



Field Crew Technology

Field Engineering, Design, Staking

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Mobile!

- *Utilities are using a myriad of mobile solutions to increase efficiencies*
- *Automatic Vehicle Location*
 - *Safety*
 - *Efficiency (where is closest crew?)*
 - *Communications Venue*
 - *Truck to truck/truck to dispatch communications*

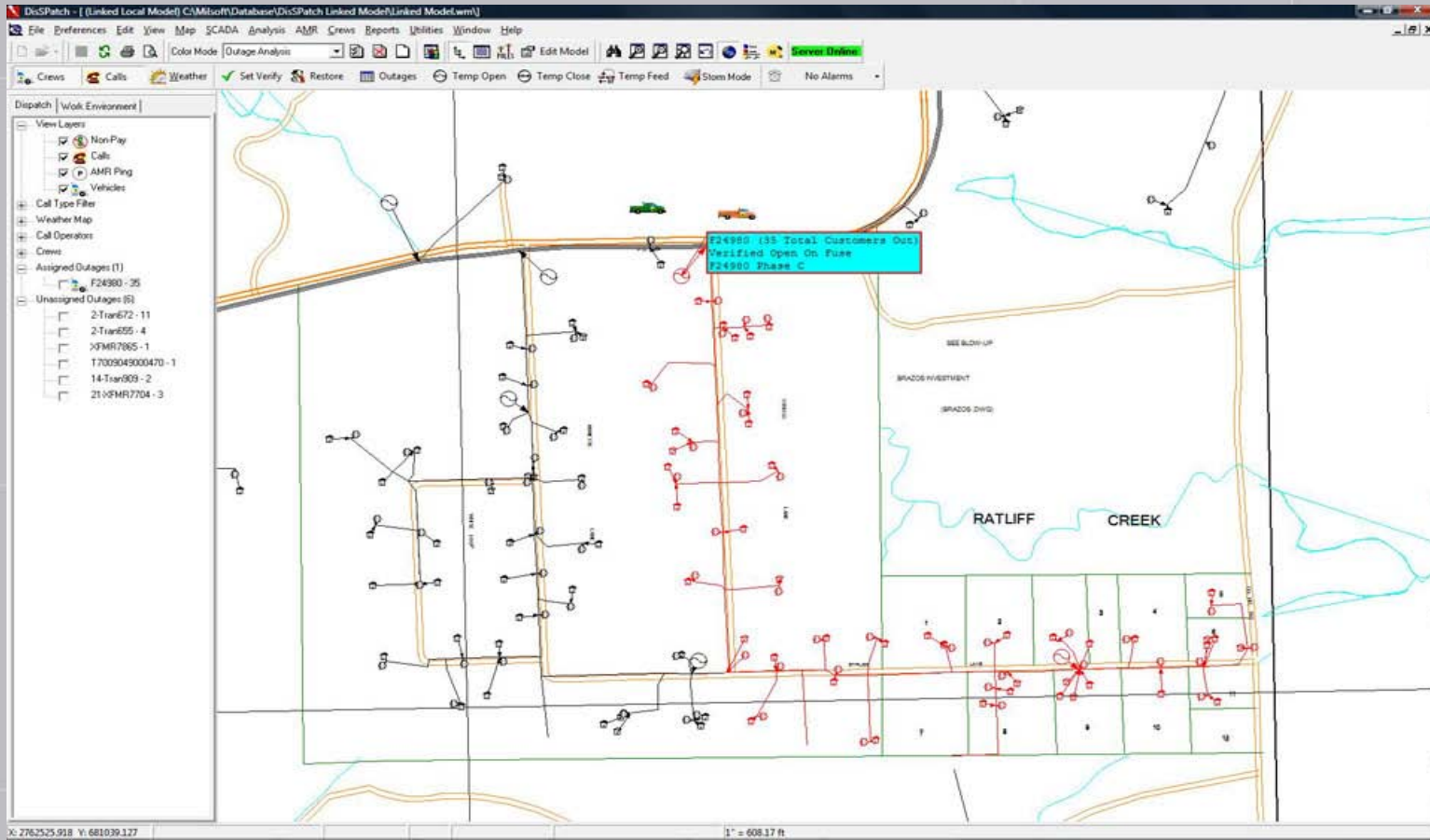


- **Global Positioning Technologies**
 - *Field data collection*
 - *Field Inventory*
 - *Field data maintenance*
 - *Spatially correct data points*
 - *Consumer locations*
 - *Poles*
 - *Devices/Spans, etc*



Data Management

- Detailed Circuit Model in the field





Detailed Circuit Models serve the entire utility:

- *Engineering Analysis*
- *Outage Management Systems*
- *GIS Systems*
- *Field Engineering/Design and Staking*
- *Customer Care Departments*

No more paper maps in the trucks!



- *Field Viewers*

- *Quickly locate consumers, devices, virtually anything on the map/circuit model*
- *Searchable by any/all criteria available in the data*
- *Displays Landbase properties (roads/waterways, up to high resolution aerial photography or Google/Virtual earth)*
- *Automatically updates with latest model information when connection to utility is available*
 - *ONLY sends delta data packets! = Fast*
- *Fast pan & zoom functionality*



Field Viewers can:

- Display detailed outage information*
- Allow crews to restore outages from the field*
- Allow crews to evaluate fault location data from Scada*
- If communication venues are available, radio traffic can be reduced through Instant Messaging*

Damage Assessment



Assessment Manager

Assessments | Historical Assessments | Display Options

Assessment Details:

Search by: For information beginning with:


	Category	Created	CreatedBy	ClosedBy
<input type="button" value="Edit Assessment"/>	POLE BROKEN	6/3/2009 4:55:37 PM	Gerald Marbury	
<input type="button" value="Delete Assessment"/>	POLE OTHER	6/5/2009 4:31:53 PM	luis	
