



secunet

secunet Security Networks AG
SINA – an Overview

Sofia, 10.6.2014

Agenda

1 Some facts about secunet

2 SINA Portfolio

3 SINA References

4 Voice Solutions

Some facts about secunet



- Germany's leading specialist in the area of highly complex IT security solutions
- Security partnership with the Federal Government of Germany
- Major shareholder: Giesecke & Devrient
- Turnover in 2009: 56 million EUR

- Joint development of SINA by BSI (Federal Office for Information Security) and secunet
- Intellectual Property Rights for SINA: BSI



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Secure Inter-Network Architecture

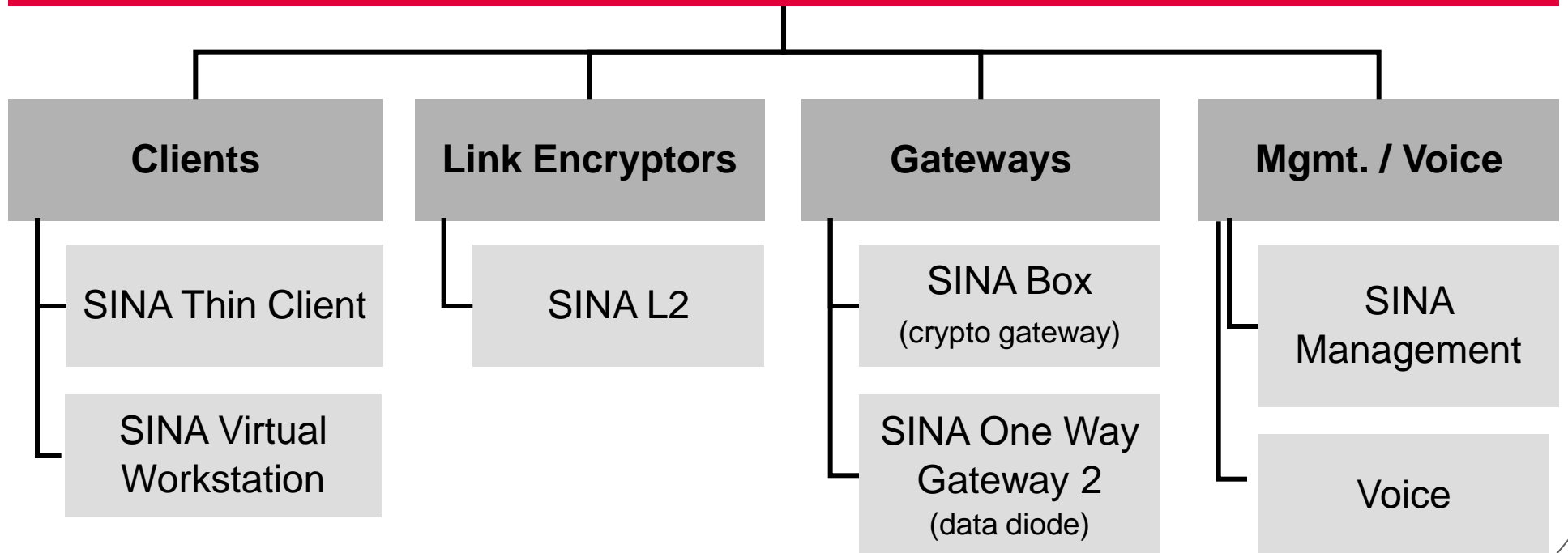


IT Security Platform

- IPsec-based VPN solutions
- Low administration costs due to use of easy-to-handle smartcards and online management
- Multi-Level-Security allows access to differently classified data
- Participation of mobile users in SINA secured networks

