



## Technical Memorandum

### SunGuide® Software System



### SunGuide Software Release 6.1 Independent Verification and Validation Test Procedures

Version 1.0

October 17, 2014

#### Prepared for:

*Florida Department of Transportation  
Intelligent Transportation Systems Program  
605 Suwannee Street, M.S. 90  
Tallahassee, Florida 32399-0450  
(850) 410-5600*

## DOCUMENT CONTROL PANEL

File Name –	SunGuide_Release_6-1_IVV_Test_Procedures
File Location –	http – //cosharepoint.dot.state.fl.us/sites/trafficoperations/its/software/Document Library/Testing/6.1/IVV_Procedures/SunGuide_Release_6- 1_IVV_Test_Procedures.docx
Version Number –	1.0

Name		Date
Created By –	Kelli Moser, Atkins	10/02/2014
Reviewed By –		
Modified By –	Clay Packard, Atkins	10/02/2014
Completed By –		

## Table of Contents

1	Scope.....	8
1.1	Referenced Documents ( <a href="http://sunguidesoftware.com/document-library">http://sunguidesoftware.com/document-library</a> ).....	8
2	Test Case Procedures .....	8
2.1	Release 6.1 Enhancement Test Cases.....	9
2.1.1	Test Case 1: Installer Conops.....	9
2.1.2	Test Case 2: System Administration Application (SAA) .....	25
2.1.3	Test Case 3a: Beacon Management Subsystem (BMS).....	39
2.1.4	Test Case 3b: Road Weather Information System (RWIS) and RWIS Simulator .....	43
2.1.5	Test Case 3c: Incident Detection Subsystem (IDS) .....	53
2.1.6	Test Case 4: ONVIF Protocol Support .....	61
2.1.7	Test Case 5a: HERE.com Plug-in.....	67
2.1.8	Test Case 5b: BlueTOAD Plug-in .....	76
2.1.9	Test Case 6: Wrong Way Driving Detection .....	81
2.2	Release 6.1 Footprint Test Cases.....	88
2.2.1	FP 1574 – RMC fails to shut down after the configured shut down time.....	88
2.2.2	FP 1589– ODS parent tables have multiple redundant records .....	89
2.2.3	FP 1635 – RM Doesn't Support Splitting System for Testing .....	91
2.2.4	FP 1748 – Fixed issues with agency contact records.....	93
2.2.5	FP 1769 – Event Chronology Shows DMS POSTED Actions after Event Closed .....	94
2.2.6	FP 1786 – Executive Handler Viewer crashes.....	96
2.2.7	FP 1825 – Prevented saving of map views with identical names .....	98
2.2.8	FP 1852 – Some UI Dialogs display too small .....	99
2.2.9	FP 1998 – Improved behavior of stop alerts .....	101
2.2.10	FP 2100 – Detector Data Report Crashed Reporting Subsystem.....	103
2.2.11	FP 2181 – Better filtering/identification of TSS link roadway information .....	104
2.2.12	FP 2191 – Jupiter Driver support for HD sources.....	106
2.2.13	FP 2194 – EM "Could not modify event location/congestion" PL/SQL error.....	108
2.2.14	FP 2261 – AVL/RR Service Memory Usage.....	110
2.2.15	FP 2283 – Data Archive running out of memory; crashing; reporting no data.....	112
2.2.16	FP 2335 – Response Plans not working.....	114
2.2.17	FP 2381 – Improved editing of multiple DMSs (compared with 5.1 and previous).....	116
2.2.18	FP 2391 – SunGuide Edit Link Placement not functioning properly .....	118
2.2.19	FP 2411 – AVL vehicle stuck in arrive status after vehicle is departed .....	120
2.2.20	FP 2422 – Random TSS are showing speed of 32000 MPH .....	122
2.2.21	FP 2430 – Travel Time TSS AVI TranscoreAllegro protocol .....	124
2.2.22	FP 2461 – TSS and Map errors upon configuring and mapping sensors.....	126
2.2.23	FP 2466 – Email Alerts using County Long Name.....	127
2.2.24	FP 2480 – Improved handling of FHP updates .....	129
2.2.25	FP 2495 – Chronology doesn't reflect unconfirmed status in FL-ATIS message.....	131

2.2.26	FP 2496 – FHP CAD Suggestions for Enhancement .....	133
2.2.27	FP 2500 – rangeZoomLimit command causing device issue.....	134
2.2.28	FP 2519 – Exception in IDS .....	136
2.2.29	FP 2522 – Installation Media Report Templates Folder .....	137
2.2.30	FP 2523 – RPG Action Failure Prevents Other Actions .....	139
2.2.31	FP 2526 – sparr is not creating events .....	141
2.2.32	FP 2529 – DMS still sending sequence messages to MAS.....	143
2.2.33	FP 2530 – Unable to audit duplicate Road Ranger activities.....	144
2.2.34	FP 2532 – Sunguide reports "Center Lane Blocked" with only two travel lanes .....	146
2.2.35	FP 2535 – MAS/DMS using DMS ID number instead of DMS name in System Messages dialog .....	148
2.2.36	FP 2536 – Selecting 0 radius returns multiple DMS signs .....	150
2.2.37	FP 2537 – SID and Service name mismatch does not allow DMS to connect to the database.....	152
2.2.38	FP 2538 – Event fails to save due to Comment Type.....	153
2.2.39	FP 2539 – Multiple emails being sent to same user in response plan.....	155
2.2.40	FP 2540 – SAS item flipping from on/off.....	157
2.2.41	FP 2541 – Improved interaction with TVT.....	158
2.2.42	FP 2542 – SAS will not allow multiple schedules to run on a device simultaneously .	160
2.2.43	FP 2543 – Event not published on FLATIS website but is on IVR.....	162
2.2.44	FP 2544 – DMS Provider not properly disconnecting for systems using subsystem communications .....	163
2.2.45	FP 2545 – TvT not gracefully handling MAS disconnect .....	165
2.2.46	FP 2546 – Lane Blockage Closed with no travel lanes.....	167
2.2.47	FP 2547 – IDS not resolving alerts .....	169
2.2.48	FP 2548 – Events not being published to FLATIS .....	171
2.2.49	FP 2549 – Data Archive memory usage spikes on startup.....	173
2.2.50	FP 2550 – Various issues at the MDX test deployment.....	174
2.2.51	FP 2552 – Event Severity not updating .....	176
2.2.52	FP 2553 – Various DAR Error/Warning Messages and Auto-Restart.....	178
2.2.53	FP 2555 – Fixed display of vehicle names across subsystem, EM, and SPARR.....	180
2.2.54	FP 2556 – Unable to interact with EM event.....	181
2.2.55	FP 2557 – Unable to save lane blockage in event.....	183
2.2.56	FP 2563 – Reimplement DMS Groups .....	185
2.2.57	FP 2564 – DMS Spelling Conflict Dialog Crashing IE/PresentationHost.....	187
2.2.58	FP 2565 – Errors with SAS-generated DMS Messages.....	189
2.2.59	FP 2566 – Fixed integration of C2C links .....	191
2.2.60	FP 2571 – Fixed startup issue with SPARR driver.....	192
2.2.61	FP 2573 – Add Platform Requirements to VDD .....	193
2.2.62	FP 2575 – Restored previous interface of RRRXML driver .....	195
2.2.63	FP 2576 – Fixed error setting RMC rate/range values.....	196
2.2.64	FP 2578 – Admin Editor does not show assigned TVT templates after DMS name	

change .....	197
2.2.65 FP 2579 – Response Plan Discrepancy Email vs. DMS Wording .....	198
2.2.66 FP 2579 – Response Plan Generator .....	200
2.2.67 FP 2580 – Video Switching has started to report Video Sources not found .....	209
2.2.68 FP 2581 – Corrected mapping of link data .....	210
2.2.69 FP 2583 – Improved disconnect/reconnect logging .....	211
2.2.70 FP 2583 – Limited use of auto-focus by desktop video wall .....	213
2.2.71 FP 2586 – Fixed issue with auditing duplicate responder timestamps .....	214
2.2.72 FP 2588 – Improved handling of MAS blanking .....	215
2.2.73 FP 2589 – Fixed missing dependency of driver .....	216
2.2.74 FP 2590 – Fixed issue with display of BlueTOAD links .....	217
2.2.75 FP 2591 – Removed unnecessary error report on successful action .....	218
2.2.76 FP 2592 – Fixed issues with updated Activu driver .....	219
2.2.77 FP 2598 – Event chronology not showing primary/secondary entries .....	220
2.2.78 FP 2605 – Response plans not generating if operator uses "Response Plan" button on EM list .....	222
2.2.79 FP 2609 – Investigating issues reported in SunGuide 6.0 patch 2 .....	224
2.2.80 FP 2612 – TSS Lagging & TSS Alerts Not Resolving .....	226
2.2.81 FP 2613 – License Plate matching appears to be case-sensitive .....	227
2.2.82 FP 2617 – VDD Platform Requirements update - SQL Server requires RS to run Native Client 11.0 which requires Windows Server 2008 .....	229
2.2.83 FP 2618 – Event showing NULL for responder timestamps despite having chronology entries .....	231
2.2.84 FP 2623 – County Information Missing in C2C data to FL-ATIS .....	232
2.2.85 FP 2624 – Connectivity issues with MCP Manager .....	234
2.2.86 FP 2626 – User Authenticated to Some Subsystems and not Others .....	235
2.2.87 FP 2627 – Errors with SAS subsystem schedules .....	236
2.2.88 FP 2634 – Failure to disassociate Video Source from Camera .....	238
2.2.89 FP 2635 – Saved open windows not working for WPF windows .....	240
2.2.90 FP 2636 – VSL Plans are not sorted .....	242
2.2.91 FP 2637 – Resend TSS configuration nightly through DAR .....	243
2.2.92 FP 2638 – DMS NTCIP issue with SES America signs .....	244
2.2.93 FP 2646 – FHP Alerts flooding in after IDF FHP Incident Driver restart .....	245
2.2.94 FP 2647 – IDS Dialogs throw error and show no alerts .....	247
2.2.95 FP 2648 – Reporting subsystem uses item ID instead of short name for AVLRR vehicles and drivers .....	249
2.2.96 FP 2649 – Short Status Option .....	251
2.2.97 FP 2652 – Update SPARR Driver to allow Event to be changed to "Unresolved" .....	252
2.2.98 FP 2653 – Event audit reporting "no dispatch records" .....	253
2.2.99 FP 2658 – Small errors detected during testing .....	254
2.2.100 FP 2660 – FHP Incidents Not Resolving Correctly .....	255
2.2.101 FP 2663 – C2C linkData.link.name contains old roadway ID instead of new numeric	

roadway ID.....	256
2.2.102FP 2664 – RS Filtering Not Working Correctly .....	258
2.2.103FP 2665 – Thresholds Dropping Out.....	260
2.2.104FP 2668 – EM wouldn't start up and was behaving slowly .....	261
2.2.105FP 2671 – Unable to edit predefined response plans .....	263
2.2.106FP 2675 – FHP CAD driver filtering out Arrival notifications .....	265
2.2.107FP 2676 – Compatibility with Externally-Generated DMS Messaging with Color Images.....	267
2.2.108FP 2678 – Audit-deleted responders still appear in event chronology .....	268
2.2.109FP 2680 – Incorrect/confusing floodgate user assignment in FLOODGATE_HISTORY .....	270
2.2.110FP 2683 – EM “Lane Blockage Description” incorrect; expected ‘closed’, showing shoulder closed.....	272
2.2.111FP 2684 – The REPORT_TIME column in the VW_RS_EVENT_RPET view differs between Oracle and SQL Server .....	274
2.2.112FP 2685 – AVL would not start; issues with handling road rangers' statuses .....	276
2.2.113FP 2686 – FHP Incident ID not being populated in events.....	277
2.2.114FP 2688 – FHP CAD event assigns incorrect camera automatically.....	279
2.2.115FP 2690 – Involved Vehicle Data will not copy to Cloned Event .....	281
2.2.116FP 2691 – Event Details fails to save when Primary Event Id is set to "N/A" .....	282
2.2.117FP 2692 – Response Plan Chronology Entries not showing Device Names .....	284
2.2.118FP 2694 – Sorting on AVLRR Operators .....	286
2.2.119FP 2695 – Default email group is not being selected.....	287
2.2.120FP 2696 – Incident Duration Full Detail is only showing Severity 1. ....	289
2.2.121FP 2698 – Functionality issue with the joystick .....	291
2.2.122FP 2699 – Searching in DMS Library .....	293
2.2.123FP 2708 – Not able to edit predefined response plans .....	295
2.2.124FP 2710 – VW_DEVICE.....	297
2.2.125FP 2712 – Email body for full closure is incorrect.....	299
2.2.126FP 2713 – Creating Geofence – Unable to add mid points.....	301
2.2.127FP 2717 – EM Issues after 6.0p2 Hotfixes 06 & 09 .....	303
2.2.128FP 2718 – Safety Barrier Stations selection snaps back to first listed station when EM is updated.....	304
2.2.129FP 2719 – SAS needs safeguard to prevent end date from occurring prior to start date.....	306
2.2.130FP 2724 – Unable to extend index – Large table needing manual purge.....	308
2.2.131FP 2726 – Unable to release ownership of events .....	309
2.2.132FP 2731 – Text is garbled in the body of the email .....	310
2.2.133FP 2742 – ERWIN Models lost Sync .....	312
2.2.134FP 2749 – Response Plan Dialog does not show priority of currently active message	313
2.2.135FP 2753 – VW_RS_EVENT_PERFMEASD view shows that every event is a secondary event.....	315

