



Change Management Board Meeting

Tuesday, September 25, 2018

Audio: 1 (646) 749-3112,

Access Code: 954-385-813

Do NOT Put On Hold Call is Being Recorded

GoToMeeting:

<https://global.gotomeeting.com/join/954385813>



Welcome and Call for Quorum

Bryan Homayouni, P.E., CMB Chairman



Agenda



Time	Item	Lead
1:30 – 1:35	Welcome and Call for Quorum	Bryan Homayouni
1:35 – 1:45	Previous Meeting Recap & Action Item Review	Bryan Homayouni
1:45 – 2:00	SunGuide Software Update	Derek Vollmer
2:00 – 2:15	Vehicle Position Data Across C2C Connection (VOTE)	Mark Dunthorn
2:15 – 2:30	Sending messages to non-color and color sign via SAS (VOTE)	Derek Vollmer



Agenda



Time	Item	Lead
2:30 – 2:45	Small-Effort JIRA Issues: 4015, 4187, 4301 and 4302 (VOTE)	Derek Vollmer
2:45 – 3:00	TAPCO Blinklink Interface to SunGuide (VOTE)	Derek Vollmer
3:00 – 3:15	Wavetronix HD Modification for WWD Reporting/Archiving (Possible VOTE)	Dan Smith
3:15 – 3:30	Cloud-Based Solutions with SunGuide	Chrissie Collins
3:30 – 3:50	Open Discussion	Bryan Homayouni
3:50 – 4:00	Review Action Items	Bryan Homayouni

CMB Agenda, slides, and attachments posted here:

http://www.dot.state.fl.us/trafficoperations/ITS/Projects_Deploy/CMB.shtm



Previous Meetings Recap and Action Items Review

Bryan Homayouni, P.E., CMB Chairman



Previous Meeting Action Items

Owner	Action Item
Romona Burke	Reach out to Alan El-Urfali about the RWIS developmental specification.
Mark Dunthorn	Update Travel Time Document to reflect how travel times are currently handled within SunGuide.
Derek Vollmer	Add RWIS to the SSUG meetings.
Derek Vollmer	Keep Districts in the loop on the Architecture update process.
Derek Vollmer	Look into adding 3986 and 4183 into the 7.2.0. release.
Derek Vollmer	Bring up bridge closures and executive notifications up at the SSUG meeting.
Derek Vollmer	Take the idea of adding images to the executive notifications to the SSUG meetings.



Previous Meeting Action Items

Owner	Action Item
Clay Packard	Get a schedule for R-ICMS deployment to be shared with everyone.
Derek Vollmer	Add Bluetooth (probe vehicle) specifications 660-2 update to ITS Working Group Meeting.

