

EZ-RFID
Improving Outcomes

INTRODUCTION TO EZ-TRAC ASSET TRACKING SYSTEM



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- The agenda of the presentation is to share the following information:
 - What is **ez-trac**?
 - Problem Statement
 - Solution Objectives
 - Solution Architecture
 - **ez-trac** – How does it work?
 - Salient Features
 - Product Features
 - Software Features
 - Product Specifications
 - Solution Benefits
 - Conclusion

Introduction – What is **ez-trac**?

- **ez-trac** is a wireless solution designed to identify, track, and manage assets at real-time at any facility. The system:
 - Greatly reduces the time taken to identify, track, and manage the assets.
 - Introduces no changes to existing process or procedures.
 - Installs in hours with virtually no system down time.
 - Improves efficiency and productivity substantially.
 - Reduces customer wait times and increase in customer satisfaction.
 - Can be used as a stand-alone system or easily integrated into any existing asset tracking/management software.
 - Is ideal for hospitals, warehouses, and retail locations of any size

Problem Statement

- Here are the problems faced by any organization in tracking their assets.
 - Organizations struggle to locate the status of the movable assets
 - ✓ How many assets are there in various locations at any point of time?
 - ✓ What is the real-time location of the asset at any point of time?
 - ✓ How many assets have been utilized at any point of time?
 - Companies struggle to perform efficient planning
 - ✓ Is it an under utilized or over utilized item? Do we keep enough in stock?
 - ✓ How many assets need to be reordered or transferred one location to another and when?
 - Exposure to Asset Losses
 - ✓ Inability to find the asset losses in real dollars

