

Integrated Video Surveillance Solution

Bosch Security Systems and Genetec



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Edge Recording & Video Tricking Architecture

Solution summary

- ▶ Supports Bosch IP devices of various platforms (CPP-ENC, CPP3, CPP4, CPP5)
- ▶ Genetec's unified platform provides seamless management of digital video, audio and data across any IP network
- ▶ Leverage unique features such as edge recording and video trickling for increased recording reliability, optimized bandwidth and lower cost of remote site recording by eliminating the need for additional servers
- ▶ Certified support for Bosch Video Recording Manager (VRM) which centrally manages direct-to-iSCSI recordings from Bosch IP cameras and encoders, distributing the load across available storage devices
- ▶ Bosch is a Gold Partner in the Genetec Technology Partner Program

A long-term, strategic partnership has driven a deep level of integration between Bosch IP video devices and the Genetec unified security platform, Security Center, and its video management system, Omnicast. Through deep integration with Bosch IP devices, customers can take advantage of many unique features that provide advanced capabilities for security and public safety applications.

Through built-in failover and redundancy capabilities, and its advanced video streaming engine, Security Center is deployed in some of the world's most demanding security applications, while enabling customers to reduce the cost of operating their IP surveillance system. A flexible architecture allows customers to grow their system over time, while its advanced Federation feature allows multi-site installations to centrally monitor remote independent sites, as if they were part of a single virtual system, improving the security and efficiency of managing multiple facilities.

Integration of motion and tamper detection, as well as Intelligent Video Analysis events are also certified to provide joint customers with advanced notification of potential security risks. Forensic Search capabilities provide customers the ability to rapidly find specific events when investigating recorded video.

Security Center also supports Bosch Video Recording Manager (VRM) technology. VRM centrally manages direct-to-iSCSI recordings from Bosch IP cameras and encoders, distributing

the load across available storage devices. The integration enables the Security Desk to request and playback video from a Bosch camera configured on a VRM server.

This depth of integration gives customers immediate access to the latest technology innovations and cutting-edge products from both Bosch and Genetec.

Compatibility

| Genetec | Bosch devices |
|--|--|
| Security Center Omnicast Standard Omnicast Pro Omnicast Enterprise | Cameras & Encoders All CPP-ENC, CPP3, CPP4, CPP5 IP devices Recording Systems VRM 2.3 / VRM 3.0 Decoders VIP XD VIP XD HDD DIVAR XF/700 Peripheral devices IntuiKey series keyboards |
| | For full list of devices refer to the Bosch firmware-product matrix in the tools section of our IPP portal (www.ipp.boschsecurity.com) |

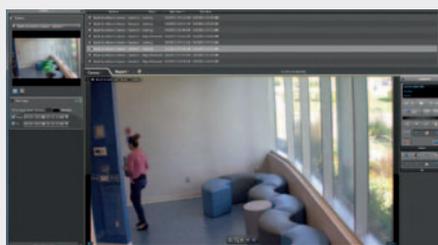
Key features covered with the Bosch & Genetec integration

| | |
|--|---|
| Automatic device discovery | Once a new device is discovered on the network it is automatically added to the list of managed devices in Security Center. |
| Dejitter buffer | Due to optimized image buffering, video will display smoothly regardless of high resolution and framerates. |
| Device configuration | A wide variety of Bosch configuration options are accessible via Security Center. |
| Direct iSCSI replay | Recorded data can be accessed directly from the attached iSCSI drive without establishing a camera connection. |
| Edge recording | Omnicast supports retrieval of recorded video on edge devices. For example, it can be used to secure a copy of the recorded video for redundancy or in case of a network failure. Also, edge recording can be used to avoid streaming video all across the network to save on bandwidth or to deploy a serverless remote location. |
| Forensic search | Forensic Search is supported in Security Center to search for user defined Intelligent Video Analysis (IVA) events from edge recordings. |
| H.264 compression | Using H.264 compression standards ensures that the data rate remains low even with high image quality and can be adapted to local conditions within wide limits. |
| Intelligent Video Analysis events | Up to eight different IVA rules can be configured via the camera interface simultaneously. Security Center can receive these events from cameras equipped with an SD card. |
| Live video transcoding | Security Center supports live transcoding from the Bosch VideoJet XTC XF H.264 for use with Bosch IP cameras that have firmware 5.60 or later. (Additional configuration is required on the unit's web page before adding the unit in Security Center.) |
| Motion alarms | Cameras that contain a built-in algorithm for detecting movement in the video can be used for receiving motion events. |
| Multi streaming | Multiple video streams from a single video encoder or IP camera are natively supported. Configure different video settings for live viewing, remote live viewing (with restricted bandwidth), recording, or other specific usage. Provides maximum flexibility to storage and bandwidth optimization without the need to compromise either one. |
| Playback via VRM | Security Center supports the Bosch VRM 3.0. Recorded data can be tunneled via the VRM without establishing a camera connection. |
| PTZ positioning | Operator can pan, tilt and zoom the camera simultaneously, allowing smooth tracking and PTZ operations. True visual PTZ field of view can be displayed in the map using Genetec Plan Manager. |
| Region of interest | The Bosch Region of Interest feature is supported by Security Center for units with firmware 5.52 or later. |
| Tamper detection | A wide range of configuration options is available for alarms signaling camera tampering. |
| Video trickling | Video trickling leverages the recording capabilities of the edge devices (IP cameras and encoders) by providing the ability to transfer, on demand, the video from the edge and store it in Omnicast for long-term archiving. Downloads on schedule, on event or manually. Downloaded video can be filtered. |

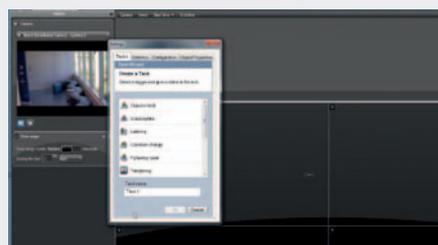
Configure and manage Bosch IP video devices through Genetec software



The integration provides advanced solutions for a variety of security and public safety applications.



Forensic Search is supported in Security Center to search for user defined IVA events in the locally managed video recordings.



Up to eight different IVA rules can be configured via the camera interface simultaneously.

Genetec is a global provider of IP video surveillance, access control and license plate recognition solutions to markets such as transportation, education, retail, gaming, government and more. With sales offices and partnerships around the world, Genetec has established itself as the leader in innovative networked solutions by employing a high level of flexibility and forward-thinking principles into the development of its core technology and business solutions. Genetec's corporate culture is an extension of these very same principles, encouraging a dynamic and innovative workforce that is dedicated to the development of cutting-edge solutions and to exceptional customer care.

For more information, visit: www.genetec.com

The Bosch division Security Systems is a leading global supplier of security, safety, and communications products, solutions and services. Protecting lives, buildings and assets is our aim.

The product portfolio includes video surveillance, intrusion detection, fire detection and voice evacuation systems as well as access control and management systems. Professional audio and conference systems for communication of voice, sound and music complete the range. Bosch Security Systems develops and manufactures in its own plants across the world.

Additional information can be accessed at www.ipp.boschsecurity.com