

# VIDEOMANAGER 14

# PERFORMANCE GUIDE

## History:

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## Overview

This white paper provides guidance on machine specs required to host VideoManager 14 in an on-premises environment up to the scale of 500 cameras. If in doubt, a Sales Engineer should be consulted to assist with overall system design.

## System Size Performance Guide

Typical Cameras	Typical number of connected DC-200s	Live Streams from VT50, VT100 or VB400	CPU	Recommended Minimum Memory
up to 84	1 or 2	up to 16 Streams	Intel Core i3 or similar	8GB minimum
up to 250	up to 6	up to 48 Streams	Intel Core i5 or similar	16GB minimum
up to 500	up to 10	up to 96 Streams	Intel Core i7 or similar	16GB minimum

For systems beyond 500 cameras it is recommended that a Sales Engineer is involved in the system design.

## CPU Cores

A minimum of 4 CPU cores is recommended. Increasing cores and RAM increases the number of simultaneous playback streams that can be supported, and increases the rate at which video can be exported.

## Supported Operating Systems

Windows Server 2016 Essentials, Standard & Datacenter

Windows Server 2012 R2 Essentials, Standard & Datacenter

Windows Server 2012 Essentials, Standard & Datacenter

Windows 10 Pro & Enterprise

## Hourly Recording Size in Gigabytes (GB)<sup>1</sup>

Includes video and audio.

Resolution	Frame Rate 30fps	Frame Rate 25fps
1080p	3 GBytes/Hour	2.5 GBytes/Hour
720p	2 GBytes /Hour	1.6 GBytes/Hour

## Storage Estimation

The computation for an estimate on the amount of non-evidential storage required is:

$$\begin{aligned}
 & \text{(Number of Cameras)} \times \\
 & \text{(Hourly recording size)} \times \\
 & \text{(Number of hours recorded per camera per day)} \times \\
 & \text{(Days that recorded footage is to be retained)}
 \end{aligned}$$

For example:

$$\begin{aligned}
 & 20 \text{ cameras} \times \\
 & 2 \text{ GByte per hour} \times \\
 & 1 \text{ hour recording per day} \times \\
 & 30 \text{ days retention} = \\
 & \mathbf{1,200 \text{ GBytes} = 1.2 \text{ TBytes.}}
 \end{aligned}$$

After the retention period is reached, new recordings replace those that are being deleted.

Additional storage required is that for any material that is marked for preservation beyond the retention period (e.g. marked as evidential); the proportion of preserved footage (every retention period) is indicative of the storage growth rate required.

In our example (20 camera, 2 GByte per hour, 1 hour per day, 30 day retention) - if 5% of the footage is marked for preservation, then every 30 days, an additional 5% x 1.2Tbytes = 60 GBytes of storage is not released for reuse by new footage, and must be provided.

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<sup>1</sup> For detailed information, see VB400 Video bitrates [ED-009-049]