e.g., min length, numeric characters, max repeating characters, password re-use prevention, password expiration with warnings, and lockout after 'X' failed logins — according to eTrust Toolkit).
 - EndoWorks supports automatic logoffs.*
 - EndoWorks logs user access to all sections of application and stores in database (with admin access to information).
 - The local EndoWorks administrator can change EndoWorks application security based on user's role.
 - EndoWorks is not Clinical Context Object Workgroup (CCOW) compliant.
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NETWORK SERVER

- EndoWorks application starts as a service.
- Olympus-supplied Uninterruptible Power Supply (UPS) – If power is lost to the server, the UPS keeps the server running for 5 minutes. If power is not restored in that interval, clean shutdown is initialized.

NOTE: If deploying an EndoWorks workstation or any associated peripherals in the vicinity of a patient, an isolation/separation transformer is required. Typically, an isolation/separation transformer is included as a component of the mobile workstation. Please refer to the mobile workstation instructions for proper use.

The optional UPS, sold for use with EndoWorks network servers, is not classified as medical grade and will not work in conjunction with the isolation/separation transformer. The UPS should not be deployed in the vicinity of a patient. If the customer wishes to use a UPS within the vicinity of a patient, that customer must purchase a medical grade UPS that meets their facility's Biomedical or Clinical Engineering department electrical leakage test requirements.

Customer-supplied server uses its own network storage backup solution.

UPGRADES AND PATCHES

- EndoWorks updates are provided to customers with Support and Maintenance Agreements (SMA).
 - Install only the approved Microsoft patches, BIOS, and driver files published on <http://medical.olympusamerica.com/technology/software-system-integration/electronic-medical-records/updates-policies>. It is recommended that you turn off Microsoft Upgrade Service or Windows Server Upgrade Service, if present.
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* EndoIntelligence only loses access to its license when it times out. It does not automatically log off.

Contact your local Field Service Engineer to discuss your individual requirements as specifications are subject to change.

EndoWorks Version 7.4 IT SPECIFICATIONS

REQUIRED RIGHTS AND PERMISSIONS FOR INSTALLATION AND SERVICE OF ENDOWORKS

The Olympus Field Employee requires the following rights and/or permissions to install and service EndoWorks:

- Administrator rights on the local and client machines with the ability to create and configure new Windows users.
 - Full Control permissions to the following folders:
 - EWClient
 - EWServer
 - Tomcat 7.0
 - Inetpub
 - Rights to install and configure the following files and programs:
 - Java JDK 1.7
 - Internet Explorer 8
 - Internet Explorer 9
 - Google Chrome Plug-in installed with Internet Explorer 8^{*}
 - QlikView 11.0_SR2^{*}
 - IIS^{*}
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^{*} Required when using EndoIntelligence.

Contact your local Field Service Engineer to discuss your individual requirements as specifications are subject to change.

REMOTE SUPPORT SERVICES (RSS)

The following remote services are provided to EndoWorks customers with a Service Maintenance Agreement (SMA). Remote support services are available for Olympus and customer-supplied servers and interface workstations; and also Olympus-supplied nodes.

- Remote Desktop control/sharing, when necessary for faster support/training/customization
- Preemptive support of EndoWorks server by monitoring basic system health
- File transfer, when necessary for troubleshooting
- Two options for an RSS connection:
 - Site-to-site (LAN-to-LAN) Secure VPN tunnel
 - Extended Network Connection (ENC) using the internet, using port 443 (non-persistent SSL VPN – see the Extended Network Connection section below for more details).

RSS Port Requirements

Option 1 Site-to-Site VPN (Tables A and B, required for full functionality).

Table A (Table A is required)

Port	Description
ICMP	Preferred to be enabled
UDP 6665/1691	Monitoring
UDP 4104 / TCP 4105	Internal CA Technology Communication/File Transfer
TCP 4728	Remote Control
TCP 161	SNMP (Monitoring – Also require service to be installed)

Table B (Table B is required for complete monitoring)

Port	Description
TCP 7774	Monitoring
TCP 4721/4722	Monitoring

Option 2 ENC

Port	Description
TCP 443	Remote Control / Monitoring *

Olympus recommends you do not use the Windows firewall; however, if you require a software firewall (Windows or otherwise), please ensure that all ports listed in Remote Support Port Requirements and EndoWorks Port Requirements are open to ensure the correct operation of EndoWorks.

Extended Network Connection (ENC)

Olympus Remote Support Services now offers an alternative way to connect to EndoWorks systems via non-persistent SSL type connection over the internet. All RSS services are provided via a single TCP port, which is commonly an open port. This connection type requires that each system has an internet connection.

* ENC connected machines must have public IP Addresses for monitoring.

Contact your local Field Service Engineer to discuss your individual requirements as specifications are subject to change.

EndoWorks Version 7.4 IT SPECIFICATIONS

ANTIVIRUS EXCLUSIONS

The following is a list of directories/files to be excluded from the virus scan.

Note: These are recommendations only. Olympus has not performed any testing with different antivirus applications to determine their impact on EndoWorks.

Server / Standalone	HL7	Client / Node (Windows XP)	Client / Node (Windows 7)	Directory / File
Exclude	Exclude	Exclude	NA	<drive>:\Tomcat 5.5
Exclude	Exclude	-	-	<drive>:\EWServer
Exclude	Exclude	Exclude	NA	<drive>:\Program Files\CA
Exclude	Exclude	Exclude	Exclude	<drive>:\Program Files\JAVA
Exclude	Exclude	Exclude	Exclude	<drive>:\Endoworks (where exists)
-	-	Exclude	Exclude	%SystemRoot%\endonode.ini
Exclude	Exclude	Exclude	Exclude	<drive>:\EWClient
If existing (The following do not have to be part of the system, exclude only if they already exist.)				
Exclude	Exclude	Exclude	NA	<drive>:\IngresII or <drive>:\Ingres [II]
Exclude	Exclude	Exclude	NA	<drive>:\AIS
Exclude	Exclude	Exclude	NA	<drive>:\Cleverpath Reporter

Note: It is assumed that all subdirectories are also excluded.

AUTOMATIC UPDATES

Automatic updates should be disabled so that non-Olympus approved software/updates are not installed on the EndoWorks machine, which could interfere with normal EndoWorks operation. Disabling automatic updates specifically applies to Microsoft Windows Update or Microsoft Windows Update Server 3.0. We approve patches from Microsoft periodically and post the approved patches on <http://medical.olympusamerica.com/technology/software-system-integration/electronic-medical-records/updates-policies>. In addition, Java updates should not be enabled.

REQUIRED USER ACCOUNTS

During the install process a user account named Administrator, with local administrator rights, is necessary. This account requires sufficient permissions to update all EndoWorks user accounts. Post install - this account can be renamed or disabled but should remain on the system.

UPDATES AND POLICIES

Please visit <http://medical.olympusamerica.com/technology/software-system-integration/electronic-medical-records/updates-policies> to view the latest policies and approved updates (i.e., Microsoft Critical Updates, Microsoft Patches and Antivirus Policy, etc.).

Contact your local Field Service Engineer to discuss your individual requirements as specifications are subject to change.

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