Lat-Lon Presentation for:

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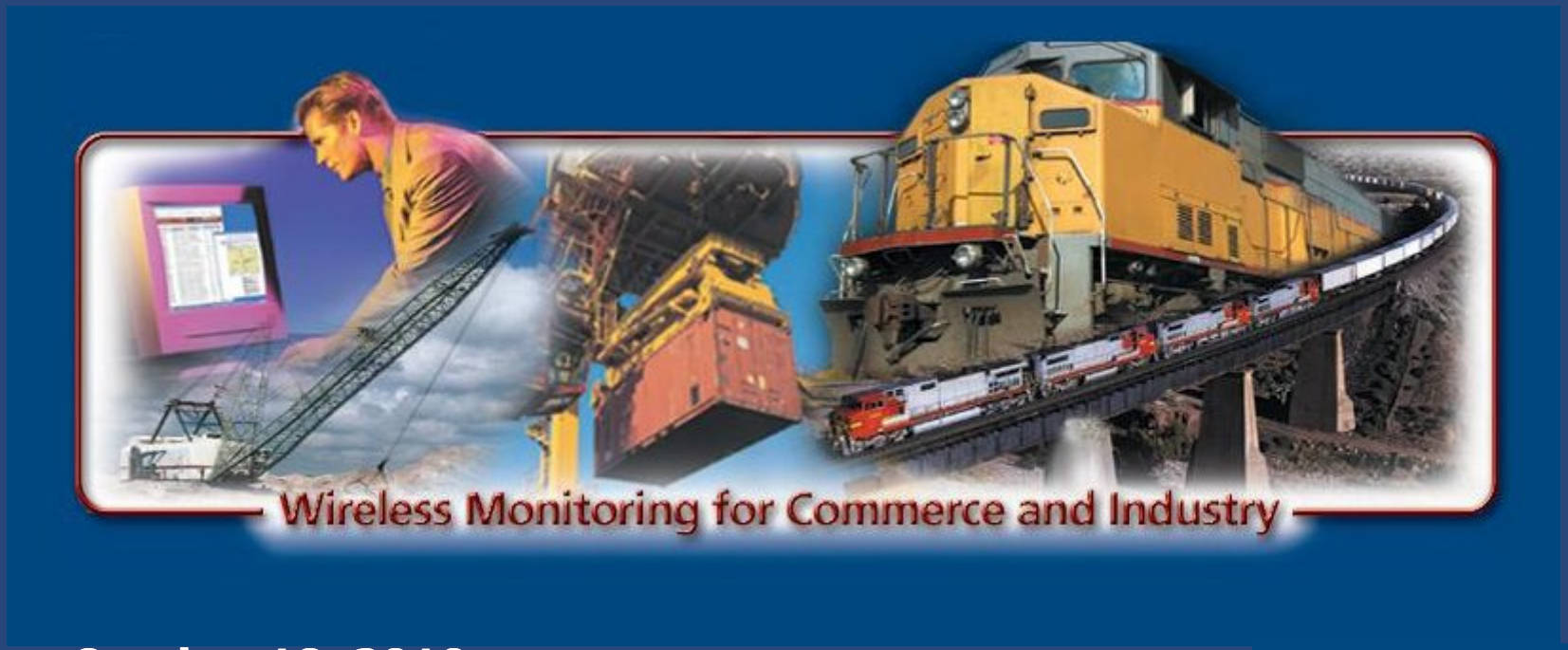

October 18, 2010

Lat-Lon

Lat-Lon Overview

- Founded 1999, based in Denver
- Maker of Wireless Monitoring Devices
  - Solar Tracking Unit (STU)
  - Locomotive Monitoring Unit (LMU)
  - Family of Sensors
- 170 active customers, 4300 digital units sold
  - Digital unit sales began in mid-2006
- Primary market is freight rail

One week of data activity (all customers)

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Some of Lat-Lon's Customers

Solar Tracking Unit

- Cellular communications (Kore Wireless)
- Camera sensor
- 3-axis accelerometer
- Wireless sensors
- Solar powered
- Hybrid battery/super-cap
- 3 Patents (one pending)
- Magnetic or screw mounting
- Two-way communications
  - Can send settings and/or new firmware
- UL-913 certified
  - Intrinsically safe
  - Available for combustible shipment monitoring
    - Propane, Ethanol, LNG etc.

