



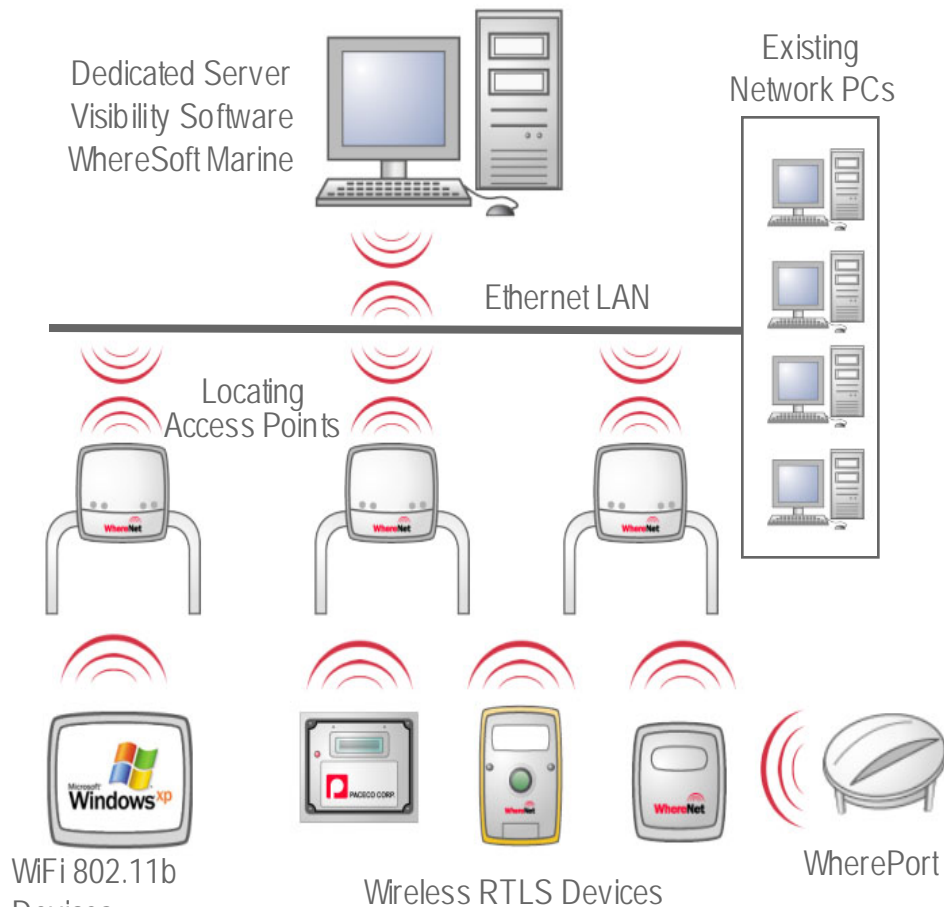
## RFID and Sensors INCITS 371.1 Real Time Locating Systems

