



Hardware and Software Requirements for Client Applications

IVS Enterprise Server Version 11.3+

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INTRODUCTION

Minimum Hardware Requirements Statement

Any recommendations regarding personal computers, servers and applications which may be implemented using RMG Networks software are based on RMG's experience and understanding of the customers' intended use of RMG products. As with any computer-based system, individual requirements and performance may vary. The optimal configuration of software and hardware may depend on a variety of factors, such as the configuration of the RMG software installed, outbound message activity, number and complexity of applications monitored, the size and complexity of the user program options selected, the amount and rate of delivery of the data to the personal computer where the Intelligent Visual Solutions (IVS) Enterprise Server (ES) system resides by other computer systems, and many other factors.

This document outlines specific selected products and application usage to determine the recommended minimum PC configurations for RMG client and server software. Unless otherwise specified, customer is responsible for provision and setup of any network/LAN devices and/or connections.

Hardware that does not meet the minimum requirements may result in varying degrees of performance degradation. RMG Technical Support may require bringing the hardware platform into compliance with stated specifications before support can be provided.

SES11.3 and IVS ES12.x HARDWARE AND SOFTWARE REQUIREMENTS FOR CLIENT

For server side requirements and all prior versions:
www.rmgnetworks.com/company/requirements

IVS InView

Operating Systems	Windows XP Pro SP3 Vista Business (32 bit) SP2/Vista Ultimate SP2 Windows 7 (32 bit) Windows 7 (64 bit)
Application Versions	IVS InView 11.3, 12.0
Installation Type	Click Once, MSI
Processor	2.0 GHz or faster Pentium 4-class CPU Dual Core 2Ghz or better recommended
Memory	2GB (3GB Recommended)
Hard Disk Storage	1-10GB hard drive space More may be required dependent on quantity and/or file sizes of digital assets (video and graphic files)
Low End Graphic Hardware	Intel 945 chipset or equivalent
High End Graphic Hardware	ATI HD 5670+ series graphics
.NET Framework	.NET 4.0
Media Player	Windows Media Player 10 or higher
Language Version	English
Network	10/100/1000 Ethernet LAN
Other	NTFS file system Latest Windows updates and service packs Latest available videos drivers from vendor MS XML v6.0
Installation Notes	<p>If installed via ClickOnce deployment, Internet Explorer browsers that support ClickOnce are required. Ensure there is access to the internet to permit the installation of MS Report Viewer.</p> <p>If installed via MSI, MS Report Viewer must be installed as a prerequisite and is provided by RMG or it may be downloaded.</p>

IVS InView Screen Saver

Operating Systems	Windows XP Pro SP3 Vista Business (32 bit) SP2+/Vista Ultimate SP2+ Windows 7 (32 bit) Windows 7 (64 bit)
Application Versions	IVS InView Screen Saver 11.3, 12.0
Installation Type	EXE
Processor	2.0 GHz or faster Pentium 4-class CPU Dual Core 2Ghz or better recommended
Memory	1GB (2GB Recommended)
Hard Disk Storage	1-10GB hard drive space More may be required dependent on quantity and/or file sizes of digital assets (video and graphic files)
Low End Graphic Hardware	Intel 945 chipset or equivalent
High End Graphic Hardware	ATI HD 5670+ series graphics
.NET Framework	.NET 4.0
Media Player	Windows Media Player 10 or higher
Language Version	English
Network	10/100/1000 Ethernet LAN
Other	-Latest Windows updates and service packs. -CD-ROM for installation -1 GB free hard drive space

IVS Design Studio

Operating Systems	Windows XP Pro SP3 Vista Business (32 bit) SP2+/Vista Ultimate SP2+ Windows 7 (32 bit) Windows 7 (64 bit)
IVS Design Studio Application Versions	IVS Design Studio 11.3, 12.0
Installation Type	.exe install
Processor	2.0 GHz or faster Pentium 4-class CPU Dual Core 2Ghz or better recommended
Memory	2GB (3GB Recommended)
Hard Disk Storage	1-10GB hard drive space More may be required dependent on quantity and/or file sizes of digital assets (video and graphic files)
Low End Graphic Hardware	Intel 945 chipset or equivalent
High End Graphic Hardware	ATI HD 5670+ series graphics
.NET Framework	.NET 4.0
Media Player	Windows Media Player 10 or higher
Language Version	English
Network	10/100/1000 Ethernet LAN
Other	-NTFS file system -Latest Windows updates and service packs -Latest available videos drivers from vendor -MS XML v6.0

IVS Data Studio

Operating Systems	Windows XP Pro SP3 Vista Business (32 bit) SP2+/Vista Ultimate SP2+ Windows 7 (32 bit) Windows 7 (64 bit)
Application Versions	11.3, 12.0
Installation Type	Click Once or MSI
Processor	2.0 GHz or faster Pentium 4-class CPU Dual Core 2Ghz or better recommended
Memory	1GB (2GB Recommended)
Hard Disk Storage	1-10GB hard drive space More may be required dependent on quantity and/or file sizes of digital assets (video and graphic files)
Low End Graphic Hardware	Intel 945 chipset or equivalent
High End Graphic Hardware	ATI HD 5670+ series graphics
.NET Framework	.NET 4.0
Media Player	Windows Media Player 10 or higher
Network	10/100/1000 Ethernet LAN
Language Version	English
Other	-NTFS file system -Latest Windows updates and service packs -Latest available videos drivers from vendor -MS XML v6.0
Installation Notes	If installed via ClickOnce deployment, Internet Explorer browsers that support ClickOnce are required. Ensure there is access to the internet to permit the installation of MS Report Viewer. If installed via MSI, MS Report Viewer must be installed as a prerequisite and is provided by RMG or it may be downloaded.

