GSN/GPRS for tracking and tracing CIT





United Armored Services

Service Area Statistics

- No of Customers 14,500
- No of Bank Locations Serviced 1,600
- No of ATM's Serviced 3,000
- No of Packages Moved Per Day 40,000
- No of Routes 15
- No of Depots 10
- No of Stops 40,000 Per Week



Current System - History and Problems

- First Deployed 1998
- Deployed to 90% of Routes
- Almost Eliminated Losses
- Very High Customer Service Level
- Supports Pay Per Stop
- Reliability Problems
- Data Transmission Obsolete Technology
- Support Costs
- Requires Custom Receipt Books



How to Record and Label Your Shipments Correctly

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New Platform

Service Levels

- Eliminate Mis-Deliveries
- Better Management of Coin Deliveries
- Provide Real time Tracking of Pickups
- Allow for Higher Same Day Banking Levels

Productivity

- Imaging Pickup Receipts and Delivery Receipts
- Eliminate Receipt Books
- Reduce Internal Costs
- Provide State of the Art Platform

Investment

■ €600,000 to Date





Hardware Requirements

Printing/Scanning One Unit

- Weapon + Ammunition precludes belt printer
- 2 items to charge and maintain
- GPRS
 - Real-time transmission
- WiFi
 - CF based wireless allows future upgrades to A or G

Large Memory

- Big databases
- Expansion slot for CF card for hard reset recovery
- Rugged
 - 5 ft drop test

Expandable/Modular

- Smart card
- RFID



Current System - Specific Issues

Pick and Drop/Round Robin

- Item picked up at stop A and dropped on same route at stop B
- Items picked up today dropped off at same location tomorrow

Multi destinations

- Customers have multiple destinations for same commodity
- Customers want destination on receipt

Dynamic Routing

- Many customers only get service if they have a shipment
- Call in during day for service specials
- Crews change route order to accommodate timing requirements

Coin Shipments

• Delivery based on Route capacity

ATM Complications

- Cassettes pickup up and delivered to adjacent Bank branch
- Load and deposit pulls together Different vaults
- Loads diverted to different machines
- Electronic combo



Real-Time

Security

- Electronic checkpoints
- Vehicle liability tracking

Customer Service

- Provide accurate ETA information
- Identify items just picked up/delivered

Same Day Crediting Customer

- Transmit credit from Truck
- Combo Issuing
 - Allow real-time issuing of ATM vault combo's
- No Loads
 - Transmit ATM no load and fault data
- No Pickups
 - Transmit and document No pickups



DAT500 ALL-IN-ONE Hand Held Computer

Manufacturer and Integrator

4P Mobile Data Processing

Location

Padova, Italy

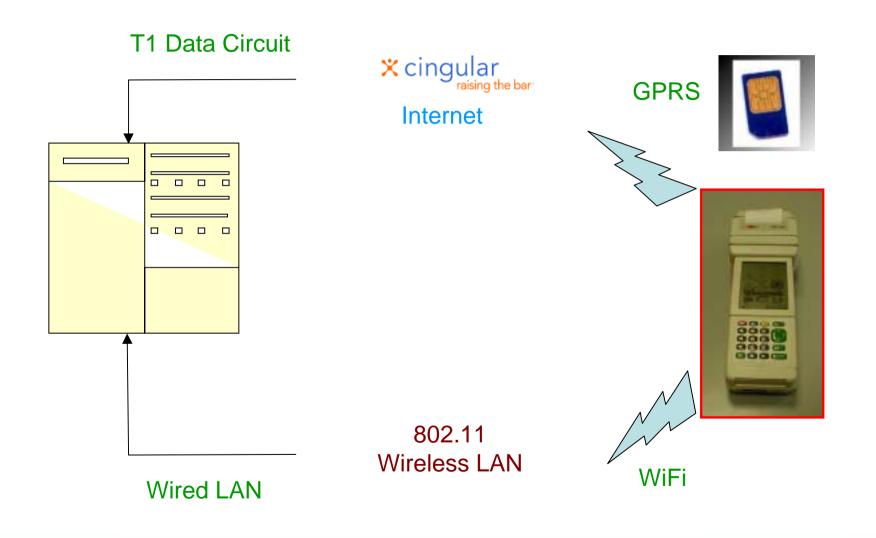
- Why 4P ?
 - 10 Years experience with CIT
 - Rugged Unit
 - All In One Unit
 - Flexible
 - Strong Skill Set





