QNAP VioStor CMS

Centralizing Sites with Ease

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	Centrally configure up to 1,024 cameras: Available configurations made on cameras: * Edit recording parameters (codec, resolution, FPS), quality * Enable audio recording, manual recording * Set recording schedule The above configurations can be synchronized by grouping devices of the same camera model
Event Management	Centrally receive events from multiple NVRs Event from camera: motion detection, camera I/O
View	Centrally configure the view from multiple NVRs 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
	Adjust live stream: Auto, performance priority (stream with the highest resolution from NVR), quality priority (stream with the lowest resolution from NVR), recording stream
	View content: Flexible view content of mixed camera videos and E-maps
	View can be managed by creating video group for security guard's easier monitoring
	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
E-map	Centrally setup E-maps for multiple NVRs Batch upload E-map Available E-map format: JPEG, PNG, BMP Device indicators on E-map: NVR, camera, link to other E-maps Unlimited E-map layers Flexible and easy editing of E-map links for multi-directional E-map management
User Management	Users can be created and assigned to different user group. Each user group can have different permission of:
	Feature access: * Administrator: System operation, User Management, View Management, E-map Management, Log Out * Client Live View: Information, Camera control, Bookmark, Snapshot, Event log * Client Playback: Export, Bookmark, Snapshot
	Device access: NVR, camera
	View access
	E-map access
Server Log	Sever, System event, NVR event, On-line users

Live View

Quad-Monitor Mode	Primary monitor: Control Live View, E-map, Playback, and Configuration
	Sub monitors (2nd ~ 4th monitors): Display the selected Live View or E-map
Central Monitor	Connect up to 1,024 camera channels from up to 128 NVRs Display up to 64 camera channels per monitor, Display up to 256 camera channels per CMS client PC (depending on PC specification)
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
Content List	View, E-map, NVR (camera)
View Content	Flexible view content of mixed camera videos and E-maps

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Detailed Features

Live View

Camera Control	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 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
E-map	When event occurs, the camera icon will turn into red indicator to show the event location When double-click the camera icon, the live view video will pop up to show the instant status Unlimited E-map layers Multi-directional E-map links

Alarm Mode	When event happens, the alarm indicator will flash and can be clicked to enter the alarm mode
	When enabling the alarm mode:
	(1) The snapshot of the alarm will be shown on the Alarm List
	    Maximum number of snap shot kept on the Alarm List: 15
	(2) The log of the alarm will be shown on the Event Log
	    Maximum number of log shown on the Event Log: 150
	Based on each alarm snapshot and the alarm log, the operators have 4 types of event instant handling options:
	(1) Open live view
	(2) Open event playback (30 seconds before and after the event)
	(3) Go to live view layout
	(4) Go to e-map layer

Bookmark	For the easier event tracking: Click Quick Bookmark to place a vertical thin bar on video footage Click Detailed Bookmark to place a vertical thin bar on video footage, and text details accordingly
Sequential Mode	Each slot can be composed of multiple camera channels to form a sequential mode Sequential mode can take place only in the selected slots The interval between each camera video's display is adjustable Sequential mode can be easily enabled or paused on live view page
Shortcut	Up to 5 most used view layout or E-map can be dragged onto the top of the window for quicker access

Playback

Central Playback	Up to 16 channels from 16 NVRs
View Layoutt	1, 2X2, 3X3, 4X4
Video Time Frame	Maximum time length is 24 hours, and can span differnet days
Content List	NVR (camera)
Video Operation	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
	Sync playback: All channels are displayed based on the identical timeslot Non-sync playback: Each channel can be assigned to display different timeslot
Information of each channel	On slot bar: Camera name OSD: Date, time
Timeline	Timeline can be stretched wider for easier video searching

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	110~240V	110~240V
Power Consumption	25W	52W
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	NVIDA GeForce GT 430, ATI Radeon HD 5700 Equal spec or above
Monitor Resolution	1920 x 1080 pixels