

Recommended System Requirements

This document provides the recommended system requirements for the following March Networks® software-based applications:

- [Command Enterprise Software](#)
- [Command Media Archiver Software](#)
- [Command Recording Software](#) (running in a Windows® environment)
- [Command Recording Software](#) (running in a Linux® environment)
- [Command Recording Software Lite](#)
- [Command Config, SiteManager, and DecodeStation VX Software](#)
- [Command Client Software](#)
- [Web Client Software](#)
- [Visual Intelligence Software](#)
- [Searchlight Software](#)
- [Alert Communication Tool \(ACT\)](#)
- [Command Mobile and Command Mobile Plus](#)

Command Enterprise Software

Command Enterprise Software requires a dedicated server or Virtual Machine. These specifications are recommended for the Operating System and Command Enterprise Software application without Searchlight. Please contact a March Networks Sales Engineer for specific project sizing with Searchlight or for systems with greater than 3,500 servers or recorders. The HDD space listed is the amount of space recommended for the operating system, Command Enterprise Software application, and free space necessary for backups and install files.

System Requirements for Command Enterprise Software

	SMALL LESS THAN 10 SERVERS OR RECORDERS	MID 10 – 100 SERVERS OR RECORDERS	LARGE 101 – 3500 SERVERS OR RECORDERS	EXTRA LARGE 3,501 – 10,000 SERVERS OR RECORDERS
Operating System (OS)	Windows Server 2012; Windows Server 2012 R2; Windows Server 2016; Windows Server 2019			For installations consisting of more than 3500 servers or recorders, please contact March Networks Sales Engineering or Technical Support for specific system requirements.
Processor (CPU)	Quad Core Intel Xeon	Quad Core Intel Xeon	Eight Core Intel Xeon	
HDD Space	50 GB	50 GB	80 GB	
Infrastructure	If you are integrating LDAP with the Command Enterprise Server, a Microsoft Active Directory Server is required (provided with Windows Server). If your system is managing more than 250 servers/recorders, March Networks recommends that you use a Microsoft SQL Server 2008, 2012, or 2014 as the external database, instead of the pre-configured Microsoft SQL Server Express 2012 included with Command Enterprise.			
Network Interface	Gigabit Ethernet	2 x Gigabit Ethernet	2 x Gigabit Ethernet	
Memory	6 GB	8 GB 1333 MHz	16 GB 1333 MHz	

Command Media Archiver Software

Requirements listed in this table are based on typical installations with less than 250 recorders. For systems managing more than 250 recorders, please contact March Networks Technical Support.

System Requirements for Command Media Archiver Software

Operating System (OS)	Windows Server 2012; Windows Server 2012 R2; Windows Server 2016; Windows Server 2019
Processor (CPU)	Quad Core Intel Xeon
HDD Space for OS and Applications	100 GB (minimum)
Archiver Storage Volume	1 TB (minimum)
Network Interface	2 x Gigabit Ethernet
Network Bandwidth	50 Mbps (minimum) for each network interface
Memory	8 GB

NOTE: For case sharing and Searchlight, the Archiver can be installed on the same server as the Command Enterprise Software. However, with Command for Transit, the Archiver must be installed on a different server.

Command Recording Software (running in a Windows environment)

Command Recording Software application requires a dedicated workstation, server or virtual machine. These specifications are recommended for the Operating System and Recording Software. The recommended system requirements are estimated for a typical usage, under the assumption that the cameras are configured to consume 2-4 Mb/s of bandwidth each. For large camera numbers, it is recommended not to exceed an overall input bandwidth of 1 Gbps. The HDD Space listed is the amount of space recommended for the operating system, Command Recording Server application, and free space necessary for the configuration backups and install files. Video Storage requires a dedicated storage volume, not on the Operating System drive. All systems and the operating system must be 64-bit.

NOTE: It is not possible to downgrade to a previous release once you upgrade to Command Recording Software release 2.9 or higher.