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Back Office / Website

- Designed for variety of customers
  - Customers can build their own:
    - Reports
    - Groups of units
    - Alerts
    - Geofences, geopoints, trip-wires databases
    - Sub-user accounts
    - Preferences (time zone, units etc.)
- Designed for variety of applications
  - Sensor reassignment
    - “RF_digiital_1” becomes “Hatch Open”
- XML data access for 3rd parties
- Small screen version for smartphones / iPad
- Various specialty reports
  - Productivity
  - Aging history by location
  - Start/stop summary
  - Fuel usage summary

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Solar Tracking Unit (STU)

Four Models

- **STU – Tracking unit**
  For companies that want near-real-time visibility to their mobile assets including location, speed, direction, etc.

- **STU / I – Tracking with impact monitoring**
  For companies that want to monitor their shipments for damaging impacts

- **STU / RF – Tracking with wireless sensors**
  For companies that also want to monitor various conditions of a mobile asset such as temperature

- **STU / RF / C – Tracking with camera (picture taking ability)**
  For companies that also want to monitor their assets or shipments for security reasons

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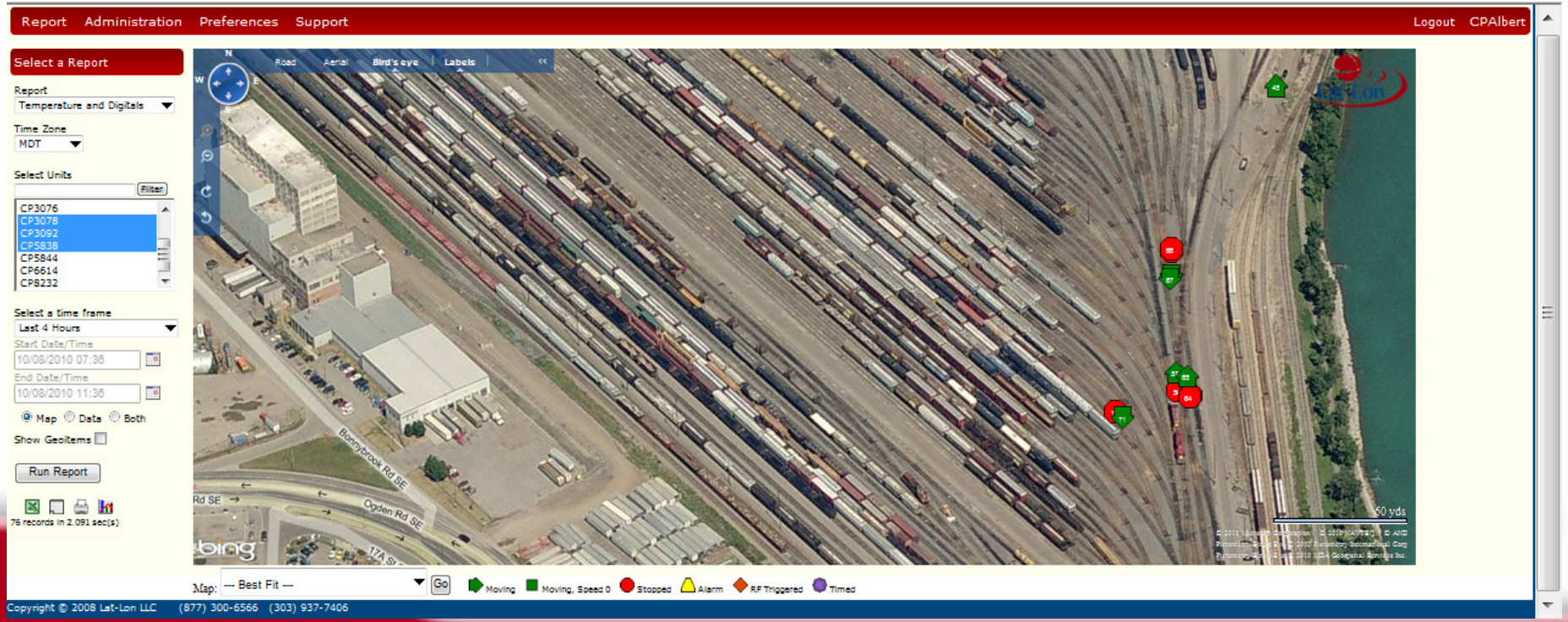
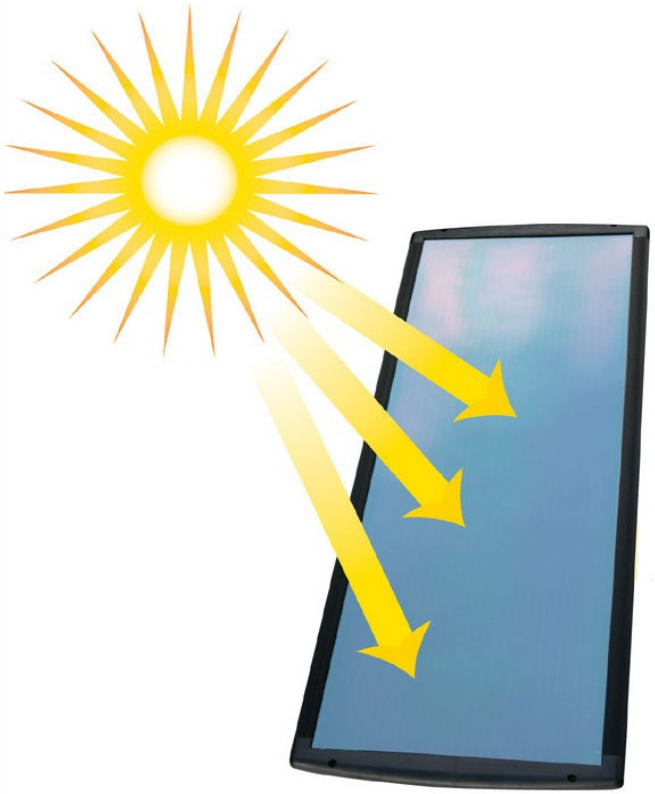
STU Features

