



# **Change Management Board Meeting**

Wednesday, May 22 2012

Video Conference: CO- Burns Video Bridge 3

Audio: 850 - 410 - 5667





# Welcome and Call for Quorum

Javier Rodriguez, CMB Chairman



# **Agenda**



Time	Item	Lead
1:30 – 1:35	Welcome and Call for Quorum	Javier Rodriguez
1:35 – 1:40	Previous Meeting Recap and Action Item Review	Javier Rodriguez
1:40 – 1:50	ITS WAN Update	Randy Pierce or Frank Deasy
1:50 – 1:55	SSUG Update	John Hope
1:55 – 2:00	Event Type Mapping (vote)	John Hope or Jason Summerfield
2:00 – 2:15	Video on Desktop	Clay Packard
2:15 – 2:35	Bulk Update AVL RR (vote)	Robert Heller or Tucker Brown
2:35 – 3:00	Need for SunGuide GUI update	Arun Krishnamurthy



# **Agenda**



Time	Item	Lead
2:50 – 3:00	Break	
3:00 – 3:15	Vehicle Alert Templates (vote)	Robert Heller or Tucker Brown
3:15 – 3:30	DMS Blanking	Robert Heller or Tucker Brown
3:30 – 3:45	DMS C2C for OOCEA (vote)	Robert Heller or Tucker Brown
3:45 – 4:00	Update on upcoming SunGuide releases	Arun K or Robert Heller
4:00 – 4:15	Top Priority SunGuide Item by District	Arun Krishnamurthy
4:15 – 4:20	Action Item Review	Javier Rodriguez

CMB agenda, slides, and attachments posted here: <a href="http://www.dot.state.fl.us/trafficoperations/ITS/Projects\_Deploy/CMB.shtm">http://www.dot.state.fl.us/trafficoperations/ITS/Projects\_Deploy/CMB.shtm</a>





# Previous Meetings Recap and Action Items Review

Javier Rodriguez



#### **November 2011 Action Items**



- 1. A. Krishnamurthy to send T. Hensley the SQL Storage Guidelines document.
- 2. Districts to review Footprint 1744 suggestions and provide comments for finalization.
- 3. SwRI to provide cost estimate / description for making separate templates for Amber, Silver and Leo alerts.
- 4. SSUG to discuss ONVIF and requirements for video decoding.
- 5. A. Krishnamurthy to send ONVIF requirements and cost estimate to Districts.
- 6. SSUG to discuss bulk update AVL-RR solutions.





## **ITS WAN Update**

Randy Pierce or Frank Deasy



# **ITS WAN Update-The Future**



- FTE RTMCs, Pompano and Turkey Lake
  - ITS WAN equipment installed at Pompano RTMC
  - Next Step: FTE switch configuration and connection to ITS WAN switch
- Connecting D7 & D1
  - ITS WAN equipment ready for on-site commissioning
  - Fiber splicing needed from D6 to FTE fiber
  - TransCore preparing to test and characterize fibers
- Connecting D6 RTMC to TERL
  - 1 Gbps connection in place
  - Supporting testing and video to the State EOC
- Connecting D3 RTMCs, Pensacola and Tallahassee
  - GBIC's received, connections being scheduled



## **ITS WAN Update-The Future**



#### FHP CAD

- Connected directly to ITS WAN equipment at D5 RTMC
- Available to Districts connected to ITS WAN
- MultiCast Re-Addressing
  - Districts should re-address now to enable Statewide MultiCasting
  - VAS can then receive MultiCasting video without the need for further re-addressing
- Working with VAS
  - Replacing dedicated circuits with ITS WAN where fiber connections are available
  - Resolving connectivity issues at D5 and D4





# **SSUG Update**

John Hope



# **SSUG Update Current Topics**



- C2C Issues Discussion
- ONVIF Video Encoders/Decoders Plans
- Event Type Flag Recommendations
- HAR and SQL Storage Guidelines Feedback
- SSUG Charter Document
- Zero Speeds and Occupancy Issue
- Additional User Permissions per devices/highways
- AVL-RR Mobile Reconnect Issue Recommendations

