



Synchronizing Healthcare



CompuGroup™  
Medical

# CGM ENTERPRISE EHR™

EHR Software Suite for Community Health & Beyond

## System Requirements

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# ***INTRODUCTION***

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CompuGroup Medical approved the system requirements and technical details outlined in this document as of the release date of this version. The information in this document may change, as we test and upgrade CGM Enterprise EHR for compatibility with the latest software and hardware.

We realize that each of our customers may have different computing environment and needs. For assistance in determining the requirements and details for your environment, please contact our customer support team at (855) 270-6700 Monday through Friday, 8 AM to 5 PM, Eastern Time.

# SYSTEM REQUIREMENTS

This section identifies the hardware/software components and other requirements CompuGroup Medical identifies as necessary for the successful installation and use of CGM Enterprise EHR 10.0.4.

If you are running other applications on the same computer (that is running CGM Enterprise EHR), make sure you allow for these other applications when calculating requirements; e.g., memory and storage. Running other applications on the same computer (that is running CGM Enterprise EHR), may affect the performance of the EHR application.

Using hardware that you did not purchase from CompuGroup Medical, or that CompuGroup Medical has not tested, may negatively affect the EHR software performance.

Computers must meet the requirements (detailed in this section) before CompuGroup Medical will load the EHR software.

Loading EHR software does not transfer any liability of the computer’s hardware or software to CompuGroup Medical.



## SERVER SPECIFICATIONS

The server specifications (below) identify requirements for a small-to-midsized practice. Consult your Account Manager for practices with more than 65 users. CompuGroup Medical will perform a custom analysis for practices with more than 101 users.

Component	Requirement
Processor	Quad Core Intel® Xeon 2.7 GHz or greater
Memory	4 GB RAM base + 192MB per user minimum
Storage <sup>1 2</sup>	Hardware RAID controller (RAID level 1 or 10 recommended) <ul style="list-style-type: none"> <li>• C: Partition for OS 40 gig minimum with at least 20 gig free</li> <li>• D: Partition &gt;= 250 GB available disk space (25 GB base + 35 GB per physician)</li> <li>• E: Partition for swap space</li> </ul>

<sup>1</sup> Scanning may require additional resources (RAM, processor, and/or hard drive space).

<sup>2</sup> For optimal configuration use two (2) arrays – one array with O/S under Raid 1, and the second array with four (4) drives under Raid 10.

Operating system	<ul style="list-style-type: none"> <li>• Microsoft® Windows® Server 2008 Standard (32 bit and 64 bit)</li> <li>• Internet Information Services (IIS) 6.0 installed onto drive C: with at least 20 GB <b>free</b> on the system partition</li> </ul> <div style="border: 1px solid gray; background-color: #f0f0f0; padding: 5px; margin-top: 10px;">  <b>Note:</b> All versions of Microsoft Windows Small Business Server are <b>not</b> supported.         </div>
Internet browser	Microsoft® Internet Explorer® (IE) version 8, 9, 10, or 11 with 128-bit encryption
Video	Minimum resolution of 1024 x 768, 16-bit color; minimum 17" flat screen monitor
Network adapter	100/1000 MBPS gigabit Ethernet
UPS	<ul style="list-style-type: none"> <li>• Auto shut-down capable recommended</li> <li>• Refer to your equipment manufacturer for the appropriate wattage requirements</li> </ul>
Firewall	HIPAA-compliant firewall (For more information, see <a href="http://www.hipaa.org">www.hipaa.org</a> or <a href="http://www.hhs.gov/ocr/hipaa">www.hhs.gov/ocr/hipaa</a> .) <ul style="list-style-type: none"> <li>• FTP (outgoing, ports 20, 21)</li> <li>• SSL (bidirectional, port 443)</li> </ul>
Backup device	Capacity of backup device should be equal to, or larger than, the total disk space to ensure you can complete a system backup. (See the Technical Backup Information section in this document for more information about backing up the EHR application.)
Antivirus software <sup>3</sup>	ESET NOD32® Antivirus (or a comparable business antivirus solution) <div style="border: 1px solid gray; background-color: #f0f0f0; padding: 5px; margin-top: 10px;">  <b>Note:</b> Exclude the EHR and EPM directories and databases from continuous scans. Instead, consider an antivirus/antispysware hardware appliance.)         </div>
Additional software and hardware	<ul style="list-style-type: none"> <li>• Adobe® Acrobat® Reader® v9.0 or higher</li> <li>• JAVA Runtime Environment Version 6.0 Update 43 (JRE1.60 u43)</li> <li>• Antispysware recommended<sup>3</sup></li> <li>• Monitor, keyboard, and mouse</li> </ul>
Remote support/upgrades	Bomgar or eBLVD (Software installed with CGM assistance at no cost.)

