

The Total Video Network Software Solution



FEATURES

Pilot Enterprise is a complete management software system for video, audio, data, environmental sensors and network switches. Pilot software provides a wide range of product integration. As part of afi's "Open Path" commitment to system integration, Pilot software operates with major manufacturers of IP Cameras, Video Streamers and DVRs and includes ONVIF support. "Open Path" assures you that Pilot systems will continue to integrate with today's and tomorrow's video hardware components.

When combined with video codecs, Pilot software can easily integrate with existing legacy analog systems and new IP security products to form a complete hybrid solution. In addition to video, Pilot software reads alarms and status of afi's Net IO series of products to form a complete network monitoring command center. Pilot's unique methods for handling data and video assures fast response search times and the ability to interact with data platforms from a majority of access control and other data generating sources. Pilot operates on industry standard server and storage solutions. Video sources can be MJPEG, MPEG-4, H.263 and H.264. Video, data and audio are recorded in a secure format for limited access can be converted into standard formats. Pilot software provides complete management for IP security and surveillance networks.

Dynamic Stream Control offers the ability to change resolution, frame rate and Group of Pictures (GOP) on the fly or at preprogrammed times or conditions to

respond to specific events. The system can be programmed for three types of recordings scheduled (time lapse), manual and alarm/event recording.

Data Integration with data parsing for interface with ATMs, Access Control Systems, Point of Sales Systems and Cash Registers.

Report Generator: auto multiple page generator for email with built in PDF generator.

Grouping of servers allows for building large scale multiple server solutions to meet requirements for tens, hundreds and even thousands of cameras.

Redundant and mirror server programming to assure continued operation capturing every video, audio and data input in the event of server failures.

Pilot Enterprise is licensed per channel. Its cascade ability allows it be combined with any number of servers to handle hundreds and even thousand of channels. Pilot Lite is designed for smaller business solutions. These smaller systems can be configured for 4, 9 or 16 cameras.

Pilot Enterprise includes advance user and group functions. All features can be accessed over the network using secure permission levels.

Pilot Management Features

- Deployable for single camera up to 1000+ video sources, alerts from Commander and Scout
- Intelligent and fast recording engine supporting MJPEG, MPEG4, H263 and H264 and HD video streams
- Alarm center connection for video verification of alarms
- 100% camera vendor independent and wide support for video sources (>1700 supported devices).
- Easy installation and configuration
- User-rights functionality with username and password for secure login
- Wide range of user and group profiles for company wide operation
- Intelligent architecture offers fast image exchange
- Dynamic floor plan support for fast situational awareness and response
- Event notification with sound, pop-up or e-mail
- Support for Pan/Tilt/Zoom cameras and pre-set functionality
- Direct management of I/O embedded in the application
- SQL database for storage of information
- Advanced time line display for fast search and playback of recorded video and events
- Log and audit trail for management reporting
- Proactive watchdog functionality for maximized reliability and uptime
- Support for pre-defined video views for fast situational awareness and multiple location overview
- Intelligent bandwidth management utilization for minimization of required bandwidth
- Client to Client Communications
- a. Instant messaging communications with text recording
- b. Make Voice communications VoIP with ability to record conversations
- c. Transfer of screen images including Export and Archiving of Recordings
- Transfer of screen images between clients
- Redundant server operation
- Touch Screen Support
- Save and restore function.
- Unique alarm profile generator providing the ability to create custom alarm triggers from multiple input sources
- Advanced remote monitor application
- Expanded keyboard (Pelco and Panasonic) and joystick support
- Multi language support

