

invicta



 invicta.com.tr

 info@invicta.com.tr

CONTENT

- INVICTA
- Product Portfolio
- VAG
- MiniVAG
- VEGS
- e-SBSL
- References



INVICTA

- Invicta was established in 2008 by Dr. Attila Özgüt, Dr. Onur Tolga Şehitoğlu, and Prof. Dr. M. Ufuk Çağlayan.
- In collaboration with ASELSAN, we develop high-security technologies that meet both indigenous and international standards. By providing tailored solutions for the requirements of critical institutions, we are positioned as a trusted partner in the fields of cybersecurity, data transfer, and system isolation.
- With our highly qualified expert team, we add significant value to projects of strategic importance.

PRODUCT PORTFOLIO

VAG

It is a system solution, approved at Common Criteria EAL4+ security level, that enables secure information exchange between networks with different security levels for the execution of 'Mission Critical' operations.

MiniVAG

MiniVAG offers the "Virtual Air Gap" technology, which is dual-patented by the USA and Turkey and ensures secure information exchange between networks with different security levels, in a single box.

VEGS

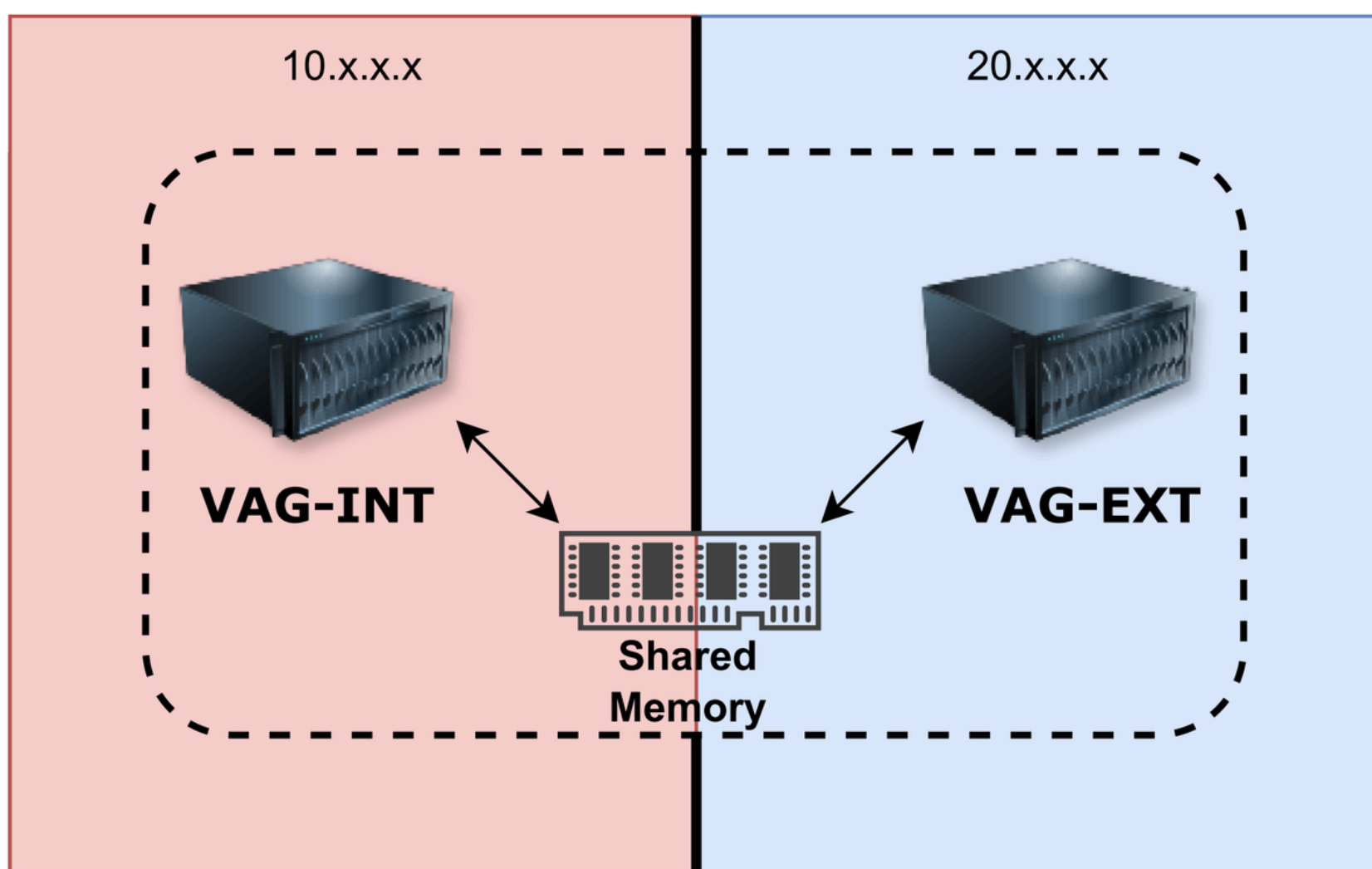
VEGS is a NATO-compliant security solution designed for the secure processing and circulation of electronic documents (txt, pdf, etc.) across different internal and inter-organizational classification level networks.

