

Release 6.1

SunGuide Operator Training

Dates of Training, 2015



Agenda for City of Tallahassee Operator Training

- Part 1: Introduction
 - SunGuide Operator Training
 - SunGuide Overview
- Part 2: User Interface Introduction
 - SunGuide Operator Map
 - SunGuide Administration Tools
- Part 3: Traveler Monitoring and Messaging
 - Transportation Sensor Subsystem (TSS)
 - Travel Times (TvT)
 - Dynamic Message Signs (DMS)
 - Roadside Weather Information Subsystem (RWIS)
 - 3rd Party Data Feeds
- Part 4: Cameras and Video
 - Closed Circuit Television (CCTV)
 - Video on Desktop (VoD)
- Part 5: Center to Center (C2C)
 - Posting and Managing Floodgates
- Part 6: Reporting Subsystem (RS)
 - Data Archiving (DA)
 - Generating Reports
- Part 7: Scheduled Actions Subsystem (SAS)
 - Disable System Wide Travel Times Schedule
 - DMS Safety Messages
 - Camera Preset Schedule
- Part 8: Event Management (EM)
 - Incident Detection
 - Event List and Details
 - Response Plan Generation (RPG)
 - Performance Measures
 - Auditing an Event

Part 1: Introduction

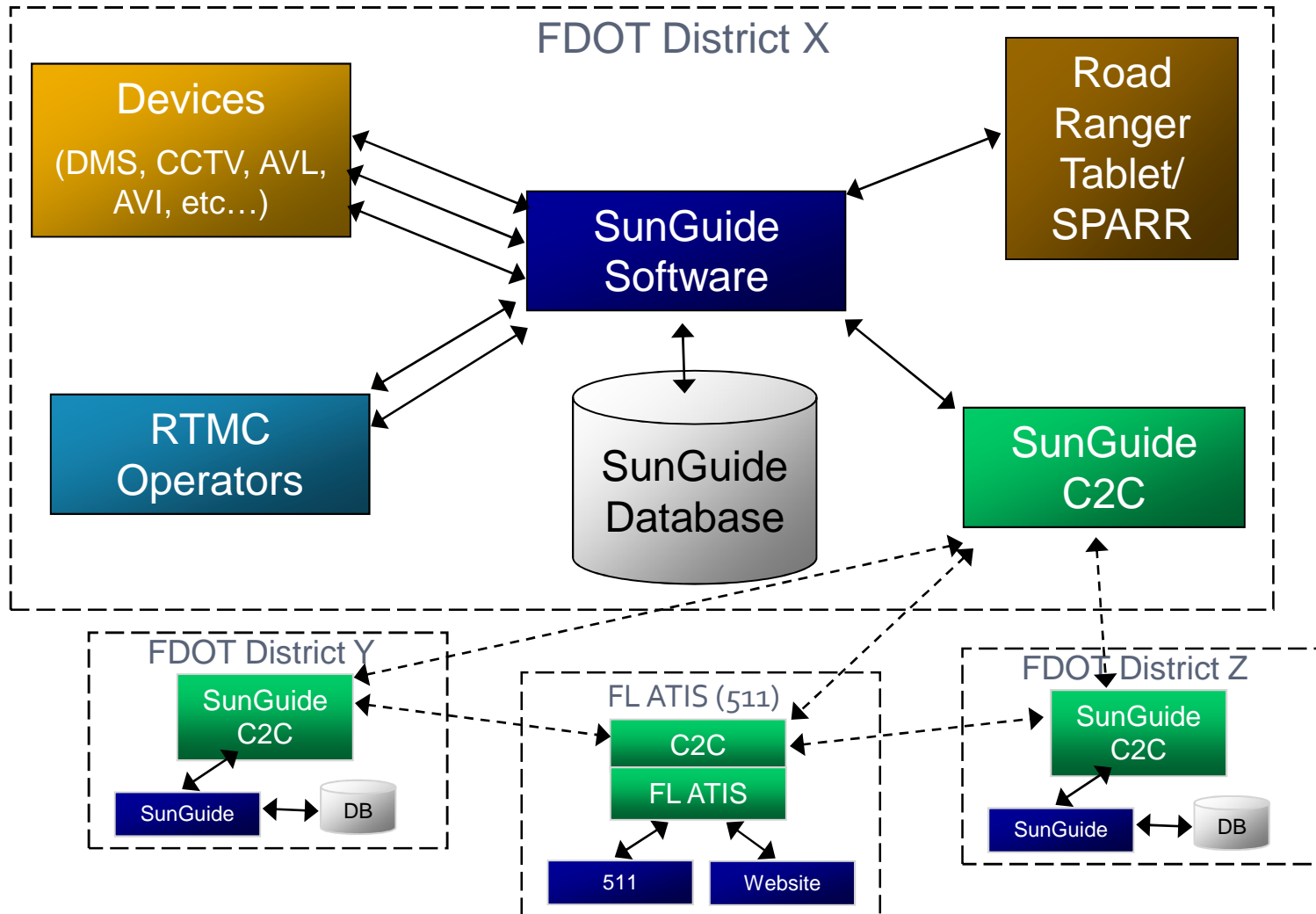
Purpose of Operator Training

- Initial exposure to SunGuide software, concepts, and latest changes/enhancements
- Explains how to use the software
 - Operational procedures differ from district to district
 - Operators should follow district-specific procedures
- Provide resources for future education
 - [SunGuide-SUM-6.1.pdf](#)
 - [SunGuide-VDD-6.1.pdf](#)