Hardware Requirements

Hardware	Client	Server	Server/Client
CPU	Intel® i3, i5, i7 or Xeon E3 series processor with support for: Hyper threading and HD graphics. Intel® i7 2600 Sandybridge or better recommended	Intel® i3, i5, i7 or Xeon E3 series processor with support for: Hyper threading and HD graphics. Intel® i7 2600 Sandybridge or better recommended	Intel® i3, i5, i7 or Xeon E3 series processor with support for: Hyper threading and HD graphics. Intel® i7 2600 Sandybridge or better recommended
RAM/Internal Memory	4GB	8GB	8GB Use 12GB with Full edition of SQL Server
Video card	VGA accelerator with minimum of 1024MB local memory Direct Draw, 3D support. DirectX 9.0c or higher. In case of multiple displays 1024 MB local memory per graphics card. (Cards need to be identical!)		In case of using your server in combination with the client software: VGA accelerator with minimum of 1024MB local memory Direct Draw, 3D support. DirectX 9.0c or higher. In case of multiple displays 1024MB local memory per graphics card. (Cards need to be identical!)
Hard disk capacity for recordings	min 250 GB (Used for exports, Actual capacity varies depending on usage and needs)	min. 500 GB (Actual capacity varies depending on operating environment) Writing speed should be equal to number of recording streams without buffering. Example: 10 cameras x 3 Mbit = Minimum writing speed (I/O speed)= 30Mbit	min. 500 GB (Actual capacity varies depending on operating environment) Writing speed should be equal to number of recording streams without buffering. Example: 10 cameras x 3 Mbit = Minimum writing speed (I/O speed)= 30Mbit
Hard disk (for the application)	250MB	250MB	250MB
Network	100Mbit (preferred 1000Mbit) (Depending upon system bandwidth calculation)	100Mbit (preferred 1000Mbit) (Depending upon system bandwidth calculation)	100Mbit (preferred 1000Mbit) (Depending upon system bandwidth calculation)
Joystick	American Fibertek DSC100 Axis 295 CH Products USB Pro		

Software Requirements

Software	Client	Server	Server/Client
Operating System	Windows® 7, Pro or Ultimate	Windows® 7, Pro or Ultimate Windows® 8.1 Pro or Enterprise	Windows® 7, Pro or Ultimate
	Windows® 8.1 Pro or Enterprise	Windows® 2003R2 SP2, Standard or Enterprise Windows® Server 2008 R1 SP2, Windows® Server 2008 R2 SP1 Standard or Enterprise Windows® Server 2012 Standard or Enterprise	Windows® 8.1 Pro or Enterprise
	* All service packs and Windows updates always fully installed	* All service packs and Windows updates always fully installed	* All service packs and Windows updates always fully installed
SQL Server software		Microsoft SQL server 2005 Express Edition <u>with SP3</u>	Microsoft SQL server 2005 Express Edition <u>with SP3</u>
		Microsoft SQL server 2005 <u>with SP3</u>	Microsoft SQL server 2005 <u>with SP3</u>
		Microsoft SQL server 2008	Microsoft SQL server 2008
		Microsoft SQL server 2012 (Only Full Edition, Express Edition not recommended)	Microsoft SQL server 2012 (Only Full Edition, Express Edition not recommended)
Internet browser	Internet Explorer (latest version)	Internet Explorer (latest version)	Internet Explorer (latest version)
Additional software	.NET Framework 3.5SP1	.NET Framework 3.5SP1	.NET Framework 3.5SP
	Adobe Reader (latest version)	.NET Framework 4.0 (if SQL 2008/2012) Adobe Reader (latest version)	.NET Framework 4.0 (if SQL 2008/2012) Adobe Reader (latest version)

Additional Recommendations

The **maximum** number of frames shown per client may not exceed 600 Frames Per Second (Depending on hardware configuration!) This reference is based on a computer with a recommended hardware configuration in an Intel® Core™ i7-2600 3.4Ghz/6GB FSB 1333 Win7-Pro 32 bit environment. While using megapixel or high definition cameras, keep in mind that performance may significantly decrease.

The computer must be only used for this specific application. The operation of other programs will decrease performance and potentially terminate operation.

Pilot is a software system designed to operate on a dedicated server. Client operations do not require the installation of additional software for its specific operations. Please note that the operation of a single client/server computer can significantly decrease performance and lead to a termination of operations. It is only possible to operate the software inside a virtual machine like Microsoft HyperV under strict guidance. Operations of the software inside Virtual Machine software, or running the software on a server that also runs Virtual Machine software may cause termination of operations or a decrease in performance.