e-SBSL

e-SBSL is a next-generation security ecosystem built on the power of the e-signature

VAG/SAHAB

Next-Generation Network Isolation Technology



Separate Your Environments:

- Transforms your critical systems into an isolated "island," shielded from the public internet or lower-trust zones.

Zero Trust Architecture:

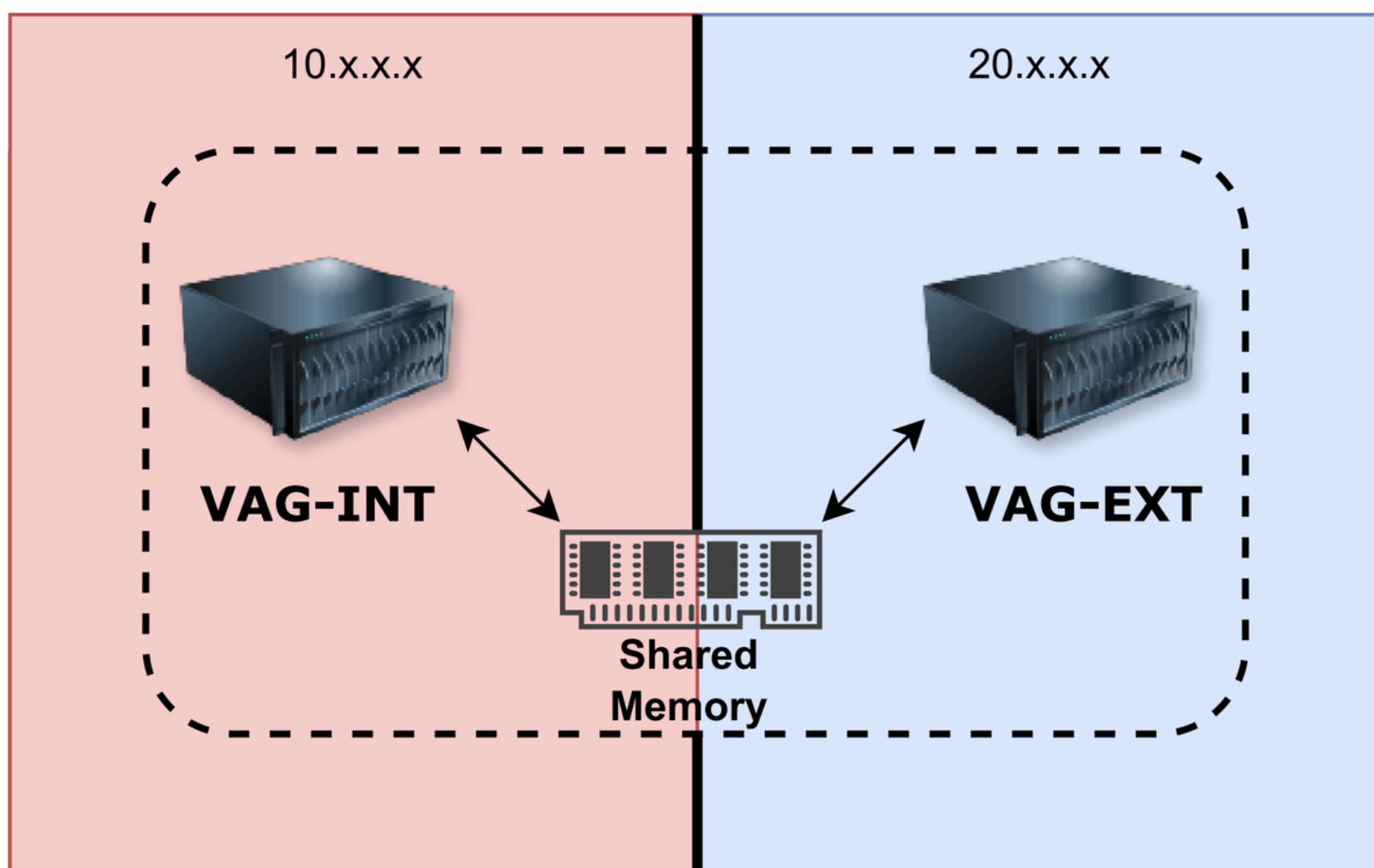
- By eliminating any direct connection between networks, it renders potential breaches physically impossible at the hardware level.

