

RTCU M2M Platform

Advanced Telematics and Telemetry Platform

For Professional M2M Applications

The **RTCU M2M Platform** embraces software and hardware building blocks carefully designed and manufactured for the most demanding M2M and Internet of Things applications.

All products rest on the **RTCU Architecture**, that brings all the necessary tools together to develop, implement and maintain today's sophisticated M2M/IoT applications.

The **development task** is supported by the powerful RTCU IDE Development Environment complemented by a large and comprehensive documentation and application example library.

The RTCU Gateway 2 is the corner-stone of the **communication infrastructure** ensuring reliable two-way device communication in any network environment.

Deploying and maintaining new application and firmware versions for devices in the field are handled by the powerful RTCU Deployment Server.

15 years of experience and know-how in one platform!

Experience and Know-how

For 15 years Logic IO has been committed to offer the most sophisticated platform for advanced and highly demanding M2M / IoT applications.

The **RTCU M2M platform** is constantly evolving and is the result of many years of accumulated experience combined with valuable feedback from hundreds of professional and mission critical applications by major organizations around the world.

RTCU products are deployed **underground, stationary, on the road, at sea, on the rail and in the skies!** - In any imaginable application and environment.



RTCU M2M Platform Building Blocks

- 10+ different hardware devices.
- Free RTCU IDE development tool.
- On-line help and code wizard.
- Powerful edge intelligence.
- Full featured Device Emulator.
- Large and comprehensive SDK.
- Code samples to kick-start development.
- Comprehensive protocol support.
- RTCU Gateway 2 back-end.
- RTCU Deployment Server.
- Fast and free email support.
- Backward and forward compatible.

" We estimate that 80% of our job was already done, when we started our development and further on, the TCO turned out to be more than favorable. "

Professional M2M developer.

RTCUC M2M Platform Highlights

Advanced Telematics and Telemetry Platform

The **RTCUC M2M Platform** is targeting a broad range of advanced telemetry / telematics applications with tools to support and assist in all stages of the M2M application life-cycle.

The **Design stage** is indirectly supported by a well defined platform and a proven development methodology. The solution designer can focus on identifying the application business logic and stay confident, that realization is possible within the projects budget and schedule.

The **Implementation stage** is directly supported by the powerful **RTCUC Integrated Development Environment**, that covers all aspects of implementation, rapid prototyping and test. The RTCUC IDE integrates with the full featured RTCUC Emulator, allowing the application to be fully tested and debugged before being deployed to a physical RTCUC device.

The **Production stage** is in the realm of the **RTCUC Gateway 2** communication back-end server for reliable, safe and economical two-way device communication.

In the **Maintenance stage** the **RTCUC Deployment Server** ensures, that devices are always upgrade with the correct application and firmware version. Remote upgrade occurs without impact on the end-users daily business.

Further the application maintenance is protected by the **RTCUC Compatibility Manifesto**, that guarantees the investment made in M2M application development is well protected over RTCUC device and software generations.



The RTCUC Compatibility Manifesto

To ensure device and application longevity the following compatibility manifesto has been formulated more than a decade ago:

"A given RTCUC generation must be binary compatible for a minimum one generation backwards. Additionally full source code compatibility for minimum two generations backwards must be ensured"

After 16 years the fourth generation RTCUC Architecture was recently released effectively meaning, that source code written 10 years ago can still execute unmodified and without further testing on the latest RTCUC devices!

Find out more and start developing today!

The RTCUC platform includes more than 10 different RTCUC devices spanning a broad range of Telemetry and Telematic applications.

To learn more about the technical details and usage of the RTCUC devices, please refer to the data sheets and technical manuals of the respective products.

Also make sure to get the **FREE RTCUC IDE** and **RTCUC Emulator** development tools as well as the **RTCUC Gateway 2** and **RTCUC Deployment Server** to get a hands-on experience how rapid development/deployment of game changing M2M/IoT applications were meant to be. Please visit www.logicio.com

The RTCU M2M Platform Development

Advanced Telematics and Telemetry Platform

The **RTCU Integrated Development Environment** is the primary tool for developing and maintaining today's professional M2M applications. Within the RTCU IDE all aspects of development are covered, such as source code editing, help, code generation, device emulation, device communication and pilot device deployment.

Highlights:

- Powerful graphical environment running under standard Windows.
- Completely FREE.
- Programmable in VPL (IEC1131-3 based) or in Lua.
- Full floating-point support.
- Multithreading with thread synchronization support.
- Target optimized dual-core Virtual Machine architecture.
- Comprehensive API covering almost all aspects of M2M development.
- More than 1300 pages of on-line documentation.
- Large library of example programs to kick-start development.
- Device Edge Intelligence.
- Full featured device emulator.
- Full remote access to devices over the **RTCU Gateway 2** or CSD.
- Comprehensive protocol support, including:
TCP-UDP/IP, FTP, SMTP, RACP, MODBUS, FMS/J1939,
Navigation and Messaging Platform / Garmin FML.
- Full MQTT support.
- Intellisync Project Drive device synchronization.

Intellisync Project Drive

The **Intellisync Project Drive** offered by the latest **RTCU NX32 Execution Architecture** is an intelligent device file-system, that utilizes state-of-the-art **Intellisync** compaction and differencing algorithms to reduce the communication overhead and bandwidth usage during device update synchronization.



Device Edge Intelligence

Device Edge Intelligence is a key element in the **RTCU M2M platform**, that offers a high degree of autonomy and intelligence in the RTCU device in contrary to back-end server intelligence.

Device Edge Intelligence reduces the amount of data sent to the server, and ultimately pre-processed intelligent data are sent yielding lower communication cost, less server load and higher system scalability.

Device Edge Intelligence requires a powerful, open and fully programmable device platform, that can be adapted to the business logic intelligence. This is, where the RTCU M2M Platform truly excels.

* Lua is under development.

Logic IO Worldwide Headquarters

Holmboes Allé 14
8700 Horsens
Denmark

Phone: +45 7625 0210

Fax: +45 7625 0211

Commercial enquiries: sales@logicio.com

Technical support: support@logicio.com

www.logicio.com

Hardware and Software. Engineered to Work Together.