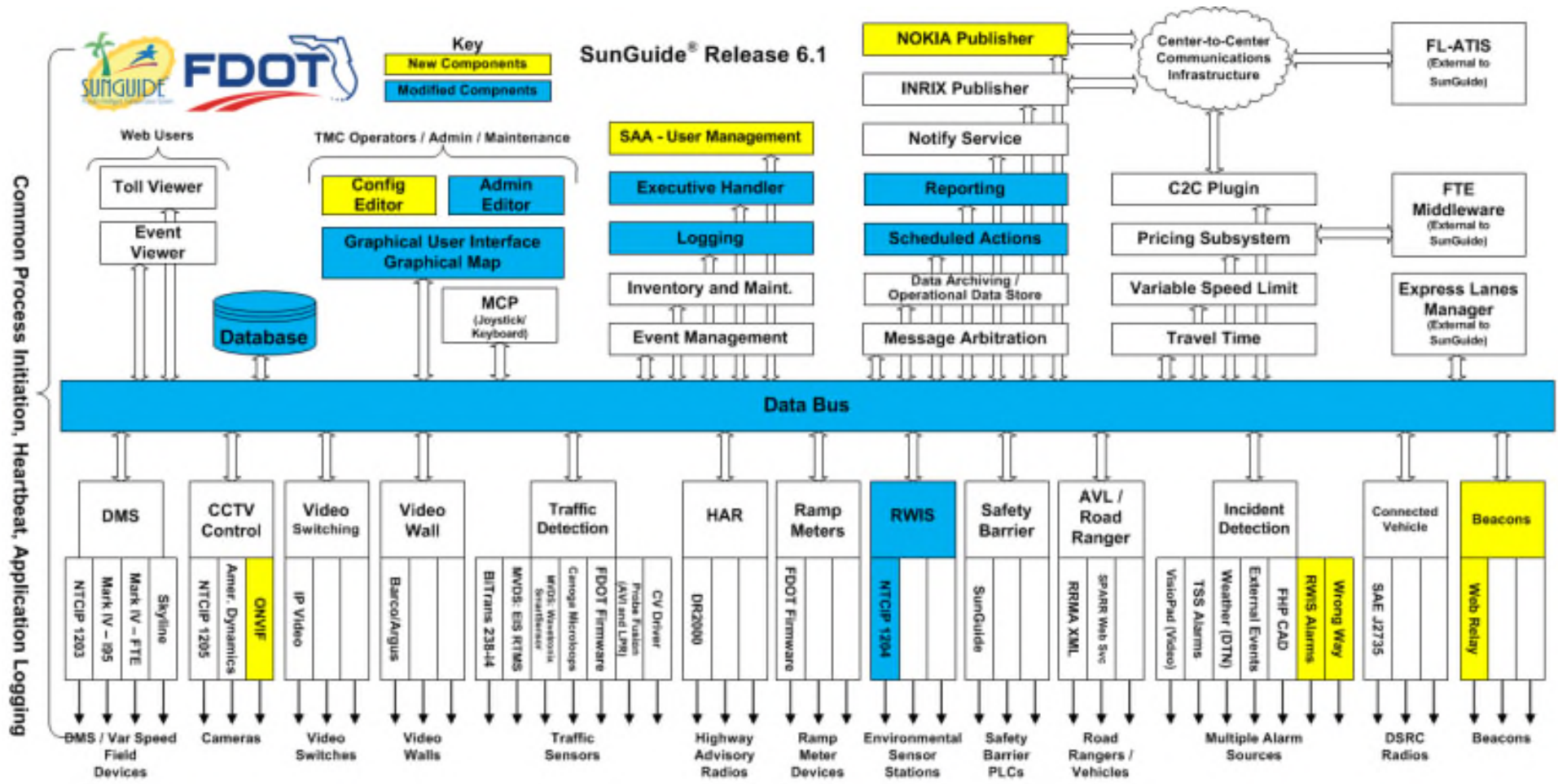
Training Format

- Step through concepts and windows on a section by section basis
- After each section, operators will have “hands on” time to familiarize current portion of the software if time permits
- Feel free to ask questions any time
- Follow-up sheet for
 - Questions, enhancement ideas, issues, and future configuration for trainer to respond to later
 - Operations tasks for TMC staff to do later to accomplish that time wouldn't permit during training

SunGuide Architecture



SunGuide Software Architecture



What's New?

- R6.1
 - SAA User Management
 - NOKIA Interface
 - ONVIF CCTV Driver
 - Wrong Way Driving Interface/Alarms
 - New IDS windows
 - Beacons Driver
 - RWIS Improvements

<http://sunguidesoftware.com/releases/release-6-1-current>

Part 2: User Interface Introduction

The screenshot displays the SunGuide software interface. The main map shows a network of roads in Tallahassee, Florida, with several green detector icons and a red link icon. A 'Views' panel on the left includes an 'Icon Configuration' button. Two data windows are overlaid on the map:

