



# ASSET TRACKING

Using RFID to Track Assets

# Objective

- ▶ Automatically track and secure assets with little or no human intervention.
- ▶ Constant and accurate visibility.
- ▶ Asset available when needed.
- ▶ Unauthorised movement of asset is tracked immediately.
- ▶ No line of sight required.
- ▶ Fast and Easy check in/out of Assets.
- ▶ Asset movement and status.
- ▶ Increased efficiency and employee productivity.
- ▶ Security concerns are addressed.
- ▶ Low Maintenance cost.
- ▶ Overall reduction in Cost.

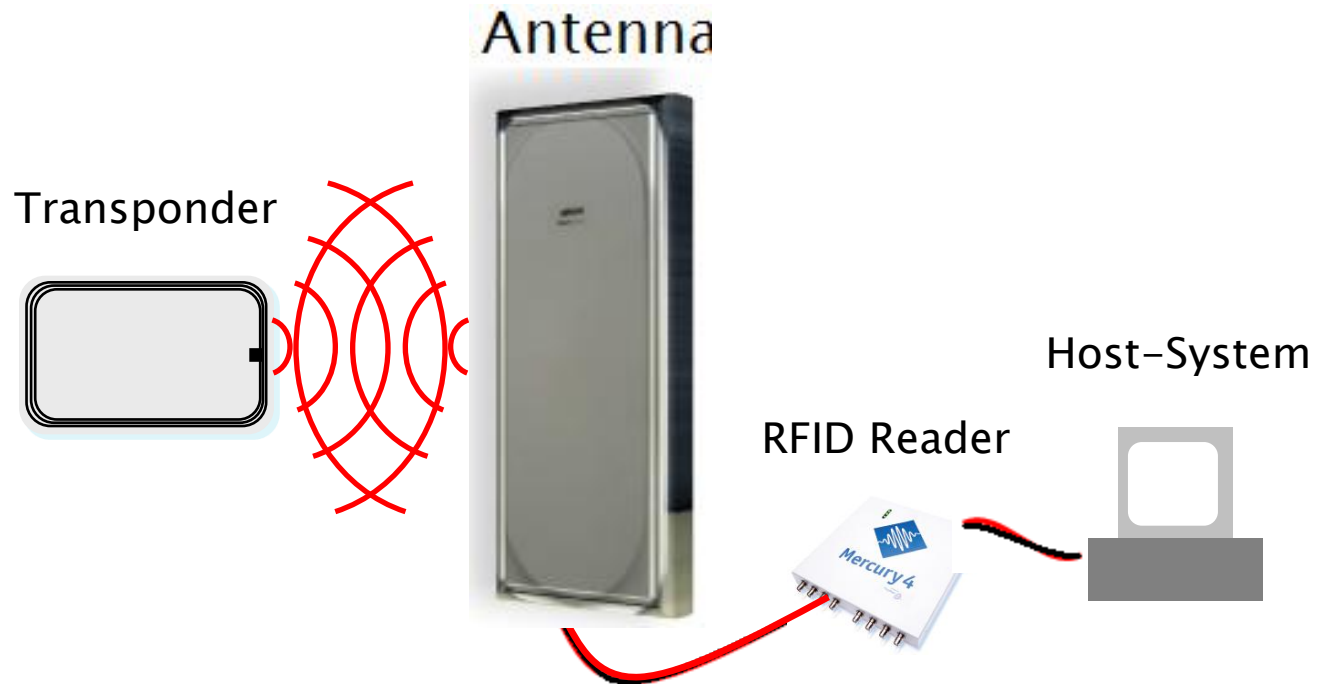
# Current Situation

- ▶ Organizations deals with enormous numbers of movable assets that keep circulating in and out side the premises.
- ▶ The cost value of asset may be insignificant but the vital business information stored in them.
- ▶ Manual system of monitoring the assets.
- ▶ Traceability is an enormous concern because of time spent adds the cost to the organisation.
- ▶ No or less accountability.
- ▶ Duplication of Assets.

# Benefits of RFID System

- Line of sight not required.
- Digital data capture.
- Offline transactions.
- Scalability.
- Data Security.
- Anti-Collision (Multiple tag read).
- Multifunctional.
- Electronic Article Surveillance.
- Tracks different type of assets.
- Real time reports.
- No or very less human intervention.
- Low maintenance cost.
- Improvement in efficiency and productivity.

# How RFID Works



Transponders or Tags are affixed on assets and the person carrying the asset  
The system authenticates the asset with the user and gives the appropriate signal

# Components of the System

- UHF Gen 2 Tags (shapes may differ for different type of assets and application)
- UHF RFID system consisting of
  - Long Range Readers
  - Hand Held Reader (Optional)
  - Gate Antenna (EAS)
  - Alarm System
- Encoder and printer
- Software for Multiple Applications

# Methodology

- ▶ RFID tags are attached to all Assets.
- ▶ Check In/Out Antennas and Readers are placed such a way so as to form an RFID grid with in the premises or storage area.
- ▶ Hand Held terminals to locate the fixed or semi-movable asset
- ▶ VRF Central Asset Tracking System (web based application) installed on the server.
- ▶ Alarm to be generated in case of unauthorized movement of asset.
- ▶ Records of asset movement/transfer and history.
- ▶ Scalable to multiple site scenario (Optional).
- ▶ Integration with any other application or business process (optional).

# Benefits

- ▶ Reduced manual errors.
- ▶ Automated tracking, monitoring and validation.
- ▶ Reduced cost and Improved productivity.
- ▶ Works with existing Ethernet/LAN network.
- ▶ Real time update and display of documents.
- ▶ Improved security.