System Requirements for Command Recording Software

	SMALL LESS THAN 32 CAMERAS	MID 32 – 64 CAMERAS	LARGE 65 – 128 CAMERAS	EXTRA LARGE 129 – 500 CAMERAS
Operating System (OS)	Windows Server 2012 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019 Windows 9 Windows 8.1 Windows 10 (All systems, including the operating system, must be 64-bit.)			
Processor (CPU)	Dual Core Intel i5	Quad Core Intel i7	Quad Core Intel Xeon	Eight Core Intel Xeon Silver
HDD Space	100 GB	100 GB	200 GB	100 GB + 100 GB every 100 cameras
Storage for Video Archive	Storage volumes for video recording must be exclusive to the CRS and managed by the CRS server's Operating System. Consider RAID volumes for optimal performance and resilience. For external storage, consider DAS (Direct Attached Storage) or Block Level SAN technologies such as iSCSI or virtual disks. SMB/CIF storage is not recommended because of inconsistent performance. Use the March Networks System Design Tool (or an appropriate third-party camera calculator) to estimate the required storage size to meet retention needs. It is extremely important that the Video Storage volume and its connection to the CRS can indefinitely sustain recording on all cameras simultaneously (consistent write speed is greater than the total camera aggregated bit rate). Consult your March Networks Sales Engineer for any questions or concerns.			
Network Interface	2 x Gigabit Ethernet (dedicated NIC for camera network)	2 to 4 x Gigabit Ethernet (dedicated NIC for camera network)	2 to 4 x Gigabit Ethernet (dedicated NIC for camera network)	2 to 4 x Gigabit Ethernet (dedicated NIC for camera network)
Memory	16 GB	32 GB	64 GB	64 GB



Command Recording Software (running in a Linux environment)

The Command Recording Software application requires a dedicated server running Linux. The following table outlines specifications for the Operating System and CRS with typical usage, under the assumption that you configure the cameras to consume 2-4 Mbps of bandwidth each, including multiple encoders. These specifications should be used as simple guidelines since the requirements greatly change according to the number of channels in use and the number of CRS instances (containers) running on the server.

NOTE: It is strongly recommended that you consult your March Networks Sales Engineer for any questions or concerns before deploying the Command Recording Software solution for centralized environment.

System Requirements for Command Recording Software

	1 DOCKER WITH 128 CAMERAS (MAX. 512 MBPS INPUT BANDWIDTH)	4 DOCKERS WITH 256 CAMERAS (EACH) (MAX. 1 GBPS INPUT BANDWIDTH)	8 DOCKERS WITH 256 CAMERAS (EACH) (MAX. 1 GBPS INPUT BANDWIDTH)	12 DOCKERS WITH 256 CAMERAS (EACH) (MAX. 1.5 GBPS INPUT BANDWIDTH)
Operating System (OS)	Any Linux Distribution compatible with the Docker platform. NOTES: • All systems including the operating system must be 64-bit • March Networks officially supports the Ubuntu Server v.18.04 and 20.04 distributions.			
Processor (CPU)	Hexa Core Intel i5 @ 2Ghz	Octa Core Intel Xeon @ 2Ghz	2 x Octa Core Intel Xeon @ 2Ghz	x Octa Core Intel Xeon @ 2Ghz
HDD Space	200 BG	1 TB	2 TB	3 TB
Storage for Video Archive	Storage volumes for video recording must be exclusive to the CRS and managed by the CRS server's Operating System. Consider distributing recording throughput over multiple RAID volumes for optimal performance and resilience. Use the March Networks System Design Tool (or an appropriate third-party camera calculator) to calculate the required storage size to meet retention needs. It is extremely important that the Video Storage volume and its connection to the CRS can indefinitely sustain recording on all cameras simultaneously (consistent write speed is greater than the total camera aggregated bit rate). Consult your March Networks Sales Engineer for any questions or concerns.			
Network Interface	Gigabit Ethernet	2 x Gigabit Ethernet (dedicated NIC for camera network)	2 to 4 x Gigabit Ethernet (one or more dedicated NICs for camera networks)	4 x Gigabit Ethernet (two or more dedicated NICs for camera networks)
Memory	4 GB Minimum	6 GB	16 GB	32 GB

Notes:

1. Legacy Intel CPUs that do not have the SSE4_1 instruction set are not supported.
2. It is strongly recommended that you format the storage paths you will use for video evidence archive with the XFS file system.

Command Recording Software Lite

Command recording Software Lite uses the Command Client application.

