

RADIO FREQUENCY IDENTIFICATION (RFID) IN MARINA

RFID SOLUTIONS FOR PORTS AND DOCK:

Storage and Security

One can now locate, protect and secure all types of watercraft and marina assets using RFID solutions. RFID location technology reduces the need for expensive surveillance and monitoring equipment, onsite marine police and other storage and security services. Protect and locate assets on the ground as well as on the water.



A complete real-time inventory of these assets is available at all times. This capability can be used to monitor and manage the location of ships, boats or other assets while in storage on land or while docked during the boating season. Any significant movement of the asset can be reported and trigger a real time alert to a monitoring station which can be on or off the premises. Know when an asset is being moved without permission immediately; anytime - day or night. During the chaos of opening and closing seasons you will have the ability to quickly identify and locate any tagged asset. That means no more time wasted trying to find a missing asset. The larger your operation the more time and money you will save, and your customers will enjoy the peace of mind knowing that their valuable asset is accounted for at all times. The application middleware produces data that can also be used to bill for services by the year, by the month, by the week or by the season. Your customers can even be billed for just the time they use the facility. Customer ID Cards enabled with RFID can be integrated to provide identification, membership detail, privileges and controlled access to docks





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OUR RFID APPLICATION SOFTWARE – *RFID-Simplicity*TM

Despite all progress made during recent year in RFID technology and cost reduction, RFID implementation projects remain complex, tedious and involve a significant risk level. The main reason for RFID projects failures and complexity does not lay on the hardware side, but rather on the software side; Actually, 80% of a typical RFID project overall cost is being spent over development and deployment of specific software. These custom-made solutions are also hard to maintain over the years from the economic point of view as the entire maintenance cost are borne by each single customer; consequently they tend to become rapidly obsolete. Hardware Vendor software packages are always limited to their own hardware, while the success of any RFID projects starts by the freedom to select for each project the most suited hardware.

Our Software, ***RFID-Simplicity*TM** closes this major gap. Being an end-to-end software package and at the same time open to any RFID hardware, ***RFID-Simplicity*TM** reduces significantly the total cost of RFID project implementations, without compromising on RFID hardware selection.

***RFID-Simplicity*TM** offers a wide range of dedicated Application Packages for various vertical markets in order to customize the application to the specific project requirements, each ***RFID-Simplicity*TM** Application Package, includes a powerful parameterization tool, enabling the implementation of RFID projects in a very short time (days to weeks), while completely eliminating the risk inherent with specific development and System Integration projects.

The ***RFID-Simplicity*TM** Core provides services such as *communicating with the RFID hardware, database management, 3rd party integration, user permission* and more. It is shared by all Vizbee Applications, and warrants for a robust performing infrastructure. The core is highly scalable. It allows gradual implementation from a small partial project and up to large multi-site installations, thereby avoiding the risk implicitly involved in big-bang operations. The ***RFID-Simplicity*TM** Core is an open system with exhaustive APIs to facilitate its integration within other systems in the organization like ***ERPs, Access control, RFID-enabled Personnel ID Badges, Video surveillance***, etc. Sharing the robust Core, dedicated Application Packages were developed, to serve the needs of different vertical markets.

HEALTHCARE-ASSET & PATIENT TRACKING	MUSEUMS & GALLERIES	ASSET TRA
DOCUMENT TRACKING	POLICE PROPERTY & EVIDENCE TRACKING	CONSTRUC LAY-DOWN
GUARD TOUR	PRISONS	CONTAINER TE
COLD CHAIN-SECURITY, LOCATION and TEMPERATURE TRACKING	MANUFACTURING WORK-IN-PROCESS (WIP)	VEHICLE TRA
WIRELESS SENSOR NETWORKS	PARKING	IT and MOBILI TRACKI
WASTE MANAGEMENT	RETURNABLE CONTAINERS & PALLETS	STUDENT &SCH TRACKI
		
CORE AND WIZARD-ENABLED BUSINESS RULES ENGINE		
HARDWARE	API	RELAYS

Priority to the Graphical User Interface Domains

RFID-Simplicity™ recognizes the primordial importance of Functional and Graphical User Interface simplicity and user friendliness for the success of projects. Benchmarks and test groups are run on each interface design to validate that it is intuitive enough, so that a non-educated operator can use the system after less than 30 minutes of training.