Controlled Bi-directional Exchange:

- Unlike traditional one-way data diodes, it enables secure, rule-based, and bi-directional data flow without compromising isolation.

VAG/SAHAB

Why VAG?



Firewall Vulnerabilities

- Firewalls primarily perform packet filtering; however, they remain susceptible to bypass via zero-day attacks, configuration errors, and sophisticated tunneling techniques.

Data Diode Limitations

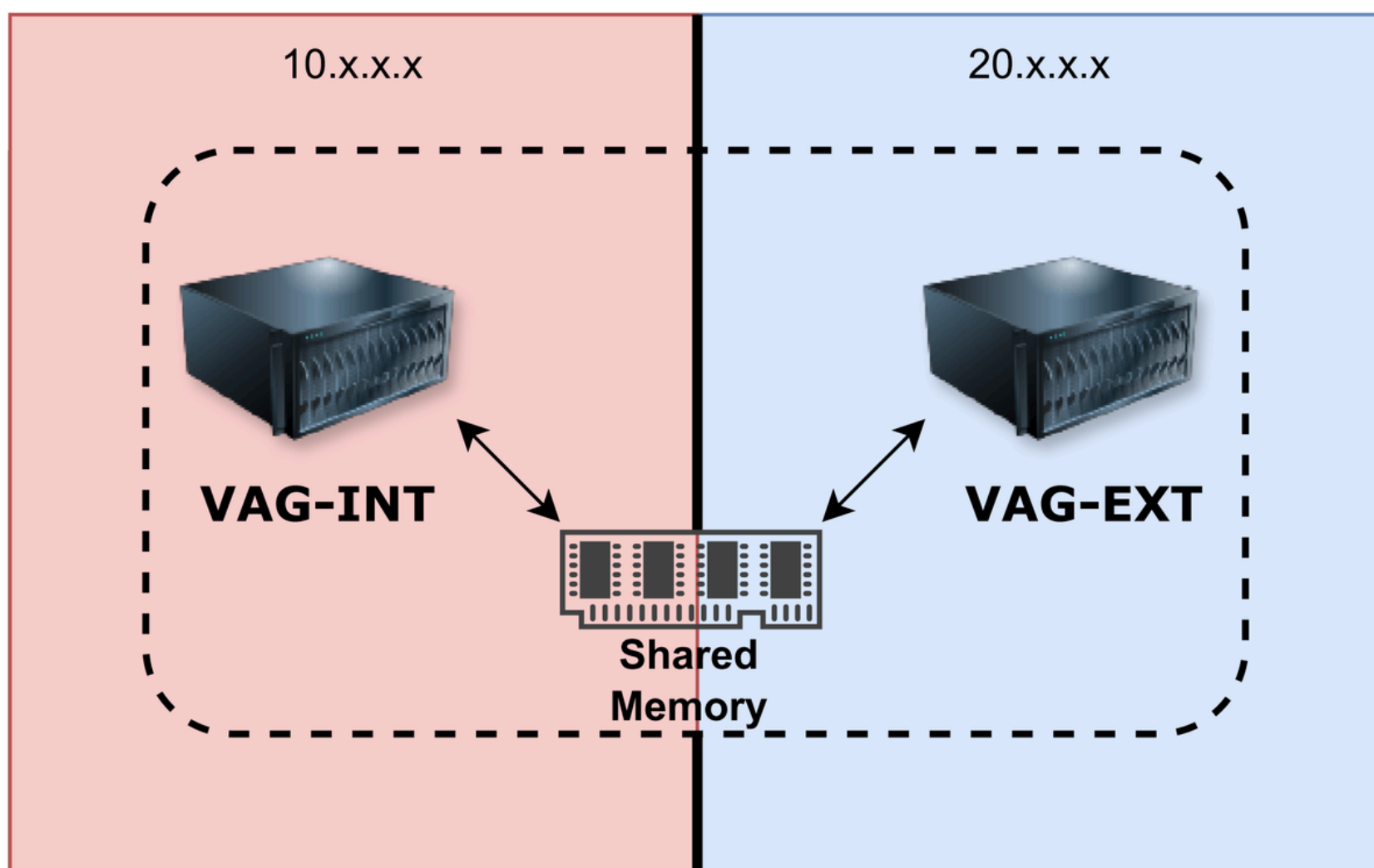
- Traditional data diodes are strictly unidirectional. They lack support for data verification (ACK), cannot guarantee file integrity, and often obstruct modern integrations such as APIs and Database (DB) synchronization.

The VAG Advantage

- VAG provides robust isolation at the network level while ensuring seamless service continuity at the application layer.

VAG/SAHAB

Field-Proven Security



Deep-Rooted Reliability:

- VAG has been actively and securely deployed for many years within the defense industry, military entities, and public institutions.

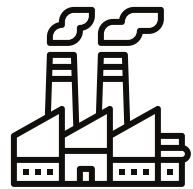
Mission-Critical Success:

- With a proven track record in mission-critical environments, VAG serves as the guardian for the most sensitive and classified data.

Rigorous Testing & Exercises:

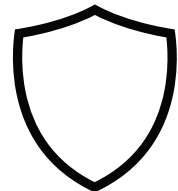
- It has successfully passed numerous rigorous cybersecurity tests and field exercises conducted by high-level authorities, including NATO and the General Staff.

VAG Use Case Scenarios for Critical Infrastructure



OT/IT Segmentation:

- Secure isolation of SCADA (plants/factories) from corporate networks.



Classified Networks:

- Controlled data transfer between different security levels.



Web Service and Database Security:

- Secure access for public-facing servers to internal databases.



Finance Digital Assets:

