



Synchronizing Healthcare



CompuGroupTM
Medical

CGM ENTERPRISE PMTM

Technical Requirements

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TABLE OF CONTENTS

- System Requirements for v11.....1**
- Server specifications 1
- Server location recommendations..... 2
- User workstation specifications..... 3
- Peripheral specifications..... 4
- Printers..... 4
- Desktop scanners 4
- Internet connection 5
- System backup 5
- Notes 6
- Pre-Installation requirements worksheet..... 7
- System Requirements Compliance 8

SYSTEM REQUIREMENTS FOR V11

CompuGroup Medical™ (CGM) has identified the requirements for the hardware and software components that are necessary for the successful installation and use of the CGM ENTERPRISE PM™.

The performance of CGM Enterprise PM may be adversely impacted and the minimum hardware requirements may be inadequate if the system is running additional applications. The use of hardware systems or components that are not purchased from or approved by CGM may negatively affect the PM software.

The system requirements outlined below are approved as of the release date of this document and are subject to change based on compatibility testing with the latest software and hardware. Please contact Customer Support for the latest requirements.



Alert

Loading of software on a client's PC does not transfer liability for the PC's hardware or software to CGM.

SERVER SPECIFICATIONS

The following requirements are for clients with fewer than 75 users per server. A custom analysis is required for clients with 76 users or greater.

Component	Details
Processor	Dual Core Intel® Xeon @ 2.6 GHz or faster
Memory	4GB O/S : 2GB Base + 20 MB per user
Storage (1)	Hardware RAID controller (RAID level 1 or 10 recommended) with partitions: <ul style="list-style-type: none"> • C: 50 GB (20 G free after OS install) • D: ≥ 100 GB available disk space (dependent on current database size) • E: 2x system RAM is the recommended partition size
Operating System	<ul style="list-style-type: none"> • Microsoft® Windows® Server 2008 Standard or Enterprise 32-bit or 64-bit Server • Microsoft Windows 2012 Standard 64-bit <p>Caution: All versions of Microsoft Windows Small Business Server are <u>not supported</u>.</p> <ul style="list-style-type: none"> • Internet Information Services (IIS) installed onto drive C: with at least 20 GB available on the system partition.
Database	Universe (Database supplied by CGM)

Component	Details
Internet Browser	Microsoft® Internet Explorer® version 9, 10, or 11 with 128-bit encryption High speed internet connection (DSL, Cable, or similar)
Video Display	<ul style="list-style-type: none"> • 17" flat screen monitor (minimum) • 1024 x 768 resolution (minimum) • 16-bit color (minimum) <p><i>The CGM Enterprise PM application automatically resizes to correctly display on monitors with larger screen dimensions, higher resolution and greater color bit depth.</i></p>
Network Adapter	100/1000 MBPS gigabit Ethernet
UPS	<ul style="list-style-type: none"> • A minimum of 15 minutes without power, plus 25% additional capacity • Auto shut down capable • Refer to server specifications for complete wattage requirements
Firewall (2)	HIPAA-compliant firewall (See www.hipaa.org or www.hhs.gov/ocr/hipaa , for more information) <ul style="list-style-type: none"> • FTP (Outgoing : Ports 20, 21) • SSL (Bidirectional : Port 443)
Backup Device	Capacity of backup device should be equal to, or larger than, the total disk space to ensure a complete system backup can be accomplished.
Antivirus Software (3)	Eset NOD32 AntiVirus or a comparable business antivirus solution.
Additional Software and Hardware	<ul style="list-style-type: none"> • Adobe® Acrobat® Reader® v9.0 or higher • JAVA Version 6 Update 24 (or later updates of Version 6) • Anti-spyware recommended (3) • Monitor, keyboard, and mouse
Remote Support/Upgrades	Bomgar or eBlvd (Software installed with CGM assistance at no cost)

SERVER LOCATION RECOMMENDATIONS

The server hardware should be located in a facility that meets the conditions listed in the table.

