

FortesServer

An Integrated Ready to Deploy Video Management Server



Infinique offers a wide range of video management solutions for IP based video surveillance that are easy to install, use and maintain. The hardware is optimized for Fortes video management software by consolidating disparate components into a single chassis which is energy efficient and greatly improves the total cost of ownership. The video management software has an open architecture that comply to Onvif and standard protocols, making it future proof and providing peace of mind for your investment. From small to very large installations, Infinique's IP based Servers are an ideal solution for today's high demanding video surveillance needs.

Maximum Performance

Infinique's FortesServer is designed with server class hardware and is preloaded with Linux operating system and FortesVMS. The performance is boosted by Intel® XEON™ Processor and high capacity RAM to meet the demands of high security video surveillance with HD video recording and playback operations. The Fortes Server supports recording and playback video streams of 100 channels in D1, 64 channels in HD, 32 channels in full HD in 30 fps real time.

FortesServer functions as a stand-alone Server and boasts a total throughput of 680 Mbps of recording and network bandwidth. However the total number of cameras supported depends on the desired frame rate, the number of simultaneous client connections, streams played back, and the available bandwidth.

Reliability

FortesServer's high reliability is achieved by Linux® operating system and FortesVMS hosted on SSD system drive, as this provides high read-write speeds with no moving parts. It also ensures increased uptime and system response time, compared to systems which have the OS installed on conventional hard disk drives. Centralized storage on FortesServer is supported through iSCSI or Fiber Channel SAN interface, making it highly efficient scalable storage solution. RAID can be

PRODUCT FEATURES

- Video recording solution with Intel® XEON™ Processor and Server hardware that is optimized for Fortes video management software
- Stable Linux OS and VMS on SSD drive with high read-write speeds and no moving parts for increased system response time and reliability
- Designed for enterprise video surveillance for a quick and no hassle installation
- Each server supports 4, 9, 16, 25, 32, 36, 64 and 100 channels and is scalable by automatic bridging of multiple NVRs to support additional IP Cameras
- Virtualization of multiple servers as a single logical unit is achieved through CMS, which enables centralized monitoring and management up to 4000+ channels from a single location
- Supports ONVIF and RTSP video protocols; ensures use for large number of such complaint IP cameras
- Network Health and Event Monitoring
- Energy efficient, has a very low power consumption
- Easy to install, comes with standard rack mountable chassis

implemented in the SAN storage to secure the loss of video in case of disk failure.

FortesVMS (Video Management Software)

FortesVMS brings in the stability and reliability which is essential for a video surveillance system. FortesVMS has all the functionality of an advanced video management system to cater any surveillance application needs. The Linux®-based operating system used utilizes an XFS file system for maintaining the video files and has automated defragmentation routines to keep the database from becoming fragmented. XFS has been widely proved to be a superior and stable file format for the data intensive video surveillance recording applications than the Windows® based recorders which come with their standard NTFS file system.

FortesMonitor - Centralized Monitoring

Advanced feature rich FortesMonitor provides centralized monitoring, control and management of multiple servers installed at different locations. A single instance of FortesMonitor installed on a high performance PC can support up to 4000+ cameras. In a single live monitor window up to 32x32 or 1024 live channels from multiple servers can be monitored, and multiple such windows can be managed simultaneously. This easy to use software, helps security professionals manage and interact with high definition video in the most efficient way.