The number of applications which can operate at same time is dependent upon the hardware configuration of your client. Each application adds to memory and processor requirements and can result in client operation problems and even loss of client server communications. If you require the operation of many simultaneous tasks, your client should have high speed dual or quad core processing approaching 3Ghz and available memory of 4 or 8 GB. As programming is maintained on the server, loss of client/server communications does not necessarily mean your system as stopped operating.

It is recommended to configure your server with the operating system and video recordings on separate physical disk drives.

Pilot Feature Matrix

Base License and Maximums	Pilot		Core Features	Pilot	
	Pilot Lite	Enterprise		Pilot Lite	Enterprise
	Base=Max	Base/Max	MJPEG Support		
Max Number Of Sites	1	5/Unlimited	MPEG4 Support		
Max Number Of Subsites Per Site	0	5/Unlimited	H264 Support		
Max Number Of Video Channels/Cameras	4, 9 or 16	Unlimited	ONVIF Support		
Max Number Of Audio Channels	1	1/Unlimited	Multiple Stream Per Camera Support		
Max Number Of Data Channels	-	0/Unlimited	Hybrid Support (Needs certified Hardware)		
Max Number Of XML Channels	-	0/Unlimited	Audio Support (Full Duplex)		
Max Number Of RSS Channels	-	0/Unlimited	Megapixel/HD Support		
Max Number Of Sensors	4, 9 or 16	10/Unlimited	Tour Support		
Max Number Of Actuators	4, 9 or 16	10/Unlimited	Time Lapse Recording		
Max Number Of Dynamic Floor Plans	1	5/Unlimited	Manual Recording		
Max Number Of Schedules	5	Unlimited	Recording On Event		
Max Number Of Profiles	5	Unlimited	Multi Lingual Support		
Max Number Of Sensor Blocks Per Profile	4, 9 or 16	Unlimited	Watchdog Support		
Max Number Of Combination Blocks Per Profile	3	Unlimited	SAN Support		
Max Number Of Action Blocks Per Profile	4, 9 or 16	Unlimited	Graphical/Scalable Time Line Search		
Max Number Of Predefined Views	3	Unlimited	Bookmarking/Tagging Support		
Max Number Of Tours	3	Unlimited	Export Of Recordings		
Max Number Of Monitors Per Client	2	4	Archiving Of Recordings		
Max Number Of Clients	2	3/unlimited	Encrypted Export of Recordings (Watermark)		
Max Number Of Client Sessions:	2	2/Unlimited	Report Generator Support		
Max Number Of Web Sessions: (Phone, PDA, Web)	1	2/Unlimited	Event Manager Support (I/O, TCP-IP, SOAP)		
Max Number Of Users	3	5/Unlimited	PTZ Support		
Max Number Of User Groups	2	Unlimited	Joystick Support		
Max Number Simultaneous Playback Of Recordings	4	9	Rectangle Zoom Support		
Max Number Of Live Views Per Screen	16	36	View Presets Support		
Advanced Features			Preset On Event Support		
Group and User Management	-		Preset Tours Support		
Instant Messaging/Chat Support	-		Digital Zoom Support		
Bandwidth Management support	-		Manual Control buttons		
Group of Server Support	-		Interactive Floor Plan Support		
Keyboard Support (Serial/IP/USB)	-		Webserver support (Smartphone, PDA, Web)		
DVR Support	-	Option	Email Support (Text and Snapshots)		
Audit Support	-	Option	Email On Event Support		
Redundancy Support	-	Option	Advanced Motion Detection Analytics	-	
Virtualization Support	-	Option	Touchscreen support		
Broadcast Support (multicasting)	-	Option	Action Log Support		
Virtual Matrix Support	-	Option	Multi Client Support		
Remote Mointor Support	-	Option	POS Support	-	Option
Advanced Management Reports	-	Option	Content Management System Support	-	Option