2.2.136FP 2754 – VW_RS_DMS_MESSAGE .....	317
2.2.137FP 2758 – c2c command receiver returning errors after v6 upgrade .....	319
2.2.138FP 2759 – Email body is incorrect for center lane.....	321
2.2.139FP 2763 – BlueTOAD Subsystem Authentication.....	323
2.2.140FP 2764 – Events being discarded from performance measures if responder Departure is null .....	325
2.2.141FP 2769 – Road Ranger reporting views .....	327
2.2.142FP 2770 – When Terminating a Response Plan, message pop up has a typo .....	329
2.2.143FP 2776 – C2C showing events as type "unknown" .....	331
2.2.144FP 2785 – EM Locking up.....	333
2.2.145FP 2788 – Reports don't work if you filter by Road Ranger or Vehicle Detector .....	334
2.2.146FP 2797 – C2C Subscriber not receiving data after C2C connection interruption .....	336
2.2.147FP 2803 – Unable to post floodgate messages.....	338
2.2.148FP 2804 – Errors when adding new TSS links to roadway geometry .....	339
2.2.149FP 2806 – DMS Details Window Is Not Launched within the Bounds of the Monitor	341
2.2.150FP 2809 – Not able to edit Layout .....	343
2.2.151FP 2810 – Add rs database configuration to VDD (related to Footprint 2444) .....	344
2.2.152FP 2822 – Unable to edit messages in the DMS Message Library .....	345
2.2.153FP 2826 – EM not responding .....	347
2.2.154FP 2841 – DMS "Reset Controller" action appears to be reliant on "Resolve spelling conflicts" permission.....	348
2.2.155FP 2848 – Mysterious Lack of Severity 2 Events in EM_EVENT_PERFMEASD .....	350
2.2.156FP 2851 – AVLRR throwing Warnings after new SPARR deployment .....	353
2.2.157FP 2852 – DMS Subsystem exceeding maximum open cursors.....	354
2.2.158FP 2862 – Event Chronology for the DMS is not working properly .....	355
2.3 Release 6.1 FAT Modifications Test Cases .....	357
2.3.1 FAT Issue 1 .....	357
2.3.2 FAT Issue 2.....	359
2.3.3 FAT Issue 3.....	361
2.3.4 FAT Issue 4.....	362
2.3.5 FAT Issue 5.....	363
2.3.6 FAT Issue 6.....	365
2.3.7 FAT Issue 7.....	367
2.3.8 FAT Issue 8.....	368
2.3.9 FAT Issue 9.....	369
2.3.10 FAT Issue 10.....	371
2.3.11 FAT Enhancement 1 .....	372
2.3.12 FAT Enhancement 2 .....	374
2.3.13 FAT Enhancement 3 .....	376
2.3.14 FAT Enhancement 4 .....	378
2.3.15 FAT Enhancement 5 .....	379
2.3.16 FAT Enhancement 6 .....	381

2.3.17 FAT Enhancement 7 .....	382
2.3.18 FAT Enhancement 8 .....	383
2.3.19 FAT Enhancement 9 .....	384
2.3.20 FAT Enhancement 10 .....	386
2.3.21 FAT Enhancement 11 .....	388
2.3.22 FAT Enhancement 12 .....	389
2.3.23 FAT Enhancement 13 .....	391
2.3.24 FAT Enhancement 14 .....	392
2.3.25 FAT Enhancement 15 .....	393
2.3.26 FAT Enhancement 16 .....	394
2.3.27 FAT Enhancement 17 .....	395
2.3.28 FAT Enhancement 18 .....	397
2.3.29 FAT Enhancement 19 .....	399
2.3.30 FAT Enhancement 20 .....	401
2.3.31 FAT Enhancement 21 .....	403
2.3.32 FAT Enhancement 22 .....	404
2.3.33 FAT Enhancement 23 .....	406
2.3.34 FAT Enhancement 24 .....	408
2.3.35 FAT Enhancement 25 .....	409
2.3.36 FAT Enhancement 26 .....	410
2.3.37 FAT Enhancement 27 .....	412
Appendix A – Requirements Reference .....	1
Appendix B: Driver Setup Supplement.....	22



## List of Acronyms and Abbreviations

AVL .....	Automatic Vehicle Location
AVLRR.....	Automatic Vehicle Location Road Ranger
C2C .....	Center-to-Center
CAD .....	Computer-aided Dispatch
CMB.....	Change Management Board
CSV.....	Comma-Separated Values
DAR .....	Data Archive for RITIS
DMS.....	Dynamic Message Sign
EM.....	Event Management
FHP.....	Florida Highway Patrol
FL511 .....	Florida Advanced Travel Information System
FTP.....	File Transfer Protocol
GUI .....	Graphical User Interface
HAR .....	Highway Advisory Radio
HD.....	High Definition
IV&V .....	Independent Verification and Validation
MAS.....	Message Arbitration Subsystem
OOCEA.....	Orlando-Orange County Expressway Authority
PS .....	Pricing Subsystem
RITIS.....	Regional Integrated Transportation Information System
RSE.....	Roadside Equipment
SPARR.....	Smart Phone Application for Road Rangers
TAM.....	Traffic Advisory Message
TSS.....	Traffic Sensor Subsystem
UDP.....	User Datagram Protocol
UTC.....	Coordinated Universal Time

## 1 Scope

This document contains the testing procedures for the independent verification and validation (IV&V) of SunGuide® Software Release 6.1. Details for the testing times and locations, required equipment, and overall testing strategy can be found in the *SunGuide Release 6.1 Independent Verification and Validation Test Plan*.

### 1.1 Referenced Documents (<http://sanguidesoftware.com/document-library>)

- *SunGuide Release 6.1 Independent Verification and Validation Test Plan*

## 2 Test Case Procedures

This section provides the detailed test procedures. Each test case includes objectives, necessary setup and resources, procedures, and a detailed script to be followed. The starting and ending times, results, and additional notes of each test case are to be collected and recorded. Upon the successful completion of each test case, tester and witness signatures will confirm the complete execution of each test case.

Every test case requires access to a set of resources in the list below, so these resources are not listed in the test case specific resources and setup conditions for any tests.

- TERL Network Environment
- Two operator workstations running Windows 7 with various network and system utilities installed
- Two SunGuide systems, each having a SunGuide application server and database server properly configured with Release 6.1 application software and upgraded database

## **2.1 Release 6.1 Enhancement Test Cases**

### **2.1.1 Test Case 1: Installer Conops**

The Installer ConOps includes several useful tools and enhancements for how the software is deployed and maintained outside of the operational usage of the software. This includes a config file editor, an improved and simplified installer, an application containing an integrated set of maintenance tools, and a way to configure an entire deployment of servers for the toolset to use.

#### **2.1.1.1 Test Case 1a: Configuration File Editor**

##### **2.1.1.1.1 Modification Description**

The Configuration File Editor is an application that reads and writes to the config.xml file. It validates the config.xml file, and provide a graphical user interface (GUI) to the user so that the user can edit the contents of the file with valid values.

##### **2.1.1.1.2 Test Objectives**

Run the ConfigEditor application to exercise its functionality while verifying its usable to modify and validate a SunGuide configuration file.

##### **2.1.1.1.3 Test Resources and Setup Conditions**

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

##### **2.1.1.1.4 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Requirement	Procedure	Notes	Pass/Fail
1		Make a copy of a release 6.0 version config.xml file and name it config_IVV_6.1.xml.		
2	<b>INS-1G</b>	Launch the config editor from the SunGuide installer media. It is the configEditorv2.exe file in the Setup folder, in either the x86 or x64 folder. Note: Configuration editor will by default use the schema file (config.xsd) in this same folder.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	<b>INS-1G1</b>	Open config_IVV_6.1.xml from the config editor.  Verify that this config file is not valid, indicated by several sections failing to validate (red X).		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
4	<b>INS-1G1A</b>	Navigate to the invalid notifyMgr block. Configuration editor will highlight an invalid 'logLevel' setting.  Select this element and click Delete. Confirm that the notifyMgr block is now valid (green checkmark).  Save the configuration file. Open it in a text editor and verify that the <notifyMgr> block no longer contains a <logLevel> tag.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
5	<b>INS-1G1A</b> <b>INS-IG2</b>	Return to configuration editor with config_IVV_6.1.xml loaded.  Navigate to the databus block. Highlight the port field and enter a text string in place of the existing number.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Step	Requirement	Procedure	Notes	Pass/Fail
		<p>Confirm that configuration editor highlights this field as not being a proper integer. Re-enter the original port number to resolve the error.</p> <p>Navigate to the McpManager block. Confirm that configuration editor reports less than the required number of providerType entries. Click Add Child and choose providerType. Confirm that this particular error is resolved.</p> <p>Save the configuration file and open it in a text editor. Confirm that that &lt;mcpManager&gt; now contains a &lt;providerType&gt; sub-section.</p>		
6	<b>INS-1G1A</b> <b>INS-IG3</b>	<p>Return to configuration editor with config_IVV_6.1.xml loaded.</p> <p>Within the databus block, navigate to the maxConnections field. If the value is not 20, change it to another number.</p> <p>Verify that configuration editor now suggests 20 as the value.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.1.1.2 Test Case 1b: Stand-alone Installation

#### 2.1.1.2.1 Modification Description

The installer for SunGuide 6.1 has been streamlined and enhanced.

#### 2.1.1.2.2 Test Objectives

The objective of this test is to successfully run through a basic SunGuide installation on a clean machine.

#### 2.1.1.2.3 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. One server shall not have Microsoft Internet Information Services (IIS) installed. Servers may have anti-virus installed as required by network policy.

#### 2.1.1.2.4 Test Script

Test Start Date and Time	
--------------------------	--

Step	Requirement	Procedure	Notes	Pass/Fail
1		For the next several steps, the target system is the one without IIS.		

SunGuide® Software System  
 SunGuide Software Release 6.1 IV&V Test Procedures

Step	Requirement	Procedure	Notes	Pass/Fail
		Prepare the server according to VDD section 3.4 (you may disregard the guidance on Crystal Reports – this is automatically installed).		
2		Identify a database to use at a version of the previous, officially supported release – Release 6.0 Patch 3		
3	INS-1	Unzip the release package to a new folder of your choice. Navigate to /setup/x64 or /x86 (depending on your system) and execute setup.exe.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
4		Execute the upgrade scripts from the release package in the Database Scripts → Release 6.1 folder against the database according to the Installation notes in the documentation folder.		
5	INS-1B	When prompted, point the installer to config.empty.xml in <u>\\[redacted]\fdot, which should be an empty file for this test.</u>  Confirm that the installer prompts the user that the system lacks IIS, and that web-based applications will not be installed. Click OK.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
6	INS-IC	Confirm that the installer now warns that the configuration file is invalid. Decline to run config file editor.  Click back a few times to the installer splash screen. Then continue as before, this time pointing installer to config.xml in the same path. Confirm that the installer accepts the config file.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

SunGuide® Software System  
 SunGuide Software Release 6.1 IV&V Test Procedures

Step	Requirement	Procedure	Notes	Pass/Fail
7	INS-1B	Click past the IIS warning to the 'custom setup' screen.. On the next screen, verify that web application components will not be installed.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
8		Cancel out of the installer.		
9		Install IIS components: Go to server manager, Add Roles, and select "Application Server" and "Web Server (IIS)"		
10		Repeat the installation procedures above, with the web components selected while executing the installer.  Under "Logon Information", specify the appropriate TERL network user account provided by the TERL network administrator.		
11		Start the SG Status Logger from the Windows Services dialog. Start the SG Executive Handler from the Windows Services dialog.		
12		Launch the SunGuide Executive Handler Viewer dialog from the Start menu. Add localhost as a host and connect. Launch the remaining subsystems.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
13		From the operator workstation, add the server address to the trusted sites from Internet Explorer. Log into the SunGuide operator map from the operator workstation by browsing to the address of the application server and clicking on the Operator		



Step	Requirement	Procedure	Notes	Pass/Fail
		Map link and logging in with a username and password already present in the system		
14		Verify that the operator map loads and logs into each of the subsystems.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.1.1.3 Test Case 1c: Master Config File and Remote Installation

#### 2.1.1.3.1 Modification Description

SunGuide 6.1 features installation templates, defined in a Master Config File. Using a master config file, it is now possible to deploy a SunGuide installation to remote machine on the network using the SunGuide Toolset application.

#### 2.1.1.3.2 Test Objectives

The objective of this test is to successfully execute a basic SunGuide installation to a network target.

#### 2.1.1.3.3 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Two application servers running Microsoft Windows 2008, with no additional software configured in the network. One server is the host. Servers may have anti-virus installed as required by network policy.

2.1.1.3.4 Test Script

Test Start Date and Time	
--------------------------	--

Step	Requirement	Procedure	Notes	Pass/Fail
1		On the target server, extract the SunGuide software package to C:\Installs\SGV6.1.0.511_IVV2 (or similar). Also create a shared FDOT folder. Execute steps required by section 3.4 of the VDD, Preparing SunGuide Servers		
2	<b>INS-1F</b>	On the host server, extract the SunGuide software package to a folder of your choice (if this has not been done yet). Within this folder, navigate to /Toolset and launch SunGuideToolset.exe with Administrative rights.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	<b>INS-1F1</b>	Select the Installation tab. Select the equivalent network path to your local C:\Installs\SGV6.1.0.511_IVV2\Setup\x64 (or similar) folder.  Then, highlight the correct system architecture on the Installers dropdown.  Click Add in the bottom left to create a new installation template. Name the template (no spaces). Select the correct SunGuide Version and Processor Architecture.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Step	Requirement	Procedure	Notes	Pass/Fail
4		<p>Choose the correct Config File, being sure to use a network path to locate the file. (Click the Open button to the right of Config File to browse to the correct path).</p> <p>Select Named User under Service User Type, then enter the username and password for the sunguide service account.</p>		
5		<p>Select the Features tab. Uncheck Web Applications if IIS is not present on the target.</p> <p>Also record the features which are to be installed.</p>		
6		<p>Click the Servers tab. Enter the target IP address and pick the new installation template. Enter the DOMAIN\username and password for an account with full administrative rights on the target.</p> <p>Enter a second target server &amp; IP address as well; however this does not need to be valid.</p>		
7	<b>INS-1F2</b>	<p>On the very top right corner of the window, click the Save button to save out to masterConfig.xml. Again select the equivalent network path to your local drive.</p> <p>Close the Toolset application.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
8	<b>INS-1D</b> <b>INS-1D1</b> <b>INS-1D1A</b> <b>INS-1D1B</b> <b>INS-1D2</b>	<p>Reopen the Toolset application, taking care to run with Admin rights.</p> <p>On the Installation tab, click Open (on the top right) to load the masterConfig.xml file saved in the last</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Step	Requirement	Procedure	Notes	Pass/Fail
		step (again from the equivalent network path of your local drive).  Click through the Templates and Servers tab, checking that the parameters saved in previous steps are reloaded. This includes the second server which will be not be used.		
9	INS-1F3 INS-1F4	On the Servers tab, highlight the target server to be tested and click Add to Queue.  Select the Queue tab and click Run.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
10	INS-1E3B	Verify that the installation successfully runs to completion.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
11		Prepare the C:\FDOT folder on the target with config.xml and anything else required to proceed.		
12	INS-1A	Launch all the subsystems, configuring as needed. Log onto Operator Map and confirm that all subsystems are running. Verify also that the components slated for installation (on the Features tab) were installed.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

#### 2.1.1.4 Test Case 1d: Command Line Installation & Reports

##### 2.1.1.4.1 Modification Description

SunGuide 6.1 features a new command-line installation mode. It is able to run without human intervention and deploy the software to a network. The installer will also install reports; these or additional reports may be executed by the user post-installation.

**2.1.1.4.2 Test Objectives**

This test will verify that SunGuide may be installed from the command line to a network location. The test will also check that the installer media contains and deploys reports, and that reports may be executed post-installation.

