

Building, Securing and Deploying smart industrial solutions

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Business security challenges for Industrial IoT?



Operator injury/fatality



Sensitive data theft – IP, Process etc



OT Meeting IT challenges



Disruption for manufacturing operations



Brand damage and reputation

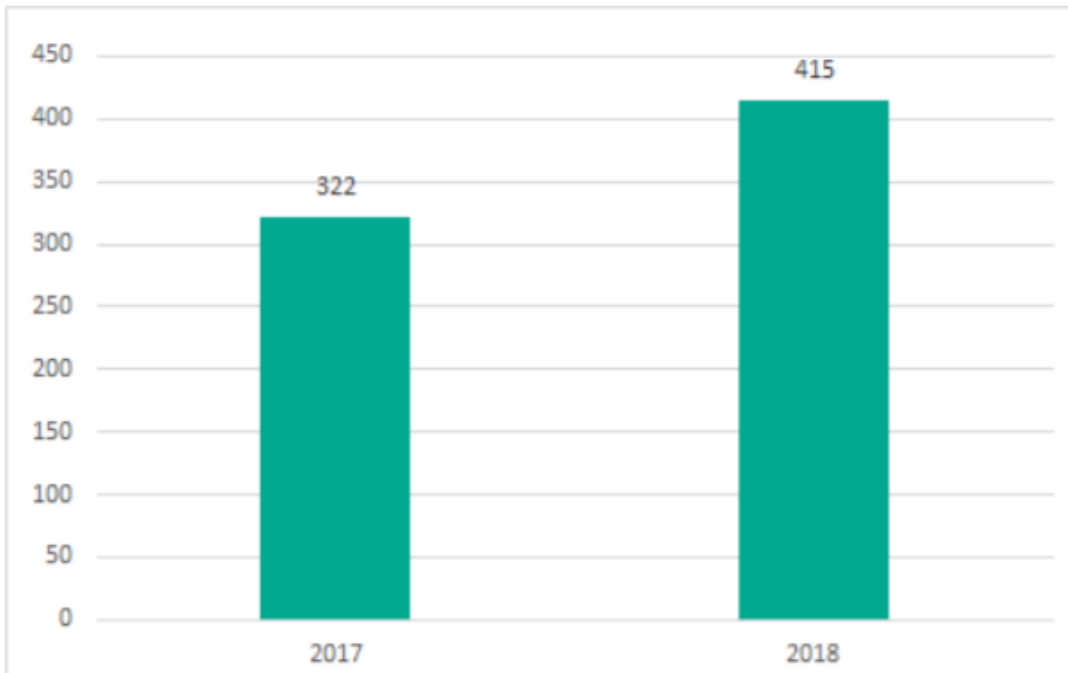


Compliance and Financial liability

- GDPR the higher of **€20 million** or **4% of annual global turnover**



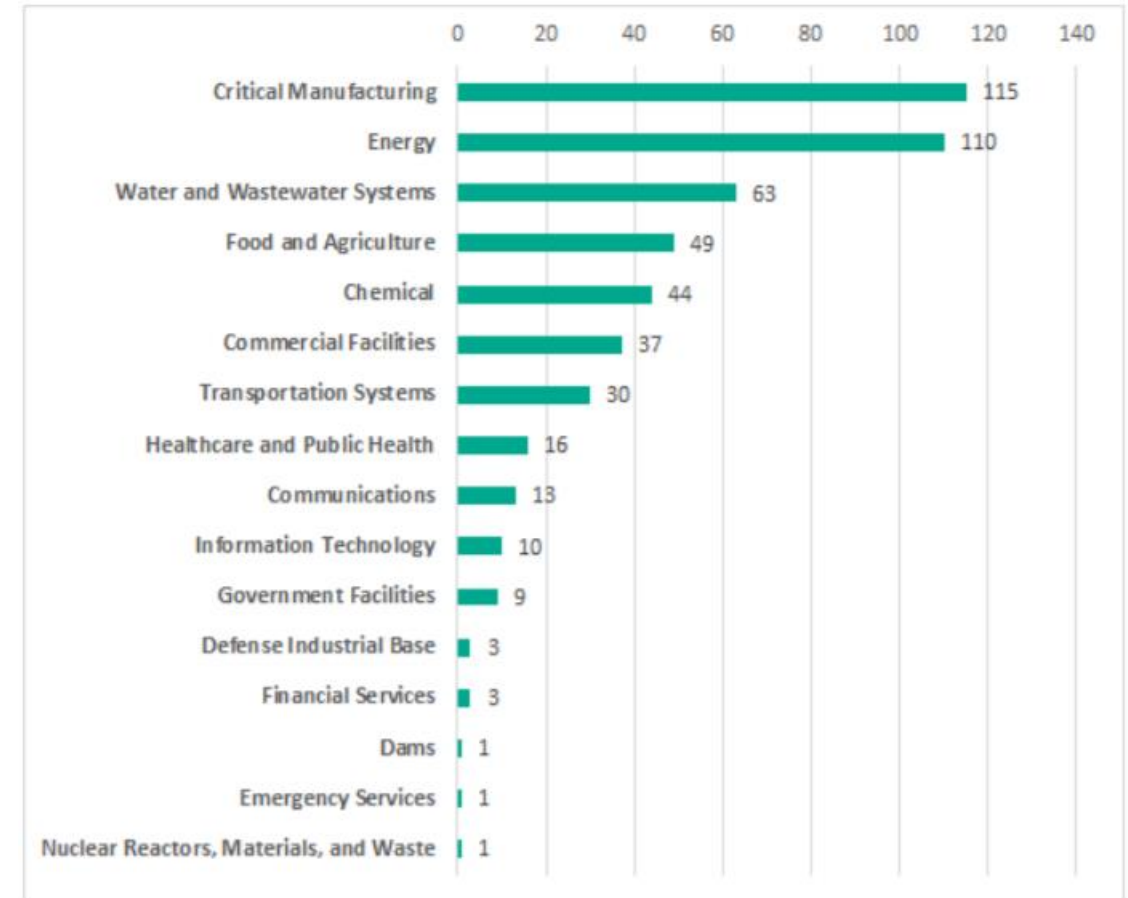
Security trends in industrial automation



Number of vulnerabilities in different ICS components, as published on the US ICS-CERT website

Ref: Kaspersky Lab ICS-CERT

www.deviceauthority.com



Number of vulnerable products used in different industries (according to US ICS-CERT classification). Vulnerabilities published in 2018

4.4.1 Trust and Integrity Management Security measures that can help ensure the integrity and trustfulness of data and devices.

TM-01: Verify the integrity of the software before starting to run it ensuring that it comes from a reliable source (signed by the vendor) and that it is obtained in a secure manner.

TM-02: Authorise all IIoT devices within the OT network utilising appropriate methods, e.g. digital certificates/PKI.

TM-03: Define data exchange channels between IIoT devices in the form of a whitelist and choose only secure channels whenever possible.

TM-04: Implement application whitelists and review the list at least annually and in case of a change to the system. Good practices for Security of Internet of Things in the context of Smart Manufacturing November 2018 41

TM-05: Ensure production data integrity through utilisation of appropriate cryptographic mechanisms and key storage tailored to processing capabilities of the implemented solutions.

TM-06: Monitor the production data at rest and in transit to identify potential unauthorised data modification.

