

RealityVision® System Requirements**Version 3.4****November 2013**

The RealityVision® system currently consists of four software components: the Server Software, the Management Console Software, the Mobile Client Software and the PC Client Software. Below are the applicable minimum and recommended hardware and third-party software requirements for each component. Please see Addendum A for additional technical information. Reality Mobile reserves the right to modify the system requirements as the technical environment changes.

Minimum Software Requirements		
	Management Console	PC Client
Operating System	Windows 7 Pro (32 or 64 bit), Vista Pro, or Windows XP	Windows 7 Pro (32 or 64 bit) , Vista Pro, or Windows XP
.Net Framework	V4.0 (Full Profile: http://www.microsoft.com/en-us/download/details.aspx?id=17718)	
Email Client	*	n/a
Internet Browser	Internet Explorer 8	
Minimum Hardware Requirements		
Processor	Intel Celeron 900 or higher	Intel Celeron 900 or higher
Memory	2 GB Ram (4 GB with Vista or Windows 7)	2 GB Ram (4 GB with Vista or Windows 7)
Storage	40 MB free space	20 MB free space
Network Connectivity	At least 256 Kb/sec upload and download speed	At least 256 Kb/sec upload and download speed
Video Card	3D capable with 128 MB of VRAM	
Display	Monitor with at least 1280 x 800 resolution	
Recommended Software Requirements		
Operating System	Windows 7 Pro (64 Bit)	Windows 7 Pro (32 or 64 bit)
.Net Framework	V4.0 (Full Profile: http://www.microsoft.com/en-us/download/details.aspx?id=17718)	
Email Client	MS Outlook 2007 or 2010 (for 'Send' Feature)	MS Outlook 2007 or 2010 (for 'Send' Feature)
Internet Browser	Internet Explorer 9 or higher	
Recommended Hardware Requirements		
Processor	Intel Core i3 or higher	Intel Core i3 or higher
Memory	8 GB RAM	4 GB RAM
Storage	40 MB free space	20 MB free space
Network Connectivity	Gigabit Ethernet NIC	Gigabit Ethernet NIC
Video Card	Dual Monitor capable video card with 512 MB VRAM	
Display	Monitors with 1920 x 1080 Resolution	

*- Microsoft Outlook client is required for 'Send To' functionality in the Management Console. The Management Console will function without an installed MS Outlook client; however the 'Send To' functionality will not operate.

** - While the Management Console and the PC Client will operate without Mapping Software, no maps will be rendered when Mapping Software is not installed. It is recommended to have Bing Maps or Google Maps present in all installations.

Minimum Software Requirements	
	RealityVision Server
Operating System	Windows Server 2008 or 2008 R2 with SP2 (32 or 64 bit) or Windows Server 2012 R2
.Net Framework	V4.0 (Full Profile: http://www.microsoft.com/en-us/download/details.aspx?id=17718)
IIS	Version 7 (2008) or Version 7.5 (2008 R2) or Version 8.5 (2012 R2)
Database	MS SQL 2008 or 2012 (32 or 64 bit) NOTE: Must match O/S version, i.e. 32 or 64 bit
Minimum Hardware Requirements (up to 25 users)	
Processor	Intel Xeon X3430 Processor or higher
Memory	4GB
Storage	Hard Drive #1 – 20GB or higher for Operating System and SQL Transaction Logs Hard Drive #2 – 100GB or higher for SQL Data
Network Connectivity	Gigabit Ethernet NIC
Recommended Software Requirements	
Server #1 (Web and RealityVision Video Server)	
Operating System	Windows Server 2008 or 2008 R2 with SP2 (32 or 64 bit) or Windows Server 2012 R2
.Net Framework	V4.0 (Full Profile: http://www.microsoft.com/en-us/download/details.aspx?id=17718)
IIS	Version 7 (2008) or Version 7.5 (2008 R2) or Version 8.5 (2012 R2)
Recommended Hardware Requirements (up to 100 users)	
Processor	Dual Intel Xeon E5-2640 Processors or higher
Memory	16GB
Storage	100GB or greater, depending on the amount of imported video
Network Connectivity	Gigabit Ethernet NIC
Recommended Software Requirements (up to 100 users)	
Server #2 (MS SQL Server)	
Operating System	Windows Server 2008 or 2008 R2 with SP2 (32 or 64 bit) or Windows Server 2012 R2
.Net Framework	V4.0 (Full Profile: http://www.microsoft.com/en-us/download/details.aspx?id=17718)
Database	MS SQL 2008 or 2012 Standard Edition (64-bit)

Recommended Hardware Requirements	
Processor	Dual Intel Xeon E5-2640 Processors or higher
Memory	16GB
Storage	Hard Drive #1 – 20GB or higher for Operating System and SQL Transaction Logs Hard Drive #2 – 100GB or higher for SQL Data with RAID 5 with Hot Spare
Network Connectivity	Gigabit Ethernet NIC

Mobile Devices and Operating Systems

Android Devices – RealityVision 3.4 requires Android 2.2 or higher for installation from the Android Marketplace

Apple iOS Devices – RealityVision 3.4 requires iOS 5.0 or higher and must be installed through the Apple App Store.