**2.1.1.4.3 Test Resources and Setup Conditions**

- Two application servers running Microsoft Windows 2008, with no additional software configured in the network. One server is the host. Servers may have anti-virus installed as required by network policy.
- Master Config file for the installation. If this is not prepared, please consult the previous case, Test Case 1c: Master Config File and Remote Installation.
  - Be sure to change the target host IP in the master config if it will be different for this test.

**2.1.1.4.4 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Requirement	Procedure	Notes	Pass/Fail
1		On the target server, extract the SunGuide software package to C:\Installs\SGV6.1.0.511_IVV2 (or similar). Execute steps required by section 3.4 of the VDD, Preparing SunGuide Servers.		
2	<b>INS-1H</b>	On the host server, extract the SunGuide software package to a folder of your choice (if this has not		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>

Step	Requirement	Procedure	Notes	Pass/Fail
		been done yet). Within this folder, navigate to \ReportTemplates. Browse Oracle Reports and SQL Reports and confirm the presence of the report templates.		
3		Open an administrator command prompt. Change directory to \Toolset.  Execute the below command to install SunGuide to a remote system. Replace the source and target IP addresses, username, password and template with your own settings. Username/password must have admin rights on the target.  SgCommandLineInstaller.exe \\[REDACTED]\FDOT\masterConfig.xml /s [REDACTED]TERLuser [REDACTED]		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
4	INS-1E INS-1E1 INS-1E2 INS-1E3 INS-1E3A	Verify that the installation runs to completion, and without human intervention.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
5		Prepare the C:\FDOT folder on the target with config.xml and anything else required to proceed.		
6	INS-1J	Launch all the subsystems, configuring as needed. Log onto Operator Map and confirm that all subsystems are running. Verify that all configuration files for the subsystems are housed in the shared C:\FDOT folder.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
7	INS-1H	Right click the map and select Reporting > Generate Reports. Expand the list and verify that		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Step	Requirement	Procedure	Notes	Pass/Fail
		the available reports match the templates from the installer.		
8	INS-1H1	Select two reports: <ul style="list-style-type: none"> <li>• Event Chronology – pick a timeframe isolating one event</li> <li>• Weekly Performance</li> </ul> Generate the reports as PDF, emailed to the tester. Verify that the reports are correctly generated.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
9	INS-1H2	Ensure you are logged into SunGuide as an administrator. Copy a report file from the App server to the local system.  In Operator Map, go Reporting > Configure. Create a new report group, and within that, a new report. Create this new report using the file copied in the previous paragraph.  Right click the map and select Reporting > Generate Reports. Execute the new report. Generate it as a PDF, emailed to the tester. Verify that the report is correctly generated.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

### 2.1.1.5 Test Case 1e: Executive Handler & Status Logger

#### 2.1.1.5.1 Modification Description

Executive handler has been improved with additional functionality in starting, stopping and restarting processes, along with system monitoring. Status Log Viewer now includes functionality handling multiple databases of logs.

**2.1.1.5.2 Test Objectives**

The objective of this test is to run through basic tasks in Event Viewer and Status Logger exercising starting, termination and display of SunGuide processes. Status Logger’s handling of data sources is also verified.

**2.1.1.5.3 Test Resources and Setup Conditions**

- One application server running Microsoft Windows 2008, with SunGuide 6.1 installed, configured and fully functional.
- Network access to a second functional and active SunGuide application server
- Administrative privileges on this system
- Windows utility such as Process Explorer (<http://technet.microsoft.com/en-us/sysinternals/bb896653.aspx>) which can suspend a process.

**2.1.1.5.4 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Requirement	Procedure	Notes	Pass/Fail
1	<b>EX006</b>	Log onto the operator map of the SunGuide Operator Map running on the application server.  Once all the subsystems have loaded, open a remote desktop to the application server. Launch Executive Handler Viewer from this workspace. Verify that the active subsystems on operator map correspond to active processes (running with status ‘Normal’) on Executive Handler Viewer.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>



Step	Requirement	Procedure	Notes	Pass/Fail
2	EX001M EX002	<p>Pick an active subsystem on Operator Map. Go to Executive Handler Viewer, right click the subsystem, and Stop it. Within a moment the subsystem will report as Stopped. Then, verify that the subsystem has gone offline in Operator Map.</p> <p>Then, in Executive Handler Viewer, right-click the subsystem and Start it. Verify that, after the appropriate startup time, the subsystem again reports as Running – and is online in Operator Map.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	EX001M EX006	<p>Check the properties of the newly started subsystem in Executive Handler Viewer. Verify that the reported Start Time is a few moments ago when the process was restarted.</p> <p>Carefully review the other subsystems, verifying that the start time, last update and status of the processes are being reported.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
4	EX002	<p>Launch Executive Handler Editor, with Administrative Privileges. Choose a subsystem, click Edit, and check Automatic Startup on Reboot. Click OK twice.</p> <p>Reboot the system. Verify that the subsystem has automatically restarted once you log back into Windows.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
5	EX002	<p>Launch Executive Handler Editor, with Administrative Privileges. Choose a subsystem, click Edit, and check Shutdown and Restart on Timeout. Click OK twice.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Step	Requirement	Procedure	Notes	Pass/Fail
		Freeze the associated process using Process Explorer or similar utility. Verify that Executive Handler eventually restarts the subsystem automatically.		
6	<b>EX001M</b>	Launch Status Log Viewer. Ensure that all subsystems are allowed through the filter (View > Filter Options). Verify that SunGuide subsystems are logging status, including any associated error messages.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
7	<b>EX005L</b>	<p>Click File &gt; Connect in Status Log Viewer. Switch back the Local System.</p> <p>Enter Control Panel on the Application Server. Pick Status Logger Settings. Record the number of days in the “Delete old log files after” setting. (Note that, if Reuse Log Files is checked, this will be limited to 7 days).</p> <p>Return to Status Log Viewer. Click File &gt; Open, and select the local folder where the status logs are saved. Verify that none are older than the age setting recorded above.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
8	<b>EX004L</b>	<p>Return Status Logger Settings in Control Panel. Ensure that Enable Sharing is checked.</p> <p>Open remote desktop to another Application Server on the network. Click File &gt; Connect in Status Log Viewer and pick the primary application server.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Step	Requirement	Procedure	Notes	Pass/Fail
		Verify that your logs from the remote system are successfully displayed.		

Test End Date and Time	
Tester	
Witness	

### 2.1.2 Test Case 2: System Administration Application (SAA)

#### 2.1.2.1 Test Objectives

The objective of this test is to verify that SunGuide is capable of managing users, items, and groups with SAA.

#### 2.1.2.2 Test Resources and Setup Conditions

- Operator workstation logged into SunGuide
- Access to the SunGuide database
- Access to an operational SunGuide system with SAA and Databus

#### 2.1.2.3 Test Procedure

SunGuide® Software System  
 SunGuide Software Release 6.1 IV&V Test Procedures

Test Start Date and Time				
Step	Requirement	Procedure	Notes	Pass/Fail
1	SAA-SYS-3	Using the Config Editor, set SAA (System Administrative Application) to Detailed logging.  Restart the SAA. Confirm healthy status from the Executive Handler Viewer.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
2	SAA-SYS-4	Check the Windows Services dialog (under Task Manager) to confirm SAA is running.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	SAA-SYS-2	Check the Status Logger and confirm SAA is logging upon startup.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
4	SAA-SYS-1	Check the config.xml for the port SAA is running on. Look under <dataProviders><saa>. From a Command Prompt window (launch as admin), execute the command:  netstat -a -b -n > ports.txt  Confirm SAA is listening via configured IP/port.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
5	SAA-UC-1.7 SAA-UC-1.7.4	Using SQL Server Management Studio, log into and expand the respective database schema. The database user is sa, password is [REDACTED]  Check the CT_USER table and confirm user and password are stored.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

6	SAA-UC-1.7.1	Check the CT_USER_PERMISSION, CT_SUBSYSTEM, and CT_SUBSYSTEM_PERMISSION tables and confirm permissions are stored.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
6	SAA-UC-1.7.2	Check the SAA_EQUIPMENT_PERMISSION table and confirm permissions are stored.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
7	SAA-UC-1.7.3	Check the SAA_METADATA_PERMISSION table and confirm metadata is stored.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
8	SAA-UC-1.4 SAA-UC-1.11 SAA-AC-1	Direct your browser to the IP of the test system, and log into the operator map. You may need to add this IP address to the browser's 'Trusted Sites.'  From the context menu, select "System > Manage Users".  Select the Users tab. Confirm window displays a list of all users.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
9	SAA-UC-1.13	Confirm each user is associated with one of the following selectable user types: Normal, System, or Remote.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
10	SAA-UC-1.9.13	Confirm each user has an optional email field.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
11	SAA-UC-1.9.16	Confirm each user has an optional first name field.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
12	SAA-UC-1.9.17	Confirm each user has an optional last name field.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
13	SAA-UC-1.9.18	Confirm each user has an optional description field.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>


14	<b>SAA-UC-1.9.6</b> <b>SAA-UC-1.9.12</b>	Select the Groups tab. Confirm window displays a list of all groups.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
15	<b>SAA-UC-1.9.7</b>	Select the CCTV Group. Confirm window displays a list of users associated with the CCTV Group.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
16	<b>SAA-UC-1.9.1</b>	Select the Permissions tab. Select multiple Subsystems, one at a time. Confirm the dialog displays permissions associated with CCTV, plus all SAA permissions to allow the user to log in..		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
17	<b>SAA-UC-3</b>	Select the Logged in Users tab. Confirm window displays a list of logged in users, one of which is the user currently logged in.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

<p>18</p>	<p><b>SAA-UC-1</b>  <b>SAA-UC-1.1</b>  <b>SAA-UC-1.9</b>  <b>SAA-UC-1.7.6</b></p>	<p>Select the Settings tab. Confirm the Permission Model is set to Groups and Users. If not, change mode to Groups and Users and Save.</p> <p>Select the Users tab.</p> <p>Add a New User with the following values:</p> <p><b>Username:</b> IVVTest  <b>First Name:</b> (blank)  <b>Last Name:</b> Vollmer  <b>Email:</b> (blank)  <b>Description:</b> (blank)  <b>Location:</b> TERL  <b>Type:</b> Normal  <b>Priority:</b> 0  <b>Notify on Warning:</b> Unchecked  <b>Notify on Error:</b> Unchecked</p> <p>Assign CCTV Group</p> <p>From the Permissions Tab, select DMS and check:</p> <ul style="list-style-type: none"> <li>• Retrieve DMS data</li> <li>• Retrieve the current status of a DMS</li> <li>• Retrieve the message currently displayed on a DMS</li> <li>• Retrieve the current operational status of a DMS</li> </ul>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
-----------	---	--	--	--

		<ul style="list-style-type: none"><li>• Retrieve updates of the status of communication with a DMS</li><li>• Log in to the DMS subsystem</li></ul> Click Save, and set password to: ██████████  From a different workstation, log into the operator map using the IVVTest user. Confirm user can be logged in successfully with CCTV and limited DMS functionality.		
--	--	--	--	--




<p>19</p>	<p><b>SAA-1.7.7</b>  <b>SAA-AC-4</b>  <b>SAA-UC-1.7.8</b></p>	<p>Log the IVVTest out of the operator map.</p> <p>From the admin user login, open the User Management window, select the Settings tab, and change the Permission Model to Groups Only.</p> <p>Select the Groups tab and add a new group with the following settings:</p> <p>Group Name: SAA IVV              Priority: 0</p> <p>Select the Permissions tab, select SAA, and check all permissions.</p> <p>Finally, assign this group to IVVTest to allow this account to log in under the Groups Only model.</p> <p>From a different workstation, log into the operator map using the IVVTest user. Confirm user can be logged in successfully with only CCTV functionality.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
-----------	---	---	--	--

<p>20</p>	<p><b>SAA-UC-1.2</b>  <b>SAA-UC-1.9.2</b></p>	<p>Log the IVVTest out of the operator map.</p> <p>From the admin user login, select the IVVTest user from the Users tab and add the Tss Group to the user.</p> <p>From a different workstation, log into the operator map using the IVVTest user. Confirm user can be logged in successfully with CCTV and Tss functionality.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
<p>21</p>	<p><b>SAA-UC-1.5</b></p>	<p>From the IVVTest, select “System/Change Password” and modify password to the following:  </p> <p>Log out and log back in using the new password.</p> <p>Confirm user is allowed to change his/her own password.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>

22	SAA-UC-1.6	<p>Log the IVVTest out of the operator map.</p> <p>From the admin user login, select the IVVTest user and click Set Password. Change the password to the following: ██████████</p> <p>From a different workstation, log into the operator map using the IVVTest user using the new password. Confirm user can log in using the new password.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
----	------------	--	--	---

<p>23</p>	<p><b>SAA-UC-1.9</b>  <b>SAA-UC-1.9.3</b></p>	<p>Log the IVVTest out of the operator map.</p> <p>From the admin user login, select the Groups tab and add new group with the following settings:</p> <p>Group Name: DMS IVV              Priority: 0</p> <p>Select the Permissions tab, select DMS, and check:</p> <ul style="list-style-type: none"> <li>• Retrieve DMS data</li> <li>• Retrieve current status of a DMS</li> <li>• Log in to the DMS subsystem</li> </ul> <p>Click Save.</p> <p>Select the Users tab and add DMS IVV to the IVVTest user.</p> <p>From a different workstation, log into the operator map using the IVVTest user. Confirm user can be logged in successfully with CCTV, Tss, and DMS functionality.</p> <p>Confirm user cannot set DMS Op Status.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
-----------	---	--	--	--

<p>24</p>		<p>From the admin user login, Add New User with the following values:</p> <p><b>Username:</b> IVVTest2  <b>First Name:</b> (blank)  <b>Last Name:</b> Vollmer  <b>Email:</b> (blank)  <b>Description:</b> (blank)  <b>Location:</b> TERL  <b>Type:</b> Normal  <b>Priority:</b> 0  <b>Notify on Warning:</b> Unchecked  <b>Notify on Error:</b> Unchecked  Assign DMS IVV and SAA IVV Groups.</p> <p>Click Save, and set password to:  </p> <p>From a different workstation, log into the operator map using the IVVTest2 user. Confirm user can be logged in successfully with CCTV, Tss, and DMS functionality.</p> <p>Confirm user cannot set DMS Op Status.</p>	<p>From FAT – this is there, but is not actually used. This will be waived. (bulk permissions)</p>	<p>(success of this step is tied with step 26)</p>
-----------	--	--	--	--

<p>25</p>	<p><b>SAA-UC-1.9.4</b>  <b>SAA-UC-1.15</b></p>	<p>Log IVVTest and IVVTest2 out of the operator map.</p> <p>From the admin user login, select the Groups tab and select DMS IVV.</p> <p>Select the Permissions tab, select DMS, and check all permissions.</p> <p>Click Save.</p> <p>From a different workstation, log into the operator map using the IVVTest user. Confirm user can be logged in successfully with CCTV, Tss, and DMS functionality.</p> <p>Confirm User can now set DMS Op Status.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
<p>26</p>	<p><b>SAA-UC-1.15</b></p>	<p>From a different workstation, log into the operator map using the IVVTest2 user. Confirm user can be logged in successfully with CCTV, Tss, and DMS functionality.</p> <p>Confirm User can now set DMS Op Status.</p>	<p>From FAT – this is there, but is not actually used. This will be waived.</p>	<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>

<p><b>27</b></p>	<p><b>SAA-UC-1.9.5</b></p>	<p>Log the IVVTest and IVVTest2 out of the operator map.</p> <p>From the admin user login, select the Groups tab and remove the DMS IVV group.</p> <p>Select the Users tab and confirm DMS IVV has been removed from IVVTest and IVVTest2.</p> <p>From a different workstation, log into the operator map using the IVVTest user. Confirm user can be logged in successfully with CCTV and Tss, but no DMS functionality.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
<p><b>28</b></p>	<p><b>SAA-UC-1.3</b></p>	<p>(Important) From the admin user login, open the User Management window, select the Settings tab, and change the Permission Model back to Group and Users.</p> <p>Select the Users tab and remove IVVTest and IVVTest2.</p> <p>From a different workstation, attempt to log into the operator map using the IVVTest user. Confirm user cannot log in.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>

29	<b>SAA-UC-1.5.1</b> <b>SAA-AC-5</b>	<p>From the admin user login, select the Settings tab, and set the password expiration to 1 day for all user types.</p> <p>Log out and log back in using the same user account.</p> <p>Confirm the admin user is prompted to change his/her password.</p> <p>Type in new password and confirm user is allowed to log in.</p> <p>Log out and log back in using the new password.</p> <p>Confirm user is not prompted to change password a second time and the new password enables a successful login.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
----	--	---	--	---

Test End Date and Time	
Tester	
Witness	



### **2.1.3 Test Case 3a: Beacon Management Subsystem (BMS)**

#### **2.1.3.1 Test Objectives**

The objective of this test is to verify that SunGuide is capable of managing and activating beacons via BMS.