<input type="button" value="Close Assessment"/>	POLE UPROOTED	6/12/2009 12:45:25 PM	luis	
<input type="button" value="Filter By Location"/>	REDLINE	7/23/2009 8:46:59 AM	luis	
<input type="button" value="Print Preview"/>	TREE ON PRIMARY	6/12/2009 12:22:57 PM	luis	
	TREE ON PRIMARY	8/27/2009 2:01:56 PM	From Unplugged	

Assessment Location:

Substation:
Feeder:
Address 1:
Address 2:
City:
State:
Zip:
Latitude:
Longitude:
Offset:
Comments:

Assessment Details:

Category:
Created:
Created By:
Closed By:
Closed On:
Element Name:
Element Type:
Estimated:
Job ID:
Outage ID:
Comments:



Total: 14 Total Selected: 1



Field Design Tools

- Seamless map viewing, item finding, and data viewing of the entire service area;
- Availability of all map viewing features during design;
- Automatic migration of jobs to the computer of the assigned field engineer when jobs are assigned or transferred;
- One-step process for assembly selection and construction sketch generation;



Field Design Tools continued:

- Customer-specified templates and associated units, increasing the speed of the design process;
- Copying of locations, which makes reconductor job design fast;
- Viewing multiple jobs at one time, which allows management of job phases;
- Importing of GPS data;
- Viewing and printing custom text reports from the field computer;



Field Design Tools continued:

- Viewing unit drawings and parts lists;
- Viewing and printing cost estimates from the field computer.
- Integrated to CIS and Accounting/Inventory Systems
- Programmatically updates integrated systems



- *Field Design and Engineering forces accuracy!*
 - *Provides “life cycle” management of the design job, cradle to grave*
 - *Applied to the detailed GIS model only when approved or as built*
 - *Utilized by Engineering to run analysis on proposed builds*
 - *Reports/electronic design/planning/staking sheets/ & detailed cost estimates*



Thank You

Questions?