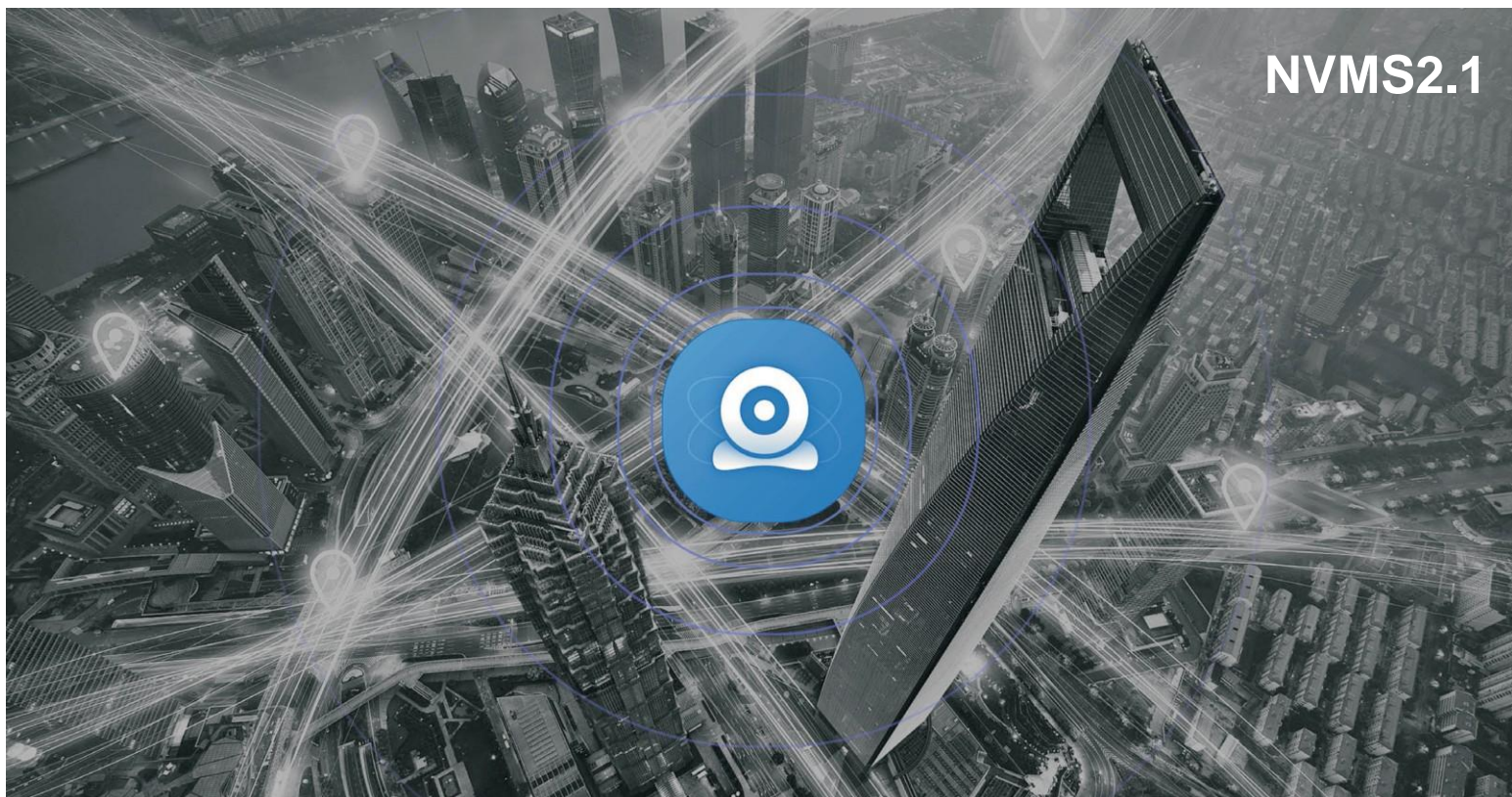NVMS2.1

NVMS Standard
Integrated Security Management Platform

NVMS Standard is a newly video surveillance management platform released by TVT, featuring seamless access to all TVT's products and encoding devices of the famous manufacturers in the industry. With the powerful capability of video surveillance management, it supports real-time preview, record storage, record playback, record downloading, alarm linkage, decoding on TV Wall, keyboard control, vehicle entrance and exit management as well as intelligent analytics. Therefore, NVMS Standard can meet the client's demands of centralized video management and can be widely used in the video surveillance of industrial park, education, banking, chain stores and buildings.

