

# iMotion for RFID



FOUNDATION

The advent of low-cost RFID tags and reader technology is creating a tidal wave of real-time, item level and sensor information. In order to harness the value of this exponentially growing edge data, companies must have the ability to collect information from a variety of devices, apply business context to generate meaningful information and integrate with existing systems to determine appropriate action. iMotion™ is built for production-scale implementations of RFID/mobile/sensor technologies and provides the comprehensive infrastructure to control devices, manage networks and transform data to optimize business processes.

For GlobeRanger partners, iMotion™ serves as the foundation for edge solutions, providing a platform runtime, software development kit (SDK), workflow components, and tools for rapid applications development and deployment. Based on Microsoft's .NET Framework, iMotion enables business consultants, application developers, and systems engineers to easily configure and manage RFID solutions.



TECHNOLOGY

## KNOW WHAT IS HAPPENING AT The Edge of the Enterprise

- Gen 2 Ready
- Enterprise-grade Device Infrastructure Management
- Visual Workflow Editor
- Device Emulation Capabilities
- Application Level Events (ALE) Standard Interface

# iMotion for RFID

**Gen 2 Ready** — With Gen 2 products presenting more powerful and complex capabilities, the need for an intelligent edge layer to orchestrate smart reader/device networks for business processes is greater than ever. iMotion fully supports Gen 2 features such as extended data format and the management of tag functionality such as memory lock, session management, password handling, tag kill and tag erase. Edge device management functionality has also been extended for Gen 2 readers.

**Edge Device Management** — Comprehensive device management capabilities for the efficient control of RFID, mobile and sensor-based devices as well as the reliable processing of raw data streams. Easily scales from a single reader to multi-device, multi-site deployments.

**Device Control and Configuration** — Centrally manage RFID devices and data filter requirements to generate clean, accurate information for upstream processing. iMotion's Edge Management Console enables device management both locally and across a network. Powerful, profile-based configuration functionality eases the administration of large and complex device networks. The ability to export/import configurations facilitates rapid recovery from equipment outages.

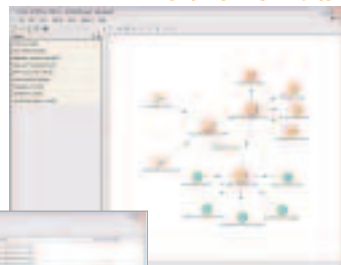
**Leverage One Infrastructure for Multiple Applications** — iMotion allows for the abstraction of the physical device layer, separating applications from device configuration details. This capability enables the sharing of RFID and sensor infrastructure across multiple applications, maximizing ROI.

**Network Monitoring** — Operation and performance information for devices is made available through industry-standard SNMP and WMI interfaces, allowing for integrated activity monitoring by standard network management systems.

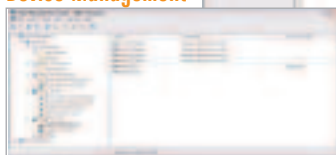
**ALE Standard Interface** — Data delivered through the emerging industry standard Application Level Events (ALE) interface, providing flexible interoperability with any ALE-conforming application.

**RFID Reader Adapters** — Standard support is available for major HF and UHF RFID readers—Class 0, 0+, 1 and Gen 2. New readers can be easily supported by downloading new reader adapters.

Event Workflow Editor



Device Management



**Edge Processes** — RFID data must be correlated with business context to create actionable events for consumption by upstream systems. iMotion provides functionalities to rapidly develop and deploy edge process workflows.

**Event Workflow Editor** — Graphically and intuitively craft business logic flows with simple drag-n-drop process components, minimizing the cost and time required for updates and business rule changes. The Event Workflow Editor provides the benefits of customized solutions without the expense of custom development.

**ALE Subscriber Components** — The iMotion platform is bundled with components that enable connection to RFID and sensor data streams through the industry-standard ALE interface. Powerful configuration capabilities give solution developers the ability to easily select the desired data.

**Component Libraries** — Bundled, pre-built workflow components provide a head start for rapid solutions development. Components for standard notification methods such as e-mail, file and database logging, HTTP POST, audio alerts, and visual displays are provided. Adapters to other data sources and upstream systems can easily be developed using iMotion's software development kit.

**Edge Process Runtime and Management** — Provides reliable and controllable execution of edge processes, fully distributable to enable scaling across a site or an entire enterprise.

**Comprehensive Development & Deployment Tools** — iMotion's powerful visual tools address all stages of solution development and delivery, maximizing productivity and ROI.

**Visual Device Emulator** — A revolutionary tool for developing RFID solutions. By emulating real-world behavior of RFID readers, printers, tags and other sensor devices, iMotion provides solution developers the ability to emulate any physical deployment scenario. iMotion's device emulator eliminates the dependence on physical hardware for development, testing and integration of RFID systems.

**Event Monitor** — Displays an accurate and real-time view of RFID tags being read. Captures history and analysis of tag-read events for application tuning and optimization.

**Software Development Kit (SDK)** — A comprehensive set of .NET classes and APIs enables third parties to rapidly develop custom workflow components. These components drop into the Event Workflow Editor, providing the same drag, drop and connect configuration as built-in components. The SDK is fully integrated with Visual Studio .NET, providing templates for rapid ramp-up with minimal training. Sample components and applications are provided to jumpstart development efforts.

Visual Device Emulator

