Personnel Tracking Using UHF RFID
UHF (Ultra High Frequency) RFID – EPC Gen 2

• Reading distance: up to 60 feet (20 meters)

• No line of sight required

• Long-life tags due to battery-less

• Resistant to dust, oil, scratches, etc.

• Superior to the barcode, LF & HF RFID for many applications
Zone by A Reader

A zone is defined by a fixed RFID reader from the top:
Other Examples of Zones by a Reader

• Track a person at a medical lab bench, a QA point of a manufacturing plant, or a key intersection on a construction site.
Zone by 2 Readers

A zone is defined by 2 fixed readers from the top:
Other Example of Zones by Multiple Readers

• Track a group of people at a medical lab bench, a QA point of a manufacturing plant, or a key intersection on a construction site.
Zone by A Reader & Barriers

A zone is defined by a reader as well as the physical barriers, namely walls in this case:
Examples of Zones by A Reader & Barriers

- Track people entering an office, a workshop, or a construction site.
Zone by a Handheld Reader

A zone is defined by a handheld reader:
Example Zones by a Handheld Reader

• Track a person at a checkpoint or a mustering point.
Tracking Based on Zones

• When a person is in a zone, the RFID tag on the person is detected by a RFID reader, hence the person is identified or tracked.

• Time stamps and location (zones) can be recorded by the system.
Tracking Movements of People

• The movement of the people can be shown on the map of zones.

• Alerts, sirens, messages, or warnings can be generated.
Operations Steps

RFID Tags
• Issue badges, wristbands, labels with RFID tags to relevant personnel
• Enter, into the database, the ID of the RFID tag of each personnel, together with his/her profile information;

RFID Readers
• Decide on zones where the personnel need to be tracked;
• Install RFID readers to define such zones

Software & System
• Connect with the RFID readers with GAO Personnel Tracking Software running on a cloud or on a server
GAO RFID System Configurations

Cloud Based

Server Based

GAO RFID Inc. - A Top 10 Global RFID Supplier Based in New York City & Toronto, Canada; sales@gaorfid.com
Why GAO RFID Inc.

- Founded and managed by experts with Ph.D. & M.Sc. from top universities
- Ranked as one of the top 10 global leaders in RFID
- Celebrates 3 decades of innovations
- Offers the largest selection of RFID AND BLE readers, tags, and systems.
- More than 11,000 RFID deployments in a wide range of industries
- Based in New York City and Toronto
- Delivers overnight within continental U.S. And Canada