



BENEFITS:

- + **Flexible:** configure any device on any network remotely, & securely
- + **State-of-the-Art:** use the Lightweight M2M standard already supporting tens of millions of devices, pragmatically combining industry-accepted standards & practices
- + **Time-To-Market:** leverage complete APIs, sample code, & full documentation
- + **Industry-Proven:** certified by Ericsson, AT&T, and Verizon, semiconductors, & industry leaders
- + **Advanced Security:** provide authentication & encryption at the device, application, data & transport-level

INDUSTRIES SERVED:

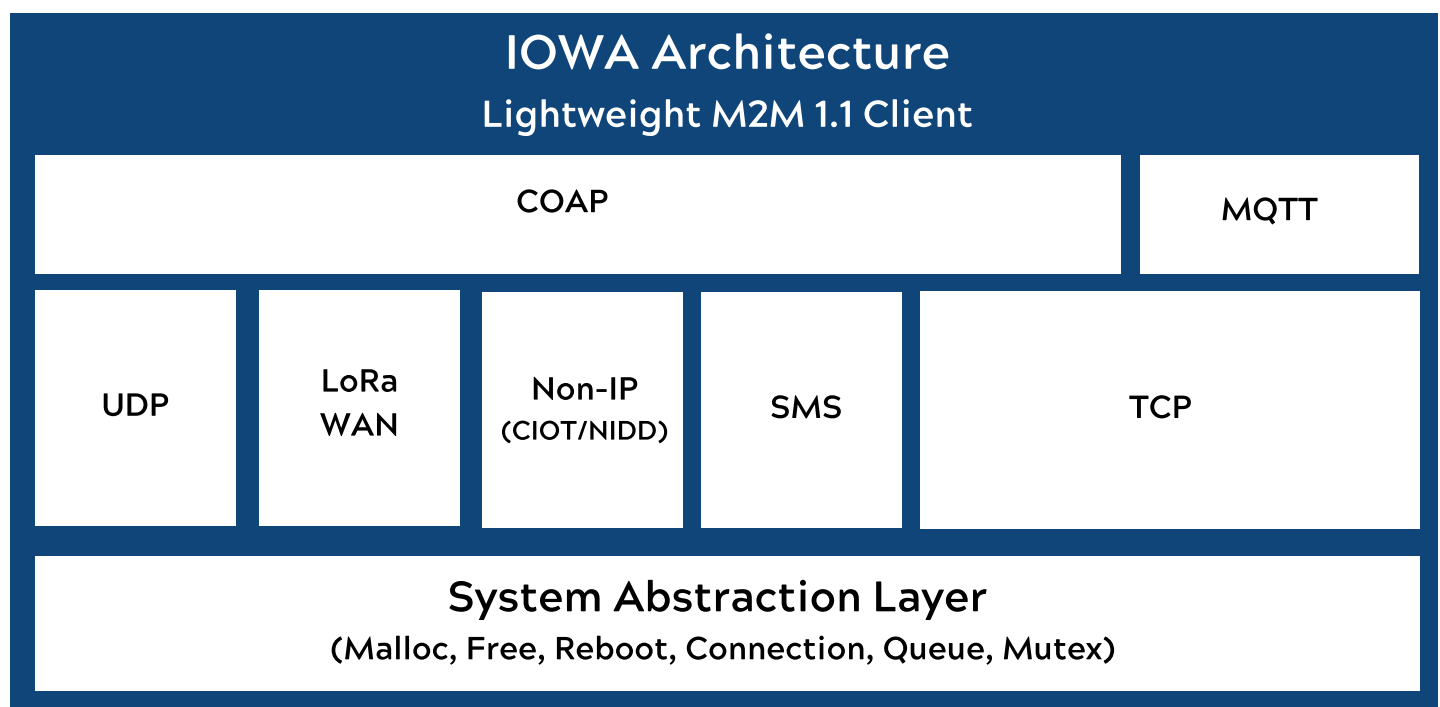
- + Smart Meter
- + Smart Lighting
- + Smart City
- + Logistics
- + Asset Management
- + Energy
- + Industrial Automation
- + Automotive



EASILY INTEGRATE:

- + **Complete Lifecycle Management:** remotely install, configure, diagnose, & update firmware
- + **Lightweight M2M 1.1 Compliance:** meet the most-stringent network operator requirements
- + **Network Independent:** support NB-IOT, LTE-M, LoRa, Bluetooth, Wi-Fi, SMS, 4G, 5G,...

REFERENCE LIGHTWEIGHT M2M IMPLEMENTATION





IOWA SDK

Portable C library:

- + Compact*: < 30KB Flash & < 5KB RAM

- + Ported to Bare Metal, ThreadX, FreeRTOS, ZephyrOS, Android, Linux,...