Select the best suited RFID hardware for each project

The selection of the best suited RFID technology is critical to the project ultimate success of any RFID project. Issues like the technology, radio frequency, radio system infrastructure, the lifetime, the physical size of the tags, maintenance requirements etc., must be carefully taken into consideration in selecting the hardware that will be used for each project.

With the **RFID-Simplicity™** platform, the system integrator can freely select for each project the RFID hardware or even combine different hardware in the same project in order to optimize, both technically and economically, the performance of the system.

Business Rules Engine

All **RFID-Simplicity™** Applications include an advanced and intuitive Wizard-assisted Business Rules Engine enabling the seamless programming of business/security rules for every tracked item, whether it is an asset or a person. Complex rules can be programmed easily assisted by the **RFID-Simplicity™** Rules Wizard. Each rule includes the definition of the system reaction to its violation, including: *Display*

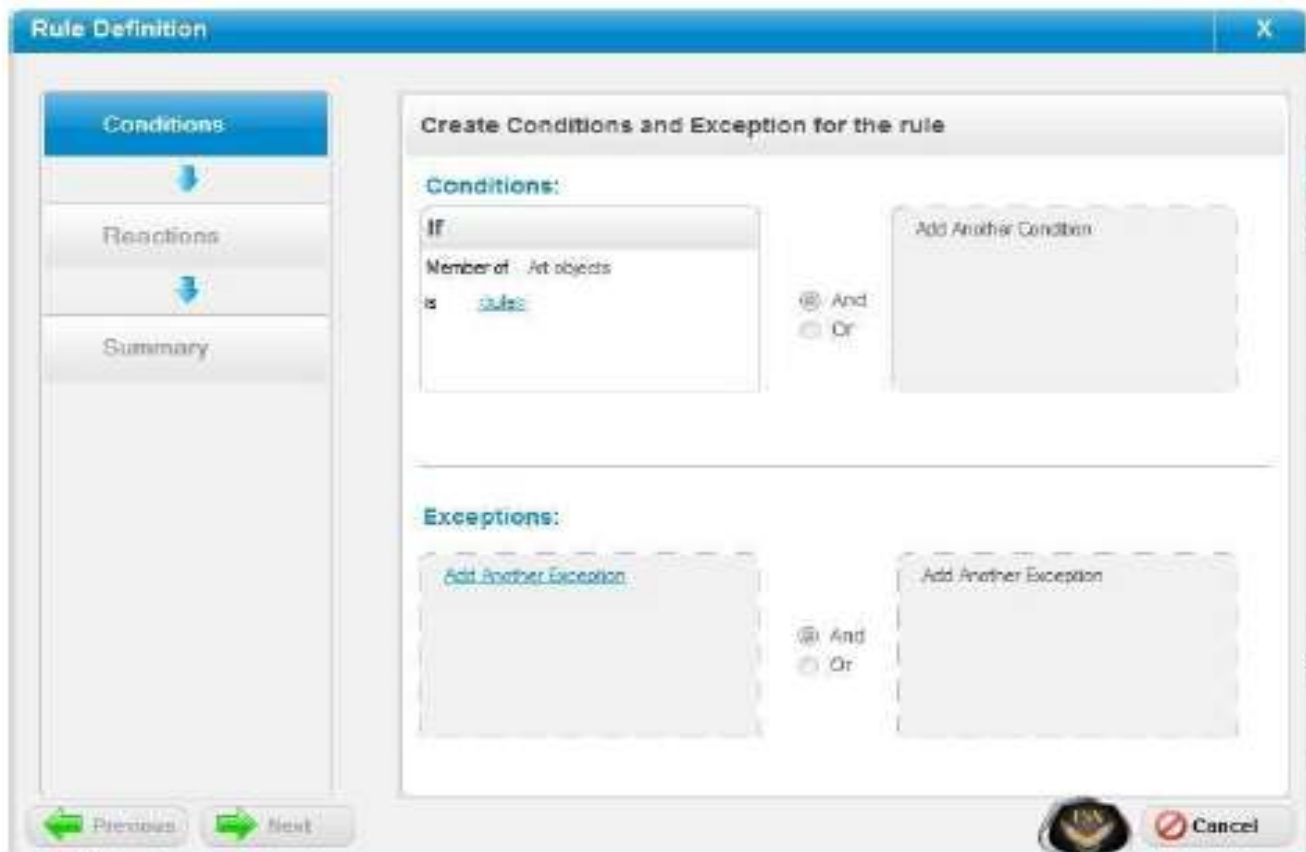


of the alert on the map, Audio alarm, SMS, emails, opening or closing contacts, focusing a PTZ Camera on the Alert location and commencing recording, or sending commands to third party systems. Multiple condition actions and alerts can easily be added and modified as required.