Features

Device Access

- Supports TVT private protocol, ONVIF protocol, standard RTSP, SDK
- Supports adding devices by manually entering IP address, domain name, serial number, URL or IP range, by auto search, or by auto report
- Setting the network of the devices before quick adding them

Resource Management

- Supports channel (or camera) group management and device area management
- Supports centralized management of decoding devices, encoding devices and platform services
- Supports hot spare function of storage and transfer servers

Device Configuration

- Supports the basic configuration and user management of the devices
- Supports the date, time and time zone, network, email and DDNS configuration of the devices
- Supports getting the information of the device's HDDs
- Supports multi-OSD setup of one channel
- Supports the camera's ROI, video mask and motion detection settings
- Supports intelligent analytics
- Supports the camera's resolution, frame rate, VBR/CBR, image quality and bitrate settings
- Supports the camera's brightness, contrast, saturation, hue, AZ settings, etc.
- The parameters of multiply devices can be set at one time
- Supports configuring record plan for storage devices
- Supports device application scenes, face capture source and face capture schedule settings

User Management

- Supports multi-user talk
- Supports user MAC address binding
- Supports user lock
- Supports different users and permission
- Supports permission based on resources and operation
- Permission can be assigned to each channel (or camera) of the device

Snapshots

- Supports snapshots in the live view mode and playback mode
- Supports triggering camera snapshot

Live View

- Supports multi-screen display mode:
  Supports 1/2/3/4/6/8/9/10/13/16/117/21/25/33/36/49/64/84/100 standard screen display mode
- Supports 2/4/6/7/9/12/16/24/36/48 widescreen display mode; Supports customized screen display mode
- Supports corridor mode
- Supports adding fisheye and panoramic cameras
- Supports channel group auto-switch
- Supports stream self-adaption and one-key stream switch
- Supports aspect ratio switch
- Supports steam copy
- Supports multi-monitor display
- Supports instant playback
- Supports decoding with hardware
- Supports device's smart area and result display
- Supports smart view mode

Two-way Talk and Broadcast

- Supports remote listening
- Supports two-way talk
- Supports 8K or 16K audio sampling rate
- Supports multiply audio formats: G.711 a-law, G.711 u-law, G.722.1, G.726, AAC, MP2L2, PCM
- Supports voice broadcast and audio file customization

PTZ Control

- PTZ remote control, including preset, track and cruise calling and settings
- Supports zoom in/out and focus+/-
- Supports PTZ protocol configuration
- Supports 3D positioning control (the target can be quickly positioned and captured by box selection
- Support scheduled tasks, wiper one-button guard and one-button cruise configurations

Record Playback and Backup

- Supports multi-channel simultaneous and asynchronous playback
- Supports multiple record source playback
- Supports multi-window playback
- Supports playback by channel, time slice, time, tag and event search
- Supports one-key stream switch, aspect ratio switch
- Supports playback by frame, dragging the progress bar, fast forward or slow speed
- Supports record backup: manual backup, scheduled backup, backup by channel, time, tag and event search; supports cutting records and backup in the playback interface
- Supports smart playback by face or license plate
- Supports POS record playback
- Supports pre-alarm, post-alarm and offline record settings

Record Storage

- Multiple storage types, such as IP-SAN, NAS and iSCSI
- Supports schedule record, alarm linkage record, manual record
- Supports image and video storage