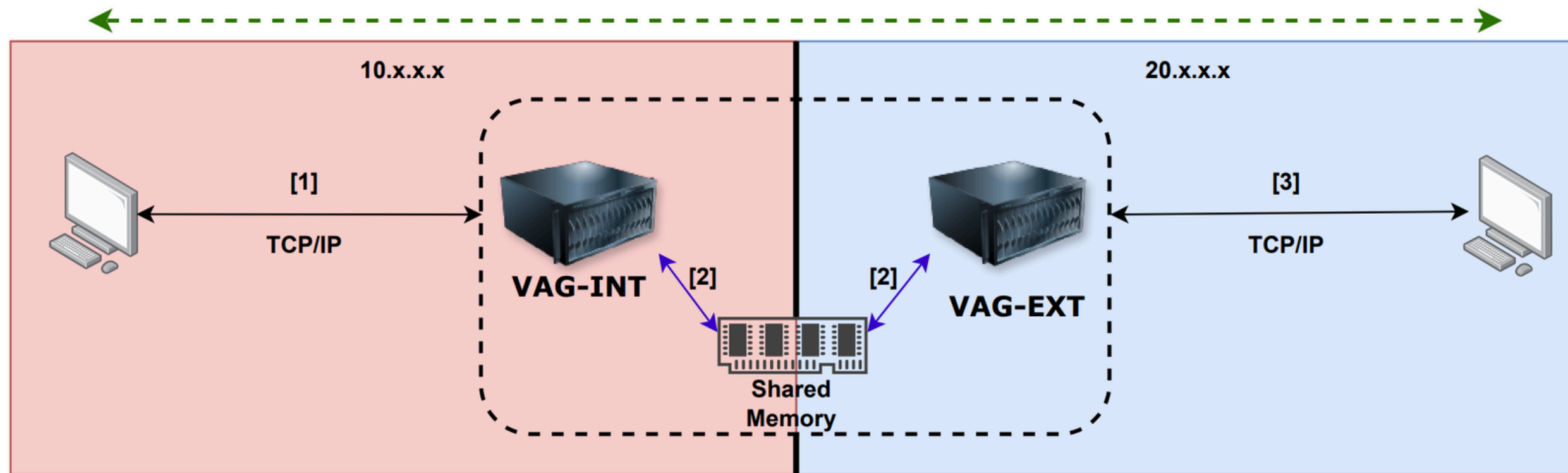
- **Banking:** Total isolation of **Core Banking** and **SWIFT** from the internet.



- **Crypto Custody: Air-gapped** transaction signing between Hot and Cold wallets.

HOW DOES VAG WORK?

Protocol Break and Session Termination



Dual-Server Structure:

- VAG consists of two physically separated independent servers (Internal and External Server).

Session Isolation:

- Example: A TCP/IP session originating from the outside world is terminated at the "External Server." No direct connection is established to the internal network.

Proprietary Messaging Protocol:

- Data is transferred between servers via Invicta's proprietary protocol, which is immune to external manipulation.

Full Sterilization:

- Data transfer between the two networks is achieved through raw data, not "network packets."

MINIVAG

"VAG Security, Now Everywhere"

Compact Design, Robust Protection

- VAG technology in a set-top-box form factor; fits any desk or cabinet without taking up space.

Same DNA, Same Performance

- Retains the exact high-security architecture and military-grade software standards of the flagship VAG.

Engineered for the Field

- Cost-effective, plug-and-play gateway for remote offices, branches, mobile units, and temporary workspaces.

Absolute Isolation

- Dual independent internal servers sever physical links between networks, making breaches impossible.

VEGS

NATO-Standard Classification

- Auto-labels and digitally seals sensitive files (PDF, Office, etc.) based on international security standards.

Zero-Trust Insurance

- VAG integration physically blocks accidental leaks to unauthorized zones, completing your Zero Trust strategy.

Secure Workflow

- VEGS and VAG work together to physically stop the leakage of critical data to lower-security networks.

E-SBSL

"E-Signature Meets Cyber Defense"

Integrated Cryptographic Defense

- A unified software suite centralizing file encryption, secure mailing (PGP), and hardware-backed key management under a single secure architecture.

Passwordless & Verifiable Identity

- Eliminates vulnerable passwords by utilizing e-signature devices as non-clonable digital keys for enterprise logins and API authentication.

VAG Integration

- Seamlessly integrates with VAG to provide cryptographic proof of sender identity and data integrity for all network traffic, preventing spoofing and forgery.

REFERENCES

aselsan



TAI





THANK YOU

info@invicta.com.tr



Silikon Blok K1-5 ODTÜ Technopark



0 312 988 11 55



www.invicta.com.tr