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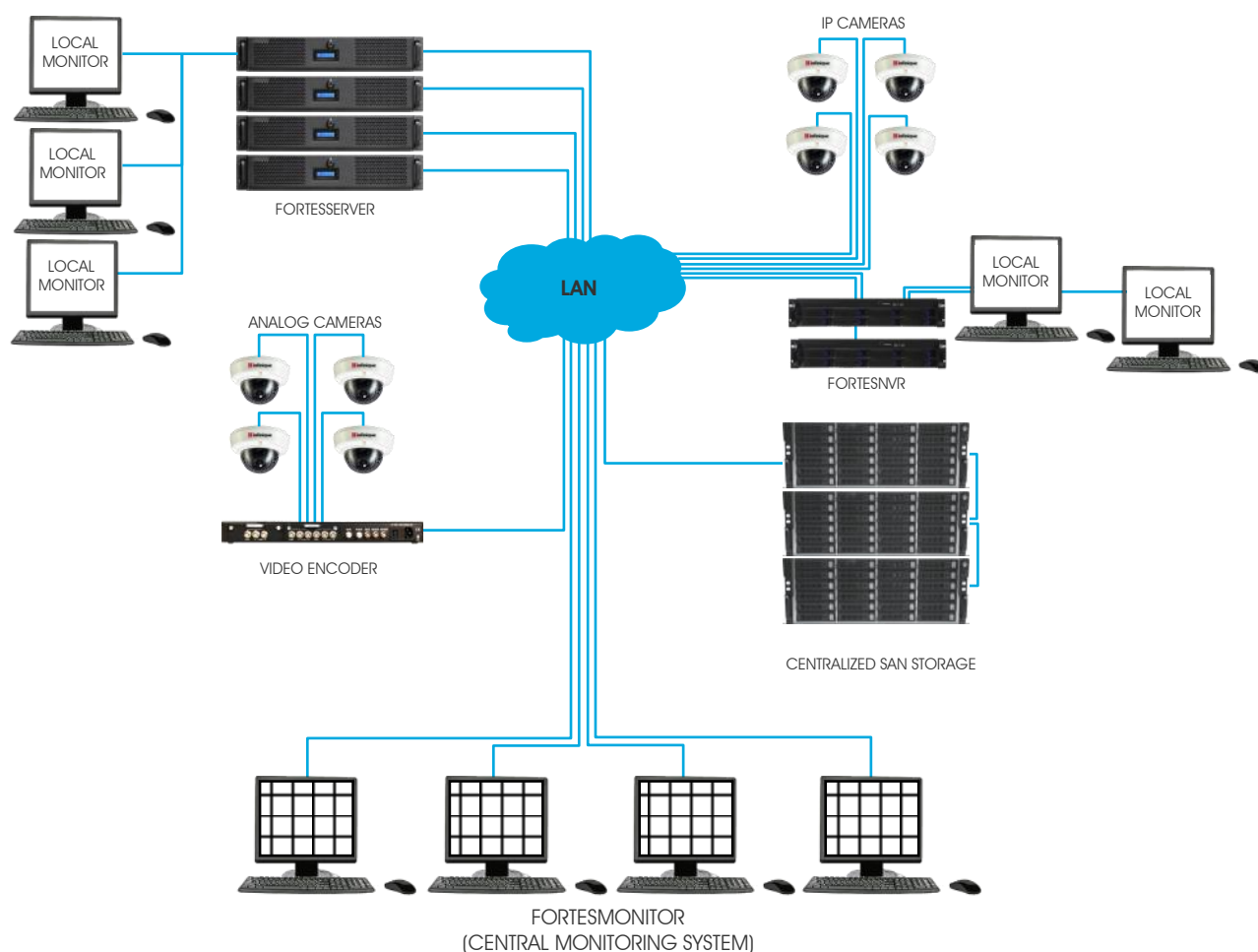
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Open Architecture

Fortes Server is ONVIF compliant and provides a true open architecture that ensures support for a large number of IP cameras and encoders from various manufacturers. The system is also compatible with different video compression formats such as H.264 and H.265. It is built using industry open standard hardware and operating system which has been integrated for easy commissioning of IP video surveillance. This optimized integrated solution offered by Infinique

provides peace of mind and removes the compatibility risks and unavailability of prompt support associated with solutions where VMS software and the hardware are sourced from different vendors. Third party system integration such as access control and building management systems are supported through a comprehensive SDK. All these features combined, makes Fortes Server a truly open architecture platform.

