



Windows NVR application programming interface



OS	Windows 7、Windows 10		
Video codec	H.264		
Audio codec	G711u、PCM、AAC		
Function	Record Mode : Continue Record / Event Record / External Device Integrated Record		
Live monitoring	Maximum 64CH Live View		
Play back	4CH Playback		

Suggest hardware	CPU	RAM	Capture Card
16~36CH	i5	8G	GT-1050-DDR2G
36~64CH	i7	16G	GT-1080-DDR4G

★Product specifications are subject to change without notice; please contact us for the latest information.~

Windows NVR

Contest Management System

Video Broadcast Recording Management System

1. Platform software supports Onvif Profile S.
2. It can record 8 sets or above of IP, network camera IP Camera or network encoder Video server. Can be expanded to 64 groups or above of IP, webcam IP Camera or network encoder Video server.
3. The system adopts the Client-Server architecture, the server provides the database, video storage and broadcast services; the server management software can be configured on one or more servers or workstations, allowing administrators to flexibly manage; the client software supports monitoring, Read, transfer, and centralized monitoring, allowing monitoring personnel to flexibly deploy monitoring methods. Each workstation can perform basic operations through the client software.
4. The system supports multiplex mode: record, playback, parameter setting, live view monitoring, alarm event search, server function status monitoring and other tasks simultaneously.
5. The connection device can be live monitored in the system, any loss of camera connection or error will alert via E-Mail & Line message to personnel.
6. The system supports Multi-Streaming. The number of files and video streams is at least 10 sets.
7. The system has multiple video streaming sourcing function. Users can configure and set the video stream file source according to the actual needs of recording and live view functions.
8. Works normally on Microsoft Windows Server 2003/2008, Windows 7/10; 64-bit version
9. English and Traditional Chinese interface available more at request
10. A digital authenticity system that creates a digital signature for each saved photo to ensure image authenticity
11. Support IPv4 and VPN cross-network settings
12. The utility power jumps the system and causes the system to be unstable. After the power is restored, it will start automatically without manual intervention. After the startup process is completed, the system will resume service immediately.
13. The image management system has a built-in mobile device video streaming system that can instantly receive mobile device images and record images through pre-setting.
14. Need to provide Unicast and Multicast features, saving bandwidth required for remote workstation software network
15. There is no upper limit for the number of cameras in the central monitoring terminal, and the video receiving end depends on the performance of the hardware system, and the camera MAC parameters cannot be locked to avoid increasing the trouble of future maintenance.
16. The images can set the desired watermark text, the position and size of the watermark can be self-planned, and can input 32 characters and modify the font color according to the environment and the background color to highlight the watermark.

Video Performance / Storage Management / System Settings / Device Management

17. A tree-directory mode is required, and indicator icon is required on the tree diagram; it is easier to distinguish device error, and a single software can control multiple servers.
18. Allows setting 1 pair 1, 1 pair N and N to N server for failover function
19. According to different image compression formats of the image terminal device, the system needs to simultaneously record three different algorithm formats.
20. Advanced disk management system provides disk allocation function. Users can have a plan on the allocation for best storage.
21. Backup system video folder and encrypted video file.
22. The video format must conform to the international standards MPEG-4, MJPEG, Wavelet, H.264, etc...
23. Record and save computer screens and other computer workstation screens in MJPEG or MPEG4 or H.264 format
24. Audio recording format: PCM, G.711u and AAC
25. Each channel can display time, date, fps, algorithm, resolution, bit rate and camera name.
26. Motion Recording - pre-alarm recording 60 seconds and post-alarm recording 60 seconds
27. Compliance to Open Network Video Interface Forum (ONVIF) imaging equipment
28. The central image management system needs to support a minimum of 140,000 pixels and a maximum of 12,000,000 pixels subject to algorithm and fps maximum 60 fps.
29. Camera preview setting digital zoom in, snapshot and motion detection.
30. Algorithm and fps can be set individually. And users can customize the parameter file to facilitate the use in different network condition.
31. Capture screens, keyboards, and mouse from any computer connected to the Internet and run Windows and record their screens in the same storage media as CCTV for future search.

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Video Performance / Storage Management / System Settings / Device Management

32. Users or groups can be authorized the rights to live view and playback on video terminal devices
33. The name and camera description of each image terminal device can be customized by the users and description as long as 50 characters.
34. Click the mouse to change live view resolution from remote software for streaming control and better performance.
35. Footage must be saved in given location and encryption format must be exclusive for disclosure of footage.
36. Need to build ONVIF imaging equipment scanning tool. Cameras best be ONVIF compliance for better replacement policy.