System Requirements for Command Recording Software Lite

6 CAMERAS	
Operating System (OS)	Windows 8; Windows 8.1; Windows Server 2012; Windows Server 2012 R2; Windows Server 2016; Windows Server 2019
Processor (CPU)	Dual core or greater processor (minimum)
HDD Space	25 GB (minimum). Separate disk/partition for video storage recommended.
Network Interface	Gigabit Ethernet
Memory	4 GB Minimum



Command Config, SiteManager, and DecodeStation VX Software

System Requirements for Command Config, SiteManager, and DecodeStation VX Software

	COMMAND CONFIG (browser-based for 6700 Series only)	SITEMANAGER	DECODESTATION VX
Operating System (OS)	Windows 8 Windows 8.1 Windows 10	Windows 8 Windows 8.1	Windows 8 Windows 8.1 Windows 10 (64-bit)
Processor (CPU)	Intel i3 or equivalent (minimum)	Intel i3 or equivalent (minimum) Intel i7 64-bit or equivalent (recommended)	Intel i7 or equivalent
HDD Space for Clients	50 MB	150 MB	150 MB
Network Interface	Gigabit Ethernet	Gigabit Ethernet	Gigabit Ethernet
Memory	2 GB (minimum) 4 GB (recommended)	2 GB (minimum) 6 GB (recommended for 64-bit systems)	4 GB (minimum)
Web Browser	Microsoft Internet Explorer 9 (or later, Windows only), Firefox (up to version 29.0), Safari 8 (Mac OS X 10.10 Yosemite) with Microsoft Silverlight® 5.x	N/A	N/A
Video Card	Any video card (128 MB per monitor maximum) capable of 24-bit color depth (true color)	Any video card (256 MB per monitor minimum) capable of 24-bit color depth (true color), compatible with Microsoft DirectX 11 (or later) and Direct3D	1GB dedicated video card for every monitor. Microsoft DirectX 11 and Direct3D
Other	N/A	N/A	1 USB Port (required for the licensing dongle)

Command Client Software

System Requirements for Command Client Software

	COMMAND CLIENT – MINIMUM SPECS	COMMAND CLIENT – OPTIMAL PERFORMANCE
Task	Minimum video access, one or two simultaneous stream playback and export.	Dedicated Command Client workstation with up to four monitors for many simultaneous live streams, playback and export. Max number of simultaneous streams depends on total FPS and bit rate of all viewed cameras.
Operating System (OS)	Windows 8, Windows 8.1, and Windows 10 with Microsoft .NET Framework 4.5.2 installed.	Windows 10 64-bit with Microsoft .NET Framework 4.5.2 installed.
Processor (CPU)	Intel i3 or equivalent (minimum)	Intel i7 with 8 Cores
HDD Space for Clients	200 MB	200 MB
Network Interface	Ethernet	Gigabit Ethernet
Memory	4 GB (minimum)	8 GB
Video Card	Intel HD 4000 video card (minimum) or an equivalent video card compatible with Microsoft DirectX 11 and Direct3D	1GB Dedicated video card for every monitor. Microsoft DirectX 11 and Direct3D

Notes:

1. March Networks recommends that installations with a high number of megapixel cameras and live viewing enable multi-streaming (high and low resolution streams) for all cameras. This helps to limit CPU overhead for live monitoring on Command Client, Site Manager, and Decode Station VX workstations.
2. For Windows 8.1 users, it is required to download and install the following updates from the Microsoft website. The updates must also be applied in the following order:
 - a) KB2919442 (for more info, see <https://support.microsoft.com/en-us/kb/2919442>)
 - b) KB2919355 (for more info, see <https://support.microsoft.com/en-us/kb/2919355>)
3. A 64-bit Operating System is required for smooth reverse playback in Command Client/Player.
4. For the multi-monitor feature, it is required a video card with a minimum of 256MB per monitor.
5. March Networks does not support Command Client in Virtual Desktop Infrastructure (VDI). VDI is not ideal for CCTV clients because its architecture shares a pool of resources between multiple simultaneous clients. This means that client performance is dependent on available hardware resources, backend software and configuration, number of concurrent sessions, the number of simultaneous streams viewed, and their profiles.
6. If .NET Framework 4.5.2, Microsoft Visual C++ 2015 Redistributable, and the UCRT library are not installed on the Client PC, the Command Client and the Command Player installers automatically trigger the installation of the component (an internet connection is required). To use the Command Player Portable application (if not present) you must manually install the .NET Framework 4.5.2 from the Command Software DVD or from the official Microsoft website.

For the .NET system requirements, please consult the official Microsoft website.



