

High Security “to Go”

Successstory: The German Federal Police chooses
SINA Workstation for the mobile and decentralised workplaces





Flexible, mobile and secure work thanks to SINA Workstation

Secure remote access and the processing of classified documents can also be easily handled by the German Federal Police on the move.

Challenge

In the wake of digitalisation, the trend towards mobile work practices is also leading to profound changes. Public authorities have been facing this challenge for quite a while and are looking for appropriate solutions. On the one hand, the key issue is how to make more flexible working models possible, while on the other hand public authorities and organisations with security functions, such as the police, are often needed “on the spot” – both nationally and internationally. The success of their work today also depends on secure and reliable mobile technology.

Thus, the German Federal Police faced the challenge of providing access to their central systems to employees on international assignments, as well as employees who often work away from the office environment, while at the same time meeting stringent security requirements. Initially, this was implemented exclusively using a terminal server solution with SSL

Internet connection. This meant that general data could be exchanged with sufficient security, however the solution reached its limits on one crucial point: the processing and transfer of classified data.

Working with personal data, such as information from identity and document checks, which must be transmitted to central databases, is part of the Federal Police’s everyday routine. In addition, the occasional handling of classified information, in particular material classified as VS-NfD (restricted), is part of the daily business for many employees of the German Federal Police. However, as classified information can only be processed, stored and transferred using IT systems that meet specific security requirements and that are approved by the highest authority for IT security in Germany, the Federal Office for Information Security (BSI), this was not possible with the existing solution.

Client

Sector:

Public authorities / Police

Organisation:

The German Federal Police performs extensive and diverse policing tasks in order to protect Germany's internal security particularly in the areas of border security, railway police and aviation security. Within the framework of these tasks, the German Federal Police also plays an active role in combating crime.

With its approximately 48,700 employees, of whom more than 40,000 are highly trained law enforcement officers, the German Federal Police operates nationwide at a highly efficient level. It is represented at over a hundred locations and is present at all major transport infrastructure points in Germany.

Requirements

Aiming to equip mobile workplaces with modern technology approved for processing, storage and transfer of classified data, the German Federal Police imposed the following requirements:

- Comprehensive mobile access to data and applications of the German Federal Police's central IT system
- Approval for the handling of information classified as VS-NfD
- Centralised administration of the overall solution
- High-level reliability due to a redundant configuration



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Facts and Figures

secunet has delivered the following solutions and services to the German Federal Police as part of the workstation migration project:

- Provision of a high security infrastructure approved for VS-NfD data for more than 4,500 mobile and decentralised workstations
- Connecting the new solution to the German Federal Police's central IT department
- Continuous consulting on implementation and integration
- Installation of the SINA Install Server for easy administration of the solution
- Administrator training (using the “train the trainer” principle)

The basis for this project was the existing SINA infrastructure used by the German Federal Police to securely connect their locations.

The SINA system architecture operated by the German Federal Police for mobile use essentially comprises the following components:

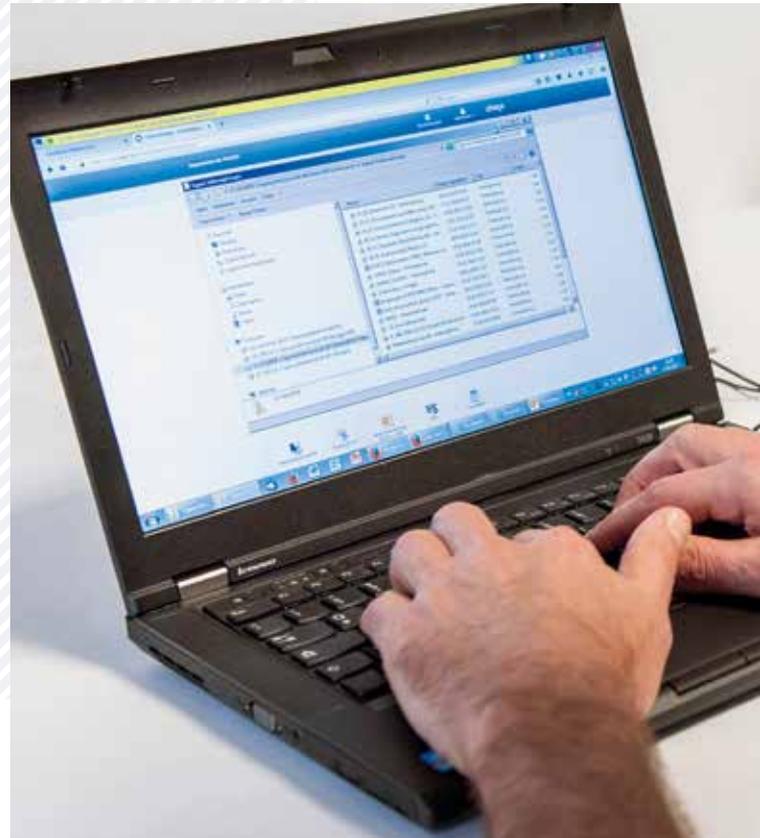
- SINA Workstation S
- SINA L3 Box S
- SINA Management
- SINA Install Server