RealityVision Push-to-Talk Requirements

RealityVision Android and iOS clients now support Push-To-Talk (PTT) functionality. In order to use PTT functionality a SIP server must be provided. In addition, the RealityVision Clients support secured PTT traffic on SIP servers configured for both TLS and SRTP.

Addendum A to RealityVision® System Requirements September, 2013

Server Software

As a general rule, the number of users that a single server can handle is a function of the specific server hardware and bandwidth of the data center hosting the server. For deployments in excess of 200 users, multiple server installations are required. For bandwidth, a general rule of 400 Kbps per user is recommended for mobile phones. Additional information is available on potential configuration options.

Commands sent to iOS devices through the RealityVision Management Console require use of Apple's Push Notification Service. Per Apple policy, Reality Mobile hosts a Push Notification Service, which manages the flow of information through Apple's servers. Customer installations of the RealityVision Server software must be able to initiate connections through port 443 to this hosted Push Notification Service in order for commands to be received on the iOS devices.

Security

The system includes out of the box support for SSL encryption. The encryption level is at the customer's choosing (from 256 bit to 2k). As SSL relies upon certificates of trust, the customer should procure and install a certificate at the time of server setup.

Mobile VPNs has been used by Reality Mobile's customers. This requires a compatible router/IPSec compatible firewall.

IP Cameras

The Server Software includes a video proxy component that allows an organization to make IP network cameras available as video sources within the RealityVision system. The proxy server also supports pan-tilt-zoom (PTZ) controls on the network camera only if the PTZ controls and the video stream are available through HTTP(S).

The system natively supports Motion JPEG. The video proxy component supports real-time transcoding of up to 10 simultaneous feeds of various other video formats addressable by either HTTP(S) or RTSP into Motion JPEG.

Map Server Options

The system will support WMTS mapping servers. One of the following Map Server Options may be selected for all RealityVision clients via the Operational Settings page:

- MapQuest Open
- Microsoft Bing Maps
- OpenStreetMap
- WMTS

The system is preconfigured to operate using MapQuest Open. For other Mapping Servers, you will need to provide the URL or key.

If you are operating the RealityVision server on a closed network, you will need to provide a Map Tile Server, if mapping is required for your implementation.

PC Client Software

Camera Options

A variety of cameras may be used for video transmission. Most built-in cameras and USB cameras are compatible once the applicable camera drivers are installed. Additionally, a variety of other cameras, including camcorders, may be used to transmit video by purchasing a third-party USB video converter.

GPS Options

A variety of USB or embedded GPS chipsets can be used to provide GPS positions. The GPS chipset must be NMEA 0183 compliant and be accessible through a known COM port.

Mobile Client Software

The application runs on supported Android™ and Apple iOS® mobile devices. Please note the following:

- The device certification process has focused on specific devices of interest to existing customers, rather than automatically seeking to test every new device as it enters the market. If you are interested in a device that is not on the certified list, please let us know.
- The application was designed to work on GSM networks (AT&T, T-Mobile and others), CDMA networks (Sprint, Verizon Wireless and others) and LTE Networks (AT&T, Verizon and others) and WiMax Networks (Sprint). Any mix of supported devices and wireless carriers may be used. Whichever carriers and devices are selected, it is recommended that an unlimited data plan for each device be purchased, along with a suitable voice plan in order to take advantage of the software's full functionality.
- The application will use any IP network – Wi-Fi, commercial cellular, tactical wireless, or other – that the phone uses for internet access. Each phone may have its own process for determining

the data network to use. The application will attempt to maintain its connection across data network changes.

- The application does not support Windows Phone 7 at this time due to current operating system limitations. We continue to monitor its ongoing development.
- Apple iOS devices receive commands through Apple's Push Notification capabilities, which require the device to have an internet connection. iOS devices connected to a RealityVision Server on an entirely closed network will not receive commands.
- An internet connection must be available to Apple iOS devices and Android Smartphones in order to view mapping information associated with video feeds. Android and iOS devices connected to a RealityVision server on an entirely closed network will not be able to view these maps.