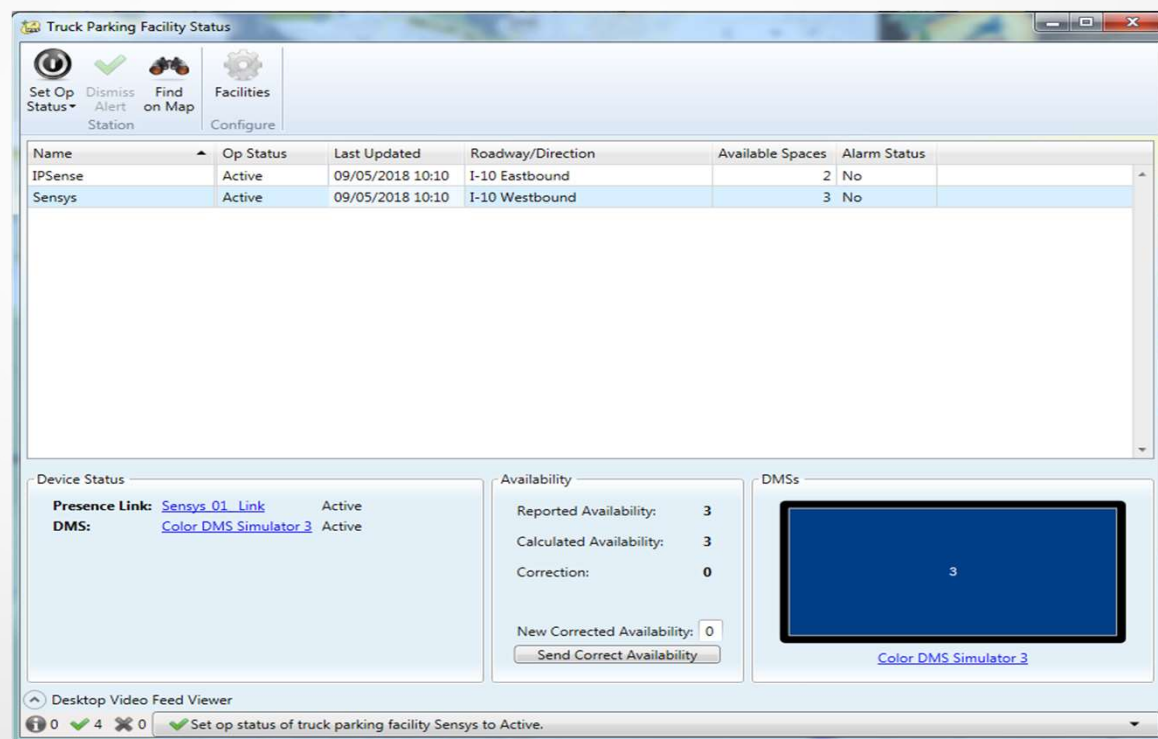


SunGuide Software Update

Derek Vollmer, FDOT

Truck Parking Update

- New configurable color DMS for Truck Parking
- Truck Parking icon can be published in FL511
 - You now have the option to select which TPF to be published in FL511



The screenshot shows the 'Truck Parking Facility Status' web application. At the top, there are navigation buttons: 'Set Op Status', 'Dismiss Alert Station', 'Find on Map', and 'Facilities Configure'. Below this is a table with the following data:

Name	Op Status	Last Updated	Roadway/Direction	Available Spaces	Alarm Status
IPSense	Active	09/05/2018 10:10	I-10 Eastbound	2	No
Sensys	Active	09/05/2018 10:10	I-10 Westbound	3	No

Below the table, there are three main sections: 'Device Status', 'Availability', and 'DMSs'.
 - 'Device Status' shows 'Presence Link: [Sensys_01_Link](#) Active' and 'DMS: [Color DMS Simulator 3](#) Active'.
 - 'Availability' shows 'Reported Availability: 3', 'Calculated Availability: 3', 'Correction: 0', and 'New Corrected Availability: 0' with a 'Send Correct Availability' button.
 - 'DMSs' shows a video feed of a blue screen with the number '3' and the label 'Color DMS Simulator 3' below it.

At the bottom, there is a 'Desktop Video Feed Viewer' bar with system icons and a notification: 'Set op status of truck parking facility Sensys to Active.'



SunGuide 7.1.1

- SunGuide 7.1.1 has been released and it contains the following:
 - Lane by Lane Detector Data
 - Links on Map Option 1 – C2C Icon Configuration
 - Traffic Signal Malfunction Event Type – New Event Types
 - Traffic Signal Dark, Traffic Signal flash, and Bridge up
 - Roadway Type Flags
 - Limited Access, Arterial, and Express Lanes
 - Bluetooth MAC Address matching



SunGuide 7.2 Update

- What to expect
 - **Audit Chronology**
 - SunGuide software will enter AUDIT records into event chronology at the time the audit is performed.
 - **Link Display**
 - SunGuide software will display an expanded view when hovering over multiple links that are stacked on top of each other.



SunGuide 7.2 Update

- What to expect
 - **Roadway Primary/Secondary**
 - SunGuide software will support configuring a parent roadway in the Roadway Configuration window.
 - **Case Sensitivity in Object Names**
 - SunGuide software will enforce case insensitive uniqueness for the name of configuration items



SunGuide 7.2 Update

- What to expect
 - **Monitor and Regulate DMS Fonts**
 - Adding font monitoring to SunGuide. Can detect when a font has changed on a sign
 - **Planned Events**
 - Ability to have a start and end times for planned events like marathons, bike week, parades...
 - Response plan needs to be approved between creation of the event and start of the event
 - **ICMS integration changes**
 - Changes to SunGuide for the D5 ICMS project.
 - Includes porting over TMDDv3 signal interface



SunGuide 7.2 Update

- What to expect
 - **Executive Notification Automation**
 - Hopefully this passes today
 - **Intersection EM Locations**
 - Hope this passes today



SunGuide Hotfixes Released

- Too many items to list here
- Please see the e-mails sent out and the readme files for the hotfixes for a list of items
- Please test any items listed as deferred to District in the e-mail



QUESTIONS?