Agenda and notes available here:

http://www.dot.state.fl.us/trafficoperations/ITS/Project s\_Deploy/SSUG.shtm





### **Event Type Mapping (vote)**

John Hope & Jason Summerfield



### Footprint 1744: Event type flag



 SSUG suggestions for response plans event type flags are in the following table

Event Type	Current SunGuide DMS event type flag	SSUG suggestions for DMS, email and FL-ATIS event type tag in auto messages
ABANDONED VEHICLE	ABANDONED VEHICLE	DISABLED VEHICLE
CRASH	INCIDENT	CRASH
BRIDGE WORK	CONSTRUCTION	CONSTRUCTION
CONGESTION	CONGESTION	CONGESTION
DEBRIS	INCIDENT	DEBRIS
DISABLED VEHICLE	DISABLED VEHICLE	DISABLED VEHICLE
EMERGENCY VEHICLES	INCIDENT	EMERGENCY VEHICLES
OFF RAMP BACKUP	INCIDENT	CONGESTION
PEDESTRIAN	INCIDENT	PEDESTRIAN
POLICE ACTIVITY	INCIDENT	EMERGENCY VEHICLES



# Footprint 1744: Event type flag



Event Type	Current SunGuide DMS event type flag	SSUG suggestions for DMS, email and FL-ATIS event type tag in auto messages
PSA	SPECIAL EVENT	SPECIAL EVENT
ROAD WORK - EMERGENCY	CONSTRUCTION	CONSTRUCTION
ROAD WORK - SCHEDULED	CONSTRUCTION	CONSTRUCTION
SPECIAL EVENT	SPECIAL EVENT	SPECIAL EVENT
VEHICLE ALERT	(Some template)	Needs to be specific: silver, leo, amber
VEHICLE FIRE	INCIDENT	VEHICLE FIRE
VISIBILITY	INCIDENT	LOW VISIBILITY
WEATHER	INCIDENT	WEATHER ALERT
EVACUATION	OTHER	EVACUATION
FLOODING	INCIDENT	FLOODING
OTHER	OTHER	OTHER
INTERAGENCY COORDINATION	OTHER	INTERAGENCY COORDINATION



# **Event Type Flag**



- Cost: nominal support effort
- (vote)





# Video on Desktop: Virtual Video Wall

Clay Packard



#### Virtual Video Wall - Background



- Originally requested by Lee County
  - No shared Video Wall
- Video on Desktop used by many users currently
  - No SunGuide Integration
  - Approved by CMB on April 18, 2011
- District 4 has new scope for building this
- We can partner with them to specify a feature-set that works well for all users
- Updated Conops describes value added features



# Virtual Video Wall – Inspiration









#### Virtual Video Wall - Concept



- Integrated into Operator map
  - Double-click, drag-and-drop
- Full-featured and detailed for usability
  - User saves/loads VWW viewer positions (and tours)
  - PTZ control and preset buttons in viewer
  - Full screen
    - Virtual video wall in monitor
    - Viewer in the virtual video wall
  - Support for video tour "drag and drop-on-top"
    - Tour configuration saved with virtual video wall layout





# **AVLRR Bulk Update (FP 1591)**

**Tucker Brown** 



#### The Problem



- When there are rapid position from the AVLRR system (due to queued updates in mobile application), the GUI will refresh and make the AVLRR screen unusable
  - Each position update causes a refresh in the GUI
  - Access to GUI is degraded until all updates are processed



#### **Proposed Solution**



#### Bulk Position Update Messages

- AVLRR and SPARR Drivers would make a bulk update message that would allow clients to pass older position information
- AVL Subsystem will store these updates directly to the database with no update notifications to the GUI
- Client applications will handle the situation of when this message should be used

#### Status Updates

 Status update are tied directly to events (assisting/not assisting) so separating them out from events does not work with current design of AVL



#### **Cost/Schedule and Vote**



- Schedule: Released with 6.0
- Cost
  - Drivers/Subsystem: \$10K
  - SPARR Application: \$2.5K

(vote)





#### **SunGuide GUI**

Arun K



### **Need for GUI update**



- Move admin editor into SunGuide operator map
  - D6 high priority item
  - Several FPs would be addressed
- Convert all IE screens to WPF screens
  - We believe, software performance improves if we move from IE to WPF
  - When using IE, workarounds needed to make SunGuide work



# What could be added to the scope



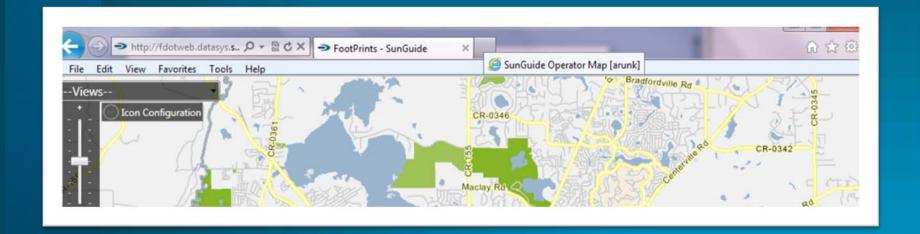
- This touches several aspects of SunGuide
- Could be used as an opportunity to re-design the GUI to better meet our needs