Alarm

- Supports multiple alarm types: Motion alarm, sensor alarm, smart event linkage alarm, line crossing counting linkage alarm, face match linkage alarm, access control linkage alarm, arming or disarming linkage alarm, allow/block list vehicle alarm, etc.
- Supports multiple alarm linkages: Platform recording, client message pop-up, client preview, audio, decoding on TV Wall, device recording, device snapshot, local recording, local snapshot , email reminder and so on
- Supports arming or disarming.
- Supports SOP (alarm handling process) configuration
- Supports alarm information export by time period
- Supports manual alarm output

Decoding On TV Wall

- Supports working with decoders or decoding matrix to control multiple video walls
- Supports12MP/ 8MP/5MP/4MP/3MP/1080P/720P
- Supports decoding on TV wall in the audio format of G.722, G.711A, G.711U or AAC
- Support live view and playback on TV wall
- Supports 1/4/9/16/25/36 screen mode
- Supports multiple splicing modes: 1x1, 1x2, 2x1, 2x2, 3x1, 3x2, 3x3, 4x1, 4x2, 4x3, 4x4, 4x5, 4x6, 4x7, 4x8
- Up to 999 plans configurable
- Supports channel group and plan sequence view
- Plan task configurable
- Supports triggering decoding on TV wall; customized alarm window (unlimited)
- Supports notification for node offline

Electronic Map

- Supports Baidu map and picture map. The picture map supports JPG, BMP, PNG and TIF formats
- Supports multi-level maps; adding, modifying, moving, deleting hot spots (monitoring points, sensor)
- Supports layer edition and display as well as self-defined layer
- Supports alarm linkage, like icon flickering, video pop-up
- Video preview, image search by image; E-map monitoring

Data Dashboard

- Self-defining the desired display modules, including video
- Window, face comparison, body temperature measurement, E-map, smart snapshot, traffic flow statistics and remaining parking space

Line Crossing Counting

- Supports the threshold settings of people/motor vehicle/non-motor vehicle entering and exiting
- Supports daily, monthly people/motor-vehicle/non motor vehicle flow display by chart
- Supports historical people/motor vehicle/non-motor vehicle counting displayed in a histogram or curve graph and exported to an Excel
- Supports single/multi-channel real-time statistics and daily/monthly/yearly statistics via E-map
- Historical data searched by single/multi-channel, time period and line crossing and exported to a curve graph or histogram, or an Excel

Group Management

- Supports binding devices and people group; the personal information of the group will automatically transfer to the device database and then these people will be given access permission.
- Supports batch adding and importing face pictures; people attribution information configurable
- Supports vehicle registration to allow or block list
- Supports personal information registration to person list or block list

Search

- Supports image search and playback by face image (captured face image or uploaded face picture) and all searched face images can be viewed via the list or track on the E-map
- Supports face comparison result search and export
- Supports license plate comparison result search and export
- The captured face/human body/motor vehicle/non-motor vehicle images can be searched and exported

Face Attendance

- Attendance time configurable
- Supports flexible attendance
- Supports multiple shift settings for one person
- Supports viewing today's attendance status
- Supports attendance check point settings
- Supports real-time display of attendance overview
- Supports displaying the employee's photo and the compared time on the right panel after successful comparison
- Supports multi-screen display mode (1/4/8/9/16); the face attendance video can be projected onto a sub-screen
- The attendance record can be viewed and filtered by day, week, month, working day/ non-working day/late/leaving early/overtime working/normal working/check-in /no check-in
- Supports attendance display by week, month or year
- Supports displaying attendance status and overtime working status in the form of a list, which can be exported to an Excel
- Supports sending attendance report regularly
- Supports attendance handling log search

Face Greeting

- Supports self-defining the style and other configuration items of the greeting interface
- Real-time visitor information display on the client
- The VIP visitor 's photo will be shown on the pop-up window of the sub-screen and the corresponding audio will be broadcast simultaneously
- Single visitor loop play time can be configured in seconds
- Greeting pop-up window quantity, height and duration configurable
- Support visitor access records search