Derek Vollmer, P.E., FDOT

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Vehicle Position Data Across C2C Connection *(VOTE)*

Mark Dunthorn, FDOT



Vehicle Position Data Across C2C Connection

- SG-3470 – Originally requested by District 3
 - Would allow Road Rangers to be visible in other SunGuide deployments
- More recently requested by the TIM program at the CO
 - Joint effort with FDOT GIS group
 - Goal is real-time locations of Road Rangers statewide on a map at the EOC



Vehicle Position Data Across C2C Connection



- What changes will be required?
 - New C2C data type and associated schema updates
 - Minor changes to Operator Map
- What data will be included?
 - Location (latitude/longitude)
 - Road Ranger Availability status (Patrolling, Arrived, etc.)



Cost & Schedule

- Estimate: \$11.5K
- Schedule Release: 7.2



QUESTIONS? *(VOTE)*

Mark Dunthorn, FDOT

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Sending Messages to Non-Color and Color Signs via SAS *(VOTE)*

Tucker Brown, SwRI



Current Situation



- In D6 SAS schedules for DMS, can get into a scenario where there is a color message scheduled with non color DMS included.
- The message is sent, but will fail on the non-color signs
 - They do not recognize the color tag
- D6 sets up two schedule items, one for color and one for non-color messages
- Would like something that can send color messages to color signs and non-color messages to non-color signs all in one scheduled item



Enhancement



- Use predefined plan concept with SAS
- Allow users to specify different messages per sign
 - Use graphic/color as needed
 - Abbreviations not needed as editor would restrict the user entering the message
 - Filter in configuration grid could indicate which signs support color or graphics
 - Helps with adding message to color vs non-color signs
- Schedule item would then activate a plan not a message



Cost & Schedule

- Estimate: \$11.5k
- Schedule Release: 7.2



QUESTIONS? *(VOTE)*

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Small-Effort JIRA Issues: 4015, 4187, 4301, and 4302 *(VOTE)*

Tucker Brown, SwRI



Executive Notifications (4015)

Tucker Brown



Current Behavior



- An email is automatically generated based on a subset of the executive notification criteria
- Email can be modified by TMC staff before sending
- Emails can be manually triggered for an event
- Emails are re-sent at configurable intervals until the event is completed
 - Changes are not highlighted.



Proposed Enhancement



- Notifications will be generated for the 8 criteria listed in the ConOps.
- Notifications will be sent to users in SunGuide as a dialog in the software.
 - User can make any needed changes themselves or request an authorized user to approve
- Generated email will still be based on a template but allow the user to modify the fields directly in the software
- User corrections will be stored and future notifications will have the same change already made.
- System will highlight any changes for updated notifications



Proposed Enhancement



- The system will provide a way to combine notifications from multiple events into a single notification
- The system will allow the user to take and attach snapshots from the Video on Desktop video stream (optional)
- The system will use the user's contact information in the notification



Cost & Schedule

- Estimate: \$66k
- Schedule Release: 8.0



QUESTIONS? *(VOTE)*

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Intersection Locations (4187)

Tucker Brown



Current Behavior



- Locations are based on a single point, with a single roadway, dir, and lane map
- For Intersections,
 - Some districts have been putting in multiple events to track intersection events
 - This can throw off event/performance metrics
 - FLATIS is unable to correlate this as well so the 511 information is not consistent

Enhancement - Configuration

- Add the ability to configure a location that has multiple approaches (roadway, direction, and lane map)

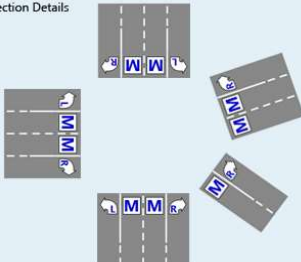
EM Location Configuration

New Location Delete Location New Approach Delete Approach Find on Map Location Placement Mode Place on Map