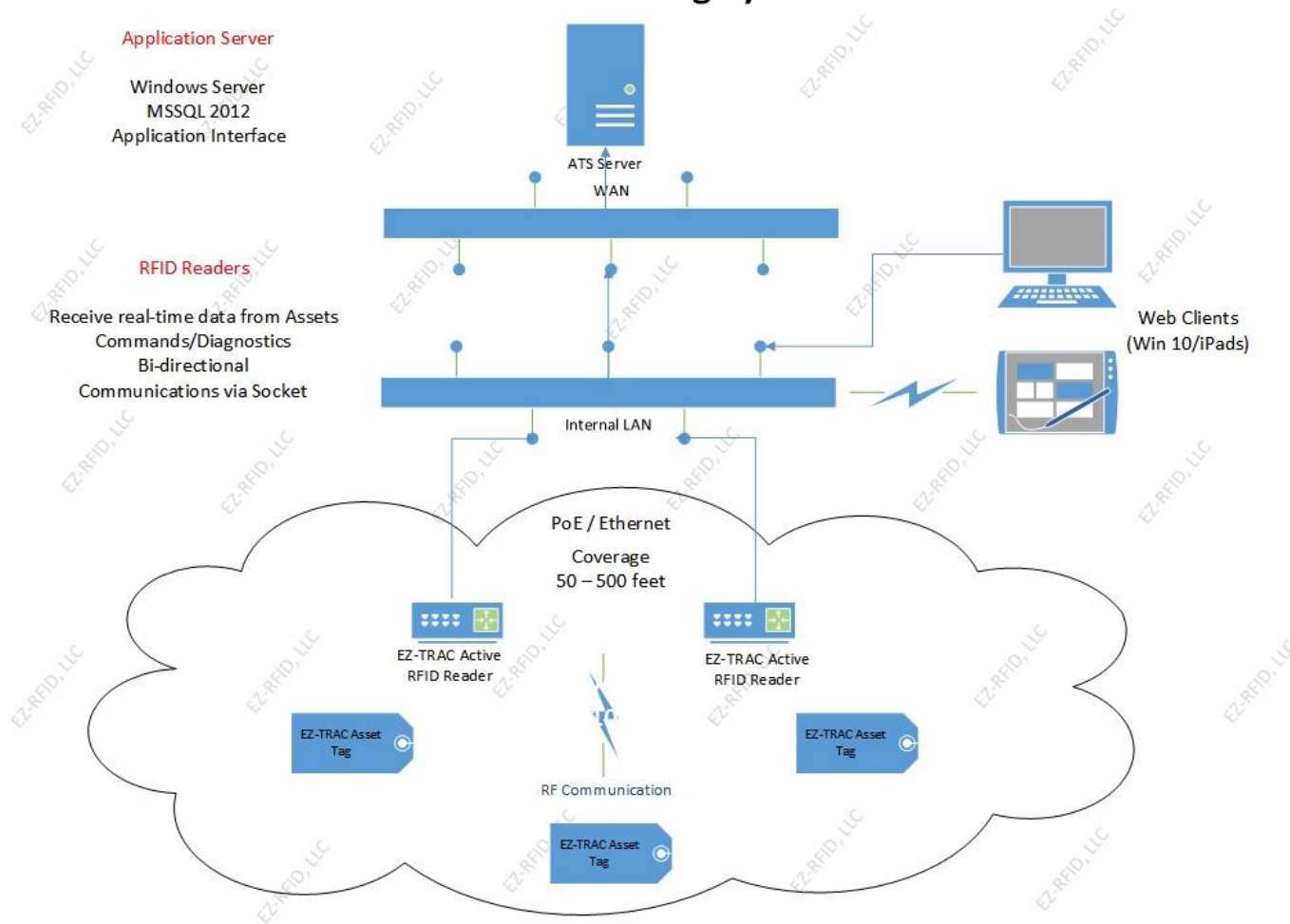
Problem Statement

- Here are the problems faced by any organization in tracking their assets.
 - Most solutions require manual inventory processes
 - ✓ Can be expensive, slow, and are immediately out of date once they are complete
 - ✓ Generally utilize highly skilled people due to the value attached to the asset, security, and other reasons
 - Current technology approaches do not fully solve the problem
 - ✓ Bar code label solutions are labor intensive, manual, and batch oriented
 - ✓ Passive RFID solutions are ineffective
 - Audit non-compliance
 - ✓ A serious audit non-compliance as organizations are usually unaware of the total quantity and value of the assets
 - ✓ What is the status of the leased assets? When are they nearing end of life or when do we need to renew the lease?

Solution Objectives

- Here are the systems objectives of implementing the **ez-trac** solution.
 - ✓ Provide Real-time Inventory Data
 - ✓ Includes location, building, and floor
 - ✓ Real-time Notification of Asset Movement
 - ✓ Efficient and Effective Asset Management
 - ✓ Accurate Inventory Data
 - ✓ Reduced Asset Losses
 - ✓ Integrated Solution with Asset Management Software
 - ✓ Competitively Priced to Provide Quick ROI

EZ-TRAC Real-Time Asset Tracking System - Architecture



ez-trac – How does it work?

- An active tag will be attached to every asset that has to be monitored. The association of the tag to the asset will happen at the time of installation.
- Stationary active RFID readers will be used to capture the data from the active tags.
- Active RFID readers will identify the real-time location of the assets based on a combination of factors and algorithms.
- Real-time monitoring will be used where the movement of the asset has to be monitored continuously whether they are stored inside the warehouse or during the movement within the hospitals or moved from one location to another.
- Any removal of tags, tampering of tags or any unauthorized movement of assets outside the location will generate immediate alerts.
- All the alerts, notifications, analytics, and reporting are done at the software level.

- Here are some of the salient features of the solution architecture:
 - Integrated solution with asset management software
 - Tag selection will be based on the ability to provide real-time data over a long range for a longer period of time
 - Active RFID asset tags will be made tamper-proof, extremely small form-factor, and fitted with sensors
 - Readers will leverage the existing LAN network in organizations thereby reducing the need to create a new network infrastructure
 - Web interface for analytics, master data management, alerts, and reporting

ez-trac – Product Features

- Here are the high-level features of the **ez-trac** product.

ez-trac Asset Tag	ez-trac Reader
One Tag per asset. Fit and Forget	Real-time communication with hundreds of Tags
Non-Rechargeable Battery with up to 3 years Battery Life and beyond	Ethernet and USB Communication
Long Range Communication	Compact Size, Quick, and Easy Installation
Wireless Configuration of the Device	Long Range Communication
Small Form Factor	Local and Remote configuration of the Device
Secure Communication	Secure Communication
Quick and Easy Installation	Local Data Storage
License-free Wireless Communication	License-free Wireless Communication
Tamper Alert	Remote Programming
Low Battery Indication	Rugged Design

ez-trac – Software Features

- Here are the high-level features of the asset tracking software.