The system works on standard PCs. Each processor can handle up to 200 RFID events / sec).The numbers of processors and servers are not limited. Web Operator Clients are available. For each dedicated application, specific functions are supported on PDAs.



RFID-Simplicity™ can be used either as the front end and even display information received from other systems. Alternatively, **RFID-Simplicity™** can be used as a service to other systems for real-time location, rule engine, settings etc, while using the other system's user interface.



The RFID-Simplicity™ parameter-driven platform enables quick and easy implementation of RFID projects –for any sized application.

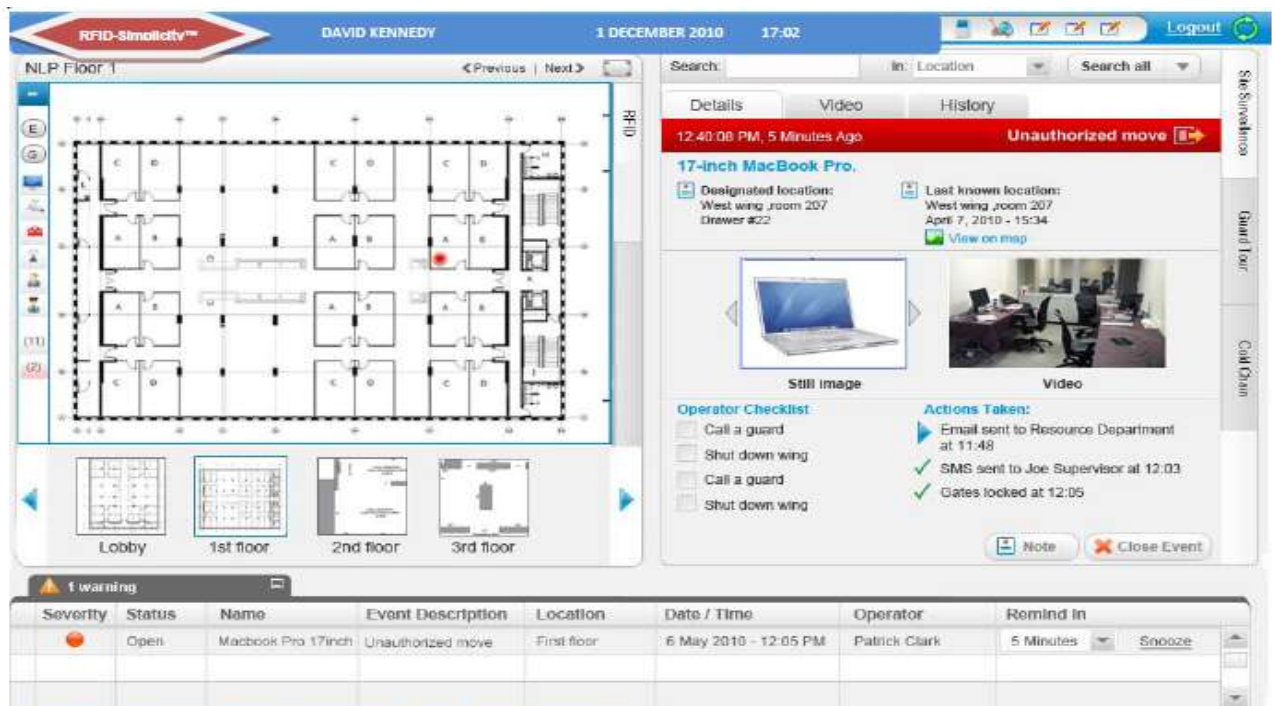
The TOPGY/FSN generic platform is a comprehensive, fully integrated solution to drive cost out of RFID system acquisition while offering flexibility and ease-of-use. It enables a total solution include all RFID software and hardware, such as Tags, Sensors, Fixed and Handheld readers, Antennas, GPS and GPRS communications as well as world class Enterprise 802.11n WLAN as required. It can monitor in real-time thousands of tags (people or assets) their presence, location, as well as other parameters, such as movement, tampering, verticality n(tilt), temperature, humidity and more.