IoT / Things – Devices, Characteristics, Scale

IT



Human Identity

MFA for Trust

User Centric

Vs

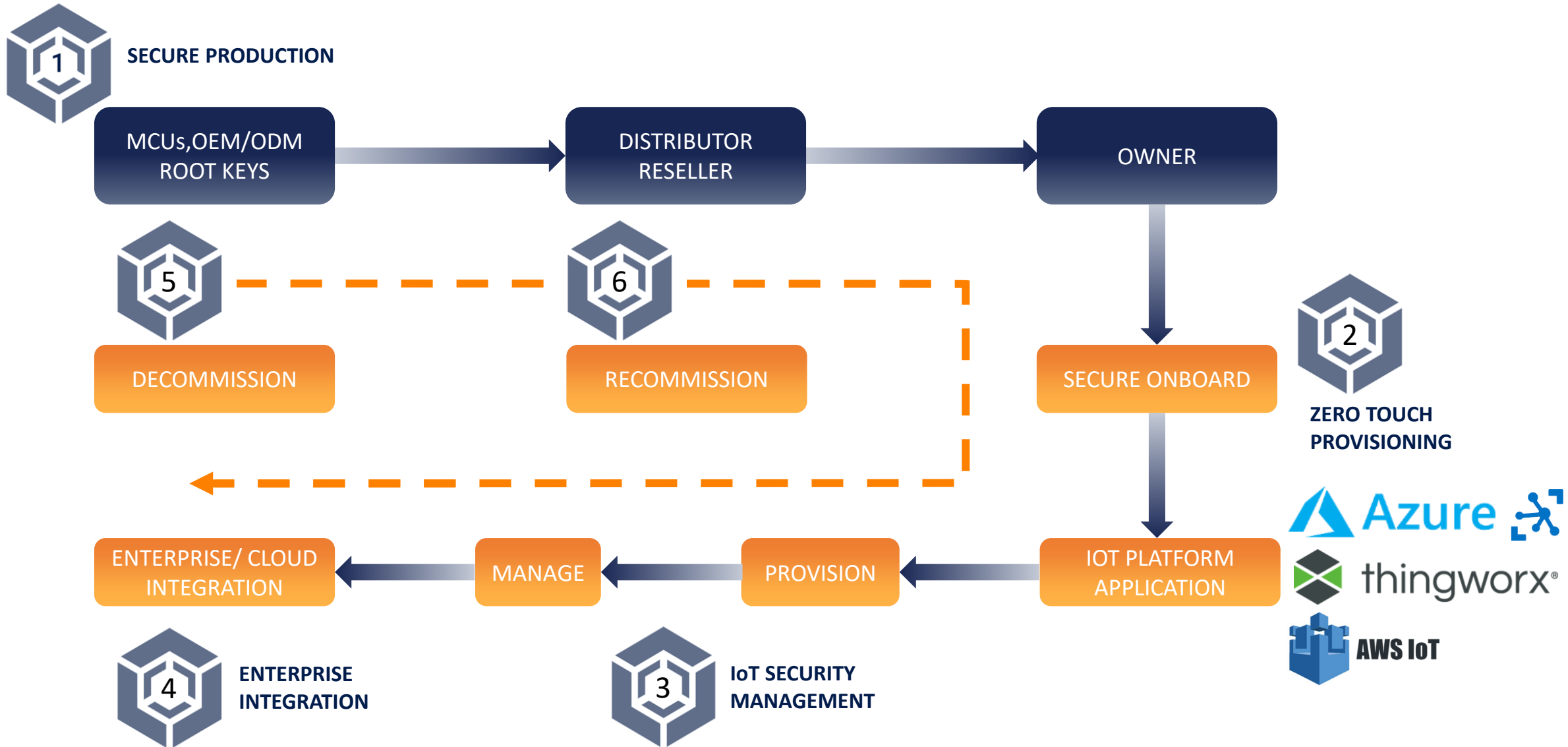
IOT



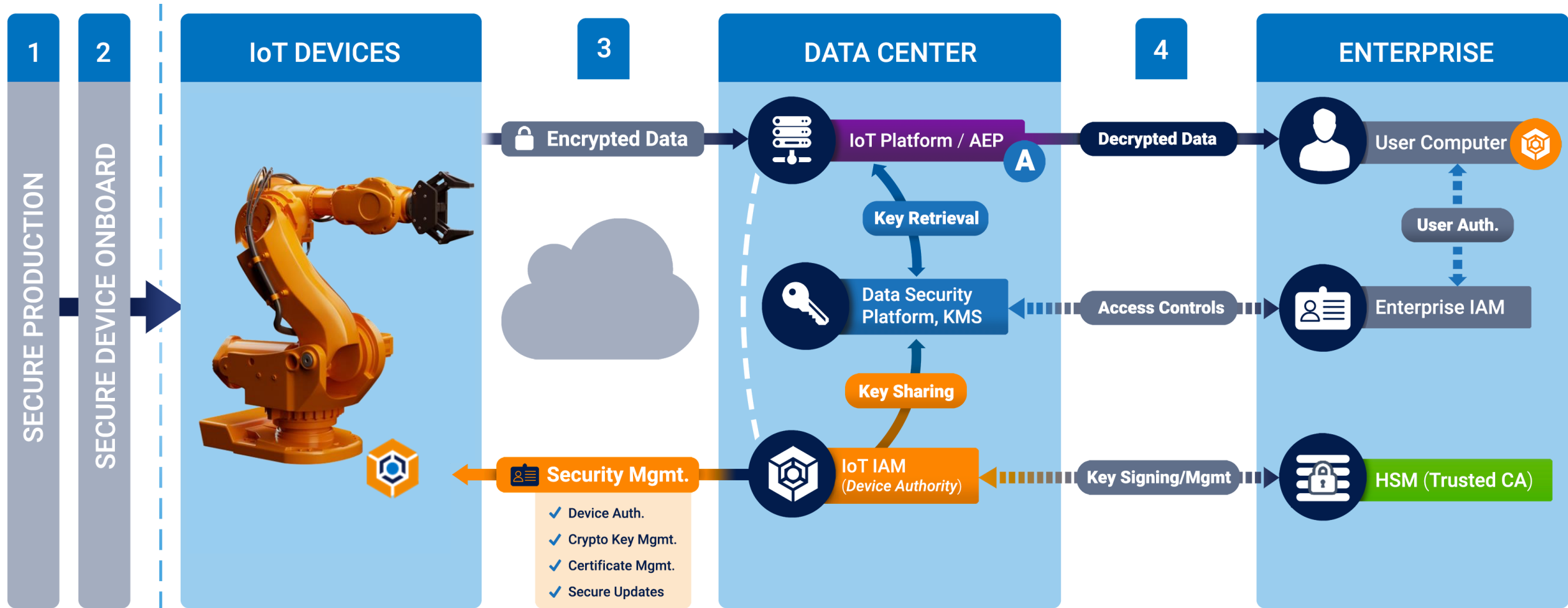
Device Identity
Trust?
Device Centric
Scale 20X