Body Temperature Measurement

- Human temperature and mask status real-time view
- Record search by filtering conditions
- Recent seven-day statistics and statistical display
- Temperature exception pop-up window, information editable (including whether to go to the affected area, name, phone number, ID number, address, etc.)
- The record can be searched according to time range, temperature range, whether to go to the affected area, processing status and key words, and it also can be exported to an Excel
- Historical statistics: curve chart, bar graph and Excel can be exported and the data of each time period can be displayed.
- Supports a lot of alarm linkages based on over temperature people detection
- Supports TVT thermal camera or the third-party temperature measurement device access

Industrial Temperature Measurement

- Real-time video preview of security thermal cameras
- Real-time display of point/line/area temperature
- Supports temperature rule settings and real-time display of temperature curve chart
- All temperature data can be searched and exported as needed

Parking Lot Management

- ANPR camera access
- Total/remaining space display
- Barrier gate control, manual/auto opening
- Historical vehicle entering or exiting information search and export
- Adding, modifying and deleting vehicle information and their parking permission
- Entrance/exit lane configuration
- Overstaying parking search and self-defining overstaying threshold
- Block list management (adding, modifying and searching vehicles to /in the block list)
- Supports statistics of vehicles entering, exiting and staying in the parking lot and these statistical data can be exported

Visitor Management

- Supports visitor list adding and visitor record search
- Supports displaying the visitor's photo and the compared time on the right panel after successful comparison
- Real-time display of the number of today's visitors, visitors to be approved and the current visitors

Face Access Control

- Real-time display of pass record
- Supports access control device management
- Supports answering/reject the call, talk with the device end
- Supports pass record search and incoming call search

Others

- Supports keyboard control
- Supports overload protection
- Supports expansion through license file authorization
- Supports operation and maintenance management:
- Operating, system and alarm logs can be searched and exported by time, type and user
- Supports B/S client, C/S and Android mobile APP
- Supports illegal lock
- Supports password protection and password retrieve by dynamic code.

Components

Service	Client
NVMS Standard Server	PC Standard Client Mobile APP

Specifications

Capability of Management	
Max. number of channel access	2048CH
Max. number of device access	2048
Max. decoding capability	128 CH
Max. number of transfer server access	32 servers
Max. number of storage screen display	32 servers
Max. number of screen display	100 CH, auto-switch supported
Max. number of plan view	64
Max. number of users	1024 users (a maximum of 64 users preview simultaneously)
Max. number of synchronous playback	16 CH

Recommended Configuration

Configuration	Recommended Hardware Configuration	Recommended System Configuration
Server Configuration (Minimum Requirements)		
Authentication Server	Intel Core Processor I3- 6100 3.7GHz or above/4GB DDR4 ECC / 120GB SSD /dual gigabit Ethernet ports	Windows Server 2012 /Windows Server 2016 /Windows10 Professional/Enterprise /Windows11 Professional/ Enterprise
Transfer Server	Intel Xeon Processor E3- 1225V5 3.3GHz / 8GB DDR4 ECC / 120GB SSD /four gigabit Ethernet ports	Windows Server 2012 /Windows Server 2016 /Windows10 Professional/ Enterprise /Windows11 Professional/ Enterprise
Client Configuration (Minimum Requirements)		
Monitor Client	Intel Core Processor I3- 6100 3.7GHz or above / 4GB DDR4 ECC / 120GB SSD / gigabit Ethernet port / NV GT430 or AMD HD6570 or above, 512MB GDDR5 or above (1GB GDDR5 for multiple monitors access) / 500GB	Windows7 (32bit\64bit) or (32bit\64bit) flagship version /Windows8 (32bit\64bit) professional version /Windows10 (32bit\64bit) professional version /Windows11 Professional/ Enterprise /Home
Client Configuration (Recommended Configuration)		
Monitor Client	CPU: I5-7400@3.00GHz; 16G; NVIDIA GeForce GTX 1060 6GB	Win10 64bit Win11 64bit

Typical Application