



Using Wi-Fi for Location Services

Joshua Slobin, Director of Marketing

March 2007

AeroScout Background



- ▶ Based in Redwood City, CA; offices in North America, Europe, Asia, Middle East, Australia and Latin America
- ▶ Founded in 2000
- ▶ Market leader in Wi-Fi-based Active RFID solutions

Marquee Customers



Selected Partners



Industry Recognition



How Does AeroScout Help?

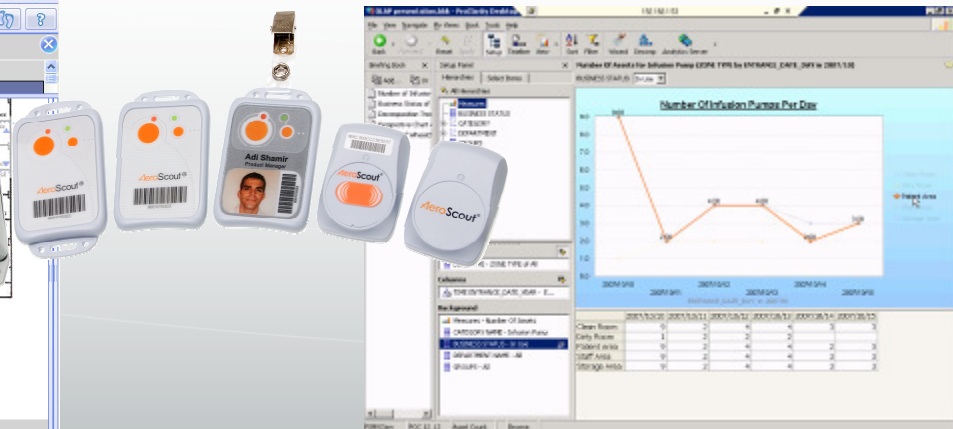
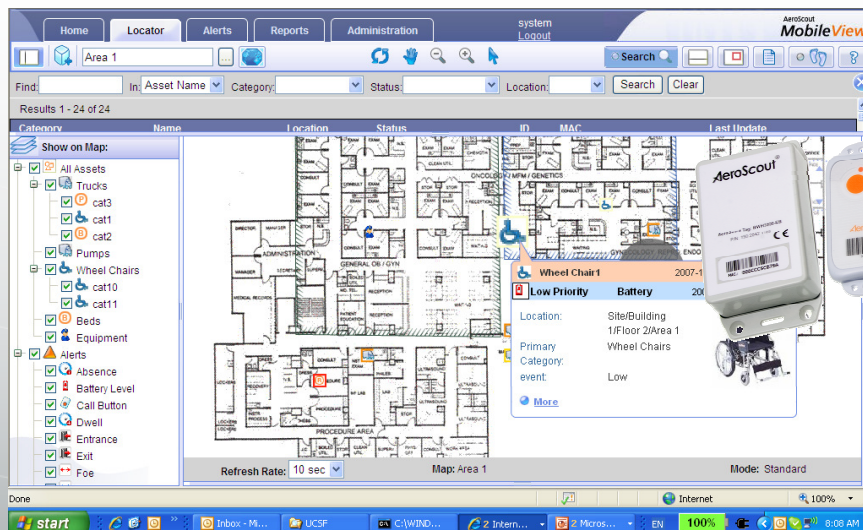


Lack of visibility of high-value assets and people is a pervasive problem.

Organizations in healthcare, manufacturing, logistics and other industries lose millions each year from poor visibility of asset location, status and condition.

AeroScout offers a pervasive solution.

By offering the broadest set of visibility services on a single Wi-Fi-based platform, AeroScout automates business processes and delivers context-aware applications - driving cost savings and improving operations.



Using Wi-Fi for Visibility

Traditional Infrastructures:

- Each piece of asset data requires its own infrastructure.
- Single-purpose Active RFID readers, wireless sensors, etc. add unnecessary hardware.

+ Data Services

+ Voice Services

+ Visibility Services



+ Overhead, wiring, support

Wi-Fi based Infrastructure:

- The existing WLAN is the visibility network, often without the need for additional hardware.

