Edge Service Package: AWS IoT Greengrass



Features

- Supports quick deployment of Amazon IoT Greengrass on edge platforms
- Extends cloud intelligence and analytics to edge devices
- Boosts productivity and response times with data
- Secure cloud communication and edge devices

Introduction

Edge-as-a-service refers to a combination of hardware, edge software, and corresponding cloud services for edge orchestration. The collaboration between Edge and Cloud is essential to digital transformation. Advantech Edge Service Packages aim at serving Advantech edge platforms, 3rd-party software applications, and cloud services for enhanced flexibility.

AWS IoT Greengrass is an open-source edge runtime and cloud service for building, deploying, and managing device software. It provides pre-built components so end users can easily extend edge device functionality without writing code. AWS IoT Greengrass enables the adding of features and quickly connects to AWS or third-party applications at the edge. With the package, end users can seamlessly download AWS Lambda and quickly initialize Greengrass service on edge devices and then manage them from AWS IoT, and send telemetry data to AWS Cloud.

Architecture



Feature Details

Supports quick deployment of Amazon IoT Greengrass on edge platforms

Sets up initialization script to configure Amazon IoT Greengrass on Amazon IoT, and then to configure Greengrass V2 core on the edge platforms.

Extends cloud intelligence and analytics to edge devices

Stream analytics, OPC UA publisher, Modbus, and other high-value AI modules can be deployed from the cloud to the edge to support diverse applications.

Boosts productivity and response times with data

Local data processing enables immediate decision-making and reduces bandwidth costs by minimizing the data transmitted from local devices to the cloud.

Secure cloud communication and edge devices

The inclusion of onboarding TPM 2.0 increases device security while an SSL ensures connectivity between the cloud and edge.

Software

- **Compatible Operating System** Ubuntu 20.04.2 LTS
- **Application**
  Docker version 20.10.17, build 100c701
  docker-compose version 1.29.2, build 5becea4c
  Java 1.8.0_342
  Python 3.8.10
  AWS IoT SiteWise Component v1.0.0 (optional)
  aws-cli/2.7.29 (optional)
  Edgemanager v1.0.1 (optional)

Ordering Information

- **32CS2271000105** Edge Service Package: Amazon IoT Greengrass V2.12.6

All product specifications are subject to change without notice.