TSS Detector Status: MVDS022_I10MM191.2EB [District 3 - Tallahassee] - Windows Internet Ex...

Detectors Find on Map

- MVDS022_I10MM191.2EB
- MVDS030_I10MM191.9WB
- MVDS041_I10MM192.7EB
- MVDS042_I10MM193.1EB
- MVDS050_I10MM193.5EB
- MVDS051_I10MM193.8EB

Filter

All Detectors

Location: Eastbound I-10: I-10 EB at MM 191.2

Operational Status: Failed

Select new op status: Active [Set Status]

Synchronize Clock

TSS Link Data: LPR4_I10MM202WB-link1 [Distri...

Speed	Link Time (mins)
LPR4_I10MM202WB-link1 (0001-01-01 00:00:00)	
3 N/A	N/A
Lanes N/A	N/A

No. vehicles used in calculation

5 miles

SunGuide Operator Map

- Primary User Interface
- Hub for ITS devices, data, events, controls
- User login with SunGuide specific permissions
- Pan and zoom, access devices and events
- Several Customizable features
 - Icon: change colors or hide/reveal by device type
 - Views and layouts, including Video on Desktop

Subsystem and Device specific operations covered in each section of training

SunGuide Administration Tools

- Executive Handler
- Configuration File
- Admin Editor
- Status Logger
- Footprints