ez-trac Asset Tracking Solution - Application Details

Web-based interface	Solution will leverage existing server, storage, and network infrastructure	Standard communication interface such as XML between the readers and application
<p>Check In/Check Out of Assets</p> <ul style="list-style-type: none"> By Users based on Prompt Automatically based on Idle Time For a particular room or section within a site, location, and floor 	<p>Historical data on Asset based on:</p> <ul style="list-style-type: none"> Movement within a date range Usage by users within a date range Various status within a date range 	<p>Alerts through Text Messages when:</p> <ul style="list-style-type: none"> Out of Range Low Inventory Low Battery Shelf Life Expiration
<p>Real-Time Asset Tracking by Status:</p> <ul style="list-style-type: none"> Available to Use Checked Out Out of Range Nearing Lease End Date etc. 	<p>Real-time Asset Tracking based on:</p> <ul style="list-style-type: none"> Site and Location Floor, Asset ID, Asset Category/Group Supplier ID/Name, Manufacturer ID/Name etc. Expiration Date 	<p>Auto Generation and Email of Reports on:</p> <ul style="list-style-type: none"> Asset Usage Out of Range Shelf Life Expiration Inspection Expiration Low Battery Low Inventory Inventory by Asset Category
Master data management for Assets, Site, Location, Floor, Sections, Tags, Readers, Users, Suppliers, Manufacturers etc.	<p>Real-time Asset Tracking by</p> <ul style="list-style-type: none"> Location Floor Section or Room 	<p>Generation of Real-Time Alerts during:</p> <ul style="list-style-type: none"> Asset Tampering Unauthorized Asset Removal
Users and User Group Management	Secure Access based on User Groups & Users	Multi-location Asset Transfer and Reporting

ez-trac – Product Specifications of Asset Tag

- Here are the features and device specifications of **ez-trac** asset tags.

Device Specifications	
Environmental Specifications	
Operating Temperature	-4° F to +122° F
Physical Specifications	
Dimensions	2.1 x 1.3 x 0.58 (in inches)
Color	Black
Enclosure Material	ABS Plastic
Electrical Specifications	
Power Source	3VDC, 1000 mAh Battery
Wireless Specifications	
RF Frequency	902 to 928 MHz
RF Output Power	+12 dBm
RF Data Rate	100 kbps
RF Sensitivity	-100 dBm
Antenna	Internal



Device Specifications (Contd.)	
Current Consumption in sleep mode	< 1µA
Covered Range	150 feet line of sight
Communication Protocol	Proprietary
Other Specifications	
Over the Air Device Configuration	Yes
Low Battery Indication	Yes
Tamper Alert	Yes
Protection Level	IP65

ez-trac – Product Specifications of Active RFID Reader

- Here are the features and device specifications of **ez-trac** reader.

Device Specifications	
Environmental Specifications	
Operating Temperature	-4° F to +122° F
Physical Specifications	
Dimensions	3.00 x 4.00 x 1.38 (in inches)
Color	Bone
Enclosure Material	ABS Plastic
Electrical Specifications	
Power Source	12V DC External
Backup Power	None
Wireless Specifications	
RF Frequency	902-928 MHz
RF Sensitivity	-116 dBm
RF Data Rate	100 kbps
RF Output Power	+24 dBm



Device Specifications (Contd.)	
Covered Range	150 feet line of sight
RF Communication Protocol	Proprietary
Communication Interface	PoE, RJ-45 Ethernet
Other Features	USB, Reset Switch
Over the Air Device Configuration	Yes

- Here are the solution benefits of implementing the **ez-trac** solution.
 - Provides real-time monitoring of assets
 - ✓ Provides 100% accuracy
 - Reduced Asset Management Costs
 - ✓ Typically 30% reduction
 - Eliminates Asset Audit Non-compliance
 - ✓ Tracking of the asset starting from the point of inception to obsolescence with precise timestamp

ez-trac – Solution Benefits (Contd.)

- Here are the solution benefits of implementing the **ez-trac** solution.
 - Reduced Inventory Tracking Expenses
 - ✓ On an average 40% to 50%
 - Labor cost savings
 - Enables proper utilization of assets and ensures proper planning
 - Fully integrated with the asset management system
 - Customizable Solution
 - Quick ROI

Thank You



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