County: Duval Roadway: I-10 Direction: Eastbound

Short Name	Long Name	Description	Sort Order	Lane Map	Metro Area	City	Reference Point Offset	Reference Point	N	S
10EB/Duval/Nassau	Nassau County	I-10 EB @ Nassau...	1800000010	Sh M M Sh	Baldwin	Jacksonville	before	Nassau County	b	a
10EB/MM341	MM 341	I-10 EB @ MM 341	1800000100	Sh M M Sh	Baldwin	Jacksonville	before	-- Between --	b	a
10EB/MM342	MM 342	I-10 EB @ MM 342	1800000200	Sh M M Sh	Baldwin	Jacksonville	before	-- Between --	b	a
10EB/US-301 Ex	US-301	I-10 EB Exit to US...	1800000980	Sh M M G Sh	Baldwin	Jacksonville	ramp to	US-301	fr	a
10EB/US-301 Ent	US-301	I-10 EB Entrance fr...	1800000990	Sh M M G Sh	Baldwin	Jacksonville	ramp from	US-301	fr	a
10EB/US-301	US-301	I-10 EB @ US-301	1800001000	Sh M M Sh	Baldwin	Jacksonville	at	US-301	a	a
10EB/MM344	MM 344	I-10 EB @ MM 344	1800001100	Sh M M M Sh		Jacksonville	at	-- Between --	a	a
10EB/MM345	MM 345	I-10 EB @ MM 345	1800001200	Intersection		Jacksonville	at	-- Between --	a	a
10EB/MM346	MM 346	I-10 EB @ MM 346	1800001300	Sh M M M Sh		Jacksonville	at	-- Between --	a	a
10EB/MM347	MM 347	I-10 EB @ MM 347	1800001400	Sh M M M Sh		Jacksonville	at	-- Between --	a	a
10EB/MM348	MM 348	I-10 EB @ MM 348	1800001500	Sh M M M Sh		Jacksonville	at	-- Between --	a	a
10FR/MM349	MM 349	I-10 FR @ MM 349	1800001600	Sh M M M Sh		Jacksonville	at	-- Between --	a	a

Intersection Details



Roadway	Direction	Lane Map	Heading
Main St.	Northbound	M M R	0
Main St.	Southbound	Sh M M M M Sh	180
1st Ave.	Eastbound	Sh M M Sh	90
1st Ave.	Westbound	Sh M M G Sh	220
Junction Way	Northbound	Sh M M G Sh	310

Unmodified Modified New Deleted Disabled

No changes are unsaved.

Save Revert

No status messages reported.



Enhancement - Configuration



- Initial import of locations would be done via a bulk import tool using the Navteq shape files
 - Users would run the tool for particular roadways
 - Users view what was generated and have opportunity to modify/delete.
 - Tool would import the locations into the system
- This tool could be used for additional roadways in the future.
 - Additional intersections could also be configured manual in the Operator Map.

Enhancement – Event Details

Event Details - 261391

Location

County: Alachua
 Roadway: I-75
 Direction: Southbound
 Reference Point: Marion County
 Offset: beyond Marion County
 Distance: 0 feet
 Mile Marker:
 Alternate Routes: N/A

Has Congestion:

Lane Blockage: No Lanes Blocked.

Anticipated Clearance Time: _____ minutes
 FL-ATIS Severity: Minor

Reporting & Dispatch

Organization: FDOT TMC
 Notifying Agency: CCTV
 Notifying Contact: Operator CCTV

Vehicle Dispatch: There are currently no dispatched vehicles.
 Procedural Errors: There are currently no errors.

Event Details

Responders: There are currently no notified responders.