Web Client System Requirements

To access the Web Client, the Command Enterprise Software must be at software version 2.10 or higher. The recorders registered to the Command Enterprise Software must be at the following software versions:

	RECORDER SOFTWARE
9000, 8000 and RideSafe Recorders	version 5.16 and higher
Command Recording Software	version 2.9 and higher

Visual Intelligence Software

System Requirements for Visual Intelligence Software:

	VISUAL INTELLIGENCE CLIENT SUITE
Operating System (OS)	Windows 8; Windows 8.1; Windows 10
Processor (CPU)	Dual Core Intel Core 2 or better
HDD Space	Up to 1 GB
Network Interface	Gigabit Ethernet
Memory	4 GB (minimum), 8 GB (recommended)
Video Card	Video card (128 MB / monitor min.) capable of 24-bit color depth (true color)

March Networks Searchlight™ Software

Before installing Searchlight, you should check the amount of free space on the Command Enterprise database (internal or external), as the transactions are stored on the same database used by that application.

Searchlight requires specific licenses (one license for each site, plus one for each site where you want to use the Business Analytics feature).

Installing the Command Media Archiver is mandatory for Searchlight, even if it doesn't require a particular amount of space, since Searchlight just stores snapshots on it. The Archiver can be installed on the same server/VM, or on a different machine on the network.

System Requirements for Searchlight Software:

	SMALL LESS THAN 10 SERVERS OR RECORDERS	MID 10 – 100 SERVERS OR RECORDERS	LARGE UP TO 3500 SERVERS OR RECORDERS
Operating System (OS)	Windows Server 2012 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019	Windows Server 2012 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019	Windows Server 2012 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019
Processor (CPU)	Quad Core Intel Xeon	Quad Core Intel Xeon	Eight Core Intel Xeon
HDD Space	50 GB	50 GB	80 GB
Network Interface	Gigabit Ethernet	2 x Gigabit Ethernet	2 x Gigabit Ethernet
Memory	6 GB	6 GB 1333 MHz	16 GB 1333 MHz

March Networks Alert Communication Tool (ACT)

For large organizations, we recommend you install ACT on a separate server. If you are installing ACT on the Command Enterprise Server, please consider these minimum hardware requirements: Windows Server, 2CPU, 8 GB RAM, 50 GB HDD space dedicated for ACT software.

System Requirements for ACT on standalone server:

	SMALL LESS THAN 10 SERVERS OR RECORDERS	MID 10 – 100 SERVERS OR RECORDERS	LARGE UP TO 3500 SERVERS OR RECORDERS
Operating System (OS)	Windows Server 2012 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019	Windows Server 2012 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019	Windows Server 2012 Windows Server 2012 R2 Windows Server 2016 Windows Server 2019
Processor (CPU)	Quad Core Intel Xeon	Quad Core Intel Xeon	Eight Core Intel Xeon
HDD Space	50 GB	50 GB	80 GB
Network Interface	Gigabit Ethernet	2 x Gigabit Ethernet	2 x Gigabit Ethernet
Memory	8 GB	8 GB	16 GB 1333 MHz



Command Mobile and Command Mobile Plus

Mobile Device Requirements	<ul style="list-style-type: none"> • Apple iPhone and iPad (iOS Version 12 and above) • Android (OS 6 and above)
Recording System Minimum Requirements*	<ul style="list-style-type: none"> • 8000 Series Hybrid NVR, v5.8.5+ • 8724 V Tribrid NVR, v5.10.0+ • 9000 Series IP recorder, v5.9.0+ • RideSafe GT Series Hybrid recorder, v5.8.5+ • RideSafe MT Series IP recorder, v5.11.0+ • RideSafe RT Series IP recorder, v5.11.0+ • X12 Series Hybrid recorder, v5.18.0+ (Command Mobile Plus only) • Command Recording Server Software, v2.2.2+ • Command Enterprise Server Software, v2.2+ (v2.10+ for Command Mobile Plus) <p>* Requirements may change based upon new releases and software/firmware EOL.</p>
Recommended Camera Settings	<p>SE2 Series</p> <ul style="list-style-type: none"> • Primary (for single streaming): 2MP / 15 FPS / LBR / GOV 30 / ~1.5Mbps • Secondary (for multi-view): 720P / 10 FPS / LBR / GOV / 60 / ~750Kbp <p>SE4 Series</p> <ul style="list-style-type: none"> • Primary (for single streaming): 4MP / 15 FPS / LBR / GOV 30 / ~2.5 Mbps • Secondary (for multi-view): 720P / 10 FPS / LBR / GOV 60 / ~750Kbps
Network Interface	<ul style="list-style-type: none"> • Applicable Cellular data Networks • Wi-Fi Network
Security	End-to-end with TLS 1.2 encryption