<sup>3</sup> Antivirus and antispysware usually consume additional computer resources.

## SERVER LOCATION REQUIREMENTS

Location Element	Requirement
Power <sup>4</sup>	<ul style="list-style-type: none"> <li>Requires a dedicated circuit with an isolated ground</li> </ul>
Ventilation	<ul style="list-style-type: none"> <li>Not over 80° Fahrenheit</li> <li>Ventilated room with air conditioning present</li> </ul>
Cleanliness	<ul style="list-style-type: none"> <li>Keep server and server area free of dust</li> <li>Server must be placed in an area easily accessed for cleaning</li> </ul>
Static	<ul style="list-style-type: none"> <li>Use static mats or sprays to control static around server</li> <li>Avoid carpeted areas</li> </ul>
Moisture	<ul style="list-style-type: none"> <li>Avoid areas high in humidity or mildew (e.g., basements)</li> <li>Avoid installing near water heater tanks</li> </ul>
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## CLIENT COMPUTER SPECIFICATIONS


CGM ENTERPRISE EHR requires the following hardware and software for each client computer (desktop, laptop, or tablet).

Component	Specification
Processor <sup>5</sup>	Intel® Core™ 2 Duo; 2.66 GHz, 3 MB, 1066 MHz FSB or faster
Memory <sup>5</sup>	2 GB RAM <b>Recommended:</b> 3 - 4 GB RAM (for best performance)
Storage <sup>5</sup>	80 GB formatted NTFS (SATA) – 4 GB free after OS installation <b>Recommended:</b> 120 GB formatted NTFS (SATA)

<sup>4</sup> Standard servers require an 110V 15 amp circuit. However, voltage requirements may vary depending upon the specific server configuration.

<sup>5</sup> Scanning may require additional computer resources.

Component	Specification
Operating system	<ul style="list-style-type: none"> <li>Windows® 7 Professional or Windows®7 Ultimate</li> </ul> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p> <b>Notes:</b> If running multiple CGM applications, see the requirements for the other application(s), for compatibility acceptance.</p> <p>Mac OS® and hardware platform are not supported.</p> </div>
Internet browser	<p>Microsoft® Internet Explorer® version 8, 9, 10, or 11 with 128-bit encryption</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p> <b>Note:</b> IE 10 is supported using Compatibility View only.</p> </div>
Video	Minimum resolution of 1024 x 768, 32-bit color
Network adapter	100/1000 MBPS gigabit Ethernet
Remote support	Not applicable. (See note below.)
Antivirus software	ESET NOD32® Antivirus (or a comparable business antivirus solution)
Additional software and hardware	<ul style="list-style-type: none"> <li>Adobe® Acrobat® Reader® v9.0 or higher</li> <li>JAVA Runtime Environment Version 6.0 Update 43 (JRE1.60 u43)</li> <li>Antispyware recommended</li> <li>Monitor, keyboard, and mouse</li> </ul>

 **Notes:**  
According to the terms of your support agreement, you must allow CGM remote access to your system when you ask CGM to provide technical support.

For remote assistance, you (the client) will initiate a one-time, secure connection with the appropriate computer. When the session finishes and closes, CGM can no longer access that computer.

Only authorized CGM personnel may provide technical support and access your system to provide that support.

