Atos Value Proposition on IoT & OT Security

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IT/OT Convergence & IoT

Trusted partner for your **Digital Journey**

Atos

Digital Security Products for IoT and OT

Key Focus Area for Digital Transformation and Convergence

How do we gain confidence in our infrastructure and devices?

Can we implement digital security solutions without major disruption to operations?

How do we reduce our risk when there are so many threats out there?

How does an organization achieve secure centralized management of many device identities for many types of devices?

Product Lines – Basic Features

Atos Digital Security Products

IDnomic

ID PKI Suite for Users

- Public key infrastructure on-prem, as a service, and in cloud
- Certificate lifecycle management and visibility

ID PKI Suite for Objects

- Public key infrastructure and certificate management for objects
- Protocol and certificate support for IoT and OT devices
- Interoperability with cloud based IoT core systems and on-prem solution

ID PKI Suite for Documents

- Digital signature for documents
- Non-repudiation for email

IDnomic for Transactions

- Blockchain
- Timestamping

Trustway

Crypt2Pay Dedicated HSM

- Secure cryptographic function execution
- Secure certificate and key vault
- Certified FIPS 140-2 Level 3 for high security applications
- High transaction per second for key generation and validation

Proteccio NetHSM

- Secure cryptographic function execution
- Secure certificate and key vault
- Up to eight (8) logically separated virtual HSM capability for secure, multipurpose use

Proteccio for Developers (OEM)

- Secure cryptographic function execution
- Secure certificate and key vault
- Internal direct memory access application server for specialty secure application development

DataProtect

- Data encryption in transit (VPN)
- Virtual Machine encryption
- Database encryption
- Tokenization
- Key management and vault
- Application encryption

Evidian

Identity Governance and Administration (IGA)

- Control identities and rights to data access

Web Access Manager

- Secure central point of access for all applications
- Custom dashboards

Enterprise Single Sign-on

- Single authentication for all applications using credentials

Analytics and Intelligence

- Suspicious behavior detection
- Assess vulnerabilities in identities and access rights

Authentication Manager

- Manage Multifactor Authentication (MFA) methods and access

Self-service password reset

- Reset windows passwords online and offline

SafeKit

- Simplest clustering high-availability solution with zero extra hardware

IoT and OT Security

Where we intervene

Transmission Security

- **Encrypt and sign** messaging to and from devices to ensure valid and authorized message delivery and receipt
- Discard unauthorized messaging to **reduce threats**
- Deliver **validated, signed code** for device firmware and configuration management

Zero Trust Infrastructure

- Securely manage the lifecycle of device identities and **gain visibility** into usage and compliance requirements
- Implement **Zero Trust Network Authorization** for devices
- Discover **cloned or unauthorized devices** and eliminate threats

Atos MDR

- **Detect and respond to threats** in near real-time with Atos AIssac (Artificial Intelligence for Cyber Analytics and Hybrid SecOps)
- Upgrade your **security maturity** without major up-front risk or learning curve with managed security operations

IoT and OT Security

Zero Trust for Devices

Transmission Security	Zero Trust Infrastructure	AtosMDR - AIssac
IDnomic Trustway	Trustway IDnomic	Atos
Command and Control Integrity **Digitally sign message** on-prem or as a managed service ensuring message authorization and authenticity	**Device Identity Management** Manage **device identity lifecycle of millions+ of devices** through portable, centralized solutions	**Threat Detection and Hunting** Telemetry from cloud, endpoints, network, users, logs, and your entire IT stack to **uncover cyber threats**
Secure Network Encryption Encrypted communication tunneling for **secure transmission of data** preventing unauthorized disclosure and sensitive data spillage	**Network Authorization** Secure network access for authorized devices. **Revoke unauthorized or cloned device** access in real-time to contain threats	**Containment & Response** Automate **threat containment** to stop the spread of attacks and reduce advanced persistent threat dwell time
Digitally Sign Firmware Validate device change control through **code signing** on-prem or as a service	**Secure Key Storage** Managed or on-premises secure key storage for device PKI **virtually eliminates keystore vulnerabilities**	**Prescriptive Security Operations** Continuously **elevate security posture** through Atos' global experience, industry expertise, SOC teams, AI & Machine Learning

IoT Security Suite Use Cases

General Use Cases

IoT data encryption and validation in transit and at rest

IDnomic
Trustway

Network authentication and authorization for IoT devices, gateways, and network infrastructure

IDnomic
Trustway

Private and secure key storage and management

IDnomic
Trustway

Embedded IoT device, software signing and gateway security for developers

IDnomic
Trustway

IoT device identity registration and validation (active and passive)

IDnomic
Trustway

Physical facility secure access system integration and management

Evidian
IDnomic
Trustway

OT Security Suite Use Cases

General Use Cases

OT data and messaging encryption and validation

IDnomic
Trustway

Network authentication and authorization for OT devices, gateways, and network infrastructure