User Authority Management

37. Group and users hierarchical management concept.
38. Provides configuration file export and import function saving configuration as backup. In case of PC replaced or the on-site problem clarified, the original configuration restored and copied.
39. Multi-rights management and password settings to avoid system changes and settings out of unauthorized person.
40. Users, groups can be added, modified, deleted, more than 100 user accounts can be created.
41. The control mechanism can be implemented for logging in to the remote IP, and the IP address cannot be logged in in the non-control list.
42. System access rights can be set according to different groups and users, such as: playback, backup, intelligent displacement search, system and device status, PTZ camera control, alarm device settings and status, object record access, manual events Execution, alarm output control, event setting, schedule setting, split screen editing, IP filtering settings, system information, authorization status, and system records; and when the user logs in through the remote software, the function rights are divided into remote local recording, Image capture snapshots, image screen save and delete, set permissions, full screen and minimized display window.
43. Can be set for the group and users, login time schedule, login IP network segment to filter illegal unauthorized or unexpected log in time.
44. The system login time schedule editing plan, the user of the login system needs to log in to the system operation control management within the scheduled time schedule (but the highest authority is not limited)
45. The system logs in to the IP editing plan. Users who log in to the system need to log in to the system operation control management at the specified IP address.
46. When the user enters incorrect password few times, the system can automatically block the account to use.
47. Restrict playback image data permissions for categorized groups and users.
48. Limit account logins for categorized groups and users.
49. Users who can be connected to the server host, including user name, source IP address, user type, and connection time.

Division Management

50. System initial default screen division - 1/4/9/16/25/36/49/64.
51. The user can pre-set the split division and support the setting of multiple split division settings according to the settings.
52. Users can define various different display modes according to their needs. Various split display styles can be presented in real-time monitoring after the system is restored.
53. The central management software can provide users with multi-screen configuration (taking into account the PC performance and supported display card output and other hardware restrictions), instant image wheel jump, real-time image of each host, real-time health status returns of each host, alarms at various points message.
54. Remote monitoring of digital host images, using network transmission convenience, setting in different groups and adjusting time monitoring of each patrol point, setting monitoring group across IP, lens can be set to different groups according to task requirements , you can click on the whole group and select the lens according to the tree structure.

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Contest Management System

System alerts and instant reports

55. Support network connection alarm box, and customize device name and description; alarm input and output points can be individually set trigger mode, and alarm event schedule is provided to manage system alarm function.
56. When motion detection, alarm event, device communication connection and video failure, the system will send the alarm message to the designated workstation user, and inform the display with the alarm message window, text message and voice alarm.
57. The system has full alarm and event management that recognizes device alerts from any connection to the camera or server
58. In the event of an external alarm (any alarm sensor connected to the camera or image server), the system will actively alert the operator to send an email or SMS to the group to warn them of the event, on the camera screen, electronic map Analyze data, turn on pop-up images on LPR, sound an alarm, move the camera to (PTZ) to a preset position. All operations can be set independently on each camera, and all cameras must have a set of operation schedules. The camera will only act according to the schedule.
59. When the alarm event pops out, the system needs to provide a number of corresponding time adjustments for the monitor to respond, including the function of allowing the user to adjust the dwell time of the window.
60. During the preset time, the system takes the initiative to detect motion, that is, the camera screen has no action during the preset time. When the system detects the action, all the above alarm operations will be performed (send email/text) . , pop up the camera image screen, sound an alarm, send an instant message to the operator, PTZ camera can move according to the preset point and trigger the alarm output of the camera and image server)
61. The system provides a manual turn-on alarm function that allows the operator to click on the action list to activate the corresponding functions such as alarm action and beep.
62. When an event occurs, a list of events can be recorded, and a play-back action that can be clicked after the list is queried can be provided to facilitate quick query and viewing of the event of the monitor.
63. Different alarm sounds allow the operator to distinguish between various alarms through different sounds
64. Alert events can send emails to specific users or groups of users
65. When any event occurs, the system can send a built-in input sentence or word from the central system to remind the user via email.
66. When the image terminal device has an alarm output/in point, the central image management system needs to be able to set the alarm output point-in reporting option for each image terminal device.
67. Support when the input point trigger of the connection device, network connection interruption, video error and displacement detection occur:
 - Send email and customize mail content messages and mailing schedules.
 - Sending image through the software, pops out the event and instantly images it in a new window and can customize the software image to report the schedule.
 - Through the warning sound alarm, multiple sets of warning sounds and custom alarm sound alarm scheduling are required.
 - Through the software message alarm, pop out the event alarm message, and customize the alarm message stay time and alarm message window schedule for the user to process sequentially.
 - The warning message reply mechanism, when the remote software receives the event message, the system will force the operator to report the event processing situation through the message window, and can customize the message reply mechanism to execute the scheduling.
 - Execute HTTP Request, issue standard HTTP commands and provide both Post and GET types.
- The records of the event alert are as follows:
 - Includes device disconnection, device reconnection, GPIO alert, image loss, image masking, hard disk anomaly, smart forbidden zone alert, smart dynamic alert, and smart hold zone alert.
 - System events (system information, system error messages, user login information, mail transfer and connection system) can be stored in the system to provide users with access to records.
 - The event record needs to be customized by the user and the number of days to keep (1-365 days).
 - Have an event record browsing window, display by date and event, in order to facilitate users to view the record.