SINA Product Line

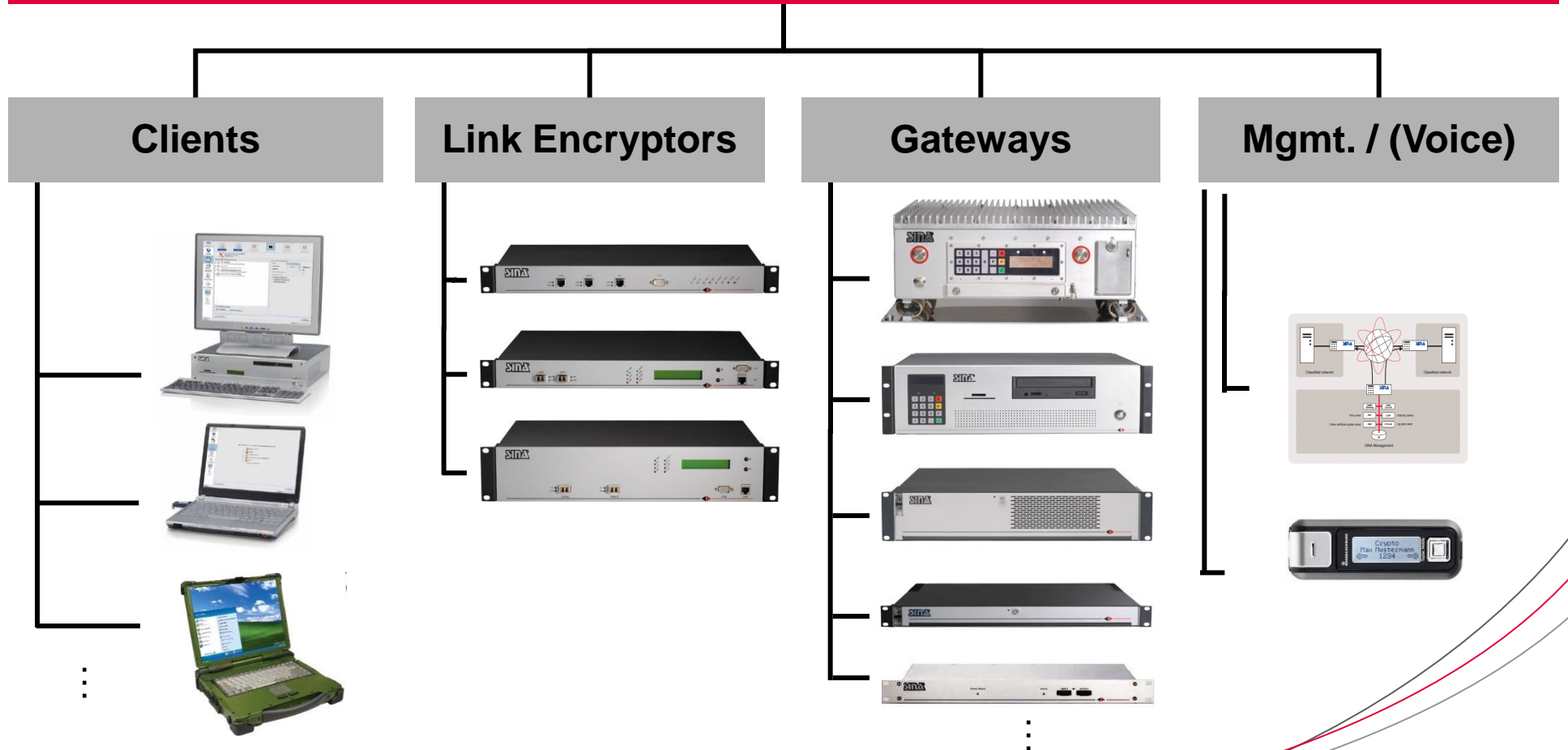
Secure Inter-Network Architecture



Since 2002 ~25.000 SINA components

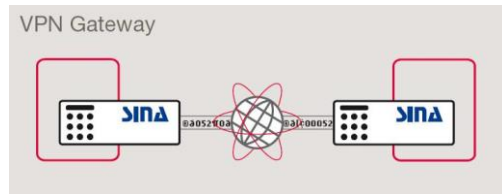
SINA Product Line

Secure Inter-Network Architecture

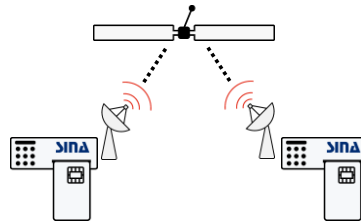


SINA Application Scenarios

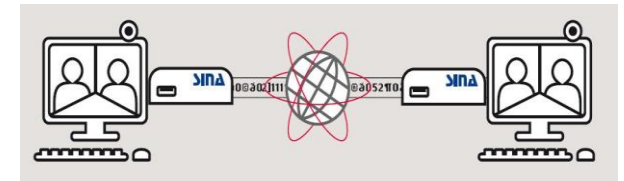
Network 2 Network



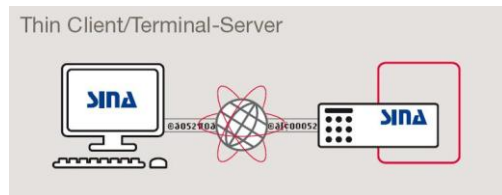
Secure Satellite Connect



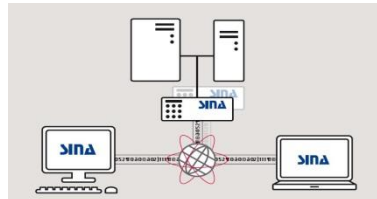
Secure Video Conferencing



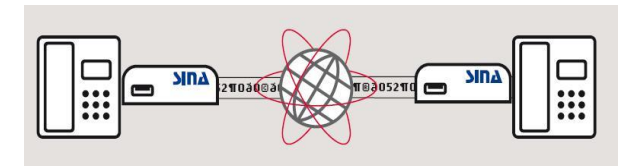
ThinClient 2 Terminal Server



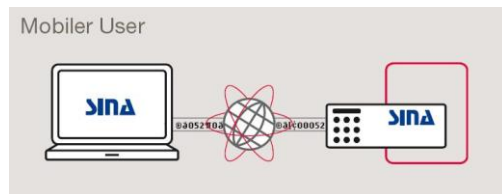
Hot Stand-by



Secure Voice-Over-IP

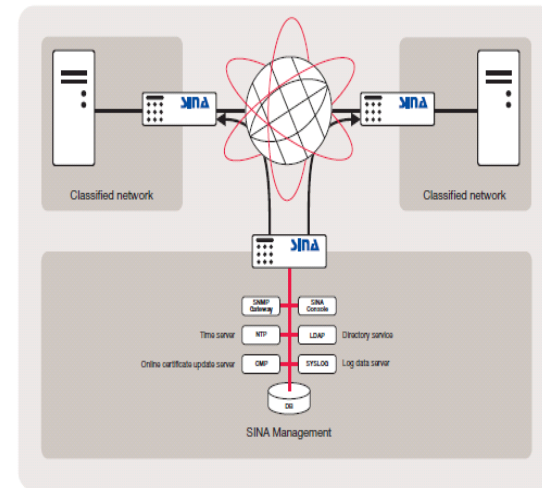


Mobile User 2 Office LAN



SINA Management

- PKI-based Identity Management for all SINA components
- Smartcards providing secure configuration for all SINA components
- All SINA components receive their configuration information...
 - Initially: from SINA smartcards
 - Real-time: from the SINA Management Station over SINA secured channels
- Different SINA management models possible...
 - Centralized 'all-in-one'
 - Distributed



Gateways – SINA Box

- Runs with SINA OS (SINA Linux)
- Boots from CD-ROM/Flash-ROM
- No information stored on Box itself
- All crypto keys, configuration data and SA on smartcard
- Throughput rates up to 1GB/Hot-Stand-by available
- For use up to SECRET UE



Gateways – SINA L2

- Throughput rate up to 10GBit/s
- Secures Fast or GB Ethernet structures
- Transparent Layer 2 transmission for VLAN, MPLS
- Seamless integration into the line between provider and LAN
- 100 MBit, 1GB, 10 GB variants available
- P2P and MP2MP