- Worldwide GSM/GPRS communication
- Easy magnet or screw mount
- Hybrid super-caps and rechargeable battery can potentially run forever
- No batteries to replace—ever!
- Patented battery isolation circuit protect batteries from abusive discharge currents
- **Creates a timed message every 2 hours (over the air programmable)**
- **Creates move-timed messages up to once every 10 minutes (over the air programmable)**
- **Alarm messages (ex: impact alarm or door open alarm) are sent out immediately**
- For immediate temperature alarms, wired sensors are available:
  - 2 temperatures and/or 2 digitals per STU



Lat-Lon = No Limits

- No limit to number of messages (location updates)
  - Fixed cost data plan using GSM/GPRS cellular data
  - Sending data is nearly free—40 location reports per penny
  - Near real time data, so you know where your unit is NOW
- No limit from power
  - With solar power, every day brings a fresh set of “batteries”
  - Enough power for 100’s of location messages per day
  - Patented power system works forever
    - STU fully functional with no battery at all
    - Battery used to bridge periods of poor lighting



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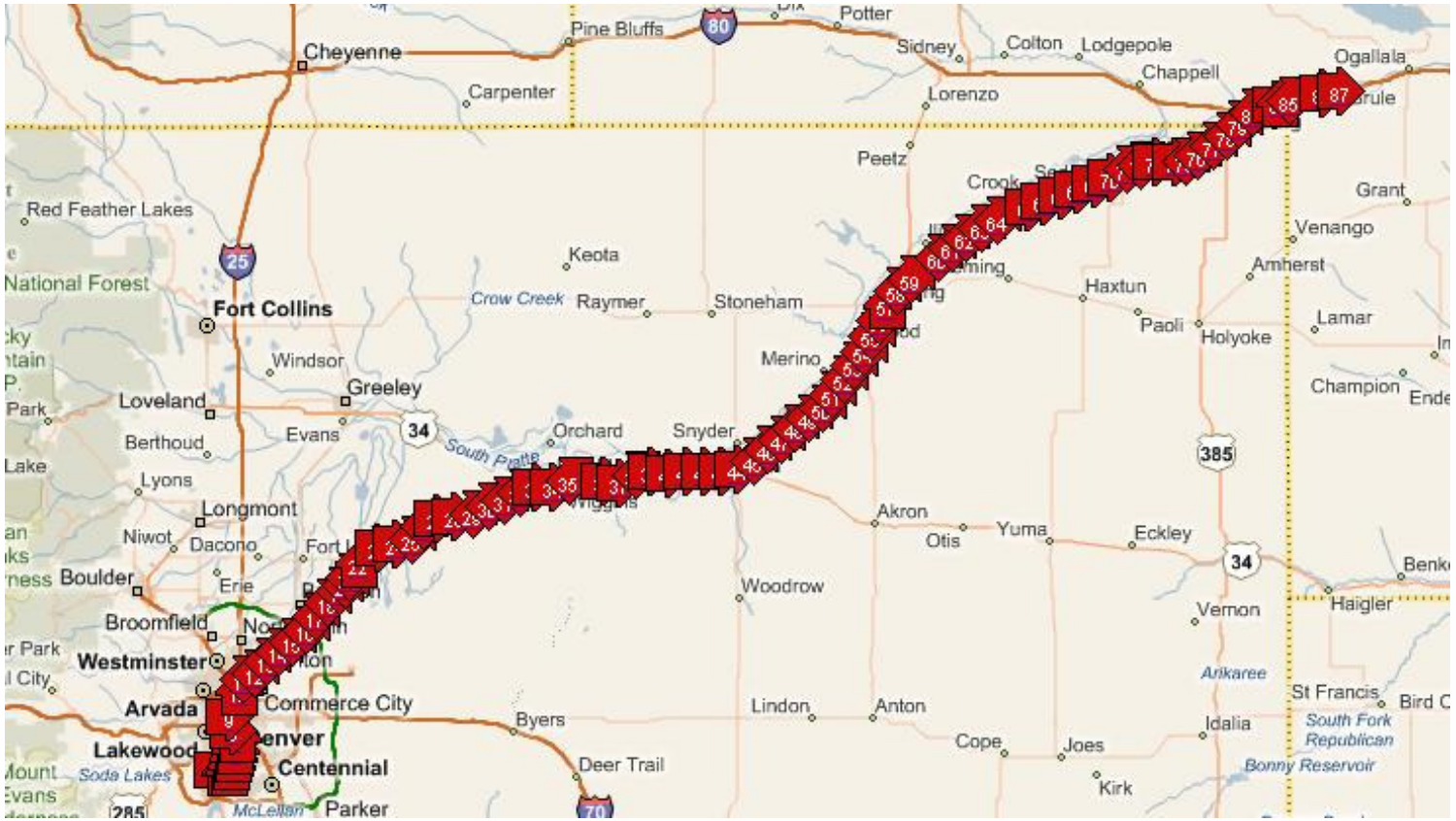
Solar Smart Power in Action

Map shows plentiful power during this test trip in good sunlight for near-real-time tracking data



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STU / I

- Internal impact detection monitoring
- Internal 3 axis accelerometer
- More power for lower impact threshold reporting
- Filtering for high and low speed impacts
- Unit reports change in velocity

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STU / RF

- 10 Wireless sensors can be assigned to each STU

- Each wireless sensor can monitor:
  - Temperature
  - Continuity switch
    can be used for open/closed door or hatch
  - Accelerometers
    can be used for tilt,
    loaded /empty,
    hand brake on / released
    (Patent pending)

The picture shows you how small the RF Wireless Sensors are in comparison to a smart phone

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Wireless Sensors Specs.

