

Crypto Client

High-performance



The SINA Workstation H Client V is a fat client with crypto file system and IPsec-secured communication. The multi-session-capable crypto client communicates VPN tunnel-secured with server or terminal server areas and can be used flexible both online and offline.

According to the requirements of the deployment scenario, different classified sessions can be combined and used in parallel, taking into account the session type.

The SINA Workstation H is a new crypto client based on Client V that has been developed jointly with the German Federal Office for Information Security (BSI) for the processing, storage and transmission of crypto information with classifications of up to German national SECRET (GEHEIM). The international approvals NATO SECRET and SECRET UE/EU SECRET are also sought. The focus lies on national and international military and official high-security networks.

High-performance cryptography

The SINA Workstation H Client V has a new SINA CORE module for significantly higher performance. This is particularly noticeable when creating new CFS containers and in read/write access on the SSD. The SINA Workstation H Client V can be used flexibly by storing and reloading different cryptographic device classes.

Optimised hardware platform for special requirements

The SINA Workstation H Client V was developed in the light of experience gained in recent years and features numerous innovative performance features.

Compared to its predecessor, the cryptographic client has an Intel® Xeon® E-2176M with six processor cores and 64 GB RAM for significantly more power.

The modern 2 TB SSD NVMe drive offers sufficient storage space. The high-resolution 27" TFT display with 4K resolution meets user requirements with regard to the interaction with graphic data processing systems. Three smartcard interfaces also offer a high level of convenience, e. g. the insertion of a PKIBw smartcard.

The dual configuration with a red and black switchable fiber optic network interface enables a high degree of flexibility for integration into heterogeneous network infrastructures.

Ergonomic device design

The new generation of devices has a much more compact design than the SINA Workstation H Client III(a) model. The SINA Workstation H Client V is fully integrated into the TFT display. The new TFT display can be adjusted in height, inclination and viewing angle and has a modern digital interface. This makes effortless work possible, with high resolution and a clear image.

Virtualisation

The SINA Workstation H Client V is supported from software version 2.8.5. This includes a current version of the virtual machine (ORACLE VM VirtualBox).

Multimedia support

HD videos can be played effortlessly. The sound output can be used in all (active) sessions. Due to the issue of eavesdropping, which would void the encryption approval, sound input (via microphone) is still allocated to just one specific session. Isochronous USB devices (e.g. webcams) in particular are generally supported by the virtual machine. Future releases will benefit from further USB optimisations.

The SINA Workstation H Client V also supports a VoIP session for SIP/RTP-based telephony using a soft phone application. The "red" network interface enables the connection of a conventional IP telephone, for example.

Benefits

- Approved for German national SECRET (GEHEIM)
- Intel® Xeon® E-2176M, 64 GB RAM and 27" 4K TFT display
- Multi Level Data Separation
- Fast switching of working environments (sessions)
- Session-specific encrypted file system partitions
- Compact, ergonomic design



Satellite communication

Professional applications via commercial Satcom IP services, such as BGAN, place high technical requirements on the cryptographic devices used. In tests by the Federal Armed Forces, the SINA Workstation has been proven to support applications such as video conferencing even with double-hop satellite connections.

Management

The SINA workstation is configured and controlled centrally in the network via the SINA Management. An integrated Public Key Infrastructure with associated user management system supports critical administrative processes involving SINA smartcards or SINA smartcard tokens. This particularly includes their customisation, the generation and updating of keys and cryptographic parameters, and the administration of their PINs and PUKs.

Approval-related construction classes



SINA Workstation H Client V

Performance data	
Approval	German national SECRET (GEHEIM)
Boot integrity protection	coreboot
Software versions	2.8
SINA CORE device	National
Manipulation protection	SINA CORE-based
Emission protection	Zone 1
Authentication token	SINA smartcard

Technical data

General data		
Size (W × H × D)	655 × 498–638 × 275 mm	✓
Weight	ca. 21,2 kg	✓
Performance data		
CPU	Intel® Xeon® E-2176M	✓
RAM	64 GB RAM ECC	✓
Graphics	Intel® P630	✓
Boot medium	2 TB SSD NVMe	✓
Sound	Built-in speaker	✓
Voltage supply	110–240 V	✓
Power consumption	In use SINA Workstation H Client V Z1 ca. 95 Watt SINA Monitor 27" Z1 ca. 46 Watt Stand by SINA Workstation H Client V Z1 ca. 12 Watt SINA Monitor 27" Z1 ca. 7 Watt	✓
Monitor		
Display	27"	1x or 2x
Resolution	4096 × 2048 (4k)	1x or 2x
Front interfaces		
USB 3.0	Type C	2x
USB 2.0	Type A	2x
Smartcard reader		3x
Audio	Headset jack	✓
Rear interfaces		
USB 3.0	Type A	2x
USB 2.0	Type A (e.g. for keyboard and mouse)	4x
Monitor	Display port	1x
Network	100/1000 MBit fibre optic switchable, LC	2x (1x „black“ SINA CORE, 1x „red“ for VoIP)
Temperature ranges		
Operation	+5 °C to +40 °C	✓
Transport and storage	-20 °C to +60 °C	✓

secunet Security Networks AG

Kurfürstenstraße 58 · 45138 Essen · Germany
T +49 201 5454-0 · F +49 201 5454-1000
info@secunet.com · secunet.com

More information:
secunet.com/sina

secunet