IDnomic
Trustway

Private and secure key storage and management

IDnomic
Trustway

Blockchain for secure inventory, supply-chain, and transactions

IDnomic
Trustway

Secure firmware device updates / software signing

IDnomic
Trustway

Physical facility secure access system integration and management

Evidian
IDnomic

Customer Reference

Code Signing as a Service

ALSTOM

Customer

- **Global leader** in the **transportation** sector
- **Manufacturer** of high-speed trains, metros, trams and e-buses. Portfolio includes digital mobility solutions
- €9.9 billion orders in 2019/20

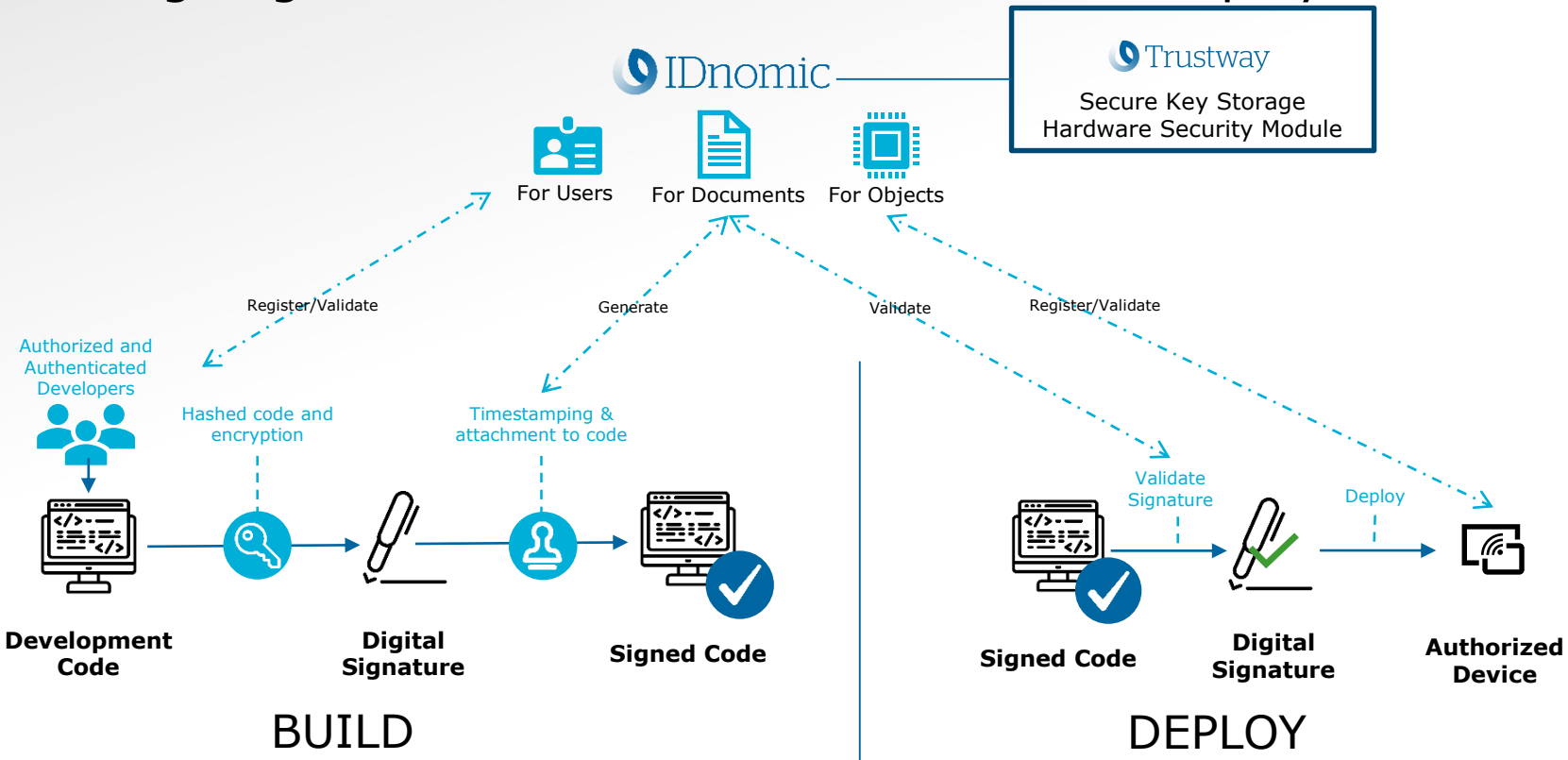
Needs & Challenges

- Enhance their customer offering by adding cybersecurity to secure train/rail device firmware deployment
- Build an internal PKI for users, machines and objects authentication, authorization and encryption

Key Benefits

- Scalability: Public Key Infrastructure and Document Signing as a Service scales to need, recent acquisition growth (Bombardier)
- Data Integrity: Solution validates code has not been altered or corrupted in transit

Code Signing as a Service for Zero Trust Code Deployment



Thank **YOU**

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