- Single, unified interface for multiple applications
- Supports all RFID technologies in a unified, single system
- Parameter-driven customization, no coding required
- Evolves with system needs , Powered by Vizbee™
- Open, flexible architecture and APIs for multi-system integration
- Easy to use SDK allows System Integrator or client modifications and is .NET compatible.
- Full mobility integration with GPS/GPRS/GSM and 802.11n WIFI.
- Seamless integration with video, alert and access control systems

Single, unified platform for maximum visibility and low cost of ownership

The **RFID-Simplicity™** generic RFID platform was designed with the user in mind. The intuitive multi-lingual human Interface is map-driven and the software and user interface delivers an intuitive, comprehensive visual overview of system status. Most actions are performed from the main screen with one button click. The system includes Administrator, Operator and Service Web access for customer provided workstations.

Single site small **RFID-Simplicity™** projects can grow gradually into multi-site and multi applications projects with hundreds of receivers and tens of thousands of tags, just by adding tags, receivers, and software licenses at each stage.. New releases of **RFID-Simplicity™** Core and Application Packages are released every year. These upgrades include new functionalities, new hardware options and warrant that the system remains state of the art over the years. Upgrades are provided automatically to all customers on the current Maintenance and Support subscription.



A SCREEN SHOT OF THE IT ASSET TRACKING APPLICATION

A handheld RFID reader can quickly and effectively take an inventory of all boats and watercraft both on land and sea. When standing six feet away, few tags were consistently read by the handheld, but when standing two feet away, almost every tag was consistently read. Users completing inventory of distributed assets within a cubicle need to make sure they are within a reasonable read range (about two feet), but they do not have to gyrate the handheld, get within inches of a tag, bend down, or shift objects in order to capture the requisite asset data, which manual and barcode data capture methods require. The physical act of using a handheld reader to complete a cubicle inventory is almost five times faster than a manual checklist and in some cases able to sweep through an entire cubicle in as little as five seconds.

Topgy Systems and FALKEN Secure Networks (FSN)— Your partner for RFID automation

If you choose to pursue RFID implementation in your organization, here is the *TOPGY and FALKEN Secure Networks* commitment to you:

- TOPGY/FSN will provide solution architects to work with you to define system requirements for your particular installation. Multiple locations can be networked together for a central and real-time view and centralized management.
- TOPGY/FSN will do a RFID site survey to validate radio frequencies, tag types, system design and performance
- TOPGY/FSN will provide all necessary hardware and software to make the system work for you

- TOPGY/FSN will integrate the system with your existing enterprise management software
- TOPGY/FSN will provide documentation for the system, including operating procedures
- TOPGY/FSN will train your people
- TOPGY/FSN will provide warranty and continued system support For RFID solution developed in Marine industry.

TOPGY SYSTEMS and FALKEN Secure Networks (FSN) bring together the right technologies to give you control over your boats and make your organisation run more efficiently. Our automated and secure processes save time and labour, and prevent problems before they occur. With us, you get the latest, non-proprietary secure RFID technology with the most powerful and flexible RFID tracking software available.