#### **2.1.3.2 Test Resources and Setup Conditions**

- Operator workstation logged into SunGuide
- Access to the SunGuide database
- Access to an operational SunGuide system with IDS, BMS and Driver, Message Arbitration System (MAS), Event Manager and Databus running
- BMS must be a client of a MAS – in the <mas> section of the config file, bms must be a <dataProvider>
- Access to a Beacon Simulator – normally found in C:\Installs\Release 6.1 Simulator Source Code\

#### **2.1.3.3 Test Procedure**

Test Start Date and Time				
Step	Requirement	Procedure	Notes	Pass/Fail
1	BMS002 BMS002a BMS003	<p>Log into the SunGuide operator map.</p> <p>From the context menu, select “System / Add Device / Add Beacon”.</p> <p>Use the following field values:</p> <p><b>Type: Low Visibility</b>  <b>IP:</b> (the test machine)  <b>Port:</b> [REDACTED]  <b>Protocol:</b> WebRelay  <b>Driver:</b> WebRelayDriver  <b>Poll Cycle:</b> 20  <b>Roadway:</b> I-10  <b>Direction:</b> Eastbound  <b>Location Desc:</b> (anything)  <b>Manufacturer:</b> vbrick</p> <p>Click “Save” and confirm beacon icon exists on operator map. Launch a beacon simulator on this same port, running as admin if needed.</p> <p>Use the ‘Place on Map’ function to move the beacon to a new location. Click “Save” and confirm beacon placement has been updated on the operator map.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
2		Using the Executive Handler Viewer, set the BMS to Detailed Logging mode.		

3	<b>BMS003A</b>	<p>Right-click on beacon added in the previous step and select “Beacon Status”.</p> <p>Set the selected beacon to “Active”.</p> <p>Confirm beacon is active but is not activated (i.e. beacon is not illuminated).</p> <p>Add a message to the beacon queue.</p> <p>Confirm beacon is activated (i.e. beacon is illuminated).</p>		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
4	<b>BMS004 BMS007</b>	<p>Remove beacon request from beacon queue.</p> <p>Confirm beacon is not activated (i.e. beacon is not illuminated).</p>		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
5	<b>BMS001</b>	<p>Check the Status Logger and confirm the messaging is using the Web Relay Protocol.</p>		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
6	<b>BMS006</b>	<p>Add 2 messages to the beacon queue.</p> <p>Confirm beacon is activated (i.e. beacon is illuminated).</p>		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>

<b>7</b>	<b>BMS005 BMS007</b>	<p>Add 2 more messages to the beacon queue.</p> <p>Confirm beacon is activated (i.e. beacon is illuminated).</p> <p>Remove all beacon messages from beacon queue via blank queue command.</p> <p>Confirm beacon is not activated (i.e. beacon is not illuminated).</p>	<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
----------	--------------------------	--	---

Test End Date and Time	
Tester	
Witness	

## ***2.1.4 Test Case 3b: Road Weather Information System (RWIS) and RWIS Simulator***

### **2.1.4.1 Test Objectives**

The objective of this test is to verify that SunGuide is capable of detecting and alerting for RWIS-triggered events using the RWIS Simulator.

### **2.1.4.2 Test Resources and Setup Conditions**

- Operator workstation logged into SunGuide
- Access to the SunGuide database
- Access to an operational SunGuide system with IDS, DMS, RWIS Subsystem and Driver, Event Manager, Databus, and Notify Service running
- The databus user must be granted all permissions to IDS, via the User Management dialog
- Check the <driver xsi:type="RwisAlarmDriver"> block in config.xml. The <dataConnection> subblock must have proper login information for the rwisAlarmDriver account
- In the config file, RWIS and BMS must be listed as dataProviders for <em>. EM must also have permission to access BMS configuration, message a beacon, and get RWIS data.
- Access to the RWIS simulators
- Access to the DMS simulators

### **2.1.4.3 Test Procedure**

Test Start Date and Time				
Step	Requirement	Procedure	Notes	Pass/Fail
1	RW0010 RW0013	Start the RWIS Simulator, running as admin if needed.  Configure an RWIS simulated device with NTCIP v2 for the following:  <b>IP:</b> (the test machine) <b>Port:</b> ████████		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
2	RW0011 RW0012	Configure an RWIS simulated device with NTCIP v3.  <b>IP:</b> (the test machine) <b>Port:</b> ████████		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

3	RW006	<p>Using the Executive Handler Viewer, set RWIS Driver to Detailed logging mode.</p> <p>Log workstation into Operator Map.</p> <p>From the context menu, select Roadside Weather Systems and click "Stations".</p> <p>Configure a new RWIS station with the following settings:</p> <p><b>Name:</b> RWISTestV2  <b>Station Type:</b> NtcipRwis  <b>IP:</b> (the test machine)  <b>Port:</b> [REDACTED]  <b>Address:</b> 1  <b>Community Name:</b> administrator  <b>Protocol:</b> UdpNtcipVersion2  <b>Driver:</b> RwisDriver  <b>Roadway:</b> I-10  <b>Direction:</b> Eastbound  <b>Latitude:</b> 30408200  <b>Longitude:</b> -84321000  <b>Manufacturer:</b> Vaisala  <b>Beacon Proximity:</b> 10</p> <p>Confirm RWIS device icon appears on the map. Set to Active.</p> <p>Check Status Logger and ensure newly added device is communicating using NTCIP v2.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
---	-------	--	--	---

4	RW007	<p>Configure a new RWIS station with the following settings:</p> <p><b>Name:</b> RWISTestV3 <b>Station Type:</b> NtcipRwis <b>IP:</b> (the test machine) <b>Port:</b> [REDACTED] <b>Address:</b> 1 <b>Community Name:</b> administrator <b>Protocol:</b> UdpNtcipVersion3 <b>Driver:</b> RwisDriver <b>Roadway:</b> I-10 <b>Direction:</b> Eastbound <b>Latitude:</b> 30409200 <b>Longitude:</b> -84322000 <b>Manufacturer:</b> Vaisala <b>Beacon Proximity:</b> 10</p> <p>Confirm RWIS device icon appears on the map. Set to Active.</p> <p>Check Status Logger and ensure newly added device is communicating using NTCIP v3.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
---	-------	--	--	---



5	RW008A RW008A1 RW008B RW008D RW008F	From the RWIS Station Status window, select "Thresholds"  Add a new Threshold with the following parameters:  <b>Station Name:</b> RWISTestV2 <b>Data Type:</b> Visibility <b>Alarm Value:</b> 20 <b>Recovery Value:</b> 10 <b>Alarm Direction:</b> Alarm on High <b>Event Type:</b> Visibility <b>Response Plan:</b> Activate Automatically Generated Plan  Confirm thresholds were saved.  Repeat for RWISTestV3 with alarm values:  <b>Alarm Value:</b> 30 <b>Recovery Value:</b> 10  Confirm thresholds were saved.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
---	---	--	--	---

6	RW008E	<p>Return to RWISTestV2 threshold.</p> <p>Attempt to change the following:</p> <p><b>Alarm Value: 10</b>  <b>Recovery Value: 20</b></p> <p>Confirm SunGuide automatically changes the alarm type to “Alarm on Low.”</p> <p>Repeat for RWISTestV3 and confirm the same alert.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
7	RW008C	<p>Discard recent changes.</p> <p>Confirm newly added thresholds are Disabled.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

<p>8</p>	<p><b>RW008G</b>  <b>RW008J</b>  <b>IDS001</b>  <b>IDS001B</b></p>	<p>In Administrative Editor, make sure that under Event Management &gt; Agencies, there is an agency with visibility to RWIS.</p> <p>Enable both thresholds.</p> <p>From the RWIS Simulator, change Visibility to exceed 20 miles, or 350,000 tenths of meters</p> <p>Confirm RWIS alarm is automatically generated for RWISTestV2.</p> <p>Confirm event is automatically created.</p> <p>Confirm event's response plan is automatically activated, by attempting to close the event.</p> <p>From the RWIS Simulator, change Visibility to 30 miles (500,000 tenths of meters) and confirm the alert, event, and response plans for RWISTestV3.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
<p>9</p>	<p><b>IDS001B1</b></p>	<p>Obtain ownership of both events, and set them to Active.</p> <p>Confirm RWISTestV2 response plan does not include small DMS.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>

10	RW009 IDS001B2	<p>From RWIS Station Configuration, check the configured distance.</p> <p>Confirm the beacons included in the response plans from the previous step are within the configured distance.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
11	RW008H	<p>From the RWIS Simulators, change Visibility to about 15 miles (or 200,000 tenths of a meter).</p> <p>Confirm RWIS alarms are not cleared.</p> <p>From the RWIS Simulator, change Visibility to under 10 miles (or 150,000 tenths of a meter).</p> <p>Confirm both RWIS alarms are cleared.</p> <p>Confirm both events are still open.</p> <p>Confirm events' response plans are still activated.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

12	IDS001A	<p>From the RWIS Simulators, change Visibility exceed 20 miles, or 350,000 tenths of meters. .</p> <p>Confirm RWIS alarm is not automatically generated for RWISTestV2.</p> <p>From the RWIS Simulators, change Visibility under 10 miles (or 150,000 tenths of a meter)..</p> <p>Deactivate response plan and close event for RWISTestV2 alert.</p> <p>From the RWIS Simulators, change Visibility exceed 20 miles, or 350,000 tenths of meters.</p> <p>Confirm RWIS alarm is automatically generated for RWISTestV2.</p> <p>Clear alert, deactivate response plan and close event for RWISTestV2 alert.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
----	---------	---	--	---

<b>13</b>	<b>IDS001C</b>	<p>From config.xml select to not include beacons in response plans. Use the &lt;autoSuggestBeacons&gt; field under &lt;ids&gt;.</p> <p>From the RWIS Simulator, change Visibility to 10 miles.</p> <p>Restart the IDS Subsystem. From the RWIS Simulator, change Visibility back to 20 miles.</p> <p>Confirm RWIS alarm is automatically generated for RWISTestV2.</p> <p>Confirm event is automatically created.</p> <p>Confirm event's response plan is automatically activated with no beacons.</p>	<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
-----------	----------------	--	---

Test End Date and Time	
Tester	
Witness	

### **2.1.5 Test Case 3c: Incident Detection Subsystem (IDS)**

#### **2.1.5.1 Test Objectives**

The objective of this test is to verify that SunGuide is capable of handling alerts within the IDS and create events.

#### **2.1.5.2 Test Resources and Setup Conditions**

- Operator workstation logged into SunGuide
- Access to the SunGuide database
- Access to an operational SunGuide system with IDS, RWIS Subsystem and Driver, BMS, and Databus
- The additional configuration requirements from Test Case 3b.
- Access to the RWIS Simulator
- Access to a BMS Simulator

#### **2.1.5.3 Test Procedure**

Test Start Date and Time				
Step	Requirement	Procedure	Notes	Pass/Fail
1	RW0010 RW0013	Start the RWIS Simulator, running as administrator if needed  Configure an RWIS simulated device with NTCIP v2 for the following:  IP: (the test machine) Port: ████████		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
2	RW0011 RW0012	Configure an RWIS simulated device with NTCIP v3.  IP: (the test machine) Port: ████████		Pass <input type="checkbox"/> Fail <input type="checkbox"/>



3	RW006	<p>Using the Executive Handler Viewer, set RWIS Driver to Detailed logging mode.</p> <p>Log workstation into Operator Map.</p> <p>From the context menu, select Roadside Weather Systems and click "Stations".</p> <p>Configure a new RWIS device with the following settings:</p> <p><b>Name:</b> RWISTestV2  <b>Station Type:</b> NtcipRwis  <b>IP:</b> (the test machine)  <b>Port:</b> [REDACTED]  <b>Address:</b> 1  <b>Community Name:</b> administrator  <b>Protocol:</b> UdpNtcipVersion2  <b>Driver:</b> RwisDriver  <b>Roadway:</b> I-10  <b>Direction:</b> Eastbound  <b>Latitude:</b> 30408200  <b>Longitude:</b> -84321000  <b>Manufacturer:</b> Vaisala  <b>Beacon Proximity:</b> 10</p> <p>Confirm RWIS device icon appears on the map. Set to Active.</p> <p>Check Status Logger and ensure newly added device is communicating using NTCIP v2.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
---	-------	---	--	---

4	RW007	<p>Configure a new WWD device with the following settings:</p> <p><b>Name:</b> RWISTestV3  <b>Station Type:</b> NtcipRwis  <b>IP:</b> (the test machine)Port: [REDACTED]  <b>Address:</b> 1  <b>Community Name:</b> administrator  <b>Protocol:</b> UdpNtcipVersion3  <b>Driver:</b> RwisDriver  <b>Roadway:</b> I-10  <b>Direction:</b> Eastbound  <b>Latitude:</b> 30409200  <b>Longitude:</b> -84322000  <b>Manufacturer:</b> Vaisala  <b>Beacon Proximity:</b> 10</p> <p>Confirm RWIS device icon appears on the map. Set to Active.</p> <p>Check Status Logger and ensure newly added device is communicating using NTCIP v3.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
---	-------	--	--	--

