Arm Mbed Cloud Services

Centralized IoT Management from Sensor to Cloud

Introduction
Arm Mbed Cloud offers IoT device management capability delivered as a service from the Cloud. Mbed Cloud offers the capability to securely manage “any device” on “any architecture” with “any cloud”. It is Arm’s first Software as a Service product aimed at OEMs. It enables them to simplify connecting, securing, provisioning and updating of devices across complex networks. This allows devices to have flexibility to work with multiple clouds. It offers coverage across Cortex-A&M, and any other device with an included flexible cloud client component. It is optimized to take advantage of the energy efficiency of the Arm architecture on constrained devices through the use of CoAP – the constrained application protocol. Efficient caching capabilities allow reduction of operating costs for networks that need sleepy devices to conserve battery life as well as frequency of communications needed. Security and trust provisioning are built in, end-to-end, and provide security for every device transaction.

Feature Details

Arm Device Management
Arm Device Management service is a centralized web-based console to remotely monitor devices. Easily manage and deploy IoT devices with LWM2M standard.
- Enables large-scale data acquisition, real-time monitoring and data analytics so as to provide reports and generate statements, helping to create new business insights.
- Allows secure and energy-efficient connectivity of a huge amount of devices with easy integration, and facilitates efficient and effective device management.
- Paves ways for big data analyses to provide insight for making business policies.
- By leveraging reliable mid or long range data transmission method, it reduces the overall cost for IoT system operation significantly.

Arm End-to-end Security
Arm End-to-end Security service provides protection goes both ways on device and on the cloud. On-device security is based on TrustZone and TrustZone-M, plus TLS to ensure connection reliability.
- Secure management of device assets to enable trusted device identification, device onboarding and service provisioning.
- Hardware-based Arm security provides device-root protection using TrustZone and TrustZone-M from chip to the cloud to ensure trusted connection.
- Secured cloud access and data transmission.

Arm Software Update
Arm Software Update is a remote firmware/ OS/ application update service on hardware which helps improve device longevity and reliability.
- Enables cost-effective, secure and reliable software update to IoT devices to ensure long product lifetime.
- Update of individual and group/s of devices.
- Authenticity, integrity and confidentiality protection to update packages.
- Protection from accidental and false updates and recovery mechanism from failed conditions.

Order Information

Mbed Cloud Services on WISE-PaaS Marketplace
- 9806WMMBC0 - Arm Device Management with 100 devices access
- 9806WMMBU0 - Arm Software Update with 100 devices access
- 9806WMMBP0 - Arm End-to-end Security with 100 devices access

Pre-configured Mbed Solution Packages
- WISE-3620IMS21A1E - WLAN Solution Package
- WISE-3610IMS51A1E - LPWAN Solution Package

All product specifications are subject to change without notice. Last updated: 8-Aug-2017