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Contest Management System

IP filtering firewall

68. IP filtering is required, and the source IP address that allows access and denial of access can be set by the administrator; and when the remote user connects to the server host, the administrator has the right to interrupt the connection of the remote user.

System status maintenance

69. Support is provided without providing software, providing digital system status monitoring interface and providing server system information. The information includes CPU usage status, memory (RAM) usage, network card connection total transmission upload/download. Performance and number of remote connected users.

70. It is required to display the total number of devices currently being assembled, the number of devices being enabled, the total number of frames transmitted, the total number of frames connected to the line, the total number of connected status streams, and the remaining space of the video disk.

71. It is necessary to individually display the enabled status of the connected device, and list the IP location of the connected device, the value of the connection code stream, the number of connection frames, the resolution of the connection, and the average number of frames transmitted per second.

72. It is necessary to inform the operator of the currently connected account or connected device.

73. Need to be able to individually set the alarm connection of the connection device port use status.

74. It is necessary to individually set the video connection scheduling status, video scheduling status and alarm scheduling status of the connection device.

75. Need to display video related information of the connected device, including the total number of video frames, total video file size, total video hours/days, remaining video hours/days, limited video size and total video recording capacity.

Additional Features Attached to the System

75. The central image management system needs to support the privacy masking function, and can customize the masking block 3 groups or more in the screen of the network image device, so that the restricted user cannot see the content of the control block (ie, the function of the mosaic). To enhance the security and privacy of the system.

76. Has a joystick interface to control the PTZ camera.

77. With a virtual joystick function, the user can click on the image and drag the mouse to slide in the direction the camera wants to move. Also supports zooming with the mouse wheel.

78. Has priority PTZ lock function.

79. PTZ monitoring system can schedule monitoring based on date and time.

80. The PTZ system can control zoom in / out, aperture, autofocus and auto iris, as well as PTZ absolute and relative camera control for these projects.

81. Manual or automatic PTZ monitoring according to system scheduling.

82. Numbers and names can be applied to the PTZ monitor. Need to use the certified keyboard to use the number to start the program.

83. Can determine PTZ control for each user, so each camera can provide PTZ control for different groups of users and users

84. Allow notification of the last user information using a PTZ mobile camera.

85. Support PTZ camera control, and can set up to 255 preset points, and provide a variety of control interfaces, including software panel control, mouse control and USB joystick control.

86. Focal length (ZOOM & FOCUS) controls function.

87. PTZ up, down, left, and right control functions.

88. IRIS automatic adjustment function.

89. Camera privacy masking function.

90. Full-featured camera preset start position function.

91. Full-featured camera preset point function.

92. Camera auxiliary contact function.

93. PTZ control mode selection function.

Host Backup System

1. In order to ensure the flexibility of surveillance video, the image surveillance system must support different forms of storage space such as DAS or NAS or iSCSI (but the maximum storage format is 4TB by multiple)

2. In order to avoid video recording failure, the video surveillance system must support the backup architecture. When any video host is disconnected, other video backup hosts will automatically take over the video.

3. English Interface in All.

4. System fully supports ONVIF Profile S network camera.

5. Video storage device supports general hard disk, external hard disk and network disk.

6. Allows setting 1 pair 1, 1 pair N and N to N group server backup failover function.

7. In order to avoid video recording failure, the video surveillance system must support the backup architecture. When any video host is disconnected, the backup video host will automatically take over the video. (It takes about 1 minute to take over).