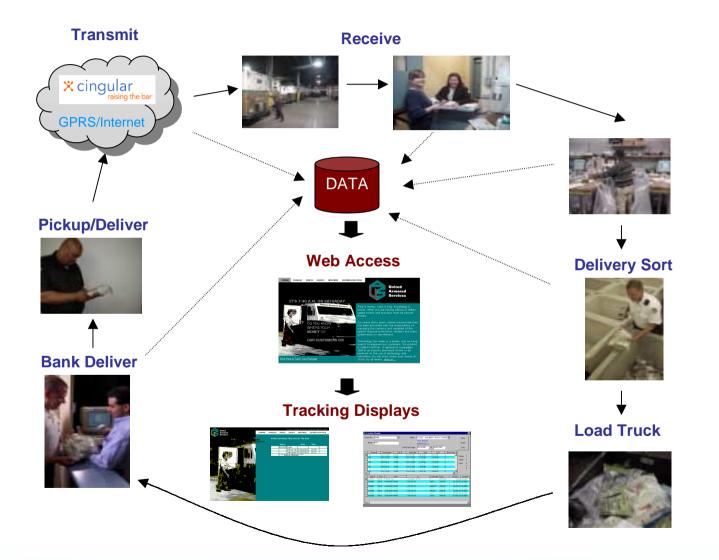


Data Transmission





Overview Of CashTrak





United Armored Services

Process

- Begin Day
 - WiFi Download of All deliveries, Identify crew, start mileage
- Load truck
 - Electronic balance of all items loaded to truck
- Pickup/Delivery
 - All Deliveries verified for correct location/deliveries
- Go Complete
 - Checks all deliveries made
- End Of Day
 - Vehicle mileage
- Check In
 - All items picked up or not delivered scanned
- Route Balance
 - Balance all loaded to truck deliveries + pickups = Check in items



Other Functions

- Coin Inventory
 - Allows crew to print current vehicle coin inventory

Enter Vehicle Repair Request

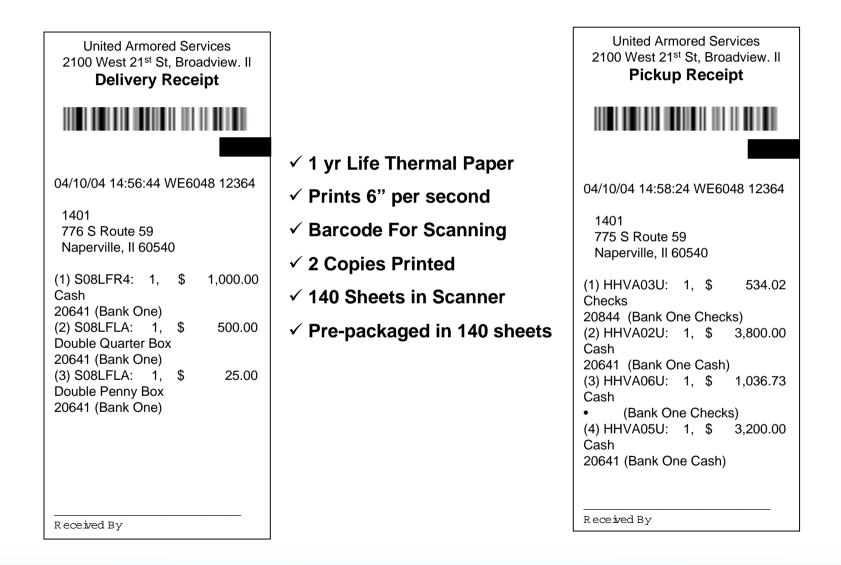
- Driver can report vehicle defects Integrates to Fleet maintenance
- No Pickup
 - Report closed or no access locations

Change Crew

- Report crew change
- Truck Transfer
 - Tracks item transfer between vehicles
- Change Truck
 - Allows Truck change on route



Example Receipts



CashTrak Screens

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Transaction Volumes

DAT500

- 200,000 transactions per week
- 600,000 scans per week

CashTrak

- Transactions > 400,000 per week
- Shipments > 100,000 per week
- Shipments > €1.14bn per week

Coin Shipments

- 50,000 boxes per week
- €9m per week
- 25m pieces



Economic Model

- System Upgrade Cost €600,000
- Receipt Book Savings €76,000
- Reduced Losses €115,000
- Labor Savings €40,000
- Communication Costs €38,000
- Support €23,000
- ROI less than 3 years



Implementation Problems

- Microsoft ended support on CE 3.0 changed to CE 4.2 ported software
- Cingular bought AT&T Wireless reprogram GPRS modules
- Time Synch Microsoft Issue
- Hard Resets Microsoft Issue
- ATM Complications New customer requirements



Timetable

Specification

- Started 2002 Completed end 2003
- GPRS
 - Fully Tested Using DAT500 Radio
- Software
 - First Delivery Oct 2004
- Scanners
 - 80 units Oct 2004
 - 50 units May 2005
- First Customer Use
 - Nov 2004
 - Full Deployment All Branches June 2005



Demonstration

United Armored Website <u>www.UnitedArmored.com</u>



United Armored Services