



PROTELION

Use Cases

Highly Secure Communication for Border Control Authorities

Modern challenges at national borders are becoming increasingly complicated and difficult to deal with. Legal border crossings have to be guarded and controlled, which can be done by border guards checking entrants for weapons, drugs and other contraband, while border surveillance along the green border is confronted with illegal immigration, human trafficking, drug smuggling and terrorism. To meet these challenges, new technologies on the part of video surveillance are indispensable. Modern cameras, video surveillance systems and drones, along the border can accomplish these demanding tasks. However, these video systems must be well protected against new types of cyber and hacker attacks.

Duties and As-Is Situation for Border Control Authorities

High volume of sensitive data and information is transmitted via inadequately protected channels, then centrally collected, processed and stored in unsafe manners

Border buildings and separation facilities are already monitored by video cameras, as is physical access to sensitive building tracts control or computer centers and server rooms

The increased use of drones takes over most of the wide-area surveillance of border installations and the green border. Uninterrupted surveillance using real-time images and location information from drones is essential for border security and rapid intervention, in the event of danger or violations, but is often transmitted unprotected

Project Specification

The enormous amount of sensitive personnel data that is collected every day, needs protected transmission to and from data centers and server farms. Border control officers in the field on surveillance and border control missions need on the other hand a secure and protected remote access to this information

The communication with drones needs to be secured and protected. The transmitted images and information demand protection against eavesdropping but mainly against manipulation and altering of the picture's content and time stamps. On the other hand, controlling and managing communication to the drones have to be protected strongly to keep sovereignty and control over the drones

Video surveillance as an essential security part of border control must be protected against manipulation and especially against DDoS-attacks to prevent downtime and blindness of the surveillance system at all times

Project Implementation

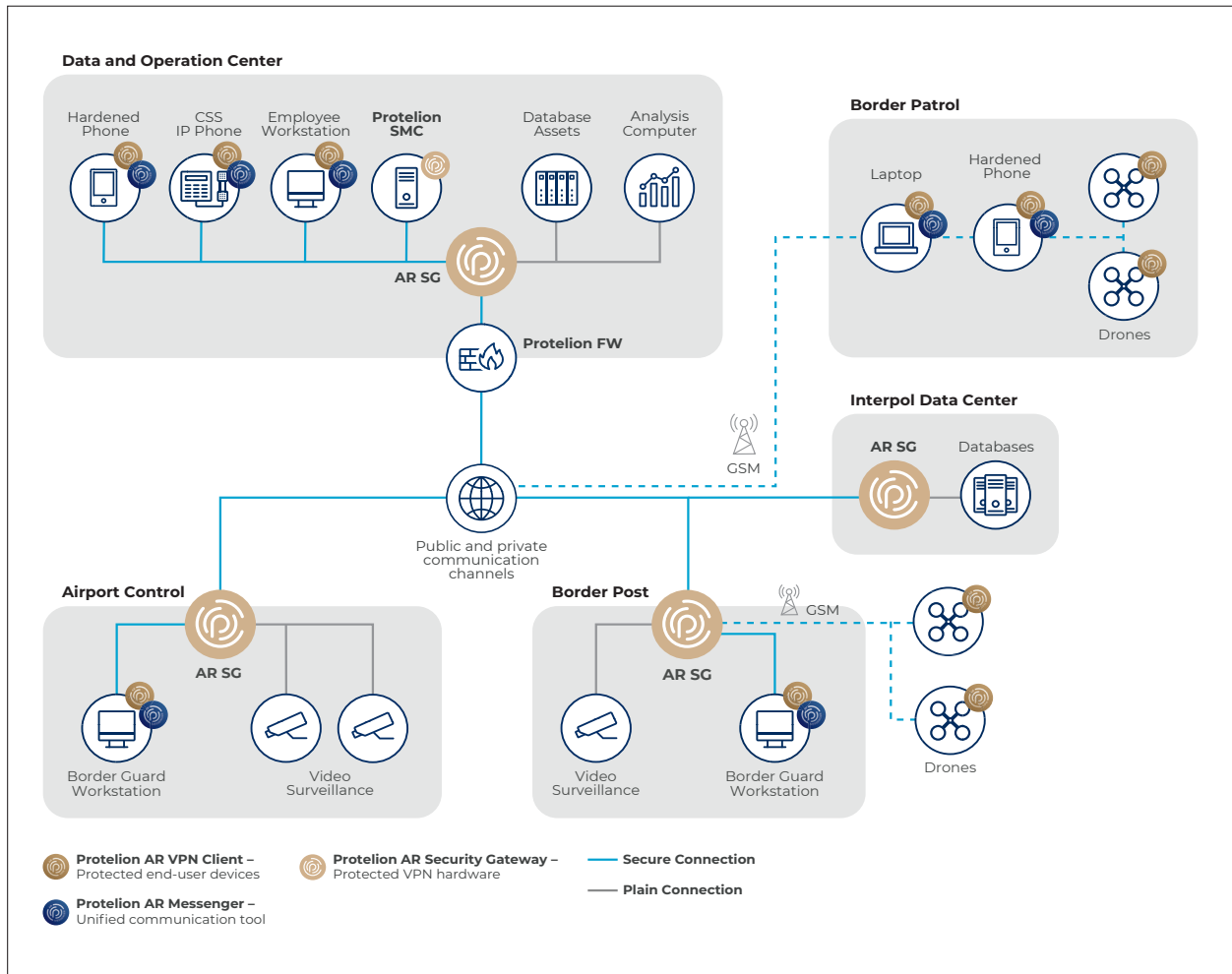
1 Protelion's Security Solutions provide secure and controlled access to databases, IT networks, video surveillance cameras and patrolling drones by protecting the transmission and exchange of their critical data and image information through Protelion's encryption algorithm

2 All data from video surveillance systems, drones and officer's computers are encrypted and can be sent over common public channels to data centers or computer centrals. The solution provides

highest protection against eavesdropping and guarantees confidentiality and integrity of all transferred data

3 Endpoint devices are protected against various types of cyber threats such as malware, zero-day exploits and fileless attacks. The solution furthermore provides increased visibility into the IT environment, allowing to identify vulnerabilities and security gaps that can be exploited by attackers and makes therefore cyber attacks useless

Scheme for Border Control Authorities



Protelion Features

Comprehensive Protection

Protelion Security Solutions offer comprehensive protection against a wide range of cyber threats, using advanced technologies and flexible, modular and cost-effective hardened platforms

Easy Use and Integration

Easy to use and seamless integration of Protelion Security Solutions within existing legacy networks which still use old legacy devices in their systems

Certified AES Algorithm

The implemented and certified Protelion encryption algorithm is designed to protect top secret data and information communication. Its security and performance features meet the customer's expectations to the highest degree

Operational Availability

Protelion Security Solutions provide a protected video and drone surveillance infrastructure with secure remote access for controlling and monitoring the devices' firmware and payload