5	RW008A RW008A1 RW008B RW008D RW008F	<p>From the RWIS Station Status window, select "Thresholds"</p> <p>Add a new Threshold with the following parameters:</p> <p><b>Station Name:</b> RWISTestV2  <b>Data Type:</b> Visibility  <b>Alarm Value:</b> 20  <b>Recovery Value:</b> 10  <b>Alarm Direction:</b> Alarm on High  <b>Event Type:</b> Visibility  <b>Response Plan:</b> Activate Automatically Generated Plan</p> <p>Confirm thresholds were saved.</p> <p>Repeat for RWISTestV3 with alarm values:</p> <p><b>Alarm Value:</b> 30  <b>Recovery Value:</b> 10</p> <p>Confirm thresholds were saved.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
---	---	---	--	---

6	RW008E	<p>Return to RWISTestV2 threshold.</p> <p>Attempt to change the following:</p> <p><b>Alarm Value: 10</b>  <b>Recovery Value: 20</b></p> <p>Confirm SunGuide automatically changes the alarm type to “Alarm on Low.”</p> <p>Repeat for RWISTestV3 and confirm the same behavior.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
7	RW008C	<p>Discard recent changes.</p> <p>Confirm newly added thresholds are Disabled.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

<p>8</p>	<p><b>RW008G</b> <b>RW008J</b></p>	<p>Enable both thresholds.</p> <p>From the RWIS Simulator, change Visibility to exceed 20 miles (or 350,000 tenths of a meter).</p> <p>Confirm RWIS alarm is automatically generated for RWISTestV2.</p> <p>Confirm event is automatically created.</p> <p>Confirm event's response plan is automatically activated.</p> <p>From the RWIS Simulator, change Visibility to exceed 30 miles (or 500,000 tenths of a meter) and confirm the alert, event, and response plans for RWISTestV3.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
<p>9</p>	<p><b>RW009</b></p>	<p>From RWIS Station Configuration, check the configured distance.</p> <p>Confirm the beacons included in the response plans from the previous step are within the configured distance.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>

<b>10</b>	<b>RW008H</b>	<p>From the RWIS Simulator, change Visibility to 15 miles (or 300,000 tenths of a meter).</p> <p>Confirm RWIS alarms are not cleared.</p> <p>From the RWIS Simulator, change Visibility to under 10 miles (or 150,000 tenths of a meter).</p> <p>Confirm both RWIS alarms are cleared.</p>	<p>Discussed with SWRI – does not occur, nor is this in requirements</p>	<p><b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/></p>
-----------	---------------	--	--	--

Test End Date and Time	
Tester	
Witness	

### ***2.1.6 Test Case 4: ONVIF Protocol Support***

#### **2.1.6.1 Test Objectives**

The objective of this test is to verify that SunGuide is capable of controlling cameras using the ONVIF protocol.

#### **2.1.6.2 Test Resources and Setup Conditions**

- Operator workstation logged into SunGuide
- Access to the SunGuide database
- Access to an operational SunGuide system with CCTV and ONVIF driver and Databus
- Access to ONVIF device

#### **2.1.6.3 Test Procedure**

Test Start Date and Time	
--------------------------	--



Step	Requirement	Procedure	Notes	Pass/Fail
1	<p><b>TV001</b>  <b>TV017D</b></p>	<p>Using the Executive Handler Viewer, set CCTV to Detailed logging.</p> <p>Open Admin Editor. Navigate to Miscellaneous &gt; Hardware Drivers &gt; Camera and add ONVIF_Driver to the options (if not already present). Then, navigate to CCTV devices and add a camera using the ONVIF protocol and specify IP of the ONVIF camera used for testing.</p> <p>Confirm camera can be saved with ONVIF protocol.</p> <p>Log into the operator map. Configure a video stream for the camera, if not already present. Once this is set up, zoom into ONVIF-configured camera.</p> <p>Click on camera icon to open camera control window. Set to Active operational state.</p> <p>Check Status Logger and confirm SunGuide can successfully communicate with the ONVIF device.</p> <p>Note: please see Appendix B: Driver Setup Supplement for related screenshots.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>

Step	Requirement	Procedure	Notes	Pass/Fail
2	TV003 A008 TV001D TV002D TV018D TV019D TV020D	<p>Configure the physical video wall to show the ONVIF camera video stream.</p> <p>Tilt the camera up and down all the way to its maximum tilt limit using the camera control window. Confirm tilting stops when it reaches its limit.</p> <p>Pan the camera left until it spins completely around. Repeat by panning camera right completely around. Confirm panning does not stop since there is no limit to panning.</p> <p>Nudge the camera up, down, left, and right.</p> <p>Zoom the camera in as far as it will go and zoom out as far as it will go. Confirm zooming stops when it reaches its limit.</p> <p>Focus the camera in and out as far as it will go. Confirm focusing stops when it reaches its limit.</p> <p>Confirm on the video wall that the camera responds properly.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Step	Requirement	Procedure	Notes	Pass/Fail
3	TV003 A008 TV001D TV002D TV018D TV019D TV020D	Open camera video within a VoD (Desktop Video Dialog) window. Drag the camera from the list onto the righthand pane.  Repeat actions and confirmations from previous step.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
4	TV022D	Position the camera so it focuses on a specific object.  Save the position and zoom level with a preset named "Position 1".  Position the camera so it focuses on different a specific object.  Save the position and zoom level with a preset named "Position 2".  Select "Position 1" and confirm camera is focused on the first object.  Select "Position 2" and confirm camera is focused on the second object.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Step	Requirement	Procedure	Notes	Pass/Fail
5	TV021D	Ensure camera is unlocked (via Camera Control window).  Select "Position 1" preset.  Confirm the camera is locked.  Wait about 5 minutes.  Confirm camera is unlocked after timeout.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
6	TV023D	From the camera control window, click "Advanced".  Select "Lens Feature Status" and select "Get Details".  Confirm details are provided without error.  Repeat for "Lens Equipment Availability", "Timeout Parameters", "Absolute Position", and "Range Objects".  Confirm details are provided for each without error.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### ***2.1.7 Test Case 5a: HERE.com Plug-in***


#### **2.1.7.1 Test Objectives**

The objective of this test is to verify that SunGuide is capable of receiving and reporting data from HERE.com.

#### **2.1.7.2 Test Resources and Setup Conditions**

- Operator workstation logged into SunGuide
- Access to the SunGuide database
- Access to an operational SunGuide system with TSS, C2C Subscriber, HERE.com plug-in, and Databus running
- Access to the HERE.com data feed, and configured to provide data to SunGuide
- See Appendix B: Driver Setup Supplement [for guidance on installation](#)
- Access to the C2C server

#### **2.1.7.3 Test Procedure**

Test Start Date and Time				
Step	Requirement	Procedure	Notes	Pass/Fail
1	NOK00713	<p>Log into the C2C server with the HERE C2C provider via remote desktop.</p> <p>Open Internet Explorer and navigate to <a href="http://localhost/{HERE C2C provider path}/ProviderServer.asmx">http://localhost/ {HERE C2C provider path}/ ProviderServer.asmx</a></p> <p>For example: <a href="http://terl01/Nokia/Provider/ProviderServer.asmx?op=RequestNets">http://terl01/Nokia/Provider/ ProviderServer.asmx?op=RequestNets</a></p> <p>Click "RequestNets".</p> <p>Type "trafficCondData" into the dataTypes field, "all" in the networks field, and click "Invoke".</p> <p>Confirm trafficCondData is reported.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
2	NOK0714	Scan through the data reported from step 1 and confirm traffic speeds are reported.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	NOK00713A	<p>From a separate Internet Explorer window, open a <b>HERE web interface</b> and request the most recent speed data in gzip:</p> <p></p> <p>Identify a few links from the HERE data and compare it to the C2C data acquired in step 1.</p> <p>Confirm data from C2C is the most recent speed data.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

<p>4</p>	<p><b>NOK0715</b>  <b>NOK0715A</b>  <b>NOK0715B</b>  <b>NOK0715C</b>  <b>NOK0715D</b>  <b>NOK0715E</b>  <b>NOK0715F</b>  <b>NOK0712B</b></p>	<p>Close window containing trafficCondData.</p> <p>Type “networkData” into the dataTypes field, “all” in the networks field, and click “Invoke”.</p> <p>Scan through the data and confirm the following items are reported:</p> <ul style="list-style-type: none"> <li>Node data</li> <li>Unique Node IDs</li> <li>Node Lat/Long data</li> <li>Link data</li> <li>Link IDs</li> <li>Link roadway name</li> <li>Link roadway direction</li> <li>Link county</li> <li>Link midpoint data (may not be present for all links)</li> </ul>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
----------	--	--	--	--

<p>5</p>	<p><b>NOK0716</b>  <b>NOK0716A</b>  <b>NOK0716B</b>  <b>NOK0716C</b>  <b>NOK0716D</b>  <b>NOK0716E</b></p>	<p>From the networkData generated from the previous step, select a link that is reporting roughly 5 to 10 midpoints. Record the name of the link here:</p> <p>_____</p> <p>Record the number of midpoints here:</p> <p>_____</p> <p>Open a Windows explorer window, navigate to the FDOT shared folder, and open the config.xml file in a text editor.</p> <p>Locate minVertextLength and modify this value, set the value to half the original value. For example, if it is set to 1000, change this value to 500. Save the file.</p> <p>Restart the HERE publisher.</p> <p>Close the networkData window and regenerate the networkData from the RequestNets window. If no data exists, wait a minute and retry.</p> <p>Locate the same link that was located earlier in this step. Confirm the link has more midpoints that the number of midpoints recorded earlier.</p> <p>If the number midpoints on this link do not increase, try an even smaller value – or do a word count in the regenerated data for total midpoints.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
----------	--	--	--	--



<p><b>6</b></p>	<p><b>NOK00711A</b></p>	<p>From the networkData, locate a link which has canPublish value of true or 1. Record the name of the link here:</p> <p>_____</p> <p>Open the HERE link configuration file (I-95TmcLocation.dat) and locate the link that was recorded above. Modify the canPublish configuration to false.</p> <p>Restart the HERE publisher.</p> <p>Close the networkData window and regenerate this data from the RequestNets window.</p> <p>Confirm the link recorded above has a canPublish value of false or 0.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
<p><b>7</b></p>	<p><b>NOK00711B</b></p>	<p>Open the config.xml file in a text editor. Modify the HERE network identifier (nokiaNetworkId) to the following: SuperGroovyNetwork</p> <p>Restart the HERE publisher.</p> <p>Close the networkData window and regenerate this data from the RequestNets window.</p> <p>Confirm reported network ID is SuperGroovyNetwork</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>

<p>8</p>	<p><b>NOK00711C</b></p>	<p>From a workstation, log into SunGuide's operator map.</p> <p>From the context menu, select Center-to-Center/Select Networks, and select to view the HERE data.</p> <p>Locate and confirm HERE speed data is reporting on the map.</p> <p>Open the config.xml file in a text editor. Modify the HERE confidence value (confidenceThreshold) to the following: <b>1</b></p> <p>Restart the HERE publisher.</p> <p>After the HERE data refreshes on the map, confirm most links are reporting no data.</p> <p>Change the threshold to: <b>10</b></p> <p>Restart the HERE publisher.</p> <p>After the HERE data refreshes on the map, confirm most links are reporting data.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
----------	-------------------------	---	--	--

<b>9</b>	<b>NOK00711D</b>	<p>Open the config.xml file in a text editor. Modify the HERE update value (updateSeconds) to the following: 10</p> <p>Restart the HERE publisher.</p> <p>After the HERE data refreshes on the map, confirm data is refreshing every 10 seconds.</p> <p>Open the config.xml file in a text editor. Modify the HERE update value (updateSeconds) to the following: 60</p> <p>Restart the HERE publisher.</p> <p>After the HERE data refreshes on the map, confirm data is refreshing every 60 seconds.</p>		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
----------	------------------	---	--	---

<p><b>10</b></p>	<p><b>NOK00712 NOK00712A</b></p>	<p>Open the config.xml file in a text editor. Add “Leon” to the HERE county values (if it doesn’t already exist).</p> <p>Restart the HERE publisher.</p> <p>After the HERE data refreshes on the map, confirm data is reporting within Leon County.</p> <p>Open the config.xml file in a text editor. Rename “Leon” to “Jefferson” in the HERE county values.</p> <p>Restart the HERE publisher.</p> <p>After the HERE data refreshes on the map, confirm data is not reporting within Leon County but is reporting in Jefferson County.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>
<p><b>11</b></p>	<p><b>NOK00717B</b></p>	<p>Log into the operator map.</p> <p>From the context menu, select “System/Manage Users”.</p> <p>Select the Permissions tab and the HERE subsystem. Check Notify on Warning, Notify on Error.</p> <p>Save the user. Confirm change was saved.</p> <p>Finally, ensure that Nokia has access to saa and databus in the config.xml.                  &lt;canSendDeviceStatusMsgs&gt; should be true.                  Ensure also that the databus user has permissions to Nokia via User Management.</p>		<p>Pass <input type="checkbox"/> Fail <input type="checkbox"/></p>

12	<b>NOK00717</b> <b>NOK00717C</b> <b>NOK00717D</b>	From the TERL's firewall to the internet, block all outbound connections to the ip address of the HERE feed..  Within 60 seconds of the firewall change, confirm SunGuide sends a disconnection alert to the user selected from the previous step.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
13	<b>NOK00717A</b>	Open the Status Logger and find error messages reported for the HERE disconnection.  From the TERL's firewall to the internet, enable connections to the HERE web service.  From the Status Logger, confirm HERE has reconnected to the databus.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### **2.1.8 Test Case 5b: BlueTOAD Plug-in**

#### **2.1.8.1 Test Objectives**

The objective of this test is to verify that SunGuide is capable of receiving and reporting data from BlueTOAD.