- Tilt in two axis (orientation, patent pending)
- Temperature (-40 to +180F)
- Magnetic reed switch on end
- Battery voltage reporting
  - Predict remaining life of sensor
- 5-10 year life
  - Depending on sensors and reporting frequency
- Can trigger STU to create message or not
- Flexible sampling intervals
- Transmits when sensor readings change
- Smart digitals to turn tilt analog values into digitals
  - Report loaded/empty or brake on/off as digital
- Status LED blinks as data is sent (confirm operation)
- 433 MHz TX frequency
- Patent pending

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STU /RF/ Camera Unit

- Camera can be activated by:
  - RF sensor(s)
  - Impact detection threshold
  - Paging unit from Lat-Lon website

- The STU can illuminate a night shot up to about 20 feet away (infrared light cannot be seen by humans)

- Different photo resolutions and different mounting options are available

STU Wireless Sensor Apps

- Hatch—three methods to detect state
  - Tilt sensing on lid (photo at right)
  - Tilt sensing with ball-switch
    - Gives longer battery life
  - Magnetic proximity
    - RF sender need not be on lid
    - Magnet needed to be near RF sender, then move away when hatch opens
    - Also gives longer battery life

- Load/Empty (photo at right)
  - Wireless tilt sensor on ramp between bolster and side-frame
    - Measures spring compression

- Handbrake sensing (photos next page)
  - Wireless tilt sensor on bell-crank
  - Or, tilt sensor on hinged plate with cable tie to chain

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Wireless Brake Sensing

- Sheave equipped car needs chain-to-ramp tilt installation
  - Cable between chain link and ramp

- Bell crank detects brake via tilt angle using accelerometer sensor in RF sender

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STU – RF Sensor Config.

- Each STU can host up to 10 RF sensors
- STU contains database of sensor serial numbers and what it should do when a message is received
  - RF sensor message can trigger a STU message
  - RF sensor message can trigger a STU picture to be taken
  - RF sensor message can just update their data fields and not trigger a picture (for inclusion in next STU triggered message)
- All these settings and the RF sensors that are assigned to a STU can be updated over the air via the Lat-Lon website
  - New sensors can be added
  - Sensors can be changed out or removed
- STU can be configured to listen for RF sensors or not (to save power)

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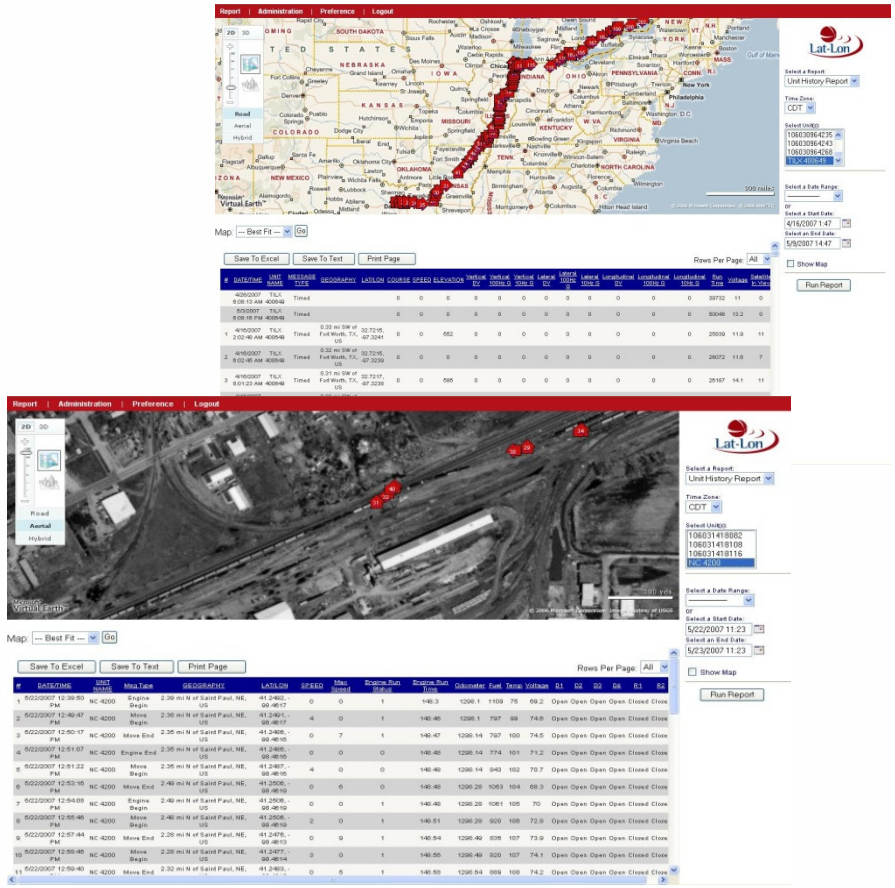
Website Reporting