Conceptual Overview



NOTE. The above network configuration is a conceptual overview only and is not intended to show a detailed network topology. The actual network requirements for your installation will differ based on the configuration, requiring changes or perhaps additional network equipment. Please contact Infinique representative to discuss your specific requirements.

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TOP REASONS TO CHOOSE

<p>Stable and Reliable VMS preloaded on SSD</p>	<p>FortesServer high reliability is achieved by Linux® operating system and preloaded FortesVMS on a SSD system drive, which provides high read-write speeds and has no moving parts. This also increases system response time, compared to systems which have the OS installed on conventional hard disk drives.</p>
<p>High Performance Dual Processors</p>	<p>FortesServer is optimized for delivering high performance, boosted by Intel® XEON™ Dual Processors. This configuration provides the processing power to meet the stringent demands of large enterprise video surveillance solutions where simultaneous multiple HD video streaming, recording and playback are required.</p>
<p>Open Architecture ONVIF Compliant</p>	<p>Through ONVIF compliance FortesServer ensures support for a large number of IP cameras and encoders. Compatibility with video streams such as H.264 and H.265 combined with a comprehensive SDK support for third party system integration such as access control and building management systems, makes it a true open architecture surveillance system.</p>
<p>Scalable Centralized SAN Storage</p>	<p>Centralized storage architecture through iSCSI or Fiber Channel SAN interface offered by FortesServer makes it efficient with increased performance, minimized downtime and scalability. SAN Storage is ideal for surveillance applications, which involves moving of massive video data streams, as it uses block level system which reduces latency and optimises throughput. Another major advantage of centralized SAN storage is implementation of RAID in an efficient manner and scalability of the solution when additional storage is required.</p>
<p>Continuous Operation Redundant Dual Power</p>	<p>Continuous operation and stability are prerequisites to video surveillance applications, to guarantee this, FortesServer has been designed with redundant dual hot swappable power supply. On failure of one power supply, the system will be powered by the other power supply to ensure continuous operation and a stable environment.</p>
<p>Reliable Transmission Dual Ethernet</p>	<p>FortesServer is equipped with dual gigabit NICs to provide increase bandwidth and avoid single point of failure. Under normal circumstances, data is transmitted via two NICs, but when one NIC fails, all data will be automatically switched to the other NIC to ensure hassle free transmission.</p>
<p>Zero Downtime Failover</p>	<p>One or more FortesServer can be designated as a failover server to minimize downtime. Servers can be configured for failover as one-to-one, one-to-many or many-to-many option. If one of the server goes offline, the failover server will immediately takeover and manage all of its video devices, users, and security permissions to provide continued recording and access to devices.</p>

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SYSTEM	
Processor	2x Intel® XEON™ Dual Core 6GHz
Operating System	Linux and X-Windows with OpenGL
OS Device	4GB on SSD
Memory	DDR4 32GB
User Interface	CMS (Central Monitoring System)
Camera Channels	Upto 100 Channels
Storage	Centralized SAN Storage through iSCSI or Fiber Channel
USB Interface	6x Ports - 2 Front and 4 Rear
PTZ Controller	USB Serial Port
Alarm Ports	8x Digital Inputs, 8x Digital Outputs
Ethernet Interface	2Gigabit Ethernet Ports 1000Base-T
Cameras Supported	Infinique, ONVIF Compliant Cameras and Native Integration for major camera brands
Client Modules	
FortesMonitor	Centralized Management and Monitoring
FortesMobile	Smart Phone App to watch live video
Web Client	Control and Watch Live from remote PC
VNC/SSH Client	NVR Remote Setup and Configuration
VIDEO AND AUDIO	
Video System	NVidia 1GB Low Profile
Maximum Resolution	1920 x 1200 DVI, HDMI, VGA
Video Outputs	1x VGA, 1x HDMI Ports
Video Standards	NTSC 60 Hz, PAL 75 Hz
Video Decoding	MJPEG, MPEG4, H.264 and H.265
Audio Codec	G.711
Two way Audio	Yes, if supported by camera
Audio Port	1x Audio In, 1x Audio Out
FUNCTIONS SUPPORTED	
Remote Management	VNC,SSH
Security	HTTPS, SRTP, IP Filtering
Events	Motion Detection, Sensor, Alarm, Video Loss, Video Recovery, Disk Failure, RAID Status Change
Event Handlers	Warning Message, Popup, Border Blink, Alarm, PTZ Link, Recording
Video Backup	AVI, JPG, BMP File Format
Digital Zoom	Up to 10X
Display	Triple Display: Clone or Expand
Miscellaneous	Free DDNS, Built-in NTP Server, HDD Health Monitoring using SMART
CMS	Supports up to 4000+ Channels IE, Android, iOS - Supports 16 Channels

