



Why 5G indoor precise positioning is the game-changer for smart factories

Joe Wilke, VP and Head of Sales Engineering EMEA, Enterprise Wireless Solutions, Ericsson
Mobile Robotics Summit

The value of 5G in manufacturing



Coverage

Latency

Mobility

Security

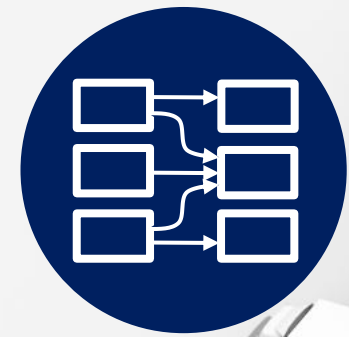
Ease of use

Throughput

LAN integration

Positioning

Identification of manufacturing challenges and use cases



Use Case
Matching

Asset Monitoring

Autonomous
mobile robots

Guiding of tools
and robot arms

Track and trace



Positioning with 5G

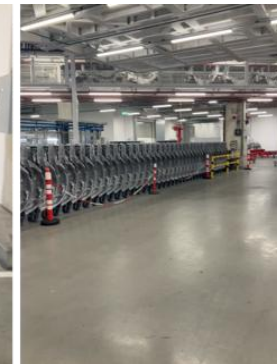
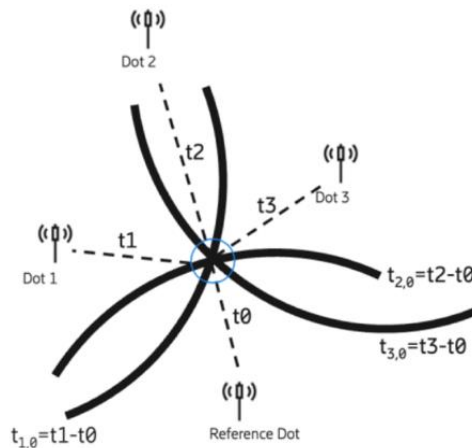
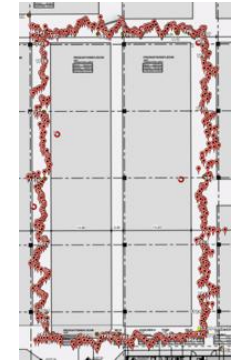
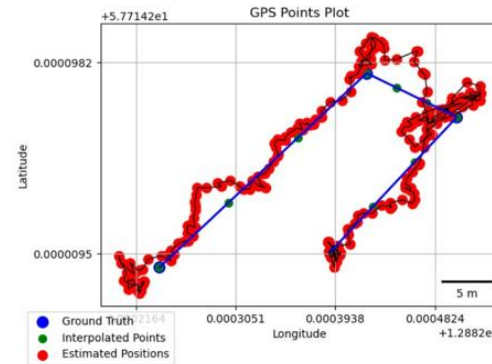
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Revolution – Precise Indoor Positioning

An Ericsson Enterprise 5G feature that revolutionizes manufacturing customer ROI

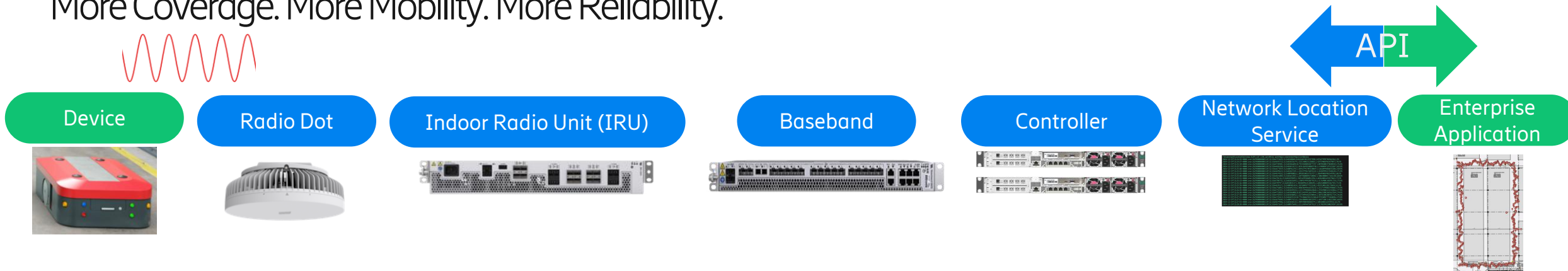
- Enables precise location tracking for devices attached to the Ericsson Private 5G network
- Device-agnostic—works for all devices
- It's based on multi-lateration positioning in which the Radio Dot System measures the relative time of arrival of 5G uplink signals to multiple radio dots



Successfully tested in harsh RF environments with industrial customers; location precision of ~1m

Network Locations for Positioning

More Coverage. More Mobility. More Reliability.



Accuracy is dependent on:

- Bandwidth (100 MHz en-bloc is fine),
- Device Speed
- Number of dots receiving signals from the device (3 as a minimum)
- Accurate Position of radio dot in the Network Location Service database

Summary



Data collection

Human-in-the-loop

Device steering

Positioning

Positioning as an additional return of invest stream solving a large set of manufacturer's challenges



Questions and Answers
ericsson.com/manufacturing