Subsystem and Device specific administration covered in each section of training

DMS Device Availability

Scenario #1: Verify all DMS are Operational

- Setup a DMS preset on a CCTV camera to PTZ to show each DMS
- Setup a VOD layout to show all CCTV cameras with a DMS Preset
- Setup a default freeway monitoring present for each CCTV camera with a DMS preset
- Create a SAS Action List to move each camera with a DMS preset to the DMS preset
- Create a SAS Action List to move each camera with a DMS preset to the default freeway monitoring preset
- Create a SAS Schedule to invoke Action List 1, then dwell 10 minutes, then invoke Action List 2

Part 2: Traveler Monitoring and Messaging



Traveler Monitoring and Messaging

Scenario #1: Travel Times

- TSS, TvT, and DMS work together to gather, calculate, and display travel times.
- This scenario will give an overview of each component involved in this process.

Transportation Sensor Subsystem

In the admin editor:

1. Add a detector
2. Configure detector thresholds
3. Add a link and lanes to a detector

On the operator map:

1. Edit the link placement
2. View the status of a detector
3. View the status of a link

Travel Times

In the admin editor:

1. Create a travel time link

On the operator map:

1. View the status of travel times in the travel times dialog

Dynamic Message Signs – Travel Times

In the admin editor:

1. Add a dynamic message sign
2. Configure a destination
3. Configure a sign to display the output of a travel time link by editing TVT device templates (make sure to include color text and road shields if available)

On the operator map:

1. View the travel time output in the device messaging dialog

Dynamic Message Signs – Manual Messaging

Scenario #2: Manual Messaging

- Sometimes an operator needs to manually change the text on a color or standard DMS.
- This scenario will review the procedure for assessing the state of a sign's queue and making changes to that queue.

Dynamic Message Signs – Manual Messaging

On the operator map:

1. View the message queue of a dynamic message sign currently displaying travel times
2. Add a manual message to the queue with higher priority (make sure to include color text and road shields if available)
3. Verify that your new message is now displayed in place of the old
4. Merge the travel time message and the manual message

Silver Alert Messaging

- Configure a DMS group
- Create a vehicle alert event
- Generate a response plan
- Add the DMS group to the response plan

Roadside Weather Information Subsystem

Scenario #3: Roadside Weather Information Subsystem

- RWIS devices gather weather data with the purpose of giving advanced warning to motorists.
- This scenario will review the procedure for checking weather conditions through the use of RWIS detailed status dialog.

Roadside Weather Information Subsystem

On the operator map:

1. Add a roadside weather device.
2. View the RWIS detailed status dialog.

3rd Party Data Feeds

Scenario #4: 3rd Party Data Feeds

- 3rd Party data feeds can provide traffic information about stretches of roadway without installed ITS equipment.
- This scenario will review the procedure for viewing the speed data from 3rd party data feeds.

3rd Party Data Feeds

On the operator map:

1. View the short status of a HERE data link.

Wrong Way Driving Detection

- Review the WWD SOG
- Wrong way driving detection alert appears
- Handle the alert
- Verify the WWD response plan
- Coordinate with responders
- Terminate the response plan after WWD detection event expires
- Manage any secondary events

Part 3: Cameras and Video



Cameras and Video

Scenario #1: CCTV/Video on Desktop

- This scenario will review the steps for adding a camera to SunGuide, configuring it for VOD, and using Video on Desktop features.

Closed Circuit Television

In the admin editor:

1. Add a camera

On the operator map:

1. View the camera control dialog
2. Manipulate the camera with the Pan/Tilt/Zoom (PTZ) controls in the camera control dialog to verify everything is working
3. Configure a camera preset in the CCTV dialog

Video on Desktop

On the operator map:

1. Configure the video stream path for a camera
2. Open a VOD window for the camera
3. Place four cameras from the device list in four different viewers and resize the window to be square
4. Add two additional cameras to the top right viewer
5. Create an ad hoc tour in the bottom right viewer using one additional camera
6. Save the current window configuration as "OperatorTrainingLayout"

Video on Desktop non-PTZ URL

From the Admin Editor:

1. Configure a camera without PTZ

From the Operator Map:

1. Configure a URL for the non-PTZ camera
2. Launch the camera in Video on Desktop

Part 4: Center to Center



Center to Center CCTV VOD

Scenario #1: View CCTV from another District

- View camera list from Video on Desktop

Center to Center

Scenario #1: Emergency Full Road Closure

- Due to catastrophic circumstances a state road is closed in both directions.