Establishing and Managing Trust at Scale

Trust and Automation in an IoT Device Journey

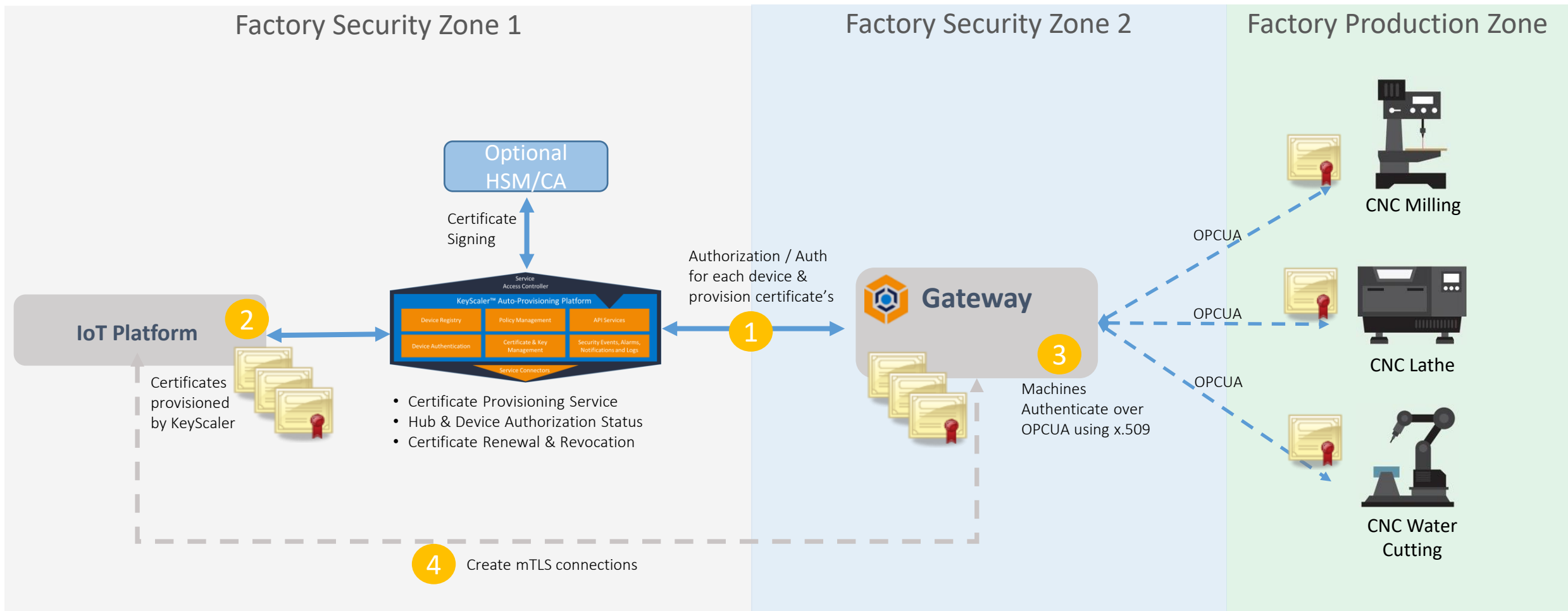


Smart Industrial, OT meets IT – Managing Security...

