

# EQUIPMENT SOLUTIONS

## DEVICE MONITORING, MANAGEMENT & CONTROL

SIMPLE M2M GLOBAL SOLUTIONS, RAPID IMPLEMENTATION



- > 100% Wireless M2M, cellular GSM Global coverage - Fixed Price, 162 countries
- > Embedded Pythio device controller, or interface to existing communication port
- > Real time diagnosis and control of remote devices with < 400ms round trip sync time
- > Custom branded, user configurable, secure web interface and mobile apps
- > Intelligent monitoring with email alerts, and server triggered device control
- > RESTful data API for integration of device data into existing business systems

SIMPLE, FOCUSED M2M SOLUTIONS FOR YOUR BUSINESS

### Technological Expertise for Rapid Implementation and Future Expandability

Pythio provides complete, out-of-the-box solutions for your monitoring, management, and control requirements. Often within weeks, usually without any development charges, and typically requiring no changes to your existing equipment, Pythio will implement focused M2M solutions, targeted to have immediate positive impact on your business operations. Our team will meet with your product experts to integrate existing, non-networked, devices onto the Pythio M2M network. Our platform is designed on a foundation of self-configuring layers, that dynamically integrate new devices in real-time based upon simple definitions that we build by working with your team to define virtual models of your products. Get rolling with a basic solution, and then expand to add more complexity and depth as business value is recognized, and M2M capabilities become part of your team's normal "go-to" toolbox.

### High Impact, Simple M2M Deployments. Business Value Focused Solutions

Connected Devices often tempt businesses to gather too much data, and the resulting system is overly complicated. Collecting huge amounts of data across M2M connections is easy, but harvesting the most valuable information, for maximum benefit, with minimum complexity, is the challenge. Systems tend to expand scope just because technology enables growth. Instead, Pythio's platform is built to offer dynamic solutions that encourage collecting and fully utilizing the least amount of data possible, resulting in real, and immediately significant, positive impact to your business. The Pythio system contains more power and possibilities than any individual typical customer should ever use. We can always add more data, features, and tools as your use of M2M evolves.



# SIMPLE, FOCUSED M2M SOLUTIONS FOR YOUR BUSINESS



*If your competition is not already working on an M2M solution . . . they will be very soon.<sup>1</sup>*

<sup>1</sup>Global cellular M2M devices 2012: 153 Million  
2015: 247 Million  
2017: 423 Million

Yankee Group ©2013

**pythio**  
get connected



SAME DEVICES, JUST DIFFERENT

## INTEGRATION EXPERTISE

Typically, non-connected devices will be upgraded for M2M by either integrating tightly to an existing communications port on the equipment's controller, or in the case of simple devices, sometimes it is preferable to replace the existing controller with a Pythio controller. In either case, Pythio's team of hardware and firmware developers will do the work to make it happen.

## TYPICAL BENEFITS

Benefits of adding M2M communications, to non-connected equipment are broad. Most projects have some commonality including these examples:

- determine usage patterns and sales data (by hour of day, day of week, month of year, etc.) and increase market share using sales data and M2M differentiation
- improve equipment performance and uptime by using proactive alerts, remote diagnosis, remote control, and preventative maintenance
- stop operating in crisis mode, by monitoring critical equipment metrics and predicting failures before they happen
- optimize warranty costs by automating registration, limiting unnecessary claims, detecting fraud and abuse
- capture additional revenue from equipment consumables because you can predict and notify, before customers even knows they need it
- manage equipment after it ships from factory by keeping firmware and operational parameters current
- offer value added services after sale like equipment leasing commissioning/decommissioning, usage based billing, remote door unlocking, access control
- reduce parts and service cost with diagnosis information before travel, faster on-site repairs, less wasted trips
- reduce factory costs of customization and programming with OTA (over the air) automatic equipment provisioning after site installation
- demonstrate your product's superiority over competition by accumulating conclusive hard data on energy usage, uptime, output, etc.

## > Monitor

Connected devices periodically send defined sets of status data. Pythio stores the data for long term availability, and constantly analyzes the data to send email alerts, or trigger events automatically.

## > Configure

Device variables, settings and configurations become synchronized with the Pythio M2M platform. Take control of any device setting to remotely reconfigure, or remotely reset a device to factory defaults.

## > Control

Internal device functions, and user initiated device functions become part of the virtual device control panel on the web interface. Control devices remotely in real time, and watch the device response in real time on the web interface.

## > Manage

Manage thousands of devices remotely with server driven event initiated control. Push new firmware rollouts or system wide configuration patches from a central location through the M2M connection.

## > Diagnose

Pythio M2M connections include a special ability to initiate a "real-time streaming" mode on devices. This mode opens a real-time device link, enabling a virtual equipment simulator screen with gages and indicators to assist with remote diagnosis of problems.

## > Analyze

User configurable charts, graphs and tables query your valuable accumulated data using hundreds of different available options. Select the method, establish default displays and tweak the settings anytime to provide regular daily information, or dive deep into raw data to create a one-time analysis.

## > Integrate

In addition to the primary custom branded web and mobile app interfaces, provided with the Pythio platform, integrate all that data and new M2M capability into your existing business systems using a secure RESTful API.

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