#### **Introduce tabbed GUI**



- Inspiration: IE
- Drag and drop screens

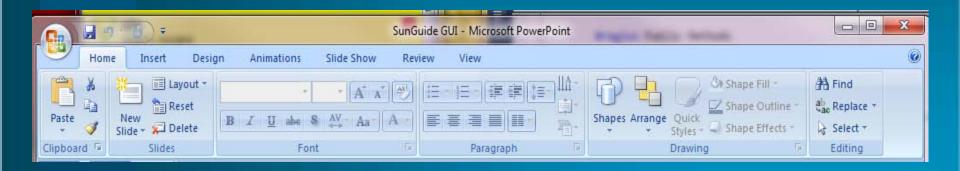


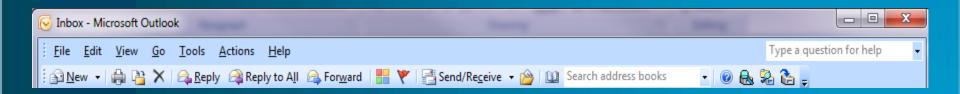


# Ribbon style menu structure



- Inspiration: Microsoft Office, Outlook
- Context specific menu structure



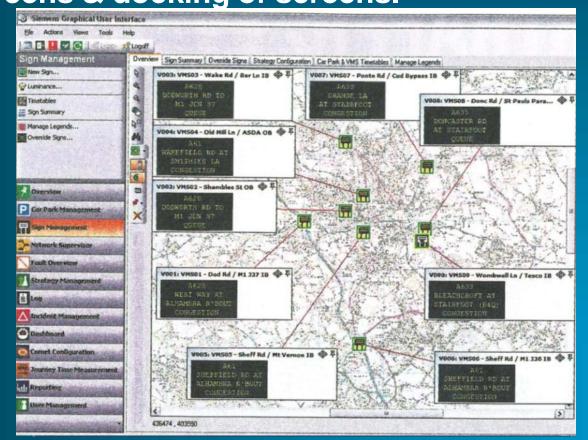




#### **Dock & Pin Screens**



 Inspiration: Visual Studio/ Pining and unpinning of screens & docking of screens.



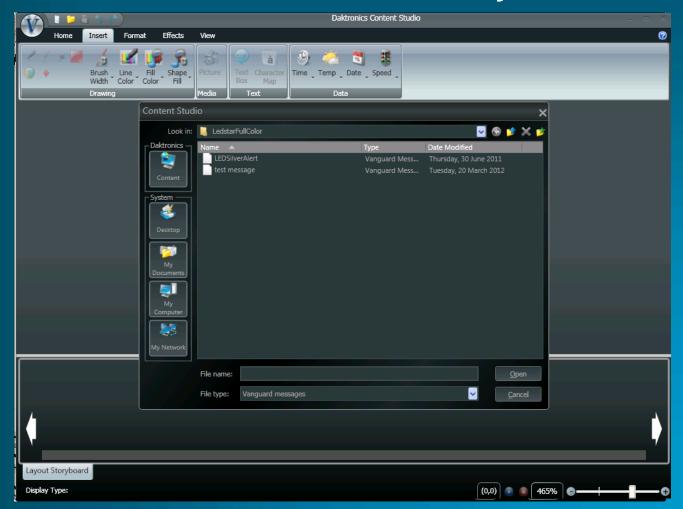
Siemens uses the pinning concept in their software.