SINA Clients: Virtual Workstation

- Mobile solution for processing, transfer and storage of classified data
- Virtualisation technology: Allows parallel sessions on virtual, encapsulated PCs
- Offline security: CFS enables session-specific local storage of data
- Physical interface policy can be configured
- Bundle Solution: HW/SW
- Up to RESTREINT UE



SINA Clients: Thin Client

- No hard-drive, no sensitive data: Ideal for Home-office
- Graphic display of Terminal Server Protocols only
- Up to six parallel sessions with differently classified data possible
- Secure authentication
- Supports all standard TS protocols
- Up to SECRET UE



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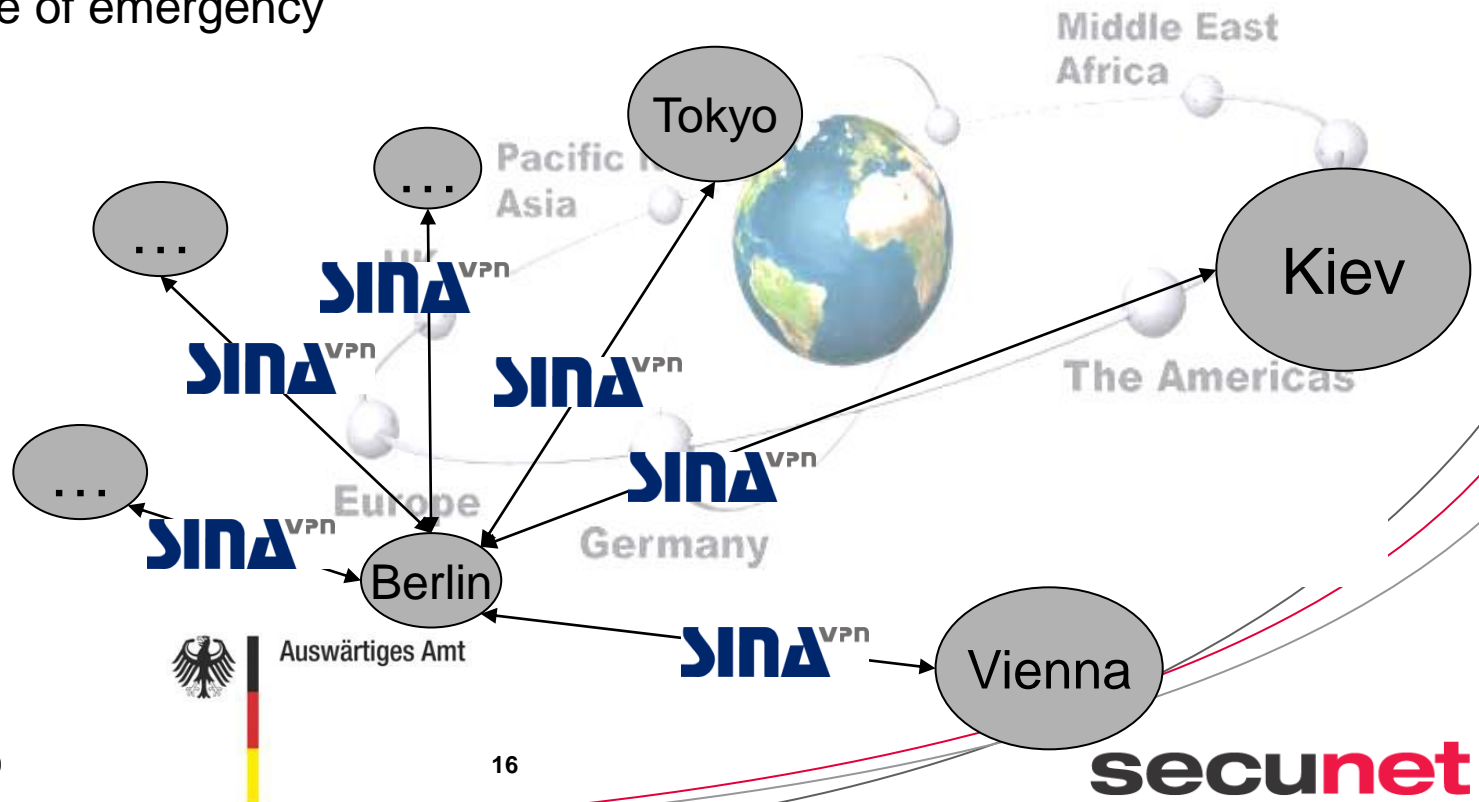
Some SINA References