#### **2.1.8.2 Test Resources and Setup Conditions**

- Operator workstation logged into SunGuide
- Access to the SunGuide database
- Access to an operational SunGuide system with TSS, C2C Subscriber, BlueTOAD plug-in (with blueToadConfig.xml generated by BT Link Editor), and Databus running
- See Appendix B: Driver Setup Supplement for guidance on installation
- Access to the BlueTOAD data feed

#### **2.1.8.3 Test Procedure**

Test Start Date and Time				
Step	Requirement	Procedure	Notes	Pass/Fail
1		<p>Log into the C2C server with the BlueTOAD C2C provider via remote desktop.</p> <p>Open Internet Explorer and navigate to http://localhost/ { BlueTOAD C2C provider path}/ ProviderServer.asmx</p> <p>For example:                      http://terl01/Bluetoad/Provider/ ProviderServer.asmx</p> <p>Click "RequestNets".</p> <p>Type "trafficCondData" into the dataTypes field, "all" in the networks field, and click "Invoke".</p> <p>Confirm trafficCondData is reported.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
2		<p>Scan through the data reported from step 1 and confirm traffic speeds are reported.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

3		<p>From a separate Internet Explorer window, open a BlueTOAD web interface and request the most recent speed data.</p> <p>Identify a few links from the BlueTOAD data and compare it to the C2C data acquired in step 1.</p> <p>Confirm data from C2C is the most recent speed data.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
4		<p>From the networkData, locate a link which has canPublish value of true or 1. Record the name of the link here:                  _____</p> <p>Open the BlueTOAD link configuration file and locate the link that was recorded above. Modify the can publish configuration to false.</p> <p>Restart the BlueTOAD publisher.</p> <p>Close the networkData window and regenerate this data from the RequestNets window.</p> <p>Confirm the link recorded above has a canPublish value of false or 0.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>



5		<p>From a workstation, log into SunGuide's operator map.</p> <p>From the context menu, select Center-to-Center/Select Networks, and select to view the BlueTOAD data.</p> <p>Locate and confirm BlueTOAD speed data is reporting on the map.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
---	--	--	--	---

6		<p>From the context menu, select “System/Manage Users”.</p> <p>Select the Permissions tab and the BlueToad subsystem. Check Notify on Warning, Notify on Error.</p> <p>Save the user. Confirm change was saved.</p> <p>Finally, ensure that Bluetoad has access to saa and databus in the config.xml.                  &lt;canSendDeviceStatusMsgs&gt; should be true. Ensure also that the databus user has permissions to BlueToad via User Management.</p> <p>From the TERL’s firewall to the internet, block all outbound connections to the ip address of the BlueTOAD feed..</p> <p>Within 60 seconds of the firewall change, confirm SunGuide sends a disconnection alert to the user selected from the previous step.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
---	--	---	--	---

Test End Date and Time	
Tester	
Witness	

### ***2.1.9 Test Case 6: Wrong Way Driving Detection***

#### **2.1.9.1 Test Objectives**

The objective of this test is to verify that SunGuide is capable of detecting and alerting for Wrong Way Driving (WWD).

#### **2.1.9.2 Test Resources and Setup Conditions**

- Operator workstation logged into SunGuide
- Access to the SunGuide database
- Access to an operational SunGuide system with TSS, IDS, Wrong Way Driving Driver, Databus, and Notify Service running
- Live Click!512 device is running and correctly configured
- Functional and accessible email server
- Access to the Click!512 Simulator

#### **2.1.9.3 Test Procedure**

Test Start Date and Time				
Step	Requirement	Procedure	Notes	Pass/Fail
1	WWD-002	<p>Log workstation into Operator Map.</p> <p>From the Incident Detection menu, select Wrong Way Devices and click "Devices".</p> <p>Configure a new WWD device with the following settings:</p> <p><b>Name:</b> WWDTestDevice  <b>IP:</b> [REDACTED]  <b>Port:</b> [REDACTED]  <b>Address:</b> 1  <b>Poll Cycle:</b> 30  <b>Protocol:</b> Click512  <b>Driver:</b> WrongWayDriverProtocol  <b>Detector:</b> Wavetronix_HD_IVV  <b>Roadway:</b> Springhill Road  <b>Direction:</b> Southbound  <b>Latitude:</b> 30410342  <b>Longitude:</b> -84304393  <b>Loc Desc:</b> TERL  <b>Direction:</b> Southbound  <b>Manufacturer:</b> Wavetronix</p> <p>Confirm WWD device icon appears on the map.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

<b>2</b>	<b>WWD-001</b> <b>WWD-001A</b> <b>WWD-001A2</b> <b>WWD-004</b>	Using the Executive Handler Viewer, set WWD Driver to Detailed logging mode.  Set WWD device to Active from the Operator Map.  Check Status Logger and ensure SunGuide is able to connect, reports heartbeat messages, and reports Active operational status.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
----------	---	---	--	---

3	<b>WWD-004A</b> <b>WWD-006</b> <b>WWD-006B</b>	<p>Configure a simulated WWD device with the following settings:</p> <p><b>Name:</b> WWDTestSim  <b>IP:</b> [REDACTED]  <b>Port:</b> [REDACTED]  <b>Address:</b> 1  <b>Poll Cycle:</b> 30  <b>Protocol:</b> Click512  <b>Driver:</b> WrongWayDriverProtocol  <b>Detector:</b> Wavetronix_HD_IVV  <b>Roadway:</b> Springhill Road  <b>Direction:</b> Southbound  <b>Latitude:</b> 30409763  <b>Longitude:</b> -84304592  <b>Loc Desc:</b> TERL  <b>Direction:</b> Southbound  <b>Manufacturer:</b> Wavetronix</p> <p>Start WWD simulator.</p> <p>Find WWD icon on Operator Map and set to Active.</p> <p>Stop heartbeat message in WWD simulator.</p> <p>Confirm WWD icon on Operator Map goes into an Error state.</p> <p>Check Status Logger and confirm operational statuses are reported properly.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
---	--	---	--	---

4	<b>WWD-006</b> <b>WWD-006A</b>	Resume heartbeat message in WWD simulator.  Confirm WWD icon goes into an Active state.  Simulate a comm loss via the WWD simulator.  Confirm WWD icon on Operator Map goes into an Error state.  Check Status Logger and confirm operational statuses are reported properly.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
5	<b>WWD-003</b>	Confirm config.xml file has the following email server configured:  Host: [REDACTED] Port: [REDACTED]  Configured a user to receive WWD alerts from actual WWD device.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

6	<b>WWD-001A1</b> <b>WWD-007</b> <b>WWD-007A</b> <b>WWD-007A1</b>	<p>Focus camera on where Click!512 device is installed to watch for WWD events.</p> <p>Watch the Operator Map's alert box for a WWD alert.</p> <p>Once WWD alert detected, confirm alert appears in alert box and email is received by configured user.</p> <p>Confirm email contains location and direction of travel for roadway segment and time when WWD alert detected.</p>		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
7	<b>WWD-007C</b> <b>WWD-008</b>	<p>Log into database and note detected alert.</p> <p>Confirm database contains alert location, direction, and timestamp. Confirm event ID is undefined.</p> <p>Generate and save an event from the WWD alert in the alert box. Confirm event type is a WWD event type. Note the event ID.</p> <p>Confirm database has been updated with the recorded event ID.</p>		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>



8	WWD-008A	<p>Check the Admin Editor to ensure a DMS template is defined for a WWD event type.</p> <p>Generate a response plan from the event generated from the previous step.</p> <p>Confirm the response plan uses the WWD event type DMS template.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
9	WWD-007C1	<p>From the Operator Map Reports, confirm there exists a WWD report.</p> <p>Generate WWD report.</p> <p>Confirm report contains a listing of WWD alerts, WWD device, direction, timestamp, and event ID.</p>		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

## 2.2 Release 6.1 Footprint Test Cases

### 2.2.1 FP 1574 – RMC fails to shut down after the configured shut down time

#### 2.2.1.1 Test Description

The objective of this test is to verify that ramp meter controllers shutdown at their configured time.

#### 2.2.1.2 Test Resources and Setup Conditions

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

#### 2.2.1.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		The setup conditions for this error are specific to District 6. Defer to District.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.2 FP 1589– ODS parent tables have multiple redundant records**

**2.2.2.1 Test Description**

The objective of this test is to verify that stop and starting TSS subsystem will not create additional configuration records.

**2.2.2.2 Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- Database Management Software

**2.2.2.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Add a new detector to SunGuide using the admin editor.  Use a database management application to view the data in the ODS_TSS_DETECTOR_CONFIGS table.  Ensure there is a single record for the new detector.  Stop TSS subsystem.  Start TSS subsystem.  Open the status logger.	Do not configure links or lanes for the detector.	

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
	Watch the start up of TSS and wait until its startup is fully complete.  View the data in the ODS_TSS_DETECTOR_CONFIGS table.		
2	Verify that there is still a single record for the newly created detector.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.3 FP 1635 – RM Doesn't Support Splitting System for Testing**

**2.2.3.1 Test Description**

The objective of this test is to verify that the socket connection a ramp meter controller is closed when the device is set offline.

**2.2.3.2 Test Resources and Setup Conditions**

Requires access to:

- 2 Application servers running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- Ramp Meter Controller

**2.2.3.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Set the ramp meter controller to “online” on the first SunGuide system.  Ensure there is communication between the device and SunGuide by viewing the details dialog for the controller.  Set the ramp meter controller to “offline” on the first SunGuide system.		

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

<b>Step</b>	<b>Procedure</b>	<b>Notes</b>	<b>Pass/Fail</b>
	Set the ramp meter controller to “online” on the second SunGuide system.		
<b>2</b>	Verify that there is communication between the device and the second SunGuide system by viewing the details dialog for the controller.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.2.4 FP 1748 – Fixed issues with agency contact records

#### 2.2.4.1 Test Description

The objective of this test is to verify that the user is given an informative error message when they attempt to re add an existing agency contact.

#### 2.2.4.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

#### 2.2.4.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Add a new agency contact with the exact same details as an existing contact in another agency.		
2	Verify that an error message is displayed which includes the agency name of the preexisting contact.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.5 FP 1769 – Event Chronology Shows DMS POSTED Actions after Event Closed**

**2.2.5.1 Test Description**

The objective of this test is to verify that the user cannot close an event with an active response plan. Also, the user should be warned and given the opportunity to terminate the response plan when attempting to close the event.

**2.2.5.2 Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.5.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event.  Ensure the location is set.  Click “Save and get response”.  Accept the suggested plan.  Activate the plan.  Go back to the event details dialog and attempt to change the event status to “Closed”.		



**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
2	Verify that a pop up appears prompting the user to terminate the response plan.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.2.6 FP 1786 – Executive Handler Viewer crashes

#### 2.2.6.1 Test Description

The objective of this test is to verify that executive handler viewer no longer crashes when the user repeatedly connects and disconnects from a SunGuide application server.

#### 2.2.6.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

#### 2.2.6.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the Executive Handler Viewer.  Add or choose an existing SunGuide application server.  Repeatedly connect and disconnect from the system for 60 seconds.		
2	Verify that the executive handler viewer does not crash during the 60 second test period.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.2.7 FP 1825 – Prevented saving of map views with identical names

#### 2.2.7.1 Test Description

The objective of this test is to verify that the user is prevented from adding multiple map views with the same name. They should also receive an informative error message when attempting to do so.

#### 2.2.7.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

#### 2.2.7.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Attempt to add a new map view with the same name as an existing map view.		
2	Verify that an error message appears and the new map view is not added.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

## 2.2.8 FP 1852 – Some UI Dialogs display too small

### 2.2.8.1 Test Description

The objective of this test is to verify that a subset of the SunGuide dialogues are now properly sized. In previous versions of SunGuide these dialogues would open too small and would not display all of their content without scroll bars or manual resizing.

### 2.2.8.2 Test Resources and Setup Conditions

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

### 2.2.8.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the System > “Edit Map shields” dialogue.		
2	Verify that all of the content in the dialogue is visible without scrolling or manual resizing.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Open the Video Switching > “Video tours” dialogue.		
4	Verify that all of the content in the dialogue is visible without scrolling or manual resizing.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
5	Right click a ramp meter controller on the SunGuide operator map and open the “Ramp meter controller firmware parameters” dialogue.		

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

<b>Step</b>	<b>Procedure</b>	<b>Notes</b>	<b>Pass/Fail</b>
<b>6</b>	Verify that all of the content in the dialogue is visible without scrolling or manual resizing.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
<b>7</b>	Open the Ramp metering > “status overview” dialogue.		
<b>8</b>	Verify that all of the content in the dialogue is visible without scrolling or manual resizing.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
<b>9</b>	Open the Video switching > “video wall control” dialogue.		
<b>10</b>	Verify that all of the content in the dialogue is visible without scrolling or manual resizing.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.9 FP 1998 – Improved behavior of stop alerts**

**2.2.9.1 Test Description**

The objective of this test is to verify that road ranger stop alerts are not generated while a road ranger is dispatched to an event.

**2.2.9.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- A smart phone with SPARR installed

**2.2.9.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
<b>1</b>	Set the RR stop threshold to 60 seconds.  Create an event using the SPARR.  Leave the phone stationary for > 60 seconds.  Depart from the event and return to the patrolling state.  Leave the phone stationary for > 60 seconds.		
<b>2</b>	Verify that a stop alert is only received 60 seconds after returning the RR status to patrolling		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.10 FP 2100 – Detector Data Report Crashed Reporting Subsystem.**

**2.2.10.1 Test Description**

The objective of this test is to verify that reports can now be cancelled while running.

**2.2.10.2 Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.10.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Navigate to the SunGuide reporting dialog.  Select and run a long running report.  Cancel the report before it finishes.	TSS lane data reports are good candidates for long running reports.	
2	Verify that the report is cancelled.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.11 FP 2181 – Better filtering/identification of TSS link roadway information**

**2.2.11.1 Test Description**

The objective of this test is to verify that filters were added to the edit link placement dialogue which allow the user to find certain these of links. These groups are specifically links that have not yet been placed on the map and links without a roadway assignment.

**2.2.11.2 Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.11.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Add a new link to SunGuide through the admin editor.  Open the “Edit link placement...” dialogue.  Select “Roadway undefined” from the Roadways filter dropdown		
2	Verify that the newly created link appears in the list of links with undefined roadways.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
3	Select “No” from the shown on map filter dropdown.		

Step	Procedure	Notes	Pass/Fail
4	Verify that the newly created link appears in the list of links with no map placement.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.12 FP 2191 – Jupiter Driver support for HD sources**

**2.2.12.1 Test Description**

The objective of this test is to verify that the Jupiter driver can now use HD IP video sources.

**2.2.12.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- An IP Camera with HD output configured in SunGuide

**2.2.12.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
<b>1</b>	Right click the operator map and navigate to video switching > video wall control...  Ensure that the current wall is using the Jupiter driver.  Drag an HD camera source from the sources area to the video wall.		
<b>2</b>	Verify that the camera output is rendered in the chosen video wall area.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.13 FP 2194 – EM "Could not modify event location/congestion" PL/SQL error**

**2.2.13.1 Test Description**

The objective of this test is to verify that EM now removes all non-numeric characters from the mile marker field.

