Maestro DB

Video over IP and outdoor IVA server

Features & Benefits ▼

- Hybrid solution for IP and analog systems
- Embedded pseudo 3D IVA algorithms
- Multiple simultaneous IVA processing per input
- Meshed architecture with no central server or single point of failure
- Ability to fully operate and configure the system from any point on the network
- Automatic fail-over and recovery
- Virtually unlimited scalability
- Synchronized playback of video for powerful event awareness
- Third party integration via XML Application Protocol Interface (API)

INTELLIGENT VIDEO ANALYTICS (IVA)

DESCRIPTION

Maestro DB is a hybrid Video Management Software (VMS) paired with poweful IVA that is optimized for outdoor security applications.

The core system can run on any standard PC and interface to analog and IP video from a wide range of manufacturers and technologies such as HD (High Definition) and Megapixel cameras.

The Maestro DB system uses a physical layout of units (with analog or digital video interface) to create a flexible, meshed, distributed archtecture that enables sharing and collaboration of data, processing and storage between all units on the network. This unique architecture results in high data redundancy with no single point of failure (as opposed to client server architecture).

The sofware and hardware flexibility allows the system to be tailored to specific applications and allows for efficient utilization of network, video and physical infrastructure in new and existing sites.

SOFTWARE APPLICATIONS

- IVA (NMD, etc.)
- Joystick / Pan-Tilt-Zoom (PTZ) controller
- Network Video Recorder (NVR)
- Video matrix / video wall
- Client workstation
- Virtual PLC

SUPPORTED ENCODING TECHNOLOGIES INCLUDE

- Megapixel
- HD
- H264
- MPEG4
- MJPEG

MAIN VMS FUNCTIONS
- Real-time flexible video matrix
- Video storage - locally or remotely
- Configurable pre / post alarm recording per channel
- Synchronized playback of multiple independent video clips
- Shared display area, managed simultaneously from different control points
- Alarm and control center
- Joy stick / PTZ controller

STATE-OF-THE-ART IVA
Developed as a virtual Perimeter Intrusion Detection System (PIDS).
The IVA algorithms are built to tolerate harsh weather conditions such as wind, rain, snow and perform extremely well in dynamic environments such as sea waves, moving trees, dynamic shadows, clouds, glare, extreme daylight or poor visibility conditions.
Maestro DB offers an extensive library of Intelligent Video Analytics (IVA) for applications such as “abandoned object” in a restricted area, unusual behavior by a pedestrian, virtual fence around protected objects and virtually any condition between 2 or more defined zones.
The IVA allows you to distinguish between human objects and small animals by incorporating pseudo 3D and other algorithms.
- PTZ cameras - IVA for PTZ cameras based on preset positions
- Video stabilizer - to reduce camera shaking and movement effects
- Multiple camera synchronized IVA - holistic analysis of many cameras by sharing data between distinct cameras to improve performance IVA
- Post recording analysis - for post event (offline) investigation

Senstar’s IVA solution processes thousands of channels around the world.
The algorithms have been continuously improved for the past 15 years, putting Maestro DB on the forefront of technology.

GROWTH PATH
The system incorporates sophisticated tools that enable modifications and changes to the functionality and operational set-up which can be executed by the System Administrator / user rather than by the manufacturer’s programmers.
These tools include:
- A rich interface layer (API) - XML over TCP / IP for import and export with external systems, applications
- A robust application generator that enables the system administrator to modify the application with no need to reprogram the software
- Sophisticated set-up tools that enable fast and automated set-up of highly populated sites, using wizards to apply to families and groups, etc.

TECHNICAL SPECIFICATIONS
HARDWARE REQUIREMENTS
- PC
- Graphic card - NVIDIA

OPERATING SYSTEMS
- Management software - Linux
- Workstations - Linux or Windows®

VIDEO COMPRESSION FORMATS
- MPEG4
- H264 / MPEG4 (part 10)
- MJPEG

VIDEO STREAMING PROTOCOLS
- RTP / RTSP
- Unicast
- Multicast

INPUT VIDEO FORMATS
- 1 / 2 / 4CIF
- D1
- HD (High Definition)
- Mega-pixel
- Analog (via encoders)

TESTED IP CAMERAS / ENCODERS
- DVTel
- SlingBox
- Axis
- Mavix
- DreamBox

SUPPORTED PTZ PROTOCOLS
- Pelco P / D
- Bosch
- DVTel

INTEGRATION TOOLS PACKAGES
- API - XML over TCP / IP
- Integration emulator
- C#, dot net and Java code samples
- DLL for decoding and displaying video for Windows® XP

VIDEO DISPLAY
- Full screen
- Matrix of 2 x 2 ... 4 x 4 and many more
- Picture in picture
- Color graphic overlay
- Pop up window on any remote PC

GRAPHICAL USER INTERFACE (GUI)
- JPEG maps + icons + graphic vectors
- Zoom map window
- Objects organized in heirarchical tool bar

ALARM FUNCTIONALITY
- Add bookmark
- Move PTZ into preset
- Load scenario (macro)
- Switch dry contact
- Export message via TCP / IP
- Change set-up

RECORDING
- Up to 128 channels per server
- Local and / or remote
- Modes:
  - Instant
  - Continuous
  - Events
  - Pre / post alarm
  - Summary
  - Panic pre-alarm

PLAYBACK
- Continuous
- Alarms / events only
- Multiple channel synchronized playback
- Use mouse as pure joystic

JOYSTICK FUNCTIONALITY
- PTZ control
- Presets (save, jump)
- Lock / unlock control
- Video clip control (play, pause, FF, REW, zoom, etc.)
- Video clip selection
- Camera and monitor switching
- Mute alarm(s)
- Sensor activation / reset
- Conflict resolution by hierarchy

Specifications are subject to change without prior notice.