Upscaling Thule

Thule wanted to take full advantage of their AWS cloud connectivity in combination with the Infor M3 AWS SaaS ERP system and move forward on their digitalization journey by testing out new ideas and projects. Figuring out new ways to implement and optimize the usage of being in the AWS Cloud in combination with their physical production lines—working towards a more connected factory and a modernized company. A starting point on their Industry 4.0 journey.

Expanding with AWS

Thule, with an established AWS Cloud Base, already on their way to upscaling and digitizing many parts of their infrastructure, both digitally and physically, felt the urge to push further in certain areas maximizing their use of AWS. With a certain focus on digitalizing various manual processes, implementing them at scale, with an end goal of setting up more connected machinery.

Aware that AWS could be used to upscale and better optimize their production lines, Thule understood that continuing on their path of using licenses, based on-prem, and databases to collect data for industry 4.0 purposes was a dead end—as the massive amounts of data to make qualified business decisions grew too fast. Thule came to the conclusion that fully utilizing their AWS services was the best way to move forward.

A Proof of Cloud Concept Solution

Instead of continuing on the on-prem path. Elastic Move and Thule saw an opportunity to start building and expanding on top of their established AWS services. With a Proof of Cloud Concept (PoCC), Thule got the perfect playground to start testing out and expand ideas that could be nitpicked and developed however best fitted to what Thule wanted to achieve or create. By using the AWS cloud, physical servers on-site were limited to a minimum and in this case only used as edge computers.

By implementing these new functions, the overall goal was to streamline the processes, and set the Infor M3 ERP system as a master and starting point. The setup is also connected to the on-prem "not previously connected" device, and to continuously receive data information back while the process is ongoing. This makes it possible for the data to stream back and forth to the edge device, connected to a machine in the production line—reaching the goal of the connected machinery.

Company:
Thule

Industry:
Consumer goods

Purpose:
"Active Life, Simplified"

Main Markets:
Worldwide

Employees:
2400

Website:
www.thule.com

About Thule:
Thule was founded in 1942 by the Thulin family in Hillerstorp, southern Sweden. Today they have 2400 employees worldwide and are global market leaders in a number of product categories, such as roof racks, roof boxes, bike racks used on a car, camera bags, as well as multisport- and bicycle trailers. Their business concept is to offer high-quality products with smart features and a sustainable design that make it easy for people across the globe to live an active life.

With the PoCC being successful, new solutions on how to advance Thule's production line and concept were set up, starting a new journey connecting machines to the Cloud and to the Cloud-based ERP system.

The overall goal was to automate a manual process with full control and traceability.

- Directly start the order in the ERP system and keep the important product configuration data only in the ERP system

- No manual involvement in the start and preparation of the work orders

- Speed up the time from start to finish in the production process

- Minimize the risk of mistakes in a manual process where the same data was stored in several systems

- Quality assurance of the whole process in case of traceability when necessary.

- Future possibility of AI and ML capabilities to increase the OEE (Overall Equipment Effectiveness)

The process flow is set to start the order in the ERP system, send the data from that system to an edge device connected to the machine.

Implemented PoCC

By setting up this first PoCC, Thule got the type of platform they were looking for to expand their operations in AWS. It combined the thoughts of using edge devices in combination with services in the AWS Cloud.

This PoCC became a way to test, monitor, scale, and implement ideas immediately—leading to a better and direct result in their production line. It was used to upgrade and ease up the manual task of weighing, labeling, and packaging directly on the factory floor—and instead connected the machines to the AWS network where it could be handled without delay and minimized the risk of human error on site.

A quick process benefiting both directly on the factory floor, and when moving forwards into the future, by giving them a space to test out new similar projects in other areas and factories.