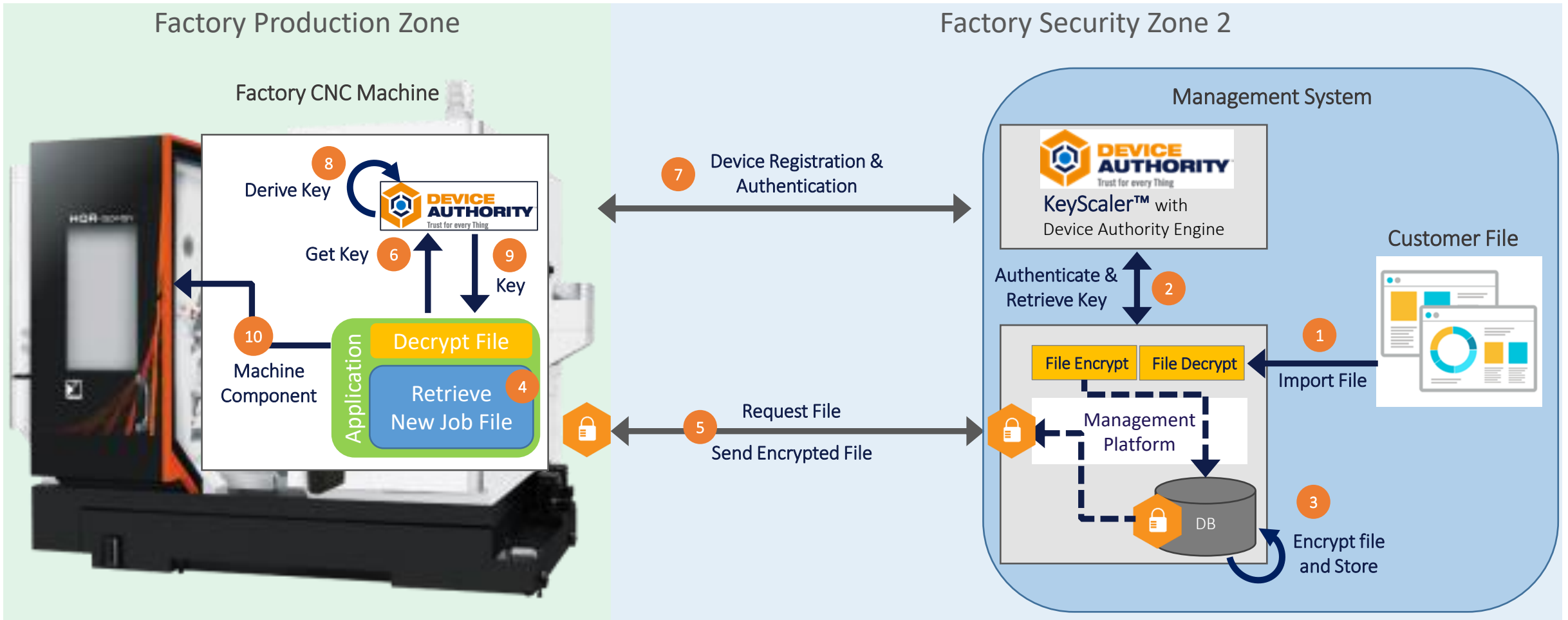


<https://www.deviceauthority.com/insights/enterprise-iot-security-blueprint-20>

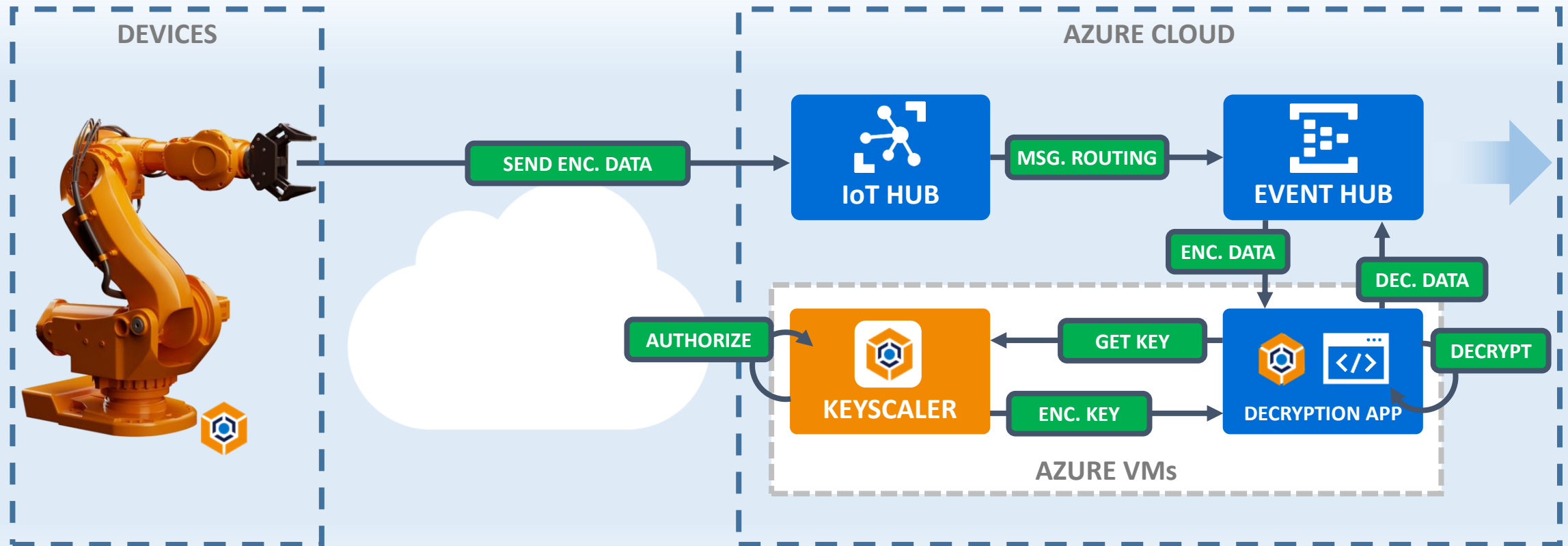
Example Use Case: Industrial, PKI Certificate Management for OPCUA