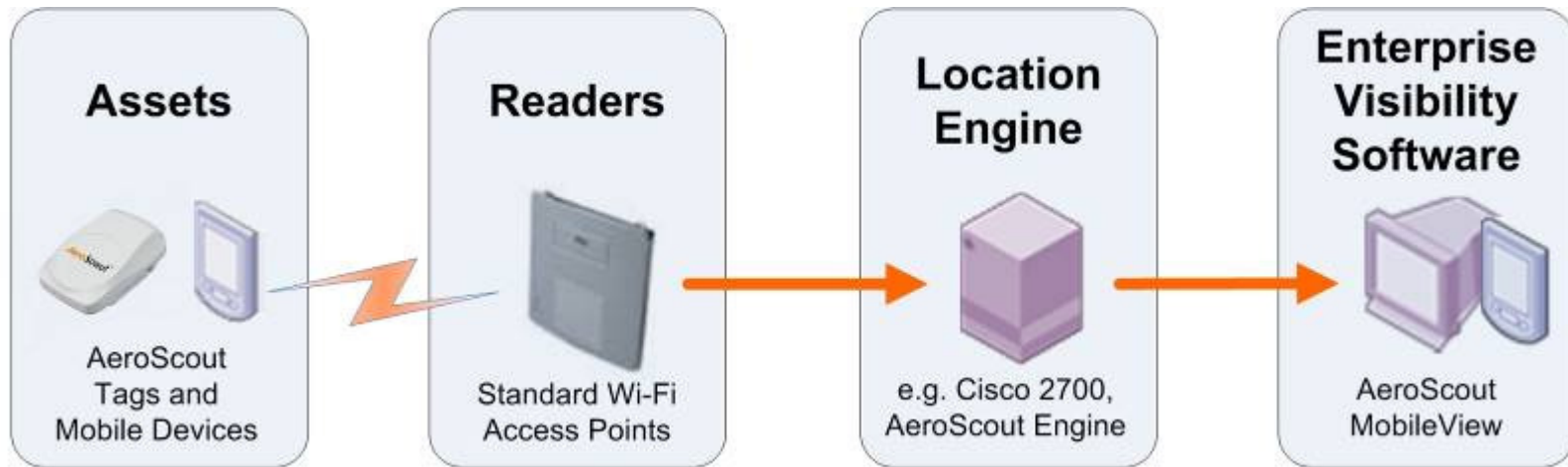
+ Data Services

+ Voice Services

+ Visibility Services



How Does it Work?



- 1) **Active RFID tags and/or standard wireless devices send a tiny wireless signal at a regular interval**
- 2) **Signal is received by the wireless access points or location receivers, and is sent to an Engine**
- 3) **The Engine (from AeroScout or Cisco) uses multiple algorithms to determine location, and sends asset data to enterprise software**
- 4) **Enterprise software uses location and status data to display maps, enable searches, create alerts, manage assets, etc.**

Solution Layers



Channel Partners



Services / Integration



Application Platform

Location Engine

WLAN Partners



Network Infrastructure

Tags

 **NewYork-Presbyterian**
The University Hospital of Columbia and Cornell



www.aeroscout.com

Ranked as one of Top 10 Hospitals in the U.S.

Challenges

- ▶ Equipment search times for preventive maintenance
- ▶ Time consuming inventory management and sterilization processes
- ▶ Overall clinical workflow

Solution

- ▶ Key assets tagged (i.e., infusion pumps) – rolled out 3,000 tagged assets (plan to expand to 10,000)
- ▶ Tags mounted on Sigma pumps
- ▶ Call button used to automate pump pick-up calls
- ▶ Leverages existing Wi-Fi network

Benefits

- ▶ Reduced labor associated with inventory management
- ▶ Reduction in equipment search times
- ▶ Improved patient care
- ▶ Improved regulatory compliance



Freescal is one of the world's largest semiconductor companies with 2006 sales of \$6.4 billion

Challenges

- ▶ Oak Hill Fab in Austin, TX - 200mm
- ▶ 4,000 wafer containers ("lots") move throughout facility between processes
- ▶ Every day, hundreds of workers process thousands of steps, each requiring the right lot
- ▶ Manual lot searches take ~5 minutes each

Solution

- ▶ 4,000 specialized tag fit on lot cases
- ▶ Utilizing Cisco WLAN, each lot box is tracked throughout the Fab and pinpointed to the rack it is placed on
- ▶ "Tag blinking" function identifies specific lot on the rack
- ▶ Integrated to Fab's MES / process scheduling software
- ▶ Users perform searches thousands of times a day

Benefits and Results

- ▶ Reduces search time to 1-2 minutes or even seconds
- ▶ Overall Fab productivity increased by 6.8%



AeroScout, Inc.

1300 Island Drive

Suite 202

Redwood City, CA 94065

Tel: +1 (650) 596-2994

Fax: +1 (650) 596-2969

www.aeroscout.com