IVS Design Studio Lite

IVS Design Studio Lite is a Microsoft Silverlight based application. [Click here](#) for the system requirements and installation instructions.

IVS Edge Server

Operating Systems	Windows 7 (64 bit) Windows Server 2008 R2
Application Versions	Edge Server 11.3. 12.0
Installation Type	EXE
Processor	2.0 GHz or faster Pentium 4-class CPU Dual Core 2Ghz or better recommended
Memory	1GB (2GB Recommended)
Hard Disk Storage	80GB + of available space more may be required dependent on quantity and/or file sizes of digital assets stored on the server (video and graphic files).
Low End Graphic Hardware	Intel 945 chipset or equivalent
.NET Framework	.NET 4.0
Network	10/100/1000 Ethernet LAN
Other	-NTFS file system -Latest Windows updates and service packs -MS XML v6.0

IVS ES Administrator, Symon Says, IVS Portal Administrator and IVS Composer

Operating Systems	Windows XP Pro SP3 Vista Business (32 bit) SP2+/Vista Ultimate SP2+ Window 7 (32 bit) Windows 7 (64 bit)
Application Versions	Versions 11.3, 12.0 of client software
Installation Type	EXE
Processor	2.0 GHz or faster Pentium 4-class CPU Dual Core 2Ghz or better recommended
Memory	1GB
Hard Disk Storage	1 GB free hard drive space
Network	10/100/1000 Ethernet LAN
Language Version	English
Other	-Latest Windows updates and service packs -CD-ROM for installation -1 GB free hard drive space

IVS DeskView

Operating Systems	Windows XP Pro SP3 Vista Business (32 bit) SP2+/Vista Ultimate SP2+ Window 7 (32 bit) Windows 7 (64 bit)
Application Versions	IVS DeskView 11.3, 12.0 (with no audio support and text-to-speech)
Installation Type	EXE
Processor	2.0 GHz or faster Pentium 4-class CPU Dual Core 2Ghz or better recommended
Memory	2GB
.NET Framework	.NET 4.0
Network	10/100/1000 Ethernet LAN
Language Version	English
Other	-Latest Windows updates and service packs -1 GB free hard drive space

IVS Broadcast PC

Operating Systems	Windows 7 SP1 (32 bit) Professional/Ultimate Windows 7 SP1 (64 bit) Professional/Ultimate
Application Versions	IVS Broadcast PC 11.3, 12.0
Installation Type	EXE
Processor	Dual Core 2Ghz +
Memory	4 GB RAM /Recommended DDR3 1333 RAM Minimum DDR2 1033
Hard Disk Storage	80GB HD (SATA or faster interface 80GB HD) (SATA or faster interface - 3.0Gb/s+, 16MB Cache) Server-grade drive recommended More may be required dependent on quantity and/or file sizes of digital assets (video and graphic files)
Low End Graphic Hardware	ATI HD 4650 graphics or greater
High End Graphic Hardware	ATI HD 5670 or greater
.NET Framework	4.0
Media Player	Windows Media Player 11 or higher
Network	10/100/1000 Ethernet LAN
Language Version	English
Other	-NTFS file system -Latest Windows updates and service packs -Latest available videos drivers from vendor -MS XML v6.0 -Video Card Support for DirectX Video Acceleration (DXVA) V1/V2

Client Software Virtual Environments

Company does not support any virtual environment for client (non-server software) applications. RMG solutions are networked applications. Citrix/Novell networks are not supported.

Network

The RMG Enterprise Server and media players (SDAs) require network connections using standard Cat 5 or 6 cabling and a network supporting IP v4. This network connection must be able to access necessary servers, systems, data sources and the internet. This is for data feeds, event interfaces, applicable content subscriptions and remote access.

- Customer shall supply appropriate internet connection connectivity for company provided solution.
- Company's RMG OnTarget content requires HTTP over TCP/IP communication using Port 80. It is further required that these communications are not filtered, modified, blocked or cached.
- Connectivity and speed of the network connection between source data and the Company servers and clients. Company clients include, but are not limited to, IVS Design Studio Editors, IVS Design Studio Lite, IVS Data Studio, media players, wallboards, remote administration suites (IVS ES Administrator, IVS Portal Administrator and IVS Composer), Symon Says, IVS InView Desktop and IVS DeskView.