MECHANICAL	
Form Factor	Industrial Grade 2U Rack Mount Chassis
Dimensions	470(w) x 290(d) x 87(h) mm
Weight	7.7 kg (17.0 lbs)
ELECTRICAL	
Power Input	100-240VAC, 50/60hz, Auto Switching
Power Supply	Dual Redundant Hot Swappable
Power Consumption	220W
SAN STORAGE REQUIREMENTS	
Protocol	iSCSI, Fiber Channel
Hard Disk Drive	Security Surveillance Grade HDD
ENVIRONMENTAL	
Operating Temperature	0° to 40°C (32° to 104°F)
Storage Temperature	-40° to 70°C (-40° to 158°F)
Operating Humidity	20% to 80% RH, non-condensing
Non-Operating Humidity	5% to 95%, non-condensing
Operating Altitude	-16m to 3048m (-50ft to 10,000ft)
Note: The server room temperature can be affected by air conditioning system, floor layout, rack configuration, etc. The NVR air intake temperature, can be significantly higher than the room temperature. To prevent system and hard drive failure, make sure the air intake temperature of the Server is always within the operating temperature range.	
ACCESSORIES SUPPLIED	
Rack Mount Kit	Brackets, rails and connecting hardware
Power Cord	Based on country; 3 prong molded connector, 1.8 m (6 ft) Cord Length
USB Mouse	1 nos
Documentation	Manual on CD
FORTESMONITOR CLIENT PC REQUIREMENTS	
Processor	Intel® Single Core 2.4 GHz (minimum) Intel® Dual Core 2.0 GHz (recommended)
Memory	1 GB RAM (minimum) 2 GB RAM (recommended)
Video Card	PCI Express, DirectX 9.0c compliant with 128 MB RAM (Intel® GMA 900, NVIDIA® 6600, ATI X1300 or higher)
Network Interface	100 Mbps (minimum) 1 Gbps (recommended)
Hard Disk Space	500 MB
STANDARDS COMPLIANCE	
Emissions	FCC Part 15 Subpart B Class B EN 55022:2010 IC ICES-003 Class B
Immunity	EN 55024:2010
Safety	UL 609501, EU: 2001/95/EC GSPD

ORDERING INFORMATION	
PART NUMBER	DESCRIPTION
INR100-300D-2	Infinique FortesServer, 100 Channels IP Device Licenses, Intel® XEON™ Dual Processors, Dual RJ45 Gigabit Ethernet LAN Ports, Dual Power, iSCSI Interface to SAN Storage, 500 Mbps Network Bandwidth, 180 Mbps Record Bandwidth, DDR3 SDRAM 16GB
INR64-300D-2	Infinique FortesServer, 64 Channels IP Device Licenses, Intel® XEON™ Dual Processors, Dual RJ45 Gigabit Ethernet LAN Ports, Dual Power, iSCSI Interface to SAN Storage, 500 Mbps Network Bandwidth, 180 Mbps Record Bandwidth, DDR3 SDRAM 16GB
ICMS08	FortesMonitor License for 128 Cameras and 8 NVR's (Free of cost)