#### Look at similar software



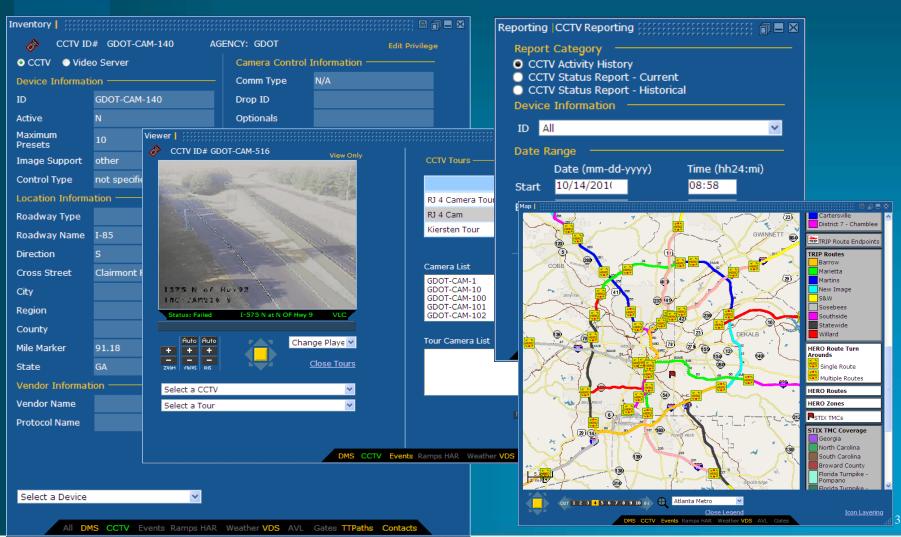
Daktronics software /use of ribbon style menu







#### Delcan software / Consistent "look and feel"



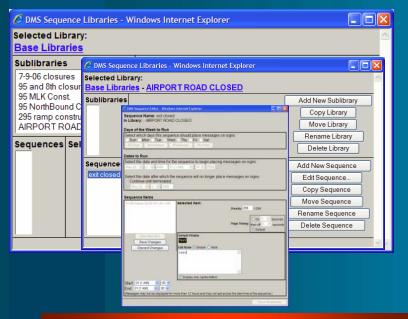


### Cost to develop new GUI

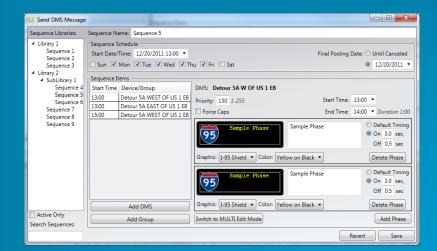


- Order of magnitude effort similar (design effort is unknown as we haven't gone through it)
  - If screens kept same, it still needs to be re-done from IE to WPF

#### Conversion of IE screens to WPF









#### Summary



- Need to move to new GUI
  - Admin editor needs to be moved within SunGuide
  - Performance improved by migrating from IE to WPF
    - Will require the software installed in every TMC computer rather than be browser based.





#### **10 Minute Break**

Everyone





# Vehicle Alert Templates: Amber, Leo, and Silver Alerts

**Tucker Brown** 



#### **The Problem**



- Current implementation does not distinguish between different types of vehicle alerts
  - Amber
  - Silver
  - Leo
- Only one template that can be saved and is used for all three types
  - Leads to slower response time as operators must manually edit messages





- Create 3 new event types
  - Amber Alert
  - Silver Alert
  - Leo Alert
- "Vehicle Alert" would be ceased but would remain in the database
- Create ability to define templates for all 3 types





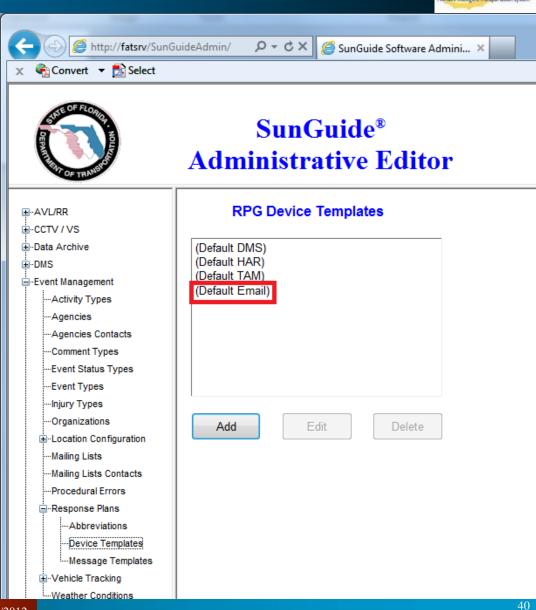
- Standard Device
   Template format
- No changes to template creation
- New selectable templates for each of the new event types







- Standard default templates for DMS, HAR, and TAM
- New default template for email
- Only used in cases of Amber, Leo, or Silver alerts





# Cost



- \$10,000
- (vote)





# **DMS Blanking (FP 1310)**

**Tucker Brown** 



#### **The Problem**



- When a sign loses communication with SunGuide, the reported message of the sign within SunGuide can not be changed until communications are restored
  - FLATIS will continue to report this message as the current state of the DMS even though the DMS may have a different message
- Communication status changes may result in the MAS queue and the message of the DMS to become out of sync