- Military Communication Systems
- EU projects: Council, Commission, Agencies
- German Border Police, 400+ locations, fully meshed
- European Battlegroups
- German Ministry of Foreign Affairs; Worldwide Embassy network, 200+ locations, centrally managed
- German Armed Forces and Ministry of Defense; 14,000+ components

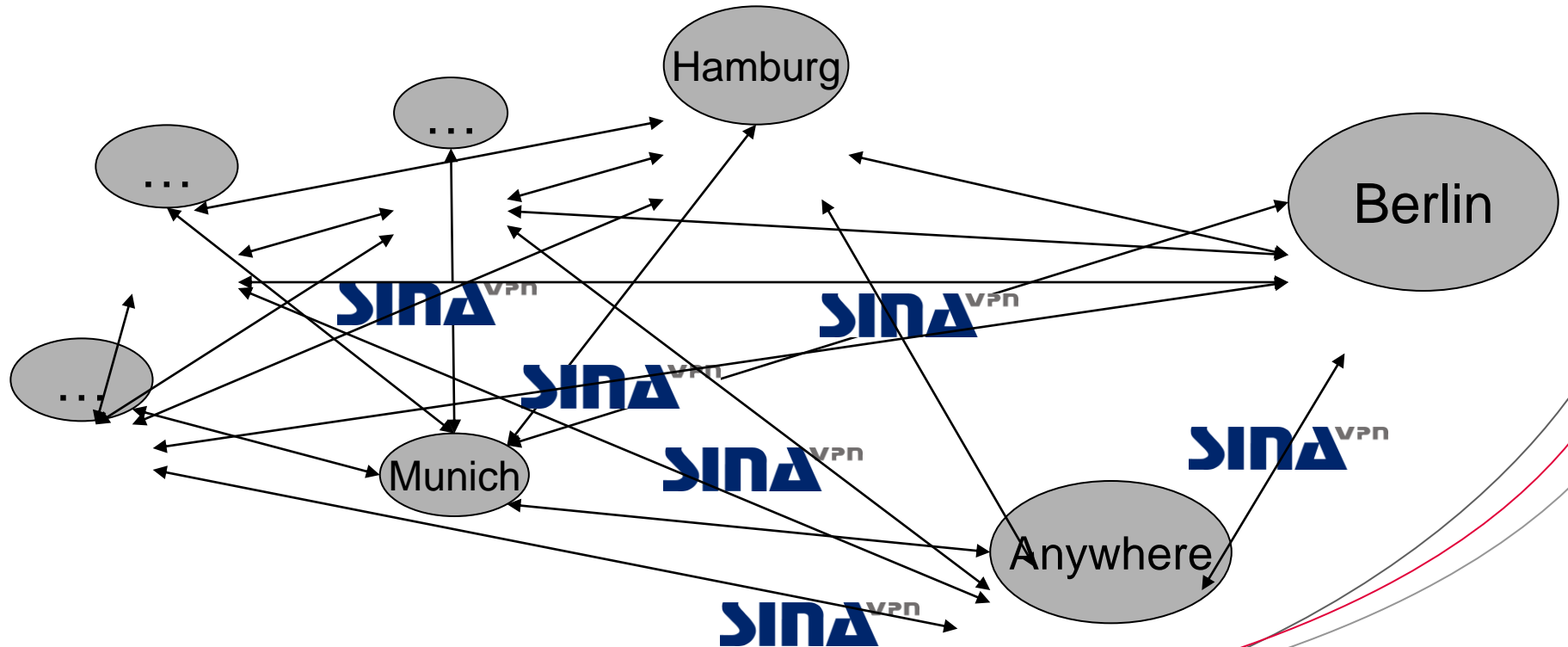
SINA – Worldwide Intranet for German Embassies