Posting events to FL511 will be covered in event management.

Emergency Full Road Closure

In the floodgates dialog:

1. Create a floodgate containing the road closure information.
2. Delete the floodgate.

Center to Center

Scenario #2: Monitoring TMCs Remotely

- A neighboring TMC needs help monitoring road ITS devices on nights and weekends

Emergency Full Road Closure

On the operator map:

1. Monitor speed, volume, and occupancy for remote TSS links
2. View video from a remote CCTV camera
3. Post a message to a remote DMS

Part 5: Reporting Subsystem

The screenshot displays the SunGuide reporting interface. On the left, a sidebar lists various report categories, each with a 'Select Report Name' dropdown menu. The categories include:

- Patch 3 Testing
- Speeds at Detector
- Event Management
- Road Ranger
- Automated Vehicle Location
- Traffic Detection
- Device
- Software System
- Dynamic Message Signs
- Test Report
- Performance Measures
- Connected Vehicle

On the right, a 'Select Filters for Report Speeds at Detector' panel is visible, showing filters for Date (04/01/2000 to 07/23/2014), Time (00:00 to 23:59), Detector Station (Any), and Summary (Daily). Below this, a preview window shows the 'Speeds at Detector' report. The report header includes the Florida Department of Transportation logo and the SunGuide logo. The report content shows the following details:

Created On:	07/23/2014 13:30:19
Created By:	ADMIN
Filter Parameters Applied:	Print Date Time: 04/01/2000 00:00:00, 2/3 Date Time: 07/23/2014 23:59
Detector:	495_TJ_01
Agency:	Spring Hill
Location:	ITS LAN 192.168.1.13, 800 514
Date Range:	04/01/2000 00:00:00 to 07/23/2014 23:59
Interval:	Daily

The report footer indicates it is Page 1 of 27.

Data Archiving

- Data generated by SunGuide is archived in the database by data archive subsystem.
- This subsystem should always be on while SunGuide is operational.
- Monitoring hard drive space for the database and application servers is very important.

Reporting Subsystem

Scenario #1: Transportation Sensor Data Request

- Data is requested by an agency for auditing or research purposes

TSS Data Request

In the reporting dialog:

1. Select the TSS Rollup Data Tabular report.
2. Enter the requested parameters.
3. Generate the report in excel format.

DMS Safety Message Audit

Scenario #2: DMS Safety Message Audit

- Central Office requests a report detailing district compliance with a DMS safety message mandate.

DMS Safety Message Audit

In the reporting dialog:

1. Select the QAR DMS Safety Message Campaign report
2. Select the requested parameters
3. Generate the report as a pdf

Device Reports

Scenario #3: Equipment and Device History Reports

- Your supervisor requests a log of the installed devices and your interaction with various SunGuide systems.

Device Reports

In the reporting dialog:

1. Run the various device and messaging reports to show the activity generated up to this point in operator training.

Report Queue

In the reporting dialog:

1. Execute a long-running report
2. Find the long running report in the queue
3. Cancel the long-running report

Part 6: Scheduled Actions Subsystem



Schedule Actions Subsystem

SAS Scenario #1:

Enable Travel Times System Wide

- Users may desire to only display travel times on dynamic message signs during peak traffic hours.
- The SAS allows users to disable or enable travel times system wide or per device.

Schedule Actions Subsystem

In the scheduled actions dialog:

1. Create new "DailyDMS" schedule
2. Add new "EnableTvTMorning" schedule item
3. Set recurrence pattern
4. Choose "Travel Times Systemwide"
5. Set action to "Enable Travel Times"
6. Add new "EnableTvTEvening" schedule item
7. Set recurrence pattern
8. Choose "Travel Times Systemwide"
9. Set action to "Enable Travel Times"
10. Activate Schedule

Schedule Actions Subsystem

SAS Scenario #2:

DMS Safety Message Schedule

- Many times a year districts are requested to run safety messages during specific daily intervals.
- The SAS can send messages to individual or groups of dynamic message signs with a specific recurrence pattern.