Tried-and-tested optimum security: SINA technology

SINA, the “Secure Inter-Network Architecture”, which was developed by secunet on behalf of the German Federal Office for Information Security (BSI), enables the secure processing, storage, transfer and a full audit trail of classified documents and other sensitive data.

SINA is an end-to-end system architecture whose security components are entirely interconnected – from the SINA OS operating system and two-factor authentication to IPsec encryption. At the top level, isolated work environments allow for the strict separation of data with different security classifications. This means that commonly used operating systems and applications can be implemented as guest systems so that users can work securely and at the same time conveniently in their own familiar environments – both online and offline.

The portfolio comprises various components such as SINA clients, gateways and Ethernet encryptors. The entire network and all SINA components are configured in SINA Management, allowing the customer to retain sovereignty over cryptography and key management at all times.



Solution

The German Federal Police had already gained extensive experience with SINA: In 2002, it became one of the first SINA customers to realise high-security networking for its sites. The positive experience encouraged the client to meet the new challenge – the secure connection of mobile and decentralised workstations – by also using SINA.

In essence, the new solution consists of SINA Workstation S units, which are connected to the German Federal Police's server areas via highly secure VPN gateways. These SINA L3 boxes are redundantly configured, so that the entire solution remains available even in the event of failures of individual components.

The SINA Workstation S enables the secure transfer, processing and storage of VS-NfD classified documents. As a crypto client, it communicates exclusively via an IPsec-secured VPN and also encrypts all files stored on the local hard drive. Access to the network can be either wireless or wired (Ethernet). Each SINA Workstation S is protected by smartcard-based authentication.

SINA Workstations allow users to work in parallel in multiple separate guest systems with different security levels – thus processing classified documents and using the Internet at the same time. Basic functions, such as administration, allocation of user rights as well as key- and certificate management are implemented centrally via online distribution using SINA Management.



Whether in the office or on the go:
With the SINA Workstation S the
German Federal Police is equipped
with a highly secure and mobile
workplace

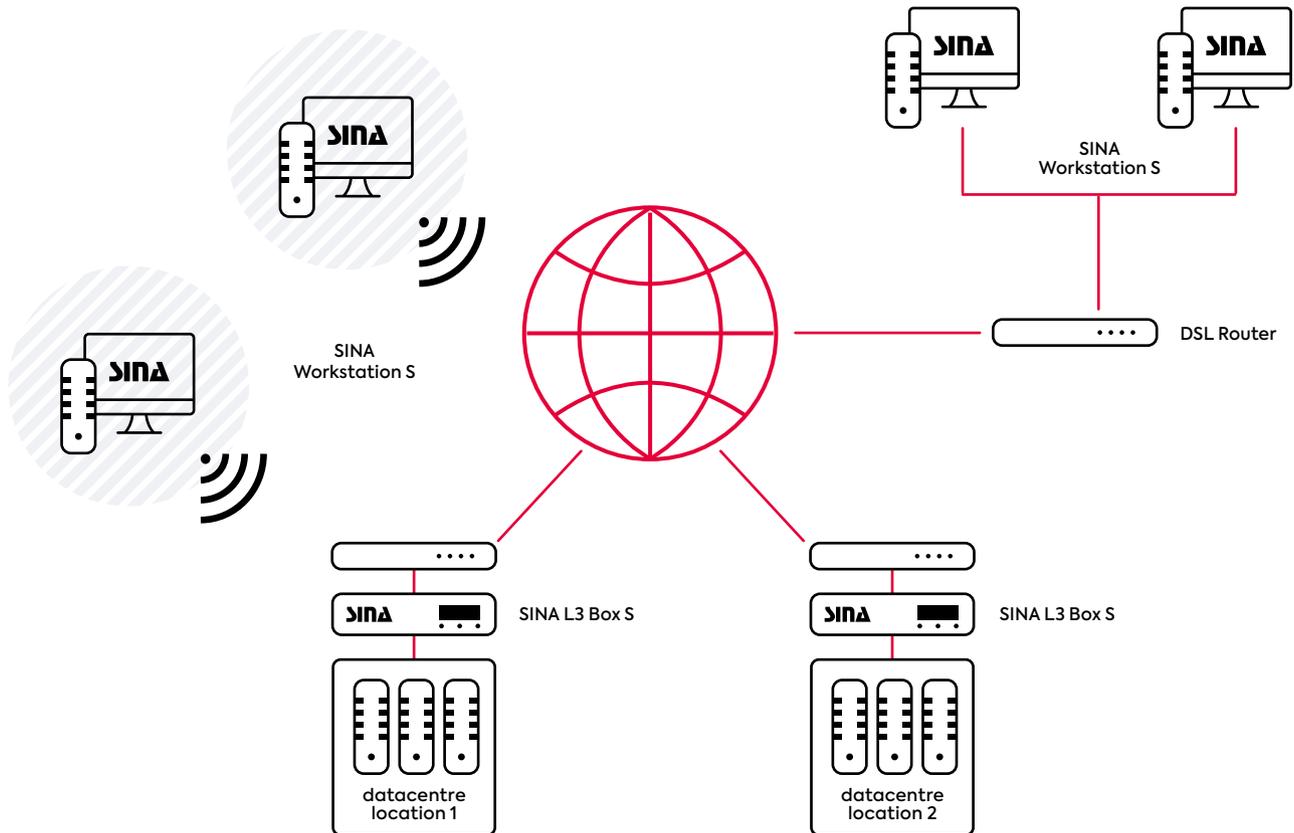
“We have been using the SINA solution for secure remote access since 2011 and we have expanded it several times since then. SINA not only guarantees top security, but is also highly available and user-friendly. All in all, the decision for SINA technology has been a complete success.”