- 230 embassies, central location Berlin
- Information transfer via internet or satellite communications
- Online management of crypto components
- Mobile users can safely connect to network
- No data left in case of emergency



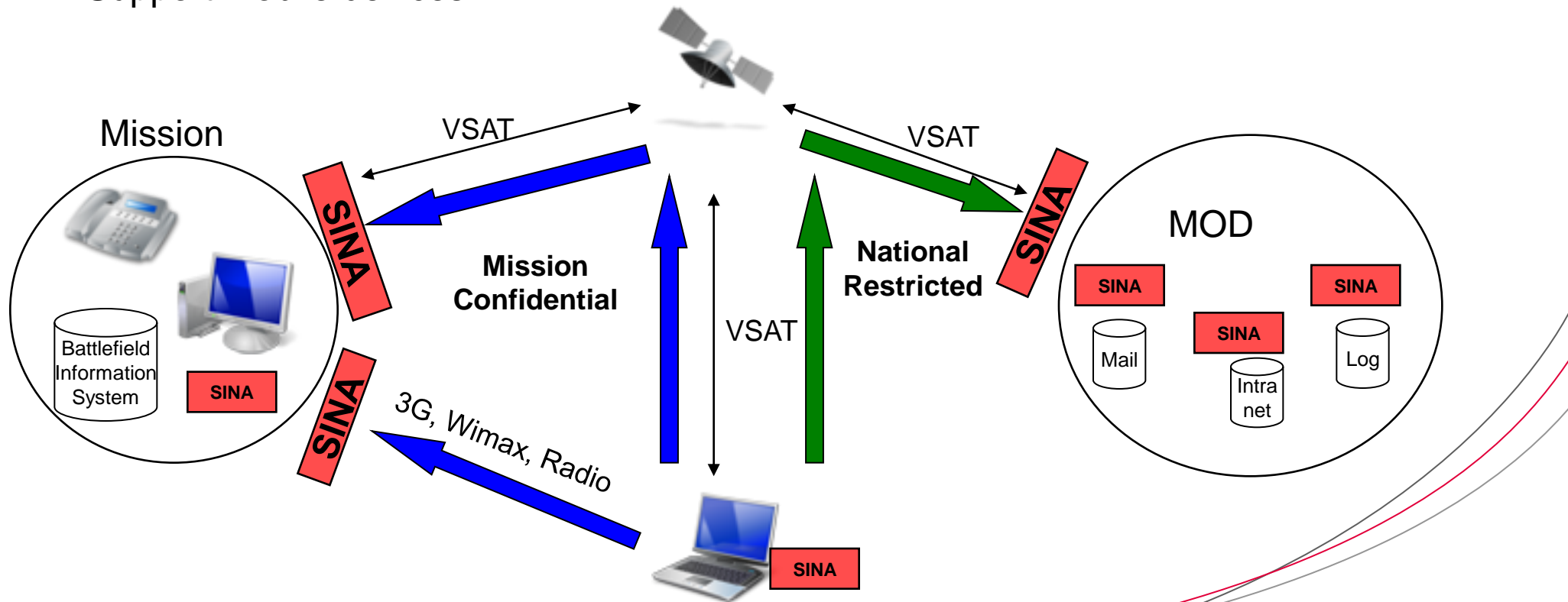
SINA – German Federal Police

- >400 locations
- Fully-meshed network



SINA – Usecase Defense

- Provide support for redundant network connections
- Allow access to data with different levels of classification
- Support mobile devices



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4 Voice Solutions

Voice Solutions (I)

Rohde & Schwarz TopSec Mobile:

- External voice encryption device with integrated mic/speaker
- Connects via Bluetooth interface to majority of mobile phones
- Hardware encryption: Elliptical curves + AES 256 bit
- Plug & Play



Voice Solutions (II)

Secusmart: **Secuvoice**

- No external device needed; insertion of smartcard into micro SD-slot of mobile phone
- Limited to use with Nokia mobile phones
- Hardware encryption: Elliptical curves + AES 128 bit
- Plug & Play

**Thank you very much
for your attention!**

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