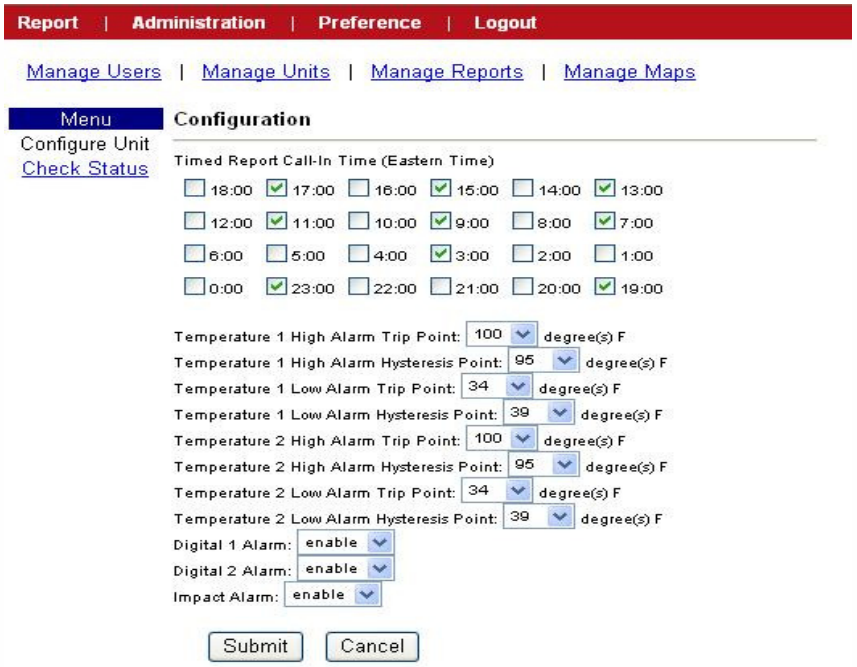
- Query Engine
  - Customer built data mining tools (custom reports)
  - Fleet and history reports
- Street level, aerial and birds eye maps
  - Integrated map/report
  - Puts data into context
- Customer specific geo-referencing
  - 0.01 Mi North of Roundhouse
  - Unlimited amounts of backend geofences and geopoints can be created by customer
- Dispatch and alert pages
  - Auto updates
- Save to Excel or CSV format
- Graph or chart creation directly from website
- Web services (XML) available
- Any message can be sent to a cell phone via text messaging or an email



Two-Way Communications

- Administrator can change parameters of a unit over the air
  - Move Timed call-in times
  - Timed call-in times
  - Temperature alarm thresholds
  - Digital alarm enable/disable
  - Impact sensor thresholds

- Unit firmware can be updated
  - Upgrades without removal
  - Performance improvements after deployment



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STU Summary

- The STU is the most advanced tracking system developed to date
  - It has moving / not moving intelligence
  - It can run forever
  - It has multiple monitoring capabilities
  - Website has the tools to get your logistics answers
  - It has a low lifetime cost of ownership
- Let Lat-Lon help you solve business problems and reduce cost with the STU.
- Call 877-300-6566