

# QNAP VioStor CMS

*Centralizing Sites with Ease*



# Key Features

## ▸ Server Configuration

- Linux-embedded turnkey solution
- Client-server architecture
- Easy installation
- Installation wizard
- Multi-NVR management
- SSL encrypted connection between CMS server & clients

## ▸ Client Configuration

- Dashboard for device status overview
- Online license activation and expansion
- Centralized device management (NVRs & cameras)
- Centralized event management
- Flexible monitoring configuration of mixed camera videos and E-maps
- Centralized E-map settings
- User privilege management

## ▸ Live View

- Quad-monitor mode
- Centrally monitor multiple camera channels from multiple NVRs
- E-map based event management
- Activate alarm mode for instant event handling
- Bookmark for later examination on playback page
- Flexible view content
- Sequential mode
- Shortcut of most frequently used view layout or E-map for quicker access

## ▸ Playback

- Centrally playback multiple camera channels from multiple NVRs
- Sync / non-sync mode playback

## About QNAP Security

QNAP Security, the world's first Linux-embedded NVR developer has implemented its award winning storage and RAID technologies to offer its most innovative local display standalone NVR. The system not only ensures remarkable stability on remote monitoring, recording, and surveillance tasks under diverse environments but also renders great simplicity. In addition, the QNAP solution allows users to choose suitable network cameras for various situations instead of being restricted to the resolution of traditional CCTV. To always be one step ahead, QNAP professional NVR team remains creative and committed to the integrity of their software and hardware. Furthermore, its great user experiences on wide range of supported devices and successful installations worldwide are more than enough to prove QNAP Security's viability internationally.

# QNAP VioStor CMS

## Detailed Functions

Server Configuration		
Operating System		Linux Embedded
Interface		Web browser: IE, Google chrome, Firefox
System Administration		
General Settings	System Administration	Set the CMS Server Name and System Port Enable Secure Connection (SSL): when SSL is enabled, the users can only connect to the CMS via the https connection
	Date and Time	Setup Time Zone, Date Format Time Setting: Manual Setting, Synchronize with an Internet Time Server (NTP) automatically, Set the server time the same as the computer time
	Daylight Saving Time	Adjust system clock automatically for daylight saving time Enable customized daylight saving time table
Network	TCP / IP	Use static IP address Obtain IP address automatically from DHCP server Enable CMS server as the DHCP server
	DDNS	Select the DDNS server Enter the username/password/domain name to register with the DDNS provider
Power Management		Restart, Shutdown Power-on the CMS server automatically after the AC power resumption, or to remain power-off after the power resumption
Backup / Restore / Reset Settings		Support
System Logs		System event logs, System connection logs, On-line users
Firmware Update		Support
Disk Management		
RAID Management		VSM-2000 (2 bays): RAID 0, 1 VSM-4000U-RP (4 bays): RAID 0, 1, 5, 6, 10 Online RAID Level Migration without turning off the CMS server RAID Recovery without turning off the CMS server
HDD Smart		Bad Block Scan & Hard Drive S.M.A.R.T.
System Status		
System Information		Check the Server Name, Firmware Version, System Up Time, Serial Number
Resource Monitor		Check the CPU Usage, Memory Usage, Disk Usage, Bandwidth Transfer, Process

Client Configuration	
Operating System	Windows 7 (64 bits preferred)
Interface	QNAP CMS client software
Dashboard	Alarm: alarm input, motion alarm User account: login error, never login, total user account Hardware status: NVR disconnection, camera disconnection, HDD failure, fan failure
License	Activate license online, Deactivate license online Activate license offline, Deactivate license offline
Server	Centrally configure up to 128 NVRs Available configurations made on NVRs: * Shutdown, Reboot, Update firmware, Synchronize settings with NVR * Edit IP: assign static IP manually * Edit system time: manually set the time zone, automatically synchronize with an Internet time server * Edit alert notification: E-mail, SMS settings The above configurations can be synchronized by grouping devices of the same NVR model

