

IOWA

Software Development Kit

Fast-track your IoT projects with the most efficient LwM2M stack

IoTerop created the IOWA software development kit to help you achieve your IoT device goals with minimum time and effort. Created by engineers for engineers, IOWA unlocks IoT device management capabilities while extending battery life, lowering communication bills, and enhancing product margins; even for the most resource-constrained devices. Its super-efficient code stack features a highly professional, easy-to-use LwM2M implementation that enables rapid application development and improves time to market.



Unlock IoT device management



Prototype in 2 hours

Build a prototype in less than 2 hours with an out-of-the box, validated SDK



Cost and space-saving

Smallest footprint on the market at < 5KB RAM, while drastically reducing communication costs



Save resources

Reduce your time to market and development costs while using the time saved for your application



Hassle-free security

Embedded security protects your IoT device and its data from the get-go



Flexible & affordable

A transparent pricing structure that scales to your deployment requirements



Extended battery life

Reduce device power usage thanks to reduction of transmissions and payload



Specialized support

Get the help you need from the highly-specialized support team that built IOWA



Latest version

Enhanced features with LwM2M 1.2, and backwards compatibility with versions 1.0 & 1.1



Leaders in LwM2M

Gain access to the latest LwM2M protocol, thanks to IoTerop's leadership on the OMA v board



Effortless IoT device life cycle management

Easily manage remote asset commissioning, configuration, data collection, security settings FOTA updates, and more

IOWA SDK Tech Specs



Code & Integration

- Portable C code can be compiled on any platform
- OS & hardware and security implementation abstraction layer
- CoAP stack including support for:
 - No security, pre-shared key, raw public key and certificate
 - Block mode (RFC7949) and block transfer Qblock1 & Qblock2 (RFC9177)
 - UDP, TCP, SMS and non-IP data delivery
- Code sample of the mbedTLS TLS/DTLS security protocol stack, including support for Continuation <u>Identifier (CID)</u>
- OSCORE security protocol stack for end-to-end encryption
- Advanced internal logs
- Choose your own transport stacks



Communication Protocols

- Radio access technology (RAT) agnostic
- Supports LwM2M features up to 1.2;
 backwards compatible with versions 1.0 and 1.1
- Supports OMA, IPSO and Custom Objects
- Optimized support for intermittent connectivity
- Exposes non-LwM2M resources over CoAP
- Supports secure and non-secure connections
- Opaque, CBOR, TLV, JSON, SenML JSON, SenML CBOR, LwM2M CBOR encoding support
- Supports MQTT channel management through LwM2M Objects
- SMS support for provisioning, wake-up, and LwM2M standard operations triggering



Client/Server Interactions

- Registration rules setting for one or multiple Server architecture
- Telemetry support
- FOTA support
- Breakdown payloads into blocks
- Stream payloads directly from the server to the device application



Power Management

- Optimized bootstrap operation
- Configure device runtime scenarios including device wake-up, on-duration, and trigger its reset
- Context storage
- CoAP retry timers configuration

Manage millions of IoT devices with ALASKA

IoTerop's ALASKA is the perfect complement to IOWA SDK. Created with scalability in mind, ALASKA will grow with your IoT device management needs, thanks to its capability of handling hundreds of thousands of IoT devices at every stage of a device's life cycle. It can operate on all connectivity types, even the most intermittent.

Contact us to learn more about why ALASKA is one of the best IoT device management platforms on the market.



About Us

IoTerop is an award-winning software company dedicated to helping organizations build efficient IoT solutions. We pride ourselves on our leadership in LwM2M, comprehensive support, and ability to meet our individual customer's needs.

European HQ Customer & Sales Support

Contact

www.ioterop.com sales@ioterop.com