Georg Piechotta,
Department 54 – Product Management,
German Federal Police

Implementation

The introduction of the SINA Workstation into the IT network of the German Federal Police began in 2011 with a pilot project which, following successful completion, served as the basis for the installation of the overall solution for regular operation. Existing architectures were integrated in the new solution and can now be mapped with the SINA Workstation.

SINA Workstation S in the network of the German Federal Police



Since the initial project, the German Federal Police has expanded the number of SINA clients several times. While the initial concern was the secure connection of employees on foreign assignments and in decentralised work situations, today, specific police applications are also being increasingly implemented in mobile scenarios,

such as procedures for identity verification and detection, using the SINA Workstation.

In order to reduce the effort associated with each extension the German Federal Police now uses a central SINA Install Server that allows the fast roll-out of SINA Workstations in large numbers.

Success / Outlook

The SINA Workstation S offers the employees of the German Federal Police a secure, modern and mobile workplace. They also have access to all key data and applications, including classified information, while on the move. This makes the work of the German Federal Police more effective and efficient, as mobile and decentralised processes become faster thanks to the extended options available.

In the meantime more than 4,500 SINA Workstations S are in operation with the German Federal Police and the trend is rising. In addition, more mobile police applications are continuously being added to the solution. Further product extensions, such as migration from the SINA Install Server to the SINA Remote Admin Server, are under consideration.

This allows SINA Workstations to be comfortably maintained and managed remotely. In addition, the German Federal Police continues to test the use of other new SINA technologies.



Also the examination of official ID documents using smartphones are part of the everyday life of the German Federal Police. For this, they rely not only on SINA but also on secunet biomiddle



Benefits

- Secure remote access to central data and applications, approved for communication in classified networks
- Central administration – easily scalable and suitable for mass roll-out
- Restricted networks and the Internet can be accessed on the same workstation
- Integrated network and hard drive encryption
- Easy expansion for the next classification level, VS-VERTRAULICH (offline) / confidential (offline)
- A single uniform security platform for the entire network

secunet – protecting digital infrastructures

secunet is Germany's leading cybersecurity company. In an increasingly connected world, the company's combination of products and consulting assures resilient digital infrastructures and the utmost protection for data, applications and digital identities. secunet specialises in areas with unique security requirements – such as cloud, IIoT, eGovernment and eHealth. With security solutions from secunet, companies can maintain the highest security standards in digitisation projects and advance their digital transformation.

Over 1,000 experts strengthen the digital sovereignty of governments, businesses and society. secunet's customers include federal ministries, more than 20 DAX-listed corporations as well as other national and international organisations. The company was established in 1997, is listed in the SDAX and generated revenues of around 337 million euros in 2021.

secunet is an IT security partner to the Federal Republic of Germany and a partner of the German Alliance for Cyber Security.

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