## Client Configuration

Camera	<p>Centrally configure up to 1,024 cameras:</p> <p>Available configurations made on cameras:</p> <ul style="list-style-type: none"> <li>* Edit recording parameters (codec, resolution, FPS), quality</li> <li>* Enable audio recording, manual recording</li> <li>* Set recording schedule</li> </ul> <p>The above configurations can be synchronized by grouping devices of the same camera model</p>
Event Management	<p>Centrally receive events from multiple NVRs</p> <p>Event from camera: motion detection, camera I/O</p>
View	<p>Centrally configure the view from multiple NVRs</p> <p>View layout: 1, 2X2, 3X3, 4X4, 5X5, 6X6, 7X7, 8X8, 1+1+4, 1+5, 1+7, 2+8, 1+11, 1+12, 12+1</p> <p>Adjust live stream: Auto, performance priority (stream with the highest resolution from NVR), quality priority (stream with the lowest resolution from NVR), recording stream</p> <p>View content: Flexible view content of mixed camera videos and E-maps</p> <p>View can be managed by creating video group for security guard's easier monitoring</p> <p>Sequential mode: Each slot can be composed of multiple camera channels to form a sequential mode The interval between each camera video's display is adjustable</p>
E-map	<p>Centrally setup E-maps for multiple NVRs</p> <p>Batch upload E-map</p> <p>Available E-map format: JPEG, PNG, BMP</p> <p>Device indicators on E-map: NVR, camera, link to other E-maps</p> <p>Unlimited E-map layers</p> <p>Flexible and easy editing of E-map links for multi-directional E-map management</p>
User Management	<p>Users can be created and assigned to different user group. Each user group can have different permission of:</p> <p>Feature access:</p> <ul style="list-style-type: none"> <li>* Administrator: System operation, User Management, View Management, E-map Management, Log Out</li> <li>* Client Live View: Information, Camera control, Bookmark, Snapshot, Event log</li> <li>* Client Playback: Export, Bookmark, Snapshot</li> </ul> <p>Device access: NVR, camera</p> <p>View access</p> <p>E-map access</p>
Server Log	<p>Sever, System event, NVR event, On-line users</p>

## Live View

Quad-Monitor Mode	<p>Primary monitor: Control Live View, E-map, Playback, and Configuration</p> <p>Sub monitors (2<sup>nd</sup> ~ 4<sup>th</sup> monitors): Display the selected Live View or E-map</p>
Central Monitor	<p>Connect up to 1,024 camera channels from up to 128 NVRs</p> <p>Display up to 64 camera channels per monitor, Display up to 256 camera channels per CMS client PC (depending on PC specification)</p>
View Layout	<p>1, 2X2, 3X3, 4X4, 5X5, 6X6, 7X7, 8X8, 1+1+4, 1+5, 1+7, 2+8, 1+11, 1+12, 12+1</p>
Content List	<p>View, E-map, NVR (camera)</p>
View Content	<p>Flexible view content of mixed camera videos and E-maps</p>

# QNAP VioStor CMS

## Detailed Features



### Live View

Camera Control	<p>By Camera Control Panel: Connect to the camera webpage, Snapshot, Enable manual recording, Enable digital zoom, Zoom in, Zoom out, Enable audio input, Enable audio output, Focus near, Focus far, Fit image to window, Keep aspect ratio, PTZ panel</p> <p>By right-click on a slot: Connect to the camera webpage, Camera settings, Digital zoom, Keep aspect ratio, Adjust live stream, Enable H/W decoding, Some of the options may not be shown due to the camera support limitation</p>
E-map	<p>When event occurs, the camera icon will turn into red indicator to show the event location</p> <p>When double-click the camera icon, the live view video will pop up to show the instant status</p> <p>Unlimited E-map layers</p> <p>Multi-directional E-map links</p>
Alarm Mode	<p>When event happens, the alarm indicator will flash and can be clicked to enter the alarm mode</p> <p>When enabling the alarm mode:</p> <ol style="list-style-type: none"><li>(1) The snapshot of the alarm will be shown on the Alarm List Maximum number of snap shot kept on the Alarm List: 15</li><li>(2) The log of the alarm will be shown on the Event Log Maximum number of log shown on the Event Log: 150</li></ol> <p>Based on each alarm snapshot and the alarm log, the operators have 4 types of event instant handling options:</p> <ol style="list-style-type: none"><li>(1) Open live view</li><li>(2) Open event playback (30 seconds before and after the event)</li><li>(3) Go to live view layout</li><li>(4) Go to e-map layer</li></ol>
Bookmark	<p>For the easier event tracking:</p> <p>Click Quick Bookmark to place a vertical thin bar on video footage</p> <p>Click Detailed Bookmark to place a vertical thin bar on video footage, and text details accordingly</p>
Sequential Mode	<p>Each slot can be composed of multiple camera channels to form a sequential mode</p> <p>Sequential mode can take place only in the selected slots</p> <p>The interval between each camera video's display is adjustable</p> <p>Sequential mode can be easily enabled or paused on live view page</p>
Shortcut	<p>Up to 5 most used view layout or E-map can be dragged onto the top of the window for quicker access</p>