Tim Harrington  
Vice President, Product Strategy

# Integrated Wireless Architecture

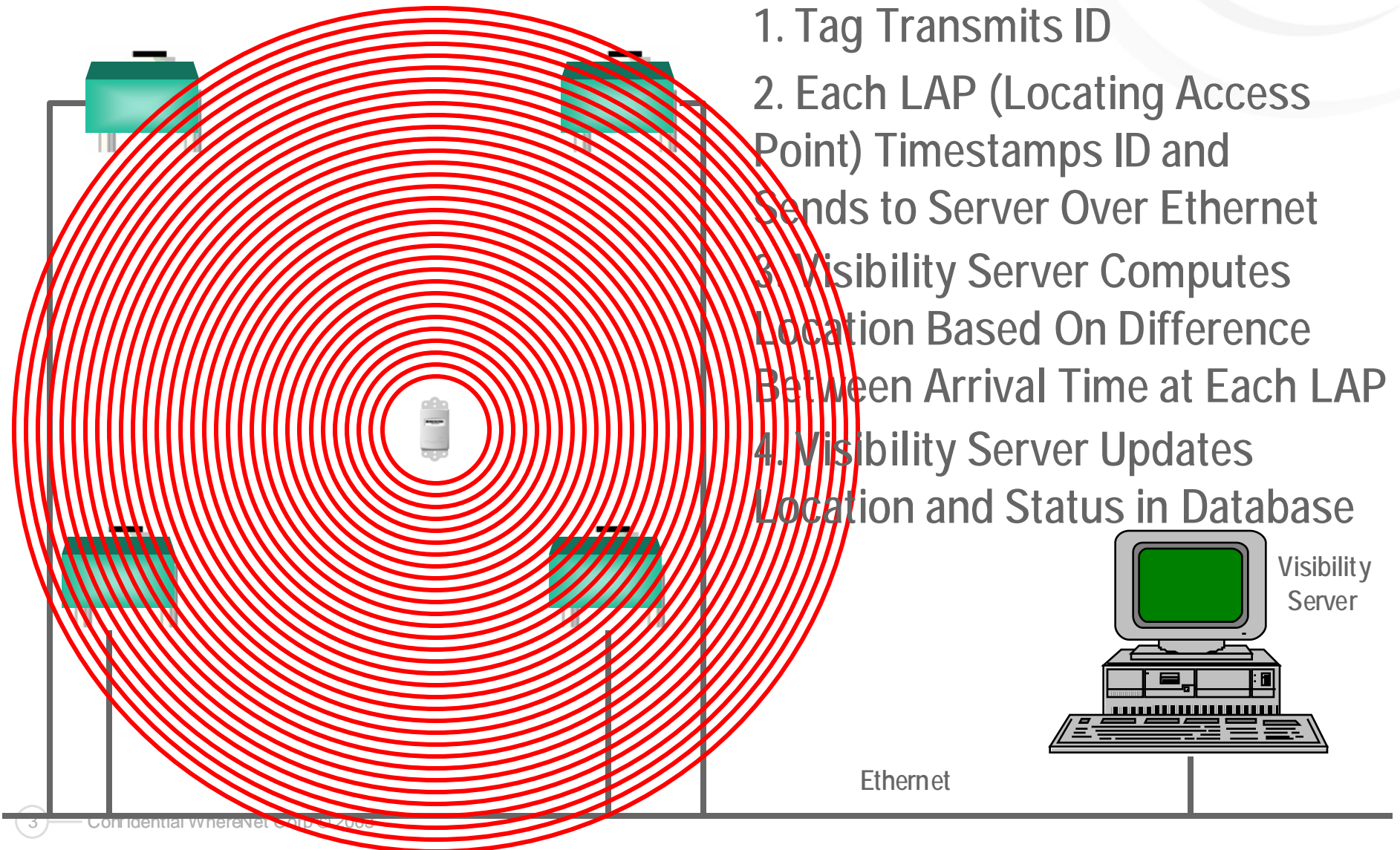


## WiFi + RTLS + RFID

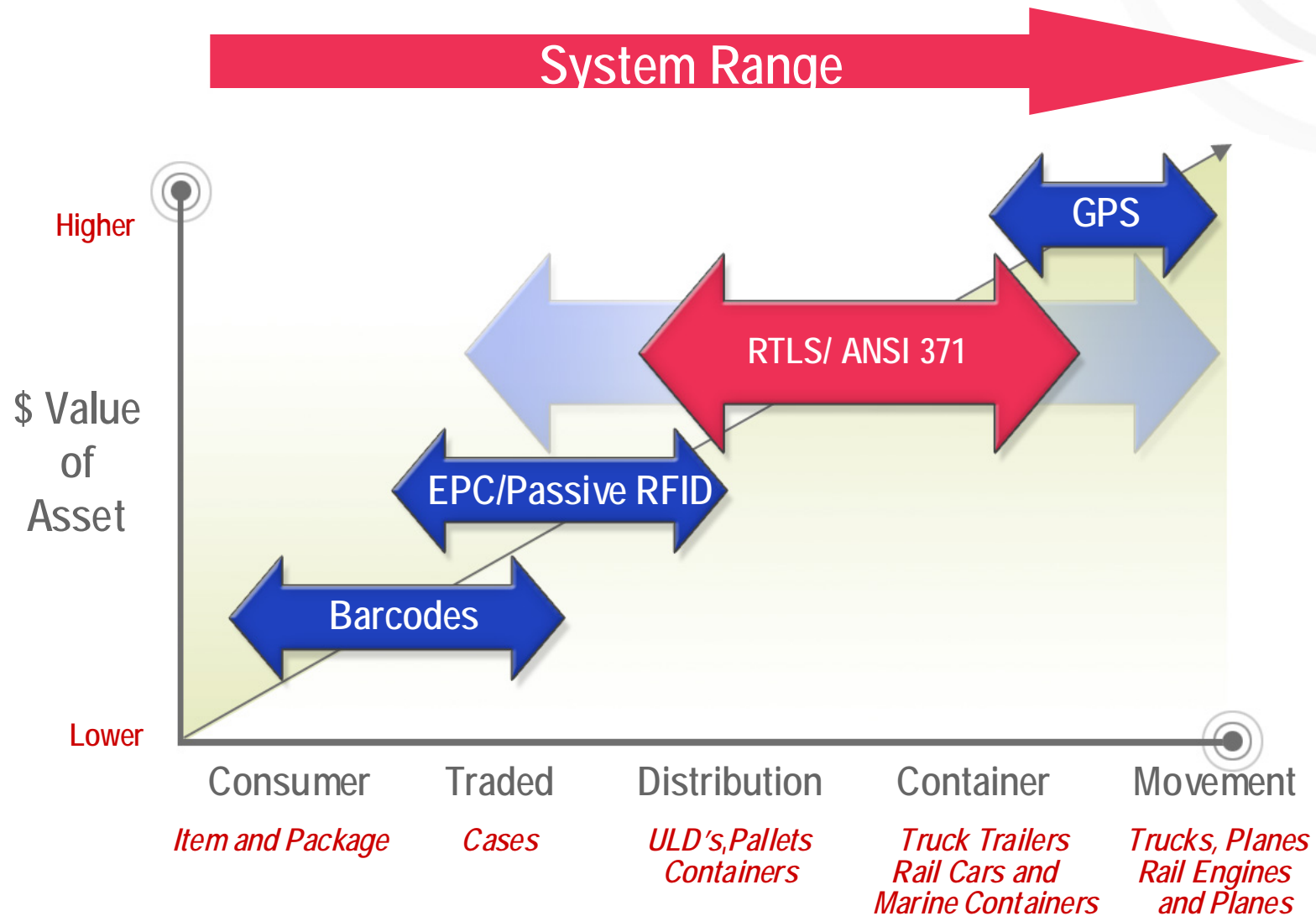


- **Visibility Server Software**
  - Windows OS
  - Microsoft SQL 2000 & 7
  - XML Event Publisher
  - Browser Based Clients
- **WhereLAN Locating Access Points**
  - INCITS 371.1 RTLS Locating
  - WiFi 802.11b/g Wireless LAN
- **WherePort Exciter/Signpost**
- **Transmit Devices**
  - WhereTag III Asset Tag
  - WhereCall Messaging Tag
  - WhereTag Serial Telemetry Tag
  - WhereTag Vehicle Telemetry Tag
  - 802.11b/g Clients

# How Does ANSI 371.1 RTLS Work?



# Physical Layer Technologies



- ANSI 371 RTLS standard created to address need for architecture compatibility. ISO standardization in process.
- Wide base of membership
  - End Users: Ford, GM, APL, DOD, DLA
  - Vendors: GE, Symbol, Northrop Grumman, Savi, Skybitz
  - Industry Groups & Consultants: AIAG, QED, Oak Ridge Nat'l Labs
- RF transmissions are low power, do not interfere, and co-exist, with existing standardized IEEE 802.11 wireless LANs.
- Co-exists with INCITS 256 RFID Standard
- Fully compliant with Global RF regulatory requirements
  - WhereNet is Certified in 38 Countries in Europe, Asia & the Americas

# Real-time Location Applications



## *West Coast Marine Terminal Operator*

### Problem

- Error rate ~30% for location current process
- Stale information

### Solution: Marine Terminal Yard Management Solution

- Automates Yard Management System
- Automatically updates Terminal Management System

### Scale

- 22,000 chassis tracking
- 300 acres
- ~ 20,000 containers moved daily

### Benefits

- Reduction / elimination of manual input
- Automated & optimizing check in/out
- Increasing throughput
- Improved Security



# Wide Variety of Applications



Marine Cargo Tracking



Parts Replenishment



Vehicle Inventory Tracking



⑦ Truck Yard Management



Military Asset Management



Hospital Asset Tracking