

Smartcard Secured Workstation Without a Hard Drive



Benefits:

- » Processing and transfer of data with different classification levels
- » Access to various terminal servers from one workstation
- » Support of all standard terminal server protocols

Only graphical screens of standard terminal server protocols of a terminal server located in a protected area are processed on the client. Data classified up to TOP SECRET can be processed „remotely“ through a cryptographically secured network connection via a potentially insecure network.

SINA Thin Client meets the most stringent security requirements and is – depending on the classification level of the data – available as a desktop PC as well as on a notebook platform. Access is protected by means of a smart card or a USB smart card token and PIN. The network traffic is cryptographically protected by an integrated IPsec VPN Gateway.




SINA Thin Client:

- Is a secure workstation within the communication network of a public authority to access classified information.
- Is ideal for a home office connected by a cost-efficient Internet connection (e.g. via the German IVBV or IVBB) to the communication network of a public authority.

Hardware specifications

	SINA® Thin Client	SINA® Thin Client S	SINA® Thin Client H
Anti-tamper	–	Yes	Yes
Tempest classification	–	Zone 1	SDIP 27A (Zone 0)
Crypto hardware	–	–	PCI crypto board PEPP
Approval ¹	RESTRICTED NATO RESTRICTED RESTREINT UE ²	CONFIDENTIAL NATO CONFIDENTIAL CONFIDENTIEL UE ²	TOP SECRET NATO SECRET SECRET UE ²

Approvals

Component			
SINA Thin Client	Up to TOP SECRET	Up to NATO SECRET	Up to SECRET UE ²

- Enables processing of classified data in up to six sessions.
- Tremendous cost savings as a result of using a SINA Thin Client as opposed to using classification-specific “red” PC workstations.
- In addition, physically separated networks are not required anymore – the cost of setting up and maintaining the corresponding infrastructures can be reduced dramatically.
- Supports all standard terminal server protocols (ICA, RDP, X11 and NX).

The technology

The SINA Thin Client is a smart card-secured workstation which contains no sensitive data at all. Instead, only graphical screens (sessions) of a server located in a security domain are processed via terminal server protocols. For this purpose, the user’s interaction (keyboard, mouse) made at the SINA Thin Client are transferred to the server via the network. The server, in turn, sends graphical information in the form of screens back to the workstation.

The protected data and documents themselves remain in the secure server environment at all times and differently classified data remain separated from each other.

The SINA Thin Client works online and is started from CD-ROM or Flash memory. Communication to the terminal server is cryptographically secured by an integrated IPsec VPN functionality which is identical to that in the SINA Box.

All initial configuration settings and security relationships of the SINA Thin Client are stored on a smart card in a specially protected area. The SINA Management allows for individual control of the access permissions within the protected network for each client user.

Up to six sessions can be used in parallel in a security domain on the SINA Thin Client. The strict separation between the individual sessions is secured by means of the underlying platform.

¹⁾ Depending on sized emission protection and integrated anti-tamper functionality
²⁾ Use in the European Council or a sub-organisation requires a second evaluation with an AQUA instance and approval by the Council (EU directive TECH-P-01-02)
³⁾ As of December 2010

About SINA

secunet developed SINA – the Secure Inter-Network Architecture – for the German Federal Office for Information Security (BSI). The product family of crypto systems enables the secure processing, storage and transmission of classified information as well as other sensitive data – according to approval requirements.

For processing and transfer of information with higher classifications (> RESTRICTED or NATO RESTRICTED), the SINA Thin Client is used with TEMPEST protected PC hardware. Depending on the respective classification levels, various encryption algorithms are provided, some on the basis of specific crypto-hardware.

Approval

SINA Thin Client is approved up to the classification level TOP SECRET and NATO SECRET, dependent on TEMPEST and anti-tamper functionality.

Sources of supply

You can purchase SINA directly through secunet or through authorised SINA distributors. A SINA Business version is available for customers from the private sector.

Thin Client software

Cryptographic methods	
Symmetric	AES, 3DES, (HMAC-) SHA1, (HMAC-) RIPEMD 160
Depending on version and hardware	Public authority methods (Chiasmus / Libelle (PEPP board))
Asymmetric	RSA, EC-GDSA, Diffie-Hellman (MODP und ECP)
Standards	
	RFC 2104 (HMAC), 2401-2412 (IPSec), 2459 (X509v3), 2510/2511 (CMP), 3281 (Attribute Certificates) ISO/IEC 15946-2 (EC-GDSA)
	IP v4
On request	IP v6, v4/v6- and v6/v4-Tunnelling
QoS	
	QoS DiffServ Code Points (DSCP) Bandwidth management per security association
Terminal server protocols	RDP (4.0, 5.0 und 5.2), ICA (6.x) , X11, NX

The product portfolio covers different gateways, line encryptors, clients and management systems which have been in use in the public sector, armed forces and companies handling classified information for many years. Selected SINA components are approved for processing and transmitting classified information up to and including the classification levels NATO SECRET and SECRET UE.³

More information:
www.secunet.com/en/thinclient

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