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NEW TRENDS AROUND PKI AS A TECHNOLOGY

IN 2023

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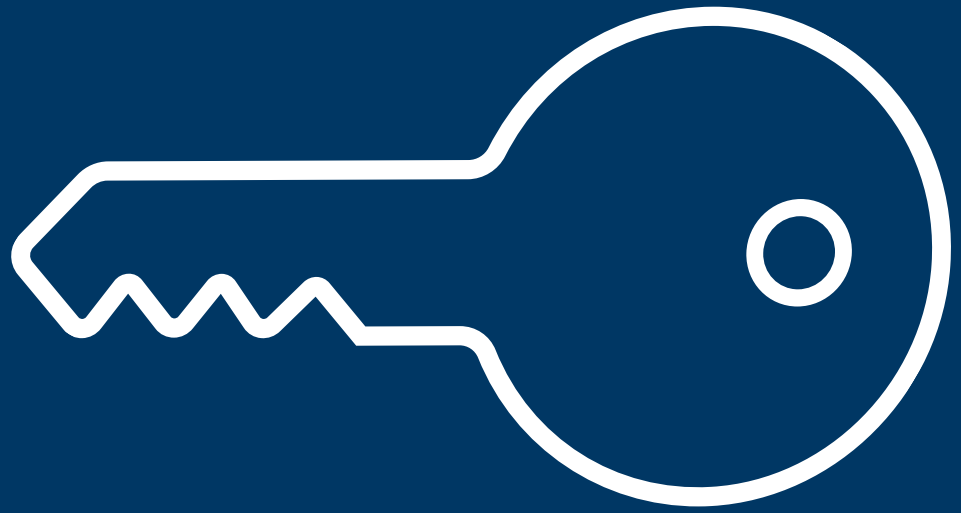
PKI IN A NUTSHELL



A Public Key Infrastructure (PKI) is a system that provides certificates and cryptographic keys to secure electronic communication by ensuring authenticity, confidentiality and integrity of data. In order to be equipped for the future challenges and changing landscape, PKI should be scalable. Nowadays, almost every single organization uses certificates for protecting data flow on networks. Yet these certificates won't remain secure forever as the technology evolves, organizations need to be ready to adapt to new secure algorithms.

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PKI AS A SERVICE (PKIaaS)

01

With the growing shift of organizations to new environments such a cloud, more and more businesses opt for a PKI. The so called PKIaaS, tends to be the more affordable version to the PKI on-premises, as it is managed on-demand by a trusted third party cloud provider.

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DevOps

02

The rise of applications and tools used for their delivery, made DevOps teams rethink about their security strategies. For example, PKI supports greater code integrity by providing code signing and securing Machine-to-Machine (M2M) communication.

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NEW ALGORITHMS

03

With time passing by, technology changes, and so is in the case of PKI. Whereas adaptation of new platforms is already a competitive necessity, organizations are called to revise **keys and algorithms** underpinning their security and PKI systems. In a case that these keys are **outdated** and **weak**, businesses need to plan for the **new algorithm** use by PKI today. Even with the **new PKI deployment**, crypto-agility has to be considered and taken into account.

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IoT

04

Smart factories solutions, connected cars, connected home appliances, to name just the few examples, where **data exchange** needs to remain secure and uncompromised. As **IoT** is now part of our everyday lives, where innumerous **devices** communicate between each other, **PKI** is an ideal method for creating a trusted system between them. As such, development of a more **tailored IoT PKI** is foreseen in the future.

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SECURITY POSTURE

05

Because of the cyber risks evolution, more and more businesses are investing in the improvement of their organizational security posture. PKI implementation provides stronger authentication compared to traditional password-based one, for both users and machines, improving trust and security within organizational networks.

THANK YOU

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