**2.2.13.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.13.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event in SunGuide.  Set the location.  In the mile marker field of the location attempt to set the mile marker to "MM 127".  Save the event.		
2	Verify that the field does not allow the user to enter non numeric characters.	The field should read "127"	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Attempt to enter the mile marker as "127.8"		

Step	Procedure	Notes	Pass/Fail
	Save the event.		
4	Verify that the field allows the use of decimal points for entering mile markers.	The field should read "127.8"	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.14 FP 2261 – AVL/RR Service Memory Usage**

**2.2.14.1 Test Description**

The objective of this test is to verify that AVL no longer has a memory leak. The memory leak was a result of closed events never being cleared out of the AVL subsystem memory.

**2.2.14.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.14.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Monitor the memory usage of the AVL subsystem.  Open and close a very large quantity of events (>1000).	Defer to District. This test requires the massive number of events created and closed by a district over a number of days.	
2	Verify that the average memory usage of AVL does not grow over time.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>



Test End Date and Time	
Tester	
Witness	

**2.2.15 FP 2283 – Data Archive running out of memory; crashing; reporting no data**

**2.2.15.1 Test Description**

The objective of this test is to verify that the storing of DMS records by data archive no longer causes linear memory growth. The subsystem would fall behind due to long duration inserts. Eventually, it would grow to the process memory limit and crash.

**2.2.15.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.15.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Ensure you have at least 100 DMS configured to display travel time messages.  Allow the system to run and data archive to log the DMS activity.	Defer to District. This test requires the massive number of events created and closed by a district over a number of days.	
2	Verify that the average memory usage of the data archive subsystem does not grow linearly over time.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.16 FP 2335 – Response Plans not working**

**2.2.16.1 Test Description**

The objective of this test is to verify that reponse plans do not throw an error when the user attempts to add multiple recipients to the mail item.

**2.2.16.2 Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.16.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event.  Ensure the event has a location.  Click “Save and get response”.  Modify the email to have more than one recipient.  Accept the response plan.  Activate the response plan.		

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
2	Verify that the response plan activates without throwing an error.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.17 FP 2381 – Improved editing of multiple DMSs (compared with 5.1 and previous)**

**2.2.17.1 Test Description**

The objective of this test is to verify that the performance of multi edit functionality in response plans is not significantly impacted by the quantity of DMSs being edited.

**2.2.17.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.17.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Add all DMSs to a single response plan. Multi-edit all of the DMSs.		
2	Verify that there is not a significant delay between typing each letter.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.18 FP 2391 – SunGuide Edit Link Placement not functioning properly**

**2.2.18.1 Test Description**

The objective of this test is to verify that the basic functionality of the edit link placement dialog is working properly.

**2.2.18.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.18.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Right click the operator map.  Navigate to TSS > Edit link placement...  Place nodes on the map for an existing link (add a link if the system has none).  Save the changes.  Exit the link placement editor.		



Step	Procedure	Notes	Pass/Fail
2	Verify that the newly configured and placed link appears on the operator map.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.19 FP 2411 – AVL vehicle stuck in arrive status after vehicle is departed**

**2.2.19.1 Test Description**

The objective of this test is to verify that road rangers using the LOCATE software no longer get “stuck” in an arrived state. In 5.1.1, this problem was caused by a threading issue in the AVL subsystem where a LOCATE status update and the AVL subsystem’s attempt to depart the road ranger would be in conflict.

**2.2.19.2 Test Resources and Setup Conditions**

Requires access to:

- A road ranger using LOCATE
- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.19.3 Test Script**

Test Start Date and Time	Deferred
--------------------------	----------

Step	Procedure	Notes	Pass/Fail
1	Create a new event in SunGuide.  Arrive a road ranger at the event who is currently using LOCATE.  Attempt to depart the road ranger.	This test is deferred to district since we do not have the required LOCATE software for testing.	

Step	Procedure	Notes	Pass/Fail
2	Verify that the road ranger is departed from the event and automatically returns to the patrolling status.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.20 FP 2422 – Random TSS are showing speed of 32000 MPH**

**2.2.20.1 Test Description**

The objective of this test is to verify that SunGuide now reports N/a on the operator map when a Wavetronix HD device sends data with the “valid bit” set to false.

**2.2.20.2 Test Resources and Setup Conditions**

Requires access to:

- Wavetronix HD Device
- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.20.3 Test Script**

Test Start Date and Time	Deferred
--------------------------	----------

Step	Procedure	Notes	Pass/Fail
1	Monitor the tss detailed dialogue for the Wavetronix HD detector in question.	This test will be deferred to the district. It requires a Wavetronix HD device that periodically sends invalid data. So far only a small subset of devices seem to exhibit this behavior.	
2	Verify that the tss details dialogue shows either valid speeds or N/a during the time the device is monitored.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.21 FP 2430 – Travel Time TSS AVI TranscoreAllegro protocol**

**2.2.21.1 Test Description**

The objective of this test is to verify that the Transcore UDP protocol is properly recognized by the admin editor.

**2.2.21.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.21.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the admin editor.  Navigate to TSS > detectors  Add a detector with the type of avi and the UDP Transcore protocol.  Click save.		
2	Verify that the detector is added without error.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.22 FP 2461 – TSS and Map errors upon configuring and mapping sensors**

**2.2.22.1 Test Description**

The objective of this test is to verify that the basic functionality of the edit link placement tool is working properly.

**2.2.22.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.22.3 Test Script**

Test Start Date and Time	Refer to FP 2391
--------------------------	------------------

Step	Procedure	Notes	Pass/Fail
1		This test case is verified as part of FP 2391. These FPs were merged.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	Refer to FP 2391
Tester	
Witness	



### 2.2.23 FP 2466 – Email Alerts using County Long Name

#### 2.2.23.1 Test Description

The objective of this test is to verify that email alerts sent from SunGuide response plans use the county long name followed by the word “county” when describing the location of an incident.

#### 2.2.23.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- Config file element “useLongNameInEmail” is set to true.

#### 2.2.23.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the admin editor.  Navigate to Event Management > Location Configuration> Counties.  Edit a county to ensure its long name and short name are different.  Create a new event.		

Step	Procedure	Notes	Pass/Fail
	Set the location of the event and ensure the location is in the previously edited county.  Click Save and get response.		
2	Verify that the email alert generated by the response plan suggestion uses the county long name followed by the word "county" in the location The objective of this test is to verify that		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.24 FP 2480 – Improved handling of FHP updates**

**2.2.24.1 Test Description**

The objective of this test case is to verify that the newly added FHP alarm filters work as intended. The user should be able to specify which fields are watched for updates. When an updated field is changed, the user should receive a new IDS alarm.

**2.2.24.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- FHP CAD Server Connection

**2.2.24.3 Test Script**

Test Start Date and Time	Also for FP 2496
--------------------------	------------------

Step	Procedure	Notes	Pass/Fail
1	Open the config.xml file.  Add the following within the FHPIncidentDriver section.  <pre>&lt;updates&gt; &lt;update&gt;Arrival Time&lt;/update&gt; &lt;update&gt;Departure Time&lt;/update&gt; &lt;/updates&gt;</pre>		

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
	Monitor the alerts list in SunGuide.		
2	Verify that the user only receives alerts for new incidents and closing incidents		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.25 FP 2495 – Chronology doesn't reflect unconfirmed status in FL-ATIS message**

**2.2.25.1 Test Description**

The objective of this test is to verify that when an event has an unconfirmed status the FLATIS message, SAE description, and event chronology reflect this.

**2.2.25.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.25.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event with an unconfirmed status.  Set the location for the event.		
2	Verify that the SAE description reflects that the event is unconfirmed.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Click save and get response.		
4	Verify that the suggested response plan FLATIS message reflects that the event is unconfirmed.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Step	Procedure	Notes	Pass/Fail
5	Accept and Activate the response plan, then go back to the event details dialog.		
6	Verify that the PUBLISH entry in the chronology reflects that the event is unconfirmed.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.2.26 FP 2496 – FHP CAD Suggestions for Enhancement

#### 2.2.26.1 Test Description

The objective of this test is to verify that FHP CAD alerts can be filtered by field. This is related to FP 2480.

#### 2.2.26.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

#### 2.2.26.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		This FP is verified by 2480.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.27 FP 2500 – rangeZoomLimit command causing device issue**

**2.2.27.1 Test Description**

The objective of this test is to verify that using zoom controls on the Bosch HD camera does not cause errors.

**2.2.27.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- Bosch HD Camera

**2.2.27.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Right click the Bosch HD camera on the operator map.  Open a video on desktop window from the context menu.  Zoom in all the way with the video on desktop controls.  Zoom out all the way with the video on desktop controls.		
2	Verify that the camera zooms as expected, and errors are reported in system messages.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>



Test End Date and Time	
Tester	
Witness	

**2.2.28 FP 2519 – Exception in IDS**

**2.2.28.1 Test Description**

The objective of this test is to verify that the IDS subsystem no longer throws exceptions when FHP incidents are received.

**2.2.28.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.28.3 Test Script**

Test Start Date and Time	Deferred to District.
--------------------------	-----------------------

Step	Procedure	Notes	Pass/Fail
1		Defer to district.  The set up conditions for the exceptions were never discovered.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.29 FP 2522 – Installation Media Report Templates Folder**

**2.2.29.1 Test Description**

The objective of this test is to verify that the folder structure of the reports has changed based on central office recommendation.

**2.2.29.2 Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.29.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Navigate to the report template folder on the installation media.		
2	Verify that within the folder there are two subfolders. One for Oracle, and one for SQL Server.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Navigate to the report template folder of an installed SunGuide application server.		
4	Verify that within the folder there are two subfolders. One for Oracle, and one for SQL Server.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.2.30 FP 2523 – RPG Action Failure Prevents Other Actions

#### 2.2.30.1 Test Description

The objective of this test is to verify that the response plan generator no longer hangs when failing to communicate with an SMTP server.

#### 2.2.30.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

#### 2.2.30.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Turn off the smtp server for this SunGuide system.  Create an event.  Set the location.  Save and get response.  Accept the suggested response.		

Step	Procedure	Notes	Pass/Fail
	Edit the email item to ensure the email is set to send to at least one recipient.  Ensure you can see both the response plan and the event chronology.  Activate the plan.		
2	Verify that the chronology is updated immediately with the PUBLISH entry.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.31 FP 2526 – sparr is not creating events**

**2.2.31.1 Test Description**

The objective of this test is to verify that the SPARR is able to create events in SunGuide.

**2.2.31.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- A smartphone with the SPARR installed.

**2.2.31.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Log in to the SPARR.  Create an event using the SPARR.  Open the event list from the SunGuide operator map.		
2	Verify that the event was created in SunGuide.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.32 FP 2529 – DMS still sending sequence messages to MAS**

**2.2.32.1 Test Description**

The objective of this test is to verify that DMS sequences are no longer being read and used by SunGuide.

**2.2.32.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.32.3 Test Script**

Test Start Date and Time	Deferred to District.
--------------------------	-----------------------

Step	Procedure	Notes	Pass/Fail
1		Defer to District. The setup conditions for this test are unique to D2.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.33 FP 2530 – Unable to audit duplicate Road Ranger activities**

**2.2.33.1 Test Description**

The objective of this test is to verify that duplicate road ranger activities mistakenly entered by an operator can be deleted via event auditing.

**2.2.33.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.33.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event.  Set the location.  Dispatch a road ranger to the event.  Arrive the road ranger.  Enter two identical “Flares” activities.		

Step	Procedure	Notes	Pass/Fail
	Depart the road ranger from the incident. Change the event status to "Closed". Navigate to the auditing tab of the tabbed GUI. Audit the vehicle dispatch activities. Attempt to delete one of the two "Flares" activities.		
2	Verify that the activity is deleted from the event.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.34 FP 2532 – SunGuide reports "Center Lane Blocked" with only two travel lanes**

**2.2.34.1 Test Description**

The objective of this test is to verify that SunGuide lists the blockage as “Left lane blocked” when the left of two travel lanes with shoulders is blocked.

**2.2.34.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.34.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	If an EM location does not exist with the following lane configuration, then configure one.  S T T S  Create an event.  Set the location to the above EM location.  Block the left travel lane.		

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
	Click save and get response.		
2	Verify that response plan generator shows "Left Lane blocked".		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.35 FP 2535 – MAS/DMS using DMS ID number instead of DMS name in System Messages dialog**

**2.2.35.1 Test Description**

The objective of this test is to verify that the DMS name is included with DMS messages in the system messages window.

**2.2.35.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.35.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the device status window for DMS.  Attempt to send a message to a sign with no connected device or simulator.		
2	Verify that the system message produced includes the DMS name.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.36 FP 2536 – Selecting 0 radius returns multiple DMS signs**

**2.2.36.1 Test Description**

The objective of this test is to verify that setting the inclusion radius for DMS to zero removes all DMS from the suggested plan.

**2.2.36.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.36.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create a crash event.  Set the location to the east end of the east bound section of I-10 above Tallahassee.  Click save and get response.  Ensure that the reponse plan suggests at least one DMS based on radius.  Set the inclusion radius to zero.		



Step	Procedure	Notes	Pass/Fail
	Get a new response.		
2	Verify that the response plan removes all DMS.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.37 FP 2537 – SID and Service name mismatch does not allow DMS to connect to the database**

**2.2.37.1 Test Description**

The objective of this test is to verify that DMS is able to connect to the database with the SID and Service name do not match

**2.2.37.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1 and connected to an Oracle database
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.37.3 Test Script**

Test Start Date and Time	Deferred to District
--------------------------	----------------------

Step	Procedure	Notes	Pass/Fail
1		Defer to district.  The setup conditions for this test are unique to District 2.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.38 FP 2538 – Event fails to save due to Comment Type**

**2.2.38.1 Test Description**

The objective of this test is to verify that custom comment types do not prevent the saving of an event.

**2.2.38.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.38.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the admin editor.  Navigate to Event Management > Comment Types  Add a new comment type.  Create a new SunGuide event from the operator map.  Set the location.  Add a comment with the newly created type.		

Step	Procedure	Notes	Pass/Fail
	Click save.		
2	Verify that the event is saved without error.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.39 FP 2539 – Multiple emails being sent to same user in response plan**

**2.2.39.1 Test Description**

The objective of this test is to verify that multiple emails are not sent to the same user when the response plan is activated multiple times.

**2.2.39.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- SMTP server is on

**2.2.39.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create a new event.  Set the location.  Click save and get response.  Accept the generated plan.  Edit the email item and ensure it has at least one recipient.		

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
	Activate the plan. Click Activate a second time.		
2	Verify that the user receives only a single email from the response plan.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.40 FP 2540 – SAS item flipping from on/off**

**2.2.40.1 Test Description**

The objective of this test is to verify that SAS items entered in different timezones no longer toggle on and off randomly

**2.2.40.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.40.3 Test Script**

Test Start Date and Time	Deferred to District
--------------------------	----------------------

Step	Procedure	Notes	Pass/Fail
1		Defer to district. The set up conditions for this test are unique to District 2.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.2.41 FP 2541 – Improved interaction with TVT

#### 2.2.41.1 Test Description

The objective of this test is to verify that TVT messages reassert themselves when the sign is blanked.