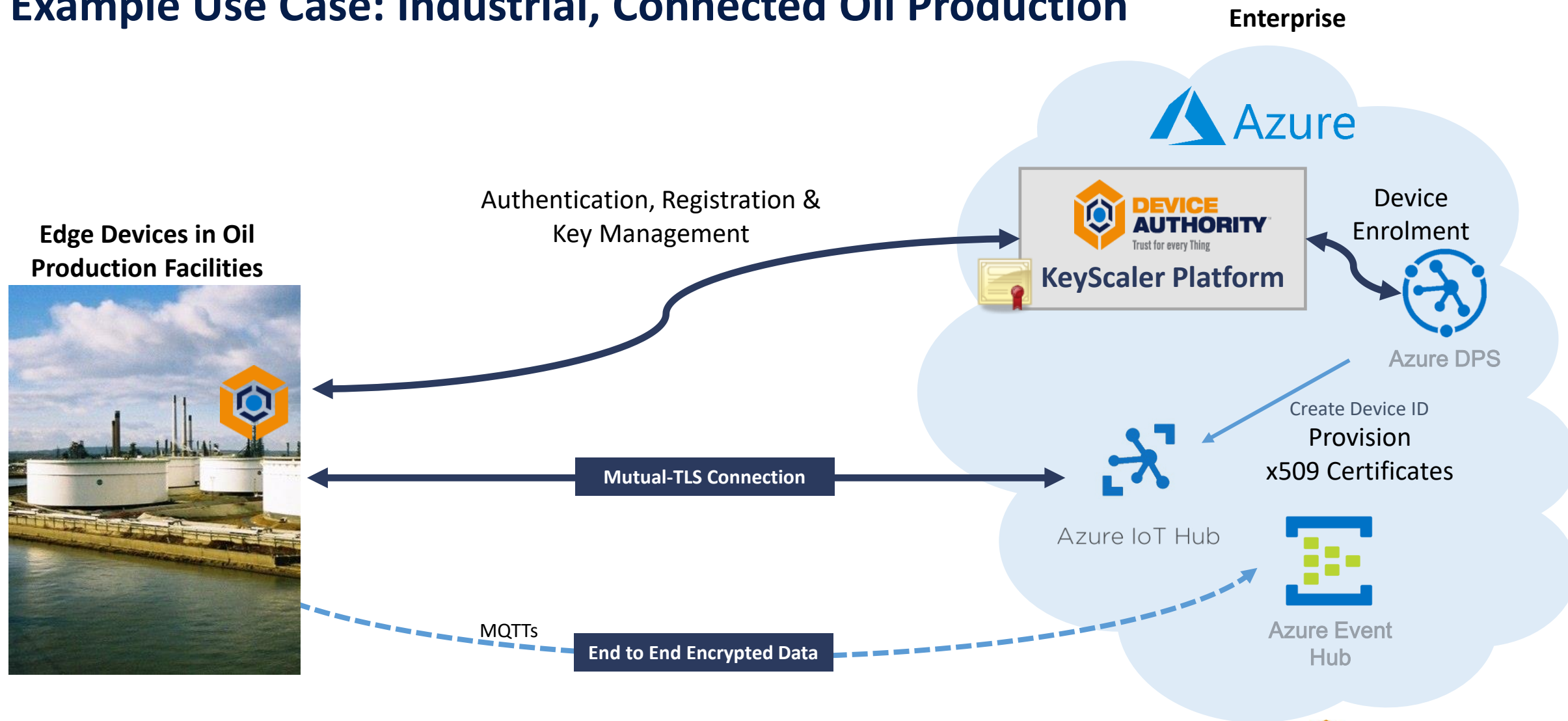
Example Use Case: Smart Machining, IP & Revenue protection



Example Use Cases – Industrial, End to end data privacy



Example Use Case: Industrial, Connected Oil Production





DEVICE AUTHORITY™

For any organisation building their **IoT strategy**, who require **trust and identity at the edge**, Device Authority is the only company truly able to deliver Identity and Access Management (IAM) for IoT. The KeyScaler platform delivers automation for critical credential management processes, in addition to tokenized access control and policy-based encryption for data, in transit and at rest.

Unlike traditional information security solutions, KeyScaler addresses the core challenges of **device trust, data trust and operational efficiency at IoT scale**, beyond the boundaries of the secure Enterprise.



Thank you!

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