- + 450-page API manual

- + Sample code:

- + Firmware update

- + DM server

- + Bootstrap server

- + Client with user security layer

- + Client including regular IPSO objects,

- + Custom object

- + Build system

- + Logger for debugging

FEATURES:

- + **Provisioning/bootstrapting:** deploy devices using centralized onboarding, configuration, activation, & security services

- + **Device Management:** remotely change device settings (security credentials, certificate, & keys), connectivity settings (APN, SMSC, preferred network and/or barriers), action capabilities, lock-and-wipe, attach/detach from network, (reboot, factory reset,...)

- + **Data Reporting:** control frequency & alert thresholds using standardized IPSO and OMA objects (location, connectivity, temperature, presence, light control, pressure,...)

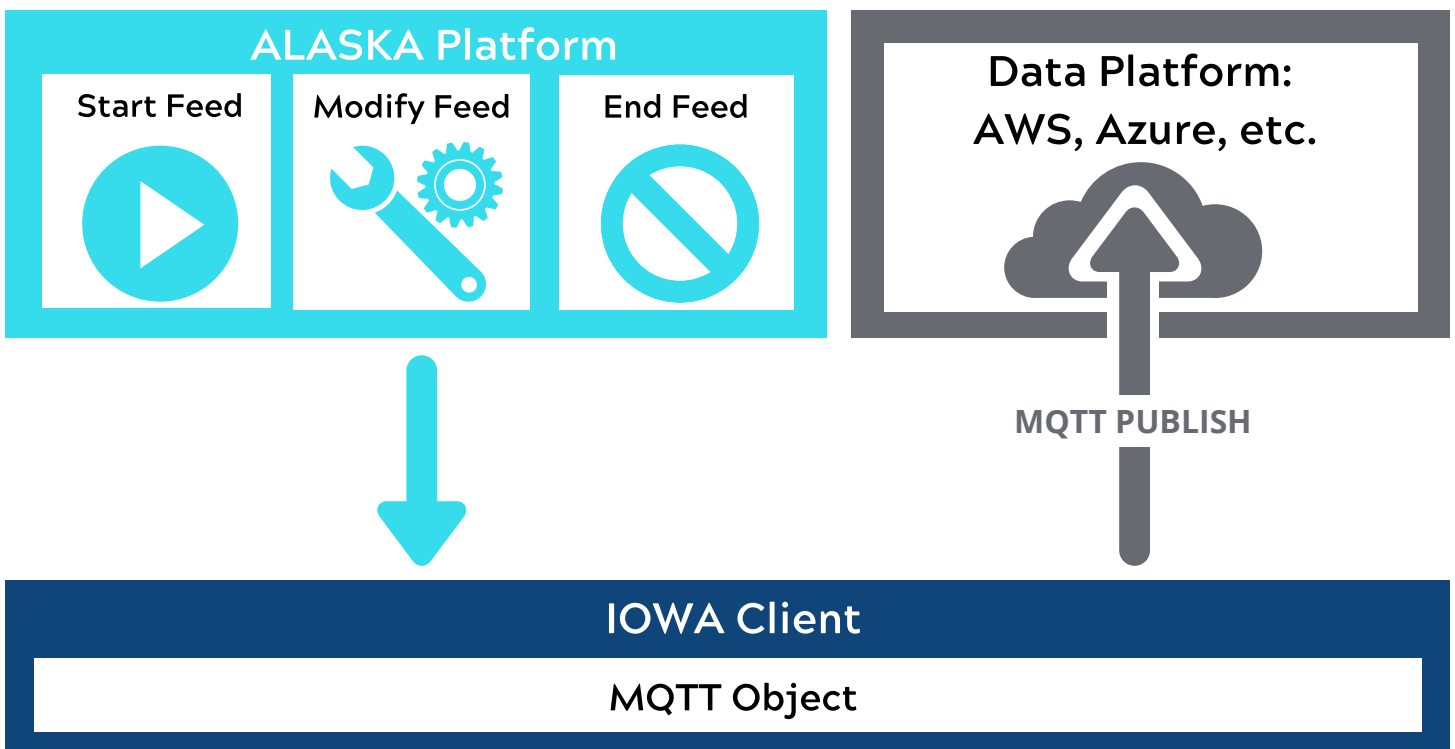
- + **Remote Diagnostics:** monitor battery levels, memory status, hardware/software version, connection logs, error codes & device variables

- + **Firmware Updates:** distribute packetized, targeted, over-the-air firmware/software updates (FOTA/SOTA)

- + **Interoperability:** protect investments by relying on LwM2M

- + **Security:** use IETF DTLS & OSCORE (PSK, X.509, & NoSec)

DYNAMIC MQTT CHANNEL CONFIGURATION:



*Industry leading