Component	Details
Power (4)	Requires a dedicated circuit with an isolated ground.
Ventilation	Not over 80° Fahrenheit. Ventilated room with A/C present.
Cleanliness	Keep server and server area free of dust. Server must be placed in an area easily accessed for cleaning.
Static	Use static mats or sprays to control static around server. Avoid carpeted areas.
Moisture	Avoid areas high in humidity or mildew (e.g. basements). Avoid installing near water heater tanks.

USER WORKSTATION SPECIFICATIONS (4)

CGM Enterprise PM v11.xx requires the following hardware and software for each client computer (Desktop, Laptop, and Tablet).

Component	Details
Processor	Intel® Core™ 2 Duo @ 2.66 GHz : 3 MB cache : 1066 MHz FSB or faster
Memory	2 GB RAM (3 - 4 GB RAM recommended for best performance)
Storage	1 GB Free Space
Operating System	<ul style="list-style-type: none"> Windows® 7 Professional or Windows®7 Ultimate Windows® 8.1 Professional <p>Notes:</p> <ol style="list-style-type: none"> If running multiple CGM applications, see the requirements for the other CGM applications for compatibility acceptance. Mac OS® and hardware platform are not supported.
Internet Browser	Microsoft® Internet Explorer® version 8, 9, 10, or 11 with 128-bit encryption Note: IE 10 is supported using Compatibility View only.
Video Display	<ul style="list-style-type: none"> 17" flat screen monitor (minimum) 1024 x 768 resolution (minimum) 16-bit color (minimum) <p><i>The CGM Enterprise PM application automatically resizes to correctly display on monitors with larger screen dimensions, higher resolution and greater color bit depth.</i></p>
Network Adapter	100/1000 MBPS gigabit Ethernet
Remote Support	When CGM support must gain access to a client computer to provide assistance, a one-time, secure connection is established with the client computer. The client initiates the session. Once the work is finished and the session closed, access to the client computer is terminated.
Antivirus Software (3)	Eset NOD32 AntiVirus™ (or a comparable business antivirus solution)
Additional Software and Hardware	<ul style="list-style-type: none"> Adobe® Acrobat® Reader® v9.0 or higher JAVA Version 6 Update 24 (or later updates of Version 6) - or - JAVA Version 7 (All Ver. 7 updates concurrent to document release date) Anti-spyware recommended (3) Monitor, keyboard, and mouse



Note

According to the terms of the support agreement, CGM must be allowed remote access to the client system so technical support can be provided. When remote assistance is required, a one-time, secure connection is established with the appropriate client computer. The client initiates the session and once the session is finished and closed, access to the client computer is terminated. Only authorized CGM personnel are permitted access to a client system. CGM personnel will not open, modify, or view patient health information (PHI) documents or data unless directly pertaining to the repair, troubleshooting, or maintenance of the CGM Enterprise PM application.

PERIPHERAL SPECIFICATIONS

The peripheral and internet connection specifications are listed in the following tables.

PRINTERS (5) (6)

Format	Models
Dot Matrix	Okidata 320/321 Turbo, 390/391 Turbo, 395, 520/521, 590/591, 3410
Laser	HP LaserJet and compatible printers supporting PCL 5, PCL 5e & PCL 6
Label	Dymo SE450



Note

CGM recommends a laser printer connected through the network and managed by the server.

DESKTOP SCANNERS (7)

A desktop scanner is required for daily scanning tasks.

Component	Details
Feed Type	Multi-sheet / single sided
Interface	USB
Driver	TWAIN Compliant - both 32-bit and 64-bit drivers
Card Scanner	<ul style="list-style-type: none"> Fujitsu FI-5110C (or comparable model) Ambir DS687 or DS687-3 Scanner

INTERNET CONNECTION (8)

CGM Enterprise PM requires a full-time, broadband internet connection. The listed bandwidth speeds are the minimum recommendation for optimal experience with CGM Enterprise PM. If there is additional internet traffic at the user site, then a higher bandwidth may be required. For assistance determining how much bandwidth your site may need to accommodate scanning and image retrieval, please contact our Professional Services team at (855) 270-6700, Monday through Friday, 8 AM to 5 PM Eastern Time.