Ports and Protocols

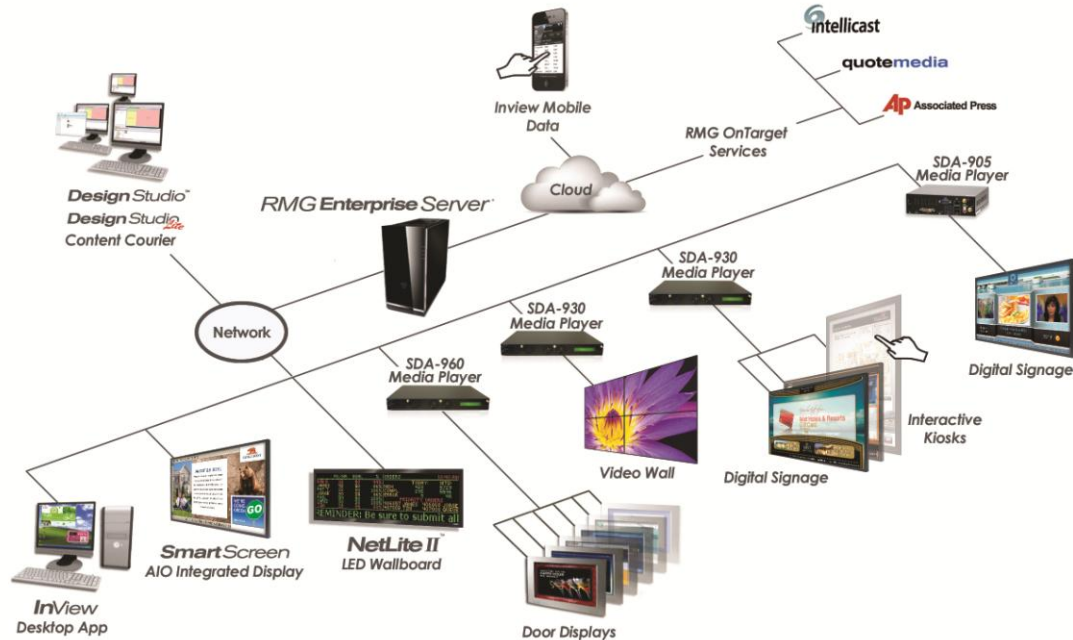
SES 11.x Component	Configuration to/from Server	Events from Server Event Engine (SEE)	Data from Server Query Engine (SQE)
IVS Broadcast PC	HTTP:80	HTTP:8014 TCP:8013	HTTP:8012 TCP:8011
IVS Content Courier	HTTP:8015		
IVS Design Studio	HTTP:80	HTTP:8014 TCP:8013	HTTP:8012 TCP:8011
IVS Design Studio Lite	HTTP:80	HTTP:8014	
IVS InView Desktop	HTTP:80	HTTP:8014 TCP:8013	HTTP:8012 TCP:8011
IVS InView Mobile	HTTP:80		TCP:8015
RMG IP Jumpstart	UDP:3424 UDP:3425		
LCD 200 Series	HTTP:80	HTTP:8014 TCP:8013	HTTP:8012 TCP:8011
IVS NetLite II	TCP:700		
IVS SDA Series	HTTP:80 HTTPS:443* FTP or FTPes:21	HTTP:8014 TCP:8013 UDP:2622 (Multicast)**	HTTP:8012 TCP:8011
IVS SMA Series	HTTP:80 HTTPS:443* FTP or FTPes:21	HTTP:8014 TCP:8013 UDP:2622 (Multicast)**	HTTP:8012 TCP:8011
IVS SmartScreen	HTTP:80 HTTPS:443* FTP or FTPes:21	HTTP:8014 TCP:8013 UDP:2622 (Multicast)**	HTTP:8012 TCP:8011
RMG OnTarget News Content Services	HTTP:80		
WayView	HTTP:80	HTTP:8014 TCP:8013	HTTP:8012 TCP:8011
Web Services	HTTP:80		

* Player version 11.2 and higher

**Content only on player version 11.2.2.1 and higher, default MC address 224.0.1.20

These default ports are added to the Windows firewall. Any changes to the defaults will require reconfiguring of firewall settings. Configuration of third party firewall software is the responsibility of the customer.

RMG NETWORK ARCHITECTURE



Communication Ports Used

(configuration to/from server, events from server, data from server)

- IVS NetLite II Wallboard: **TCP-700**
- IVS InView Mobile: **web service HTTP-80, TCP-8015**
- IVS Design Studio: **HTTP-80, HTTP-8014**
- All others: **HTTP-80, HTTP-8014 or TCP-8013, HTTP-8012 or TCP-8011**

Intelligent Visual Communications, Delivered.

Trust RMG Networks for innovative visual solutions that are perfectly tailored and rapidly deployed to meet the needs of your operations. RMG is a proven leader in digital signage, providing global end-to-end implementations for more than 30 years to over one million displays. For powerful, scalable solutions that are unmatched in the industry, contact RMG Networks today at info@rmgnetworks.com or visit us at www.rmgnetworks.com.