Edge Service Package: Azure IoT Edge



Features

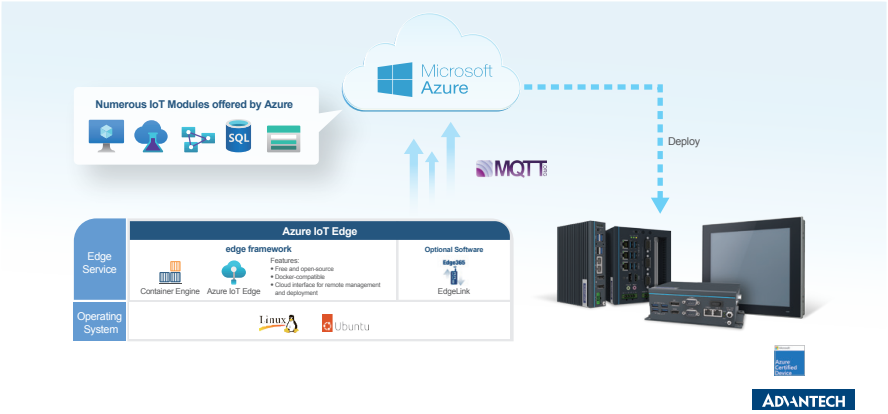
- Supports quick deployment of Azure IoT Edge on edge platforms
- Extends cloud intelligence and analytics to edge devices
- Boosts productivity and response times with data
- Secure communication between the Azure cloud and edge devices

Introduction

Edge-as-a-Service refers to a combination of the 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 the cloud services for enhanced flexibility and user experience.

This package includes Azure IoT Edge related services: IoT Hub Device Provisioning Service to connect a physical device with a device identity that exists in a Microsoft Azure IoT Hub. Also, the Azure IoT Edge Module deploys IoT Edge modules to Edge devices which can be managed from the Azure cloud, and send telemetry data to the Azure IoT Hub. Other Advantech add-ons are OPC UA Publisher and Advantech Edge Manager. OPC UA Publisher is a web application to configure and manage the OPC UA server to communicate with the OPC UA Publisher Edge module and to select the data node and send it to the cloud without coding.

Architecture



Feature Details

Supports quick deployment of Azure IoT Edge on edge platforms

Simplifies the steps to create an Azure IoT Hub, Azure IoT Hub device provisioning service, and link both services for secure device provisioning, and deploy pre-built modules to 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 with edge devices

The inclusion of Azure IoT Edge Security Daemon and onboard TPM 2.0 increases device security while an SSL ensures connectivity between the cloud and edge.

Software

- **Compatible Operating System** Ubuntu 20.04.1 x64, kernel:5.11.0-27-generic
- **Application**
  Advantech EdgeManager 1.0.2
  Advantech Auth-Server 1.8.1
  Advantech iotedgecli 1.0.1
  moby-engine 20.10.11+azure-3
  Microsoft aziot-edge 1.2.10-1 (2022-05-27)
  Microsoft aziot-identity-service 1.2.6-1 (2022-05-27)
  nodejs 10.19.0

Ordering Information

- **32CS2271000102** Edge Service Package: Azure IoT Edge