Agency	Notified By TMC?	Notified	On Scene	Departed
Core Responders				
D2 Road Rangers	<input type="checkbox"/>			
FHP	<input type="checkbox"/>			
FDOT Maintenance	<input type="checkbox"/>			
Maintenance Asset Mgr	<input type="checkbox"/>			
JSO	<input type="checkbox"/>			
Emergency Medical (EMS)	<input type="checkbox"/>			
Fire Department	<input type="checkbox"/>			
Wrecker Driver	<input type="checkbox"/>			
Other Responders				
511 Probe	<input type="checkbox"/>			
FDOT Bridge Dept	<input type="checkbox"/>			
Construction Office	<input type="checkbox"/>			
Motor Carrier Compliance	<input type="checkbox"/>			
RISC	<input type="checkbox"/>			
Safety Tow	<input type="checkbox"/>			
County Police	<input type="checkbox"/>			
Local Police	<input type="checkbox"/>			
Medical Examiner	<input type="checkbox"/>			
HAZMAT	<input type="checkbox"/>			
Life Flight	<input type="checkbox"/>			
Fish & Wildlife	<input type="checkbox"/>			
Environmental Protection	<input type="checkbox"/>			

- Location would be embedded in the existing locations
 - Could be selected from any of the roadways configured as approaches
- Users can set blockage on any approach
- Response plans will take into account the specific blockage when generating messages



Enhancement - Reports



- Reports would be modified to take into account intersections.
 - Existing reports would work the same way
 - Filters should include the location if any of the intersection approaches have roadway/dir selected in filters.
- Might need new reports specific to intersection locations (if needed)



Cost & Schedule

- Estimate: \$130k
- Schedule Release: 8.0



QUESTIONS? *(VOTE)*

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4301 – Event List Row Height

Tucker Brown



4301



- Previous version of SunGuide used multiple lines for each event in the event list.
- New Version of the Event List has 1 event per line.
 - List makes vertical monitors of limited use. Text does not wrap and words are cut off
- Proposal
 - Allow a user to select if they would like to use multiple lines per event
 - Fixed for each event (not variable).
 - Example - All events would be 2 lines, regardless of whether two lines were needed
 - Allow the text of each field to wrap if space is available.



Cost & Schedule

- Estimate: \$6k
- Schedule Release: 7.2



QUESTIONS? *(VOTE)*

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4302 – Permanent Status Filters

Tucker Brown



4302



- Previous version of SunGuide had a fixed list of filters for devices (Active, Error, Failed, Out Of Service).
- New Version only has the types that are currently available in the column.
 - If no devices are Error/Failed, this is not an available filter. This present an issue when you set all devices to Active and are waiting to see what fails. User must keep checking back to see if that filter option is now available.
- Proposal
 - For all devices, allow Active, Error, Failed, and Out Of Service to always be selectable as filters



Cost & Schedule

- Estimate: \$3k
- Schedule Release: 7.2



QUESTIONS? *(VOTE)*

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TAPCO Blinklink Wrong Way Driving API

Tucker Brown, SwRI



TAPCO



- TAPCO has provided an API into the BlinkLink software (as opposed to connecting to the device directly)
- The request is to integrate with the BlinkLink interface for new alerts, and respond to the software with the BlinkLink custom resolutions.
- The only difference the user would encounter would be a new drop down (only for TAPCO alerts from the BlinkLink interface) that would force the user to select the resolution action, in addition to the actions that SunGuide should perform



TAPCO



< Prev Alert Next Alert >

Alert Resolution

Select Resolution

- Unresolved
- Wrong Way Vehicle**
- Test Event
- Emergency Response Vehicle
- Maintenance Vehicle
- False Positive
- Vehicle Made a U-Turn
- Vehicle Backed Up

Notes

we watched veh drive off the hwy in the wrong dir off the ramp and could not confirm if veh corrected itself or not. fhp notified. sunguide#854013

Cancel Save



Alarm Type: **Wrong Way Driver**
Device: **Wrong Way Device [WWD Demo]**
Reported Location:
Detection Time: **7/3/2018 11:24 AM**
[Find On Map](#)
Speed: **51**

What would you like to do?

- Create New Event
- Dismiss as False Alarm
- Associate to Existing Event

 [Next >](#) [Cancel](#)



Cost & Schedule

- Estimate: \$10k
- Schedule Release: 7.2



QUESTIONS? *(VOTE)*

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Wavetronix Modification for WWD Reporting/Archiving *(Possible VOTE)*

Dan Smith, FDOT



Wrong Way Detection

vehicles going the opposite direction of normal travel flow

- Explore the use of existing Wavetronix HD (125/126) detectors for WWD detection
 - Two test scenarios
 - A. Using reported speeds
 - B. Using “Direction Bins”
 - Determine next steps based on test results



