Building Technologies   ⊞ BOSCH

From	Our Reference	Tel	Eindhoven
BT-SC/MKC	Pieter van de Looveren	+31 40 257-7204	20 April 2018

Q&A Document

Issue   1

Topic   **Bosch and Genetec end-to-end data security solution**

Description As the way we live and work becomes increasingly sophisticated, many enjoy the open connectivity that the Internet of Things enables. What they don't realize, however, is their vulnerability to cybercrime. Online hacking has become so widespread that, by 2021, it's estimated that cybercrime damages will be costing us a staggering $6 trillion every year[1]. All it takes is for a hacker to find a single weak link in a surveillance network to gain access to, and jeopardize, an entire data system.

To cancel out this risk, employ a data security system that's been configured by Genetec and Bosch with vast cybersecurity knowledge to make it completely effective from end-to-end.

https://www.boschsecurity.com/xc/en/news/news/bosch-and-genetec/

1. **Does CHAVE™ work with BOSCH cameras only, or does it work with other 3rd party cameras?**
   Only CHAVE™ enabled Bosch cameras can be used in a CHAVE™ solution. No other camera brands meet the requirements. However, a system can have a mix of CHAVE and non-CHAVE cameras, allowing sites to migrate to a full-CHAVE system over time if desired.

2. **When using Active Directory with Genetec, does this allow Active Directory to drive user passcode or credential changes in the alarm panel?**
   No.

3. **Does SRTP introduce extra delay in point to point communication?**
   This depends on a number of factors, but generally no. Highest impact can be expected on client side regarding CPU load when decrypting the stream. If the client workstation is powerful enough to take on the additional CPU load there will be no difference in performance

4. **Does Genetec support Bosch forensic search on recorded video?**
   In case the Bosch and Genetec end-to-end data security solution is applied the Bosch Video Recording Manager (VRM) is no longer supported. Consequently Bosch forensic search on recorded video is not supported.

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[1] Source - Official 2017 Annual Cybercrime Report.

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5. **Is CHAVE and SRTP unique? Is it only available with Bosch cameras?**
SRTP is not unique. However CHAVE™ is.

6. **Does Genetec support SRTP with other camera manufacturers?**
SRTP is supported with both AXIS and Bosch.

7. **Do we need to order special CTNs for CHAVE enabled security (with special CHAVE certificate loaded)?**
Yes. In the table below, CTNs with a -U suffix have a federally-trusted certificate loaded, those with -B have a commercially-trusted certificate.

Camera	Preloaded certificate	CTN
FLEXIDOME IP starlight 7000 VR (720p@60fps)	Federally-trusted certificate	NIN-73013-A3A-U
	Commercially-trusted certificate	NIN-73013-A3A-B
FLEXIDOME IP starlight 7000 VR (1080p@60fps)	Federally-trusted certificate	NIN-73023-A3A-U
	Commercially-trusted certificate	NIN-73023-A3A-B
DINION IP imager 9000 HD	Federally-trusted certificate	NAI-90022-AAA-U
FLEXIDOME IP panoramic 7000 MP (180-degrees)	Federally-trusted certificate	NIN-70122-F1A-U
	Commercially-trusted certificate	NIN-70122-F1A-B
FLEXIDOME IP panoramic 7000 MP (360-degrees)	Federally-trusted certificate	NIN-70122-F0A-U
	Commercially-trusted certificate	NIN-70122-F0A-B
DINION IP starlight 8000 MP	Federally-trusted certificate	NBN-80052-BA-U

8. **What happens when certificates in cameras get revoked?**
As soon as the certificate of the camera or another device is revoked respectively becomes invalid, Security Center will no longer connect to the camera or other device. Security Center will periodically communicate with the camera's certificate authority (Identrust) to check the certificate revocation status. If the camera certificate is revoked, Security Center will stop communicating with the camera. This is also true if a camera certificate is expired. Genetec plans to add an option to a future Security Center revision to allow the camera to continue to operate with an expired certificate (not a revoked certificate), but to put it into "warning state" with a visible indication in the user interface that there is an issue with the camera. This option will be disabled by default.

9. **Does video trickling also work the end-to-end data security solution?**
No edge playback doesn't work currently with client certificate. Hence, it won't work with CHAVE-enabled cameras.

10. **How many other camera vendors currently work with Genetec Security Center using end-to-end encryption?**
Depends on how end-to-end data security is defined. If we only would refer to streaming data via a secure channel (HTTPS) multiple vendors offer a solution in combination with

Genetec Security Center. Data in-transit as well as at-rest (recorded) is however not encrypted. When using HTTPS for secure streaming of data multicasting isn't supported. Both Genetec and Bosch believe that end-to-end data security involves a couple of steps. One of them is ensuring that data is encrypted both in-transit and at-rest. Moreover, communication should only take place between mutually trusted devices.

A full end-to-end data security solution (using SRTP) is momentarily only supported by both Bosch and AXIS.

11. Does Genetec has a way to guarantee that the user can only access the videos when he/she is using the workstations that are located in the control room?
Yes, this is possible.

12. Will there be documentation on the certificate maintenance procedures (revocation, expiration). Will there be a training?
CHAVE cameras can only be purchased by CHAVE-certified integrators. To achieve certification, integrators must attend CHAVE training offered by SXI, and pass a test provided in the Bosch Learning Management System. Certificate maintenance procedures are part of this training, and documentation is provided.

13. Can Genetec record Bosch metadata when applying the end-to-end data security solution?
Yes, Bosch metadata is recorded on the Genetec Archiver using the ONVIF format.

14. Can Genetec record Bosch metadata when applying the end-to-end data security solution without VRM?
Please refer to question 13. The Bosch and Genetec end-to-end data security solution doesn't support the VRM. Nevertheless, Bosch metadata is directly recorded on the Genetec Archiver using the ONVIF metadata format.

15. How do we quote a Bosch and Genetec CHAVE solution?
   a. What are the requirements for a security integrator to quote, sell, and install a CHAVE enabled system?
   b. This speaks to execution. Is there a "playbook" that outlines all of the deployment details?

Please see the answer to question 12.

16. Which other camera vendors offer the same level of integration with regard to end-to-end data security?
Besides Bosch, AXIS provides a similar level of integration. Differences can exist with regard to the portfolio covered. All Bosch cameras as of FW 6.42 support SRTP.

17. Can all Genetec products leverage our edge video analytics?
Yes, the same support is provided for video analytics from Bosch cameras be it CHAVE-enabled or not.

18. Is IDNR supported in Security Center 5.6 SR 4?
Yes. IDNR is a camera function, and works independent of any VMS.

19. Does AXIS also support CHAVE?
No. AXIS doesn't support CHAVE. This is an unique solution offered by Genetec, Bosch and SecureXperts.

20. Who is SecureXperts? What is their role?
SecureXperts is an information security technology and consulting firm. For CHAVE, SecureXperts loads the digital certificates onto the cameras in their NIST-approved secure facility, performs certificate life cycle maintenance, issues CHAVE integrator smart cards, and conducts CHAVE certification training.

21. Do we already have projects in place that use CHAVE?
The first CHAVE system is installed and operating. Others are in the planning stage.

22. Does SRTP apply to remote viewing, assuming proper network configuration?
Yes it will work.