Concurrent Users	Min. Down	Min. Up
1 – 25	640 Kbps (Typical DSL)	512 Kbps
11 – 50	1.5 Mbps (Full T1)	
<i>The latency test average should not be > 70ms.</i>		



Note

CGM prefers Frame Relay, Dedicated T1, Business Class Cable, or Business Class SDSL.

SYSTEM BACKUP

The files and directories necessary for the proper functioning of CGM Enterprise PM must be backed up on a daily basis to ensure that the PM system may be completely restored in the event of a system failure, re-imaging, hardware upgrade or other circumstances. A full system backup is the recommended level of data archiving, since it allows the system to be restored to operational status in the shortest time possible.

The following files and applications should be included in the full system backup:

- Operating system (e.g. Windows)
- Applications (e.g. CGM ENTERPRISE EHR, CGM ENTERPRISE PM)
- Data files on all local and networked (SAN, NAS, NFS, SAMBA, etc.) drives attached to the system.



Alert

The customer is solely responsible to perform and verify the system backup, including completion and integrity. Periodic verification that the backup can be restored is essential.

NOTES

- (1) *RAID 1 or 10 can also be used for redundancy. Optimal configuration would have 2 arrays - one array with O/S under Raid 1; second array with 4 drives under Raid 10.*
- (2) *Network security is recommended. (i.e. firewall & anti-virus) CGM does NOT support a software firewall.*
- (3) *Anti-Virus & Anti-Spyware usually consume additional resources on the machine.*

Note: The CGM ENTERPRISE EHR and CGM ENTERPRISE PM directories and databases should be excluded from continuous scans. (Options: Consider an anti-virus/spyware hardware appliance)

- (4) *Standard servers require an 110V 15 AMP circuit. However, voltage requirements may vary depending upon the specific server configuration.*
- (5) *Network configured printers are recommended. Some local printers are supported if above criteria is met. A list of proposed, locally connected and networked, printers and scanners can be reviewed for evaluation.*

It is the client's responsibility to provide printer drivers for existing printers.

- (6) *Other printer makes and models are supported. However, they will need to be setup and configured. It is recommended that a dot matrix or business class laser be used for preprinted forms claims printing, such as UB92 and UB04.*
- (7) *Scanning may require additional resources (RAM, processor, hard drive space).*
- (8) *WAN bandwidth recommendations are only for CGM Enterprise PM and must be considered within the context of the specific network configuration.*
 - *75kb is the recommended bandwidth for heavy usage (i.e. data entry, frequent lookups, and large reports).*
 - *50kb is the recommended bandwidth for medium usage (i.e. frequent lookups, small to medium sized reports).*
 - *25kb is the recommended bandwidth for light usage (i.e. infrequent lookups and small reports).*



PRE-INSTALLATION REQUIREMENTS WORKSHEET

CGM ENTERPRISE PM Server Details	
Server Name: (As reported by hostname command)	
Fully Qualified Domain Name:	
Server/Domain Administrator Username: (A different login with administrative privileges other than Administrator may be designated.)	
Server/Domain Administrator Password:	
Hard Drive Capacity GB:	
Memory Installed GB:	
Windows Version: (Including Standard or Enterprise with service pack)	
Processor Type and Clock Speed:	
Number of Processors as interpreted by Windows System Information: (For example, a single dual-core processor is considered two processors)	



SYSTEM REQUIREMENTS COMPLIANCE

By signing below, the customer agrees to acquire and maintain the software and hardware required to interact efficiently with CGM Enterprise PM. The customer also acknowledges the sole responsibility of performing and verifying a full system backup, as delineated within this document, on a daily basis.

CUSTOMER

Signature: _____

Printed Name: _____

Title: _____

Dated: _____