Wrong Way Detection

vehicles going the opposite direction of normal travel flow

Test Scenario A

- Review SunGuide Traffic Sensor Link data for negative speeds
- If detected set Wrong Way Detected Flag to true and record current date time
- Group relevant records by Roadway and Direction
- Use mile markers to order data by ascending / descending depending on direction
- If post processing algorithm detects two or more detectors in sequence with flag set to true and within a configured trigger interval create a wrong way event



Wrong Way Detection

vehicles going the opposite direction of normal travel flow



Test Scenario B

- Update Wavetronix driver to read the 'Direction Bins'
- Update Smart-Sensor HD detectors to set and read back the binning of events by direction into a polling interval
- The Smart-Sensor HD supports 0 or 2 direction bins. Direction bins are defined by vehicles traveling in the same direction as the configured lane and against the configured lane
- Identify if two or more detectors in sequence register a bin count for a vehicle travelling against the configured lane direction within a configurable time interval



Wrong Way Detection



vehicles going the opposite direction of normal travel flow

Test Scenario Results

- A test was conducted with Wavetronix who installed temporary detectors, and with FDOT managed test vehicles
- Test Scenario A
 - Produced positive results for every trial
 - Results may not be conclusive because link lane data within a polling interval may average to a positive speed, even if a vehicle within the interval has registered a negative speed
- Test Scenario B
 - Produced positive results for every trial
 - Results should always identify a vehicle travelling in the opposite direction of normal travel flow
- Neither test evaluated false positives



Wrong Way Detection

vehicles going the opposite direction of normal travel flow



Items to be explored:

- TSS Driver Update
- Event Management
 - UI / email alerts
 - Response plans
- Additional logic:
 - Number of detector in sequence
 - Time of day
 - Congestion levels



QUESTIONS?

(Possible VOTE)

Dan Smith, FDOT

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Cloud-Based Solutions with SunGuide

Chrissie Collins, FDOT



Information Security CIA Triad

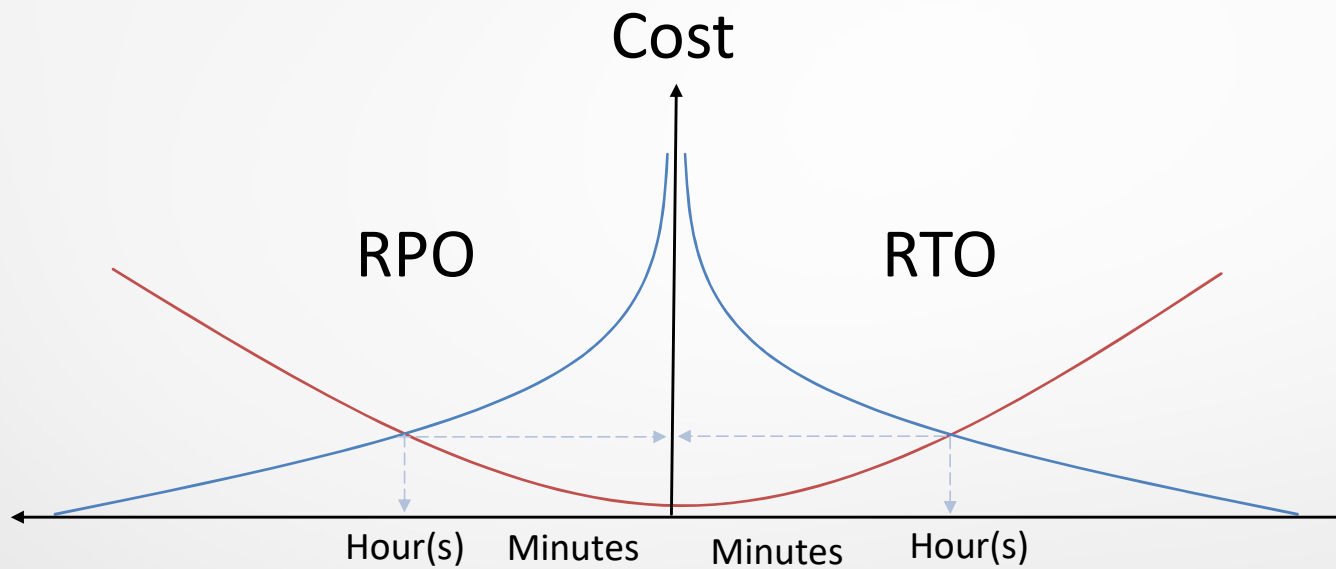




Information Security CIA Triad



RTO and RPO





Cloud Myths

- Cloud Computing
 - is just a fad
 - is less secure than on-premise
 - is cheaper



The big question...

