Accelerating Product Delivery with Docker Enterprise Edition and AWS

The Drive to Accelerate and Secure Product Delivery

Ten years ago, 80 percent of ASSA ABLOY Group’s sales were mechanical locking and access products. Today, over 50 percent of its sales are electromechanical and software-based access products, and the company is the global leader in door opening solutions. It started out as a merger between two traditional regional manufacturers in 1994, selling commercial and residential physical access systems. The company now operates in 70 countries and has over 47,000 employees. Rapid product development and comprehensive digital services are critical to its continued success.

But the company faces several challenges as it makes the transition to digital services:

- It must continue to support its existing manufacturing applications built on monolithic architectures.
- At the same time, it needs to develop new applications and products quickly to remain competitive and meet customer demands.
- Because there are both old and new architectures, the company lacked a central platform for product development and delivery.
- Security of the product delivery systems was a major concern.

A mix of 70 old and new applications need to work together to facilitate rapid product development. It was difficult to manage continuous integration and continuous development (CI/CD) processes across disparate platforms. The company needed a standard platform for its product teams.

Transforming from Manufacturing to an Entry Service Provider

In evaluating the company strategy, the ASSA ABLOY IT staff determined that containerizing applications and leveraging the flexibility of cloud platforms would help it accelerate product development. In turn, this would help the company achieve its transformation from traditional manufacturer to a technology services provider of complete entry and access solutions.

ASSA ABLOY worked with Conoa, a consulting firm in Stockholm, Sweden with expertise in Linux and open source technologies, to evaluate several container solutions. They selected Docker Enterprise Edition for its advanced management and orchestration capability, as well as its compatibility with multiple on-premises and cloud platforms.

Company Profile
ASSA ABLOY Group

Location
Stockholm, Sweden

Industry
Manufacturing

Primary Use Case
Continuous Integration

Docker Partner
Conoa AB (www.conoa.se)

AT A GLANCE

Key Challenges
- Company transforming from traditional manufacturer to entry service provider
- Needed a platform to deploy containerized microservices
- Inconsistent environment across development, test and production

Solution
- Build, test and secure delivery of firmware builds using Docker EE and AWS

Results
- A common platform for rapid, secure distribution of product firmware updates
- Secure software supply chain where dev and ops teams can work together
- Faster build process and streamlined CI/CD workflows
Accelerating Product Delivery and Quality -- Securely

ASSA ABLOY is now in the process of transitioning 15 product teams to a standard platform based on Docker Enterprise Edition and Docker for AWS with about 30 server instances now running in AWS. By using Docker Trusted Registry (DTR), the company has also been able to create a secure repository for internal product releases and updates.

"Working on this project together with ASSA ABLOY has been a great opportunity for Conoa to put our expertise and experience into practice, and a chance for us to further expand our skills in building stable and secure Docker environments," says Diego Villaman, Head of Business Development at Conoa AB.

With Docker Enterprise Edition, ASSA ABLOY has realized these benefits:

- **Secure Repository**: Using Docker Trusted Registry (DTR), the company is centralizing its firmware image repository. With centralized image management, ASSA ABLOY is driving more consistency across different teams and across the software development lifecycle.
  - Securing the repository is easier now that it’s been centralized and only the core server needs to be updated.
  - Risk is reduced as trusted images are being used at every stage of development.

- **Unified Application Delivery Pipeline**: As the product teams move projects to Docker, they get the benefit of a streamlined delivery pipeline. Project updates and changes all run on a common infrastructure.
  - Deployment times are reduced by several man-hours a week

Looking forward, the ASSA ABLOY team plans to move to a Container-as-a-Service model that allows them to create a secure software supply chain experience where Dev and IT Ops can work together. They are also exploring the ability to ship their software solutions as containers to be deployed at a customer site. These Dockerized applications are infrastructure-independent, making it easier to deploy onto diverse platforms.

**Applications**
- Containerized
  - Spring-based Java apps built on Ubuntu and Alpine Linux
  - Microservices architecture for their door-opening API modules

**Products and Services**
- Docker Enterprise Edition for AWS
  - Docker Trusted Registry
  - Docker Compose

"With Docker, we’ve been able to standardize and secure our product delivery platform, which helps us get updates out to customers and partners almost immediately."

Jan Hedström
Cloud Infrastructure Architect