### Playback

Central Playback	<p>Up to 16 channels from 16 NVRs</p>
View Layout	<p>1, 2X2, 3X3, 4X4</p>
Video Time Frame	<p>Maximum time length is 24 hours, and can span different days</p>
Content List	<p>NVR (camera)</p>
Video Operation	<p>Play, Pause, Stop, Play rewind, Speed up, Speed down, Play the next frame, Play the previous frame, Enable audio output, Place quick bookmark, Place detailed bookmark, Export video (AVI format), Enable digital PTZ, Zoom in, Zoom out, Fit image to window, Keep aspect ratio, Sync playback, Non-sync playback</p> <p>Sync playback: All channels are displayed based on the identical timeslot</p> <p>Non-sync playback: Each channel can be assigned to display different timeslot</p>
Information of each channel	<p>On slot bar: Camera name</p> <p>OSD: Date, time</p>
Timeline	<p>Timeline can be stretched wider for easier video searching</p>

# Specification

Miscellaneous		
Number of CMS Client Installation	unlimited	
Supporting QNAP VioStor NVR	NVR Hardware platform: VS-x1xx NVR Firmware version: v. 4.1.0 or above	
CMS Server Hardware		
Product Image		
Model Name	VSM-2000	VSM-4000U-RP
Number of license	Base: 64 CH, Maximum: 1,024 CH	Base: 64 CH, Maximum: 1,024 CH
HDD	Maximum 4TB per HDD 2 x Hot-swappable HDD and lockable tray (2.5" or 3.5")	Maximum 4TB per HDD 4 x Hot-swappable HDD and lockable tray (2.5" or 3.5")
CPU	Intel® Dual-core Processor	Intel® Dual-core Processor
Operating System	Linux Embedded	Linux Embedded
Ethernet Port	2 x Gigabit RJ-45 Ethernet port	2 x Gigabit RJ-45 Ethernet port
Voltage	110 ~ 240 V	110 ~ 240 V
Power Consumption	25 W	52 W
Dimensions (HxWxD)	150 (H) x 102 (W) x 216 (D) mm, 5.91 (H) x 4.02 (W) x 8.5 (D) inch	44 (H) x 439 (W) x 499 (D) mm 1.73 (H) x 17.28 (W) x 19.65 (D) inch
Weight (w/o HDD)	Net weight: 1.74 kg (3.84 lbs), Gross weight: 2.92 kg (6.44 lbs)	Net weight: 7.63 kg (16.82 lbs) Gross weight: 9.55 kg (21.05 lbs)
Operating Temperature)	0 ~ 40°C	0 ~ 40°C
Operating Humidity	0 ~ 95% R.H.	0 ~ 95% R.H.
Languages	Czech / Danish / Dutch / English / French / Finnish / German / Hungarian / Italian / Japanese / Korean / Norwegian / Polish / Portuguese / Russian / Spanish / Swedish / Simplified Chinese / Traditional Chinese	
CMS Client [Minimum] System Requirement		
CPU	Intel Core i3 or above	
RAM	4GB or above	
Operating System	Windows 7 (64 bits preferred)	
Network Interface	Gigabit Ethernet	
Graphic Card	NVIDIA GeForce GT 430, ATI Radeon HD 5700 Equal spec or above	
Monitor Resolution	1920 x 1080 pixels	

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