- Can SunGuide benefit from cloud computing?





Business Continuity



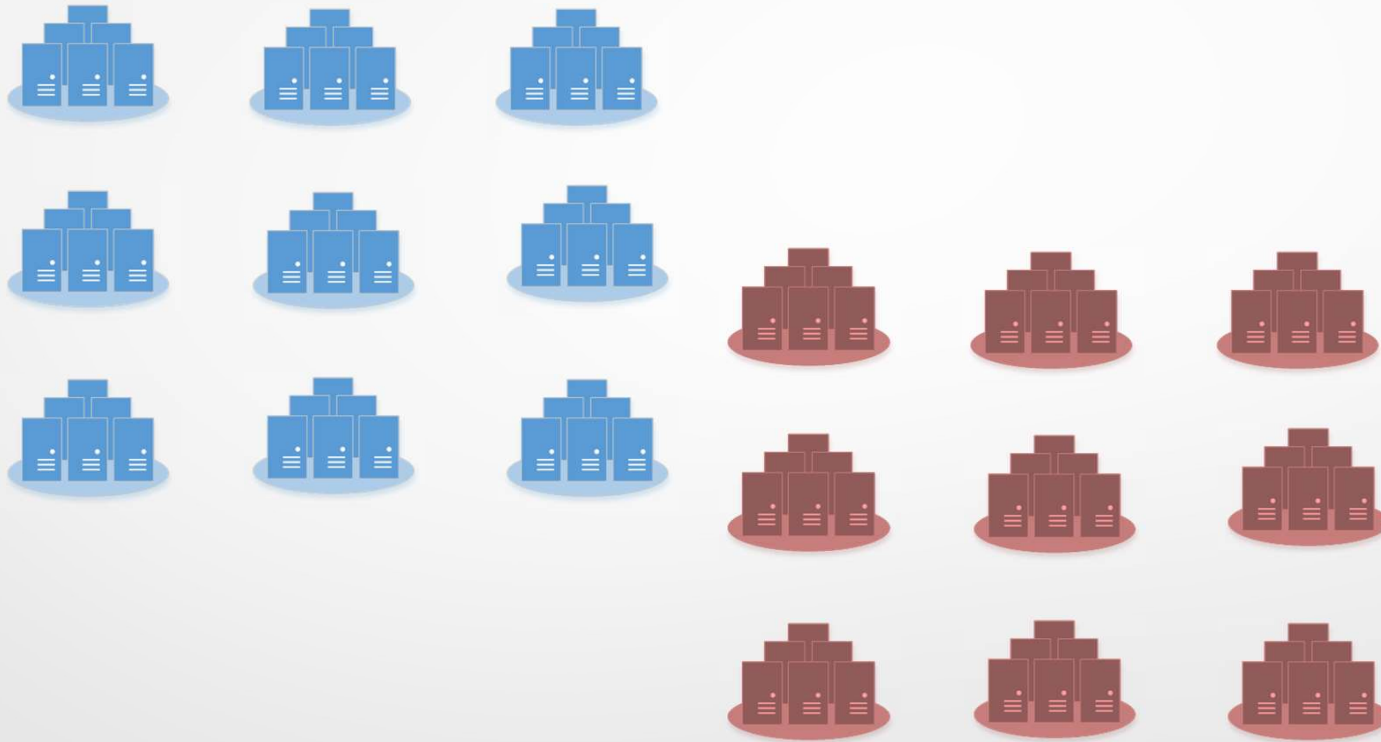
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Business Continuity



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Disaster Recovery

- VMware vCloud Air Disaster Recovery Solution



Disaster Recovery

VEEAM



QUESTIONS?

Chrissie Collins, FDOT

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Open Discussion

Bryan Homayouni, P.E., CMB Chairman



Review Action Items

Bryan Homayouni, P.E., CMB Chairman