- When a communication loss occurs operators will still be able to blank the message on the sign within SunGuide GUI and FL-ATIS
  - Operators will be notified if this is the case to avoid confusion from inconsistencies between the sign and SunGuide at this point
- When the sign comes back online, SunGuide will ensure the current message on the MAS queue matches what is displayed on the sign; else, the sign will be updated to match the intended message to be displayed.
- Scheduled to be released as part of 5.1.1





## **District to District DMS Control**

**Tucker Brown** 



#### **The Problem**



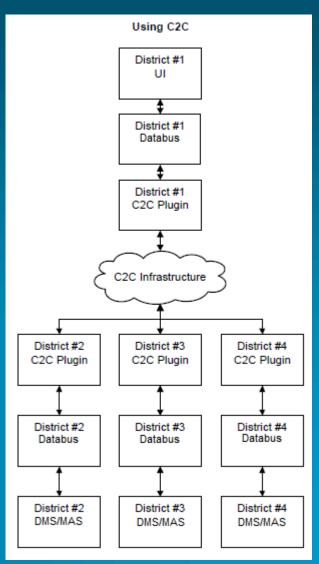
- When attempting to control another SunGuide installation, C2C DMS control is intentionally limited to a partial set of the full DMS functionality
  - Can modify messages, but only if you posted them
  - Can not modify/blank messages originating from the remote district



#### **Possible Solutions**



- Expanded C2C command/control capability
  - Web Service based
  - Expanded DMS status
    - NTCIPv2 structure
  - New datatypes (MAS)
  - New commands
    - Current commands do not support full functionality such as blank queue commands
  - New GUI implementation

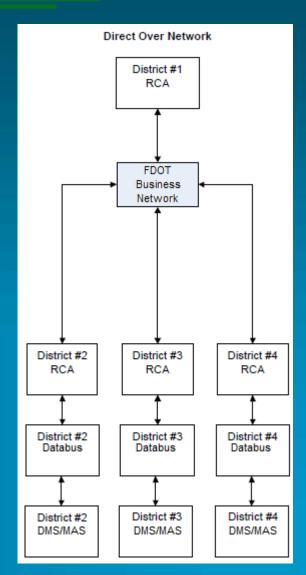




#### **Possible Solutions**



- Remote Command Application from TxDOT
  - Socket based connection (more reliable)
  - Expanded DMS GUI
    - Same controls but more DMSs to choose from
  - No new commands or datatypes
    - Command and status data will already exist





## Implementation Issues



- Release 6.0 will modify all current DMS GUIs
  - NTCIPv2 to include color graphics
- If enhancement is done before 6.0, SwRI will have to modify existing HTML/JavaScript and re-implement in Release 6.0
- If done along with Release 6.0, schedule will have to be pushed out for more development
- Recommendation is to start development after Release 6.0
  - Allows development against new DMS GUIs



#### Recommendation



- SwRI recommends using RCA
  - Consolidates local and remote DMS control to a single window
  - Gives one set of "full DMS control"
    - Through C2C, new enhancements would need to be done through DMS and C2C
  - More stable/reliable connection



# Cost/Schedule and Vote



 Proposed Schedule: Included in the next release after 6.0

Cost: 66K

• (vote)



# **Change Management Board**



# Update on upcoming SunGuide releases

**Robert Heller** 



# **5.1.1 Development Status**



Issue	Status
Short name vs long name	100%
Safety Barrier Alert	95% needs configurable list of options
DMS Blanking	50%
Probe Data Matching Algorithm Improvement	50%
Protocol Name (AVI TCP)	100%
Multiple Contact	95%
SPARR Driver	100%
CSV Classification Data	95%



# 6.0.0 Development Status



Issue	Status
Sql Server Conversion	
Nested tables unwound	100%
User types replaced	100%
Triggers migrated to code	100%
Columns renamed that conflicted with SQL Server reserved words	100%
Dual Support (ADO) 80-85%	85-90%
EM 65%	65%
Database ID	20%
DMS not started	0% (Dylla)
SAS	0 % (Starkweather)



# **Change Management Board**



# **Top Priority Item by District**

**Arun Krishnamurthy** 



### **Issues discussed last meeting**



- D7 Floodgate issue
- OOCEA C2C for DMS
  - Discussed at this CMB
- D1 FP 722: turn lane in EM
- FTE short name and long name configurable for emails
  - Added to R5.1.1
- FTE rich email text
  - Still being investigated



# **Comments**







# **Change Management Board**



#### **Action Items Review**

Javier Rodriguez