Schedule Actions Subsystem

In the scheduled actions dialog:

1. Create new "SafetyMessages" schedule
2. Add new "BuckleUp" schedule item
3. Set recurrence pattern
4. Choose "DMS Messaging" for devices
5. Select all desired DMSs
6. Create the message that will display on the sign(s)
7. Activate schedule

Schedule Actions Subsystem

SAS Scenario #3: Camera Preset Schedule

- An operator may desire for cameras to cycle through several preset locations
 - (e.g. looking down both directions of a roadway)
- The SAS allows users to create a camera actions list that repeats for a desired interval.

Schedule Actions Subsystem

In the scheduled actions dialog:

1. Create new "CameraLoop" schedule
2. Create new "ThreePreset" scheduled item
3. Set recurrence pattern
4. Choose "CCTV PTZ/Preset" for devices
5. Select all desired cameras
6. Create the action list that the camera will execute
7. Activate Schedule

Scheduled Device Reports

SAS Scenario #4: Daily Device Reports

1. Create new "TSS Status" schedule
2. Add the Detector Data Quality report as an item in the action list
 1. Set the parameters to run the report from 00:00 to 23:59 the previous day
 2. Set the report to email it to your email address
3. Test the action list by setting the report to run in 3 minutes from now
4. Set the schedule to run daily at 3:00 AM

Part 7: Event Management



Event Management

Scenario: Event Management Life Cycle

- This scenario will follow the life cycle of an event from creation to performance measures.
- This includes:
 - Incident Detection
 - Event List and Details
 - Response Plan Generation
 - Performance Measures
 - Auditing an Event

Notification Sources

Primary:

- CCTV
- Law Enforcement
- Road Rangers
- Etc.

Secondary:

- Waze events
- Calls from Motorists
- Etc.

TSS Alert Thresholds

In the admin editor:

- Configure TSS thresholds for all links on a detector

On the operator map:

- View the detailed status of a link and note the colored areas on the speed scale
- Lower the speed of the RTMS simulator below the alert threshold
- Raise the speed of the RTMS simulator above the recovery threshold

RWIS Auto-Response Plan

Configuration:

- Beacons configured for RWIS
- RWIS configured for automatically activated response plan for visibility

On the operator map:

- Configure a thresholds for low visibility
- Simulate an alarm with the RWIS sim
- Handle the alert and verify the response plan activated
- Recover the alarm with the RWIS sim
- Close the event and verify the response plan terminates

Waze Events on the Map

In the operator map:

1. View the C2C event details for a Waze event

Incident Detection

In the events list:

1. View current alerts and observe the different types of alerts
2. Select an alert and handle it by creating a new event

Event List and Details

In the events list:

1. Find the new event in the events list
2. Open the event details dialog for the event

In the events details dialog:

1. Make note of the various fields that can be edited in an event and enter the necessary information for the creation of a response plan

Response Plan Generation

In the event details dialog:

1. Save the event and generate a response plan

In the response plan dialog:

1. Review the automatically generated response plan
2. Select a response plan template instead automatic plan
3. Accept the response plan
4. Add a DMS to the response plan
5. Verify that the response plan message is displayed on the newly added DMS
6. Close the event
7. Verify the response plan was auto-terminated

Performance Measures

In the event details dialog:

1. Generate and review the event chronology report for the event
2. Unblock any blocked lanes and close the event

In the reporting tab of the tabbed GUI:

1. Generate and review a weekly performance measures report

Auditing an Event

In the auditing dialog:

1. Edit each auditable field in turn.

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SunGuide Operator Training

Instructors

Brian Ritchson, Atkins

Brian.Ritchson@dot.state.fl.us

John Hope, Atkins

John.Hope@atkinsglobal.com

Please fill out training surveys before leaving

