Field to Cloud: Seamless AWS IoT Core & AWS IoT Greengrass Integration

arm

eurotech
UNLEASHING THE POWER OF THE EDGE

ARM IP

+ Cortex-M
+ Cortex-A

OVERVIEW & GOAL

Digital transformation and IoT in asset-intensive organizations and businesses, are enabled and accelerated by AWS cloud offerings. Eurotech's offering in IoT, edge computing and edge AI helps customers and system integration partners create and utilize "best in class" solutions for industrial IoT(IIoT) in the context of AWS without compromising operational technology (OT) requirements. Eurotech is a company deeply rooted and experienced in the embedded and OT world, while AWS is a clear leader in cloud services. Together, they deliver a unique and robust market advantage.

CHALLENGE

Edge or IoT projects are often stalled due to deployment hardware and software failure to integrate successfully. Market fragmentation from a hardware and software perspective, with the resulting interoperability, compatibilit,y and security challenges become a major hurdle for solution development, deployment, and management. This is also true when developing IoT solutions to connect field assets, such as PLC's, SCADA systems, and sensors to AWS cloud services. Ensuring the OS supports the required hardware, implementing the edge AWS IoT Core SDK or installing AWS IoT Greengrass components, developing the desired edge device functionality, passing certifications, and meeting communication and configurations requirements, are just some of the aspects that become difficult to resolve. Full device life-cycle management and meeting security requirements are additional challenges.

SOLUTION AND BENEFITS

The standards, security protocols, and cloud-native ecosystem being developed by Arm in Project Cassini reduce these barriers to IoT adoption and deployment. Eurotech's ReliaGATE 10-14 IoT gateways have proven interoperability (Arm SystemReady IR) and security (PSA Level 1) compliance. The gateway, with its entire software stack, also has passed security certification IEC 62443-4-2. The ReliaGATE 10-14 is an IIoT gateway that enables industrial assets to communicate effectively with the cloud for industry 4.0 applications, such as predictive maintenance and real-time monitoring. Featuring Eurotech's IoT Edge Framework Everyware Software Framework (ESF), the device enables the seamless integration of field data, edge processing, and delivery to the cloud by interfacing directly with AWS IoT Core (SDK) and AWS IoT Greengrass. This ecosystem approach helps to reduce the time –to market of IoT deployments and allows many additional enterprises to unlock the value of IoT.
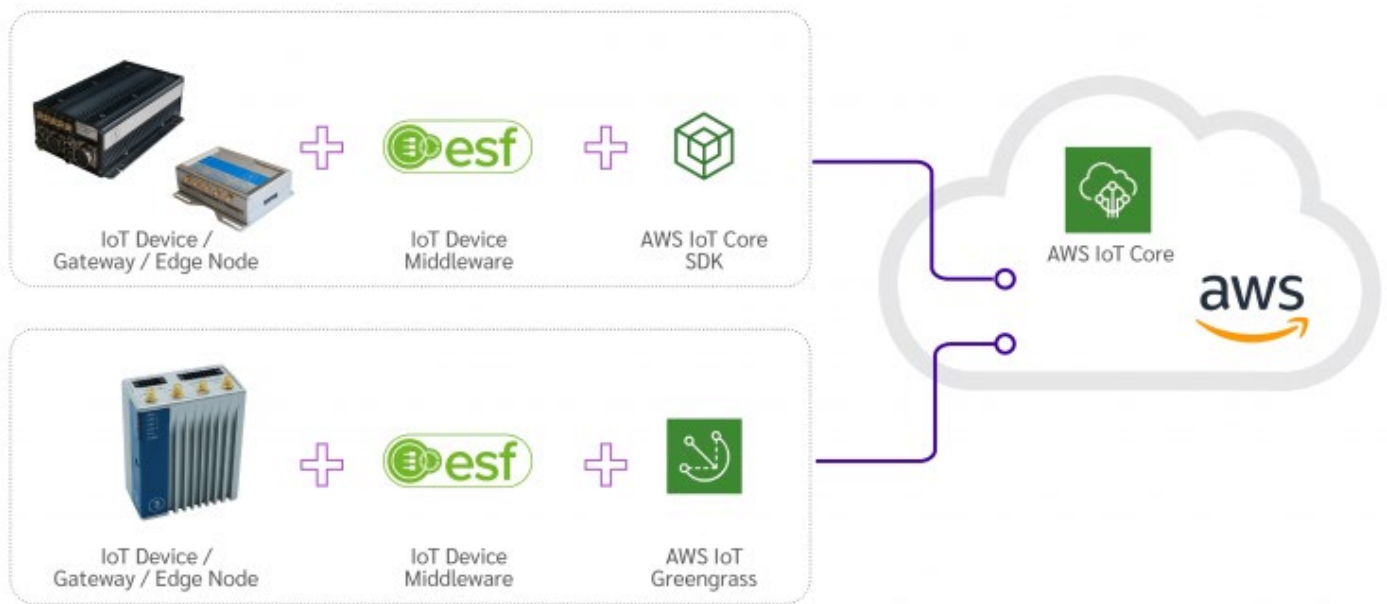
PRE-INTEGRATED AND QUALIFIED AWS IOT INTEGRATION

LINKS TO FURTHER RESOURCES:

— Product Description: https://www.eurotech.com/products/reliagate-10-14/

— System Ready IR certification:
https://www.eurotech.com/news/eurotech-edge-gateway-achieves-arm-systemready-certification/

— Achieveing IEC 62443-4-2 certification:
https://www.eurotech.com/news/eurotech-in-the-elite-of-iec-62443-certified-companies/

— Achieving PSA certified Level 1:
https://www.eurotech.com/news/psa-certified-level-1-iot-security/

— Eurotech's AWS IoT related offering:
https://www.eurotech.com/partner-ecosystem/aws-iot-integration/