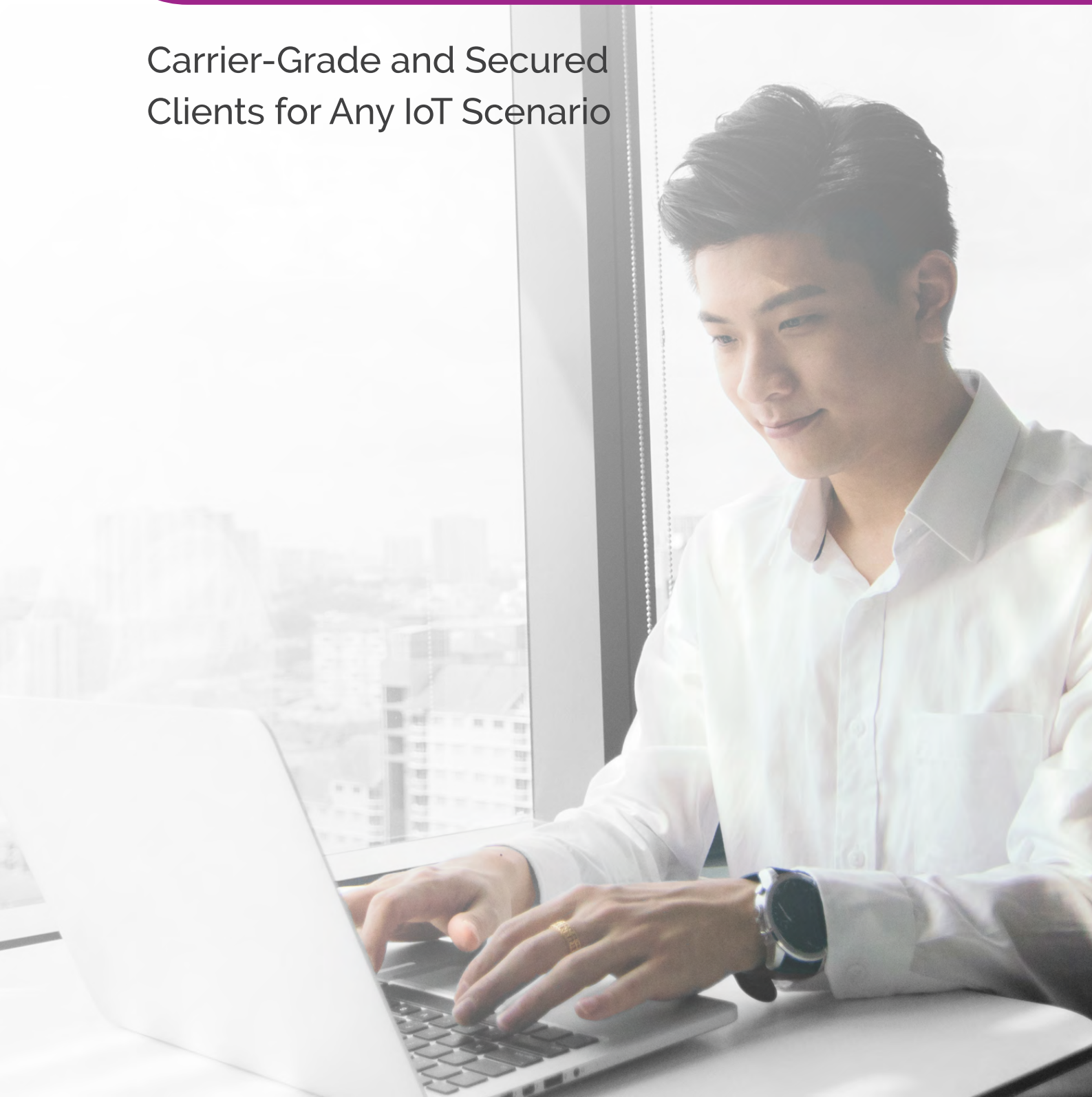


# Friendly Embedded Clients

Carrier-Grade and Secured  
Clients for Any IoT Scenario



# Friendly OMA-DM Embedded Client

Friendly's OMA-DM client is the most advanced and feature-rich OMA-DM client and is certified by the leading US carriers.



