

## Use Case

# Intelligent Data Security in Smart Warehouses



### / Use Case Description

## Meeting Modern Logistics Needs: Automation and Security

Intelligent, data-driven warehouses meet evolving logistics needs. Transparency and seamless integration of data are critical. The need for realtime data visibility and robust cybersecurity measures continues to grow. Integrated solutions that combine automation, best-in-class data security, and centralization of data from multiple sources for analysis are in demand.

Practically speaking, security is essential inside the warehouse as well. Smart shelves are equipped with weighing devices. Secure access ensures that withdrawals are authorized and accurately recorded in the warehouse management system, keeping the inventory up to date.

### / Solution

## A Collaborative Solution by Kunbus, Swissbit, AWS, Klika Tech and aicas

The technology companies Kunbus, Swissbit, AWS, Klika Tech, and aicas have developed a joint solution for intelligent warehouse data security and the establishment of a perpetual chain of trust. This includes device hardening, secure communication, and the monitoring and management of security.

The partners have combined their capabilities in a collaborative solution:

- AWS: AWS IoT cloud services
- Swissbit: Security expertise
- KUNBUS: Embedded communication
- aicas and Klika Tech: Device and data management

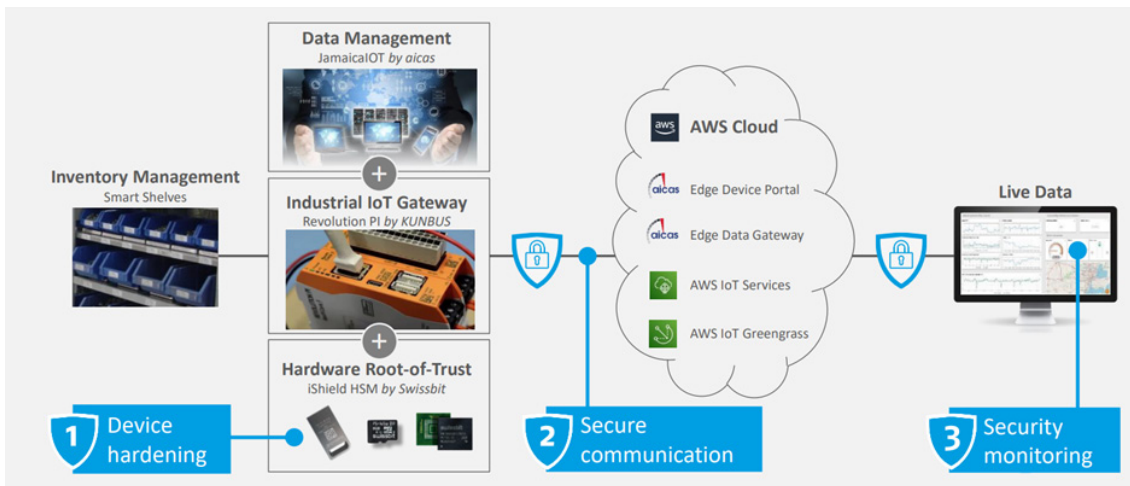
### / Summary

**WHO:** KUNBUS GmbH

**WHAT:** This use case showcases an integrated solution for smart warehousing, addressing data integrity and cybersecurity challenges.

**HOW:** The solution utilizes smart shelving, AWS IoT Services, and hardware security modules for centralized data management and realtime visibility.

**VALUE:** By combining automation with robust security measures, the solution optimizes efficiency and transparency in warehousing.



## aicas Edge Device Portal

aicas enhances the solution with comprehensive device and software management functionalities. aicas Edge Device Portal (EDP) facilitates the development, deployment, operation, and maintenance of software components on edge devices:

- Repository for newly developed microservice components
- Automated testing of components
- Remote device management
- Software over-the-air updates
- Operational status and software lifecycle control
- Remote maintenance

### AWS Approved

Implemented using Amazon Web Services (AWS), aicas Edge Device Portal (EDP) has received the AWS Foundational Technical Review (FTR).

### / Benefits

## Optimized Efficiency and Enhanced Security in Logistics

This integrated solution addresses the critical needs of modern logistics by combining automation and advanced data security. Key benefits include:

- **Highest Security:** Ensures secure system integrity and cyber threats protection in automated data processing.
- **Fast and Proven Integration:** Streamlined processes enable quick implementation.
- **Access to Live Data:** Provides realtime visibility into inventory and operations.
- **Simplified Data Management:** Expert-driven simplicity allows small teams to develop robust solutions quickly.
- **Significant Cost Savings:** Time savings translate immediately into cost reductions of up to 90%, as reported by our customers.

**Get in touch with us to learn more about our solutions!**

aicas GmbH  
Emmy-Noether-Str. 9  
76131 Karlsruhe, Germany

**Web:** <https://www.aicas.com>  
**Email:** [info@aicas.com](mailto:info@aicas.com)  
**Phone:** +49 721 663 968 0

**Sign up  
for our  
Newsletter!**

