Compumatica
SECURE NETWORKS

PROTECTION YOU CAN TRUST

WHITEPAPER: SECURE OT/IT INTEGRATION FOR CRITICAL INFRASTRUCTURES

Protect critical infrastructures with physical separation and controlled data exchange.

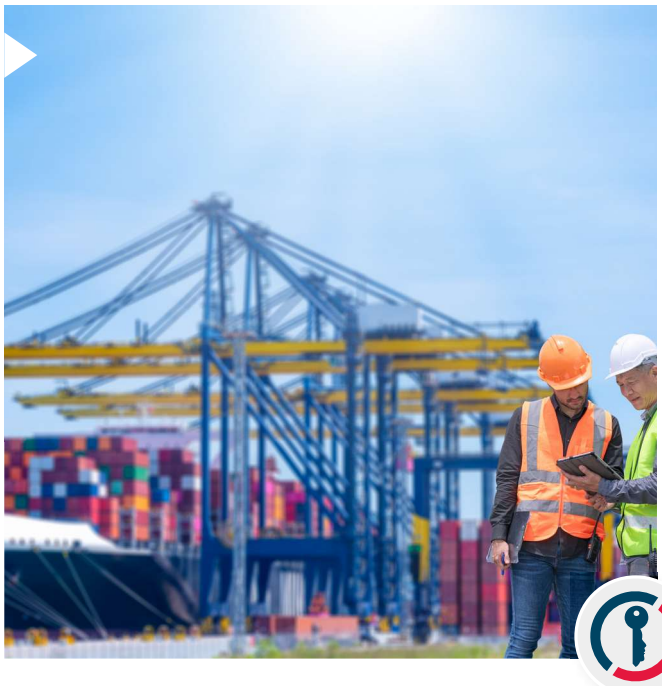
The integration of OT and IT increases efficiency but also introduces cyber risks. Where OT systems used to operate in isolation, they are now more frequently connected to IT networks, increasing the likelihood of cyberattacks. This can lead to process disruptions, data loss, or even physical damage. MagiCtwin offers a solution to securely integrate OT and IT without compromising operational continuity.

Through physical separation and controlled data exchange, OT remains protected against attacks via IT, while monitoring and analysis continue safely. MagiCtwin is fully developed in Europe, ensuring maximum security and digital sovereignty.

// OT/IT INTEGRATION: BALANCING EFFICIENCY AND SECURITY

OT and IT play vital roles in sectors such as energy, water management, and industry. IT manages data, communications, and software, while OT controls physical processes like power generation and production lines. Linking these systems enables better monitoring and data analysis, leading to improved decision-making and process optimization.

However, this integration also introduces risks. IT systems are regularly exposed to malware, ransomware, and other cyber threats. Once OT and IT are connected, these threats can disrupt operational processes with potentially severe consequences. Attacks like Stuxnet have shown that cybercriminals can exploit IT breaches to sabotage OT systems. Therefore, a balanced OT/IT integration is essential: optimal connectivity without compromising security.



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Did you know that physical separation is still the only proven way to make digital attacks technically impossible? What cannot happen physically, doesn't need to be defended digitally. Discover how critical infrastructures apply this principle to secure their OT environments, and how your organisation can do the same.