## For Android



## For Linux

- › Friendly OMA-DM client for Android (FODA)
- › Android client requiring either platform certificate signature or inclusion into Android ROM image
- › Friendly OMA-DM Client SDK for Embedded Linux (FOCS)
- › SDK to build OMA-DM client software for embedded Linux devices

Friendly Technologies provides an OMA-DM testing server.

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### Security

- › SSL 3.x and TLS 1.x
- › Basic authentication type (Logging)
- › Digest authentication type (MD5)
- › HMAC authentication type
- › SOCKS 5 proxy tunneling

### Management Objects

- › OMA-FUMO v1.0.4
- › OMA-SCOMO v1.0
- › OMA-LAWMO v1.0

### OS Support

- › Android v. 8.0, 8.1, 9.0, 10.0
- › Embedded Linux with kernels compatible with v2.6.x and above
- › Porting layers available to port the software to non-Linux operating systems

### OMA Specifications

- › OMA-Device Management (DM) v1.2
- › OMA-DM v2
- › OMA-Client Provisioning (CP) v1.1
- › Supporting Bootstrapping

## Friendly OMA-DM Embedded Client Key Features

- › Full support of the OMA-DM and OMA-CP protocol
- › Extensive SDK with implementation samples
- › Support of OMA-DM data model
- › Provisioning and bootstrap
- › Firmware upgrade over the air (FUMO)
- › Configuration management
- › Software management and update (SCOMO)
- › Lock-and-wipe functionality
- › Light footprint - Storage footprint of 2MB (with sample plugin management objects)
- › High-level security
- › Diagnostics
- › Full data tree management
- › Email object
- › Browser object
- › APN (Access Point) objects for SMS, MMS and Internet access
- › Wi-Fi access point management
- › Roaming state: Service, Signal, etc.
- › OS Info object, e.g. Build, Version, OS Name etc.
- › Device status object: Battery levels, IMEI, Network Type etc.
- › Device capabilities management, e.g., ability to turn Bluetooth on/off
- › Connection request initiation via WAP push
- › OMA-DM server setup form to configure connection parameters
- › FODA functions as a background service that can be launched on device start-up

## Friendly TR-069 Client

Top quality software targeted for device manufactures. The fully featured product supports the full specifications of the TR-069 protocol family including the latest Amendment 5 and the new TR-181 data model. The client is designed for embedded Linux and other environments.

The client's modular design ensures minimal memory footprint, support of any data model, including vendor specific parameters. The product was selected by leading device and chip-set manufactures worldwide and is already deployed on tens of millions of devices.

Friendly Technologies provides a TR-069 testing server.

## Friendly LwM2M Client

Friendly's Lightweight M2M (OMA-LwM2M) embedded client is designed for management of constrained IoT and M2M devices and sensors. Friendly's OMA-LwM2M client has a notably small CPU and memory footprint designed specifically with the IoT concept in mind, and it targets LTE Category 1, Category 0 and Category M devices.

The OMA-LwM2M client includes the client itself and the SDK which is provided as a source code with integration samples. Our technical team is available for integration assistance. Additionally, Friendly Technologies can provide an OMA-LwM2M server for lab testing and commercial deployments.

Main Features: Support of the LwM2M specs, Strong DTLS security level, Firmware upgrade, Device monitoring, Support of any data model, Bootstrap and provisioning, Device location tracking, Reset or reboot device.

Friendly Technologies provides a LwM2M testing server.

## About Friendly Technologies

Friendly Technologies is a leading provider of carrier-grade platforms for IoT, Smart Home, and TR-069 device management that enable unified administration of all types of services on one platform. Friendly has been providing device management solutions to carriers and service providers since 2007. When IoT and the Smart Home emerged, Friendly Technologies launched its IoT platform and full solution for the Smart Home. Leveraging our expertise in the device management field, Friendly extended its offering to IoT and the Smart Home markets.

Friendly's products support LwM2M, MQTT, OMA-DM, TR-069/TR-369 USP, CoAP, and HTTP protocols, as well as proprietary protocols. We provide solutions via NB-IoT, 5G, LoRA, FTTH, and DSL networks.

Friendly's device management platform enables our customers to connect and provision new devices automatically, monitor KPIs, configure and update firmware remotely, collect and analyze data, and streamline the support they provide for subscribers. Hundreds of providers worldwide trust Friendly's device management and IoT solutions. Our products are scalable and future-ready, enabling our customers to reduce both CAPEX and OPEX and generate new revenue streams.