CGM personnel will not open, modify, or view patient health information documents or data not directly pertaining to the repair, troubleshooting, or maintenance of your CGM Enterprise EHR application.

## PERIPHERAL SPECIFICATIONS

### PRINTER SPECIFICATIONS



**Note:** CGM provides printer drivers only for printers CGM provides.

Printer Feature	Specification
Interface	HP laser business class supporting PCL 6 codes, networked or locally attached (USB or parallel)
CGM recommendation	Laser printer that is connected through the network

### SCANNER SPECIFICATIONS

Daily scanning tasks require use of a desktop scanner that meets the specifications detailed below.

Scanner Feature	Specification
Feed type	Multi-sheet / single sided
Interface	USB
Driver	TWAIN compliant
CGM recommendation	Fujitsu fi-5110C (or comparable model)

### INTERNET CONNECTION

CGM Enterprise EHR requires a full-time, broadband Internet connection, and recommends minimum bandwidth speeds (below) for optimal performance of the EHR application.

If the broadband connection supports additional Internet traffic, higher bandwidth may be required.



**Note:** The latency test average should not be >70ms.

Concurrent Users	Minimum Down	Minimum Up
1-10	640 Kbps (Typical DSL)	512 Kbps
11-20	1.5 Mbps (Full T1)	--



Concurrent Users	Minimum Down	Minimum Up
21-50	3.0 Mbps	--
51>	6.0 Mbps	--

## SITE-TO-SITE WAN RECOMMENDATIONS



**Notes:**

The latency test average should not be >70ms.

CGM prefers Frame Relay, Dedicated, Business Class Cable, or Business Class SDSL.

Concurrent Users	Minimum Down	Minimum Up
1-8	640 Kbps (Typical DSL)	512 Kbps
9-20	1.5 Mbps (Full T1)	--
21-50	3.0 Mbps	--
51>	6.0 Mbps	--

# TECHNICAL BACKUP INFORMATION

You must perform a full system backup on all files on the system to help ensure you can completely restore a CGM Enterprise EHR application in the event of a system failure, re-imaging, or hardware upgrade.

CompuGroup Medical recommends running a full system backup daily.

A full system backup is a complete backup of all files on the system. A full system backup helps ensure you can restore the system to working order in the shortest time possible, because you backed up the operating system, data, and all programs.

A full system backup includes all files on all drives attached to the system, local and networked (SAN, NAS, NFS, SAMBA, etc.). This includes the operating system, the data, and the applications; e.g., CGM Enterprise EHR, CGM Enterprise PM.



## Notes:

You (the client) are responsible for the completion of a backup, which includes verifying the following:

- The backup is complete.
- The content in the backup is the same content as in the original files.
- You can restore the files from the backup.

You **must** shut down CGM Enterprise EHR services during a backup.

Use the following batch files to stop and start EA Server and DB services and to execute database backup commands.

- **Pre:** d:\cemr\backup\stop.bat
- **Post:** d:\cemr\backup\emrstart.bat



# PRE-INSTALLATION WORKSHEET

## CGM ENTERPRISE EHR SERVER DETAILS

<b>Server Name:</b> (as reported by hostname command)	
<b>Fully Qualified Domain Name:</b>	
<b>Server/Domain Administrator Username:</b> (login with administrative privileges; can be different than Administrator)	
<b>Server/Domain Administrator Password:</b>	
<b>Hard Drive Capacity GB:</b>	
<b>Memory Installed GB:</b>	
<b>Windows Version:</b> (including Standard or Enterprise and service pack)	
<b>Processor Type and Clock Speed:</b>	
<b>Number of Processors as interpreted by Windows System Information:</b> (e.g, a single dual-core processor is two processors)	
<b>Is a proxy server set up on your network?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
IP Address _____ Port _____	



# SYSTEM REQUIREMENTS COMPLIANCE

*By signing below, Customer agrees to maintain the above-mentioned software and hardware at its business in order to interact efficiently with the CompuGroup Medical application CGM Enterprise EHR.*

**CUSTOMER**

**Signature:** \_\_\_\_\_

**Printed Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Dated:** \_\_\_\_\_