#### 2.2.41.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

#### 2.2.41.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Ensure travel times are enabled and are displayed on at least one sign.  Blank the queue of a DMS that is currently displaying travel times.		
2	Verify that travel times are reposted to the sign after the configured interval.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>



Test End Date and Time	
Tester	
Witness	

**2.2.42 FP 2542 – SAS will not allow multiple schedules to run on a device simultaneously**

**2.2.42.1 Test Description**

The objective of this test is to verify that SAS will allow for multiple schedules to be run on the same device.

**2.2.42.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.42.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the scheduled actions dialog.  Create a new schedule.  Add an item to the schedule.  Configure the item to start in the near future and to put a test message on a single DMS at priority 2.  Save the item.		

Step	Procedure	Notes	Pass/Fail
	Create a second schedule.  Add an item to the schedule.  Configure the item to start at the same time as the previously configured item and to put a different test message on the same DMS at priority 1.  Activate both schedules.  Wait until the scheduled activation time.		
2	Verify that the test message from the second schedule is displayed on the sign and that both messages appear in the MAS queue.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.43 FP 2543 – Event not published on FLATIS website but is on IVR**

**2.2.43.1 Test Description**

The objective of this test is to verify that localeData in the C2C outgoing feed uses the numeric ID for roadways.

**2.2.43.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- C2C Test Client

**2.2.43.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Start the C2C Test Client.  In the test client, expand the localeData section.		
2	Verify that the roadway tag uses the numeric ID.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.44 FP 2544 – DMS Provider not properly disconnecting for systems using subsystem communications**

**2.2.44.1 Test Description**

The objective of this test is to verify that the DMS subsystem no longer prints error messages to the log when disconnecting.

**2.2.44.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- Status logger

**2.2.44.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Ensure that EM and DMS subsystems are on.  Open the status logger and filter to only DMS.  Stop DMS subsystem.		
2	Verify that exiting from DMS while EM was connected did not throw any errors.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.45 FP 2545 – TvT not gracefully handling MAS disconnect**

**2.2.45.1 Test Description**

The objective of this test is to verify that TvT is able to send new messages to the sign after the MAS queue is blanked.

**2.2.45.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- Skyline simulator
- TVT is running

**2.2.45.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Ensure travel times are displayed on the Sims.  Stop MAS.  Start MAS.		
2	Verify no errors occurred for TVT or MAS.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



### 2.2.46 FP 2546 – Lane Blockage Closed with no travel lanes

#### 2.2.46.1 Test Description

The objective of this test is to verify that lane blockage when the lane configuration contains no travel lanes reflects the situation rather than always showing closed.

#### 2.2.46.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

#### 2.2.46.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Find or configure an EM location with the following configuration.  S R S  Create a new event in SunGuide.  Set the location of the event to the above location.  Block the left shoulder.		

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
	Click save and get response.		
2	Verify that the blockage is described as “Left shoulder blocked” in the response plan.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.47 FP 2547 – IDS not resolving alerts**

**2.2.47.1 Test Description**

The objective of this test is to verify that IDS alerts resolved from the GUI are in fact marked as resolved in the database.

**2.2.47.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.47.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the event list.  Resolve the most recent alert and make note of the information, so it could be identified if seen again.  Stop IDS.  Start IDS.		
2	Verify that the resolved incident does not reappear.	Additionally, a database management client can be used to confirm the alert's status in the database.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.2.48 FP 2548 – Events not being published to FLATIS

#### 2.2.48.1 Test Description

The objective of this test is to verify that events appear in the FLATIS command receiver when created and published in SunGuide.

#### 2.2.48.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- C2C Test Suite

#### 2.2.48.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the command receiver from the C2C test suite.  Create an event in SunGuide.  Set the location.  Block a travel lane.  Click save and get response.		

Step	Procedure	Notes	Pass/Fail
	Accept the suggested plan. Activate the plan.		
2	Verify that the published event appears in the command receiver.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.49 FP 2549 – Data Archive memory usage spikes on startup**

**2.2.49.1 Test Description**

The objective of this test is to verify that data archive only reads the most recent configuration for detectors, links, and lanes.

**2.2.49.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.49.3 Test Script**

Test Start Date and Time	Deferred to District
--------------------------	----------------------

Step	Procedure	Notes	Pass/Fail
1		Defer to district.  The setup conditions for this test are unique to District 2.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.50 FP 2550 – Various issues at the MDX test deployment**

**2.2.50.1 Test Description**

The objective of this test is to verify that some issues encountered during the MDX installation are resolved.

**2.2.50.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.50.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event in SunGuide.  Set the location.  Click save and get response.  Accept the suggested plan.  If no DMS items are part of the plan, add a DMS.  Activate the plan.		



Step	Procedure	Notes	Pass/Fail
	Run the chronology report from the event details dialog.		
2	Verify that the first notified timestamp is populated.  Verify that the initial confirmed date is populated.  Verify that the DMS and email items appear in the chronology report.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>  Pass <input type="checkbox"/> Fail <input type="checkbox"/>  Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Choose a camera from the nearest camera selected dropdown.  Save the event.		
4	Verify that the event was saved without error.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.51 FP 2552 – Event Severity not updating**

**2.2.51.1 Test Description**

The objective of this test is to verify that operator map no longer throws an error related to event severity when publishing an event.

**2.2.51.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.51.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the status logger and filter to operator map.  Monitor the status logger during the test.  Create an event in Sunguide.  Set the location.  Block at least one travel lane.  Click save and get response.		

Step	Procedure	Notes	Pass/Fail
	Accept the suggested plan.  Activate the suggested plan.		
2	Verify that operator map does not throw an exception starting with "Failed to send PublishEventReq through C2C."		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.52 FP 2553 – Various DAR Error/Warning Messages and Auto-Restart**

**2.2.52.1 Test Description**

The objective of this test is to verify that the zipping portion and the upload portion of the DAR subsystem now operate independently.

**2.2.52.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- DAR FTP upload server
- RTMS simulator

**2.2.52.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Ensure the DAR is started and that zipped xml is being uploaded to the target ftp server.  Sever the connection from SunGuide to the ftp server.  Using windows explorer, navigate to the RITIS zip path.	If a network failure cannot be simulated, this can be accomplished by changing the IP in the config file and restarting DAR.  This location is detailed in config.xml.	

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
2	Verify zip files are being created and placed in this folder.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.53 FP 2555 – Fixed display of vehicle names across subsystem, EM, and SPARR**

**2.2.53.1 Test Description**

The objective of this test is to verify that the vehicle name is used rather than the ID in the vehicle status list.

**2.2.53.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.53.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the event details dialog and go to the vehicle status list. Force some vehicle updates from the SPARR or other events.		
2	Verify that the vehicle name and not its database ID appear in updates.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.2.54 FP 2556 – Unable to interact with EM event

#### 2.2.54.1 Test Description

The objective of this test is to verify that an event created with no location initially can change ownership between users.

#### 2.2.54.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- 2 Workstations with Internet Explorer 9 or 10 and .NET 4.0 installed

#### 2.2.54.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event in SunGuide from the event list.  Do not assign the event a location.  Have a second user attempt to obtain ownership of the newly created event.		
2	Verify that the second user obtains ownership without error.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.55 FP 2557 – Unable to save lane blockage in event**

**2.2.55.1 Test Description**

The objective of this test is to verify that lane blockage can be saved for any event.

**2.2.55.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.55.3 Test Script**

Test Start Date and Time	Deferred to District 2.
--------------------------	-------------------------

Step	Procedure	Notes	Pass/Fail
1		Defer to district.  Thought the test itself is simple the environmental conditions are unique to District 2.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.56 FP 2563 – Reimplement DMS Groups**

**2.2.56.1 Test Description**

The objective of this test is to verify that the DMS groups and related functionality have been reimplemented in SunGuide.

**2.2.56.2 Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.56.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create a new DMS group named “TEST” and add three signs to it.  In the device messaging dialog, filter on group and select “TEST”		
2	Verify that only the signs in the “TEST” group appear in the list.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Create a new schedule.  Set the schedule to post a message to DMS.		

Step	Procedure	Notes	Pass/Fail
	Filter the available DMS to the "TEST" group.		
4	Verify that only signs from the "TEST" group are available as sign choices.		Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>
5	Enable the schedule and wait for the schedule to trigger.		
6	Verify that the scheduled message was posted to only the signs in the "TEST" group		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
7	<p>Ad Hoc Steps:                      Added a new sign to the group.</p> <p>Checking if the new sign appears in the group in SAS.</p> <p>Check if a message is placed on the new sign for a recurring schedule.</p> <p>Add the group to a response plan and verify the individual signs in the group appear.</p> <p>Filter device messaging to group, select all signs and send a message to verify the message goes to all of the signs.</p>		

Test End Date and Time	
Tester	
Witness	

**2.2.57 FP 2564 – DMS Spelling Conflict Dialog Crashing IE/PresentationHost**

**2.2.57.1 Test Description**

The objective of this test is to verify that

**2.2.57.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.57.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Make a SAS schedule with a multiple words that are not approved.  Activate the schedule		
2	Verify user is prompted to resolve spelling errors.  Resolve the spelling errors.  Verify that the operator map does not crash.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.2.58 FP 2565 – Errors with SAS-generated DMS Messages

#### 2.2.58.1 Test Description

The objective of this test is to verify that SAS removes previously created SAS messages from the queue upon start up.

#### 2.2.58.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

#### 2.2.58.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the scheduled actions dialog.  Create a new schedule.  Add an item to the schedule.  Set the item to start in the near future.  The item should post a test message to a DMS for a duration of one hour.		

Step	Procedure	Notes	Pass/Fail
	Activate the schedule.  Wait until the test message is added to the MAS queue.  Stop SAS.  Start SAS.		
2	Verify that the test message appears in the MAS queue only once.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



### 2.2.59 FP 2566 – Fixed integration of C2C links

#### 2.2.59.1 Test Description

The objective of this test is to verify that C2C links can be added to TvT segments and travel times are calculated.

#### 2.2.59.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

#### 2.2.59.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create a TvT segment that contains a C2C link.		
2	Verify that travel times are calculated and displayed for the TvT segment.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.60 FP 2571 – Fixed startup issue with SPARR driver**

**2.2.60.1 Test Description**

The objective of this test is to verify that the SPARR driver starts successfully.

**2.2.60.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.60.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Start the SPARR driver.		
2	Verify that the SPARR driver starts successfully and that a SPARR client is able to communicate with SunGuide.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.61 FP 2573 – Add Platform Requirements to VDD**

**2.2.61.1 Test Description**

The objective of this test is to verify that a platform requirements section was added to the VDD.

**2.2.61.2 Test Resources and Setup Conditions**

Requires access to:

- Sunguide 6.0 Version Description Document

**2.2.61.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the VDD.  Search for the platform requirements section.		
2	Verify that similar text is present for the current version.  SunGuide Release 5.1.1 – Application Server: <input type="checkbox"/> Operating System: Windows Server 2003 or 2008R2 <input type="checkbox"/> .NET: 2.0, .NET 4.0 (4.5 prohibited) <input type="checkbox"/> IIS Web Server <input type="checkbox"/> Oracle Client 11.2 – Database Server:		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

Step	Procedure	Notes	Pass/Fail
	<ul style="list-style-type: none"> <li><input type="checkbox"/> Operating System: Windows Server 2003 or 2008R2</li> <li><input type="checkbox"/> Database Product: Oracle Database Enterprise 11.1 or 11.2</li> <li>– Workstation: <ul style="list-style-type: none"> <li><input type="checkbox"/> Operating System: Windows XP or 7</li> <li><input type="checkbox"/> Browser: IE 8 or IE 9; (IE 10 not supported)</li> <li><input type="checkbox"/> .NET: 2.0, 4.0 required, (.NET 4.5 not supported)</li> </ul> </li>   <li>SunGuide Release 6.0</li> <li>– Application Server: <ul style="list-style-type: none"> <li><input type="checkbox"/> Operating System: Windows Server 2003, 2008R2, or 2012</li> <li><input type="checkbox"/> .NET: 2.0, 4.0 required (.NET 4.5 can be installed but will prevent Operator Map from running on Server)</li> <li><input type="checkbox"/> ODP.NET (If Oracle is being used.)</li> <li><input type="checkbox"/> IIS Web Server</li> </ul> </li> <li>– Database Server: <ul style="list-style-type: none"> <li><input type="checkbox"/> Operating System: Windows Server 2003 or 2008R2</li> <li><input type="checkbox"/> Database Product: Oracle 11.2 or 11.1 or SQL Server 2012</li> </ul> </li> <li>– Workstation: <ul style="list-style-type: none"> <li><input type="checkbox"/> Operating System: Windows XP or 7</li> <li><input type="checkbox"/> Browser: IE 8 or IE 9; IE 10</li> <li><input type="checkbox"/> .NET: 2.0, 4.0 required, (.NET 4.5 not supported)</li> </ul> </li> </ul>		

Test End Date and Time	
Tester	
Witness	

**2.2.62 FP 2575 – Restored previous interface of RRXML driver**

**2.2.62.1 Test Description**

The objective of this test is to verify that RRXML and LOCATE communicate properly.

**2.2.62.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.62.3 Test Script**

Test Start Date and Time	Deferring to District
--------------------------	-----------------------

Step	Procedure	Notes	Pass/Fail
1		Defer to district.  The LOCATE software and hardware is required for this test.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.63 FP 2576 – Fixed error setting RMC rate/range values**

**2.2.63.1 Test Description**

The objective of this test is to verify that rates and range values for a ramp meter controller can be successfully edited.

**2.2.63.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- Ramp Meter Controller simulator

**2.2.63.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the RMC dialog. Attempt to set the range and rates for the selected RMC.		
2	Verify that the changes are made successfully.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.64 FP 2578 – Admin Editor does not show assigned TVT templates after DMS name change**

**2.2.64.1 Test Description**

The objective of this test is to verify that after changing the name of a DMS the assigned TvT template is still shown.

**2.2.64.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.64.3 Test Script**

Test Start Date and Time	Deferring to District
--------------------------	-----------------------

Step	Procedure	Notes	Pass/Fail
1		Defer to District.  The issue was never reproduced outside of District 2.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.65 FP 2579 – Response Plan Discrepancy Email vs. DMS Wording**

**2.2.65.1 Test Description**

The objective of this test is to verify that response plan emails and dms now follow identical verbage in regard to lane closures. In both mediums, all lanes and shoulders blocked should read – CLOSED and all lanes without shoulders blocked should read – BLOCKED.

**2.2.65.2 Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.65.3 Test Script**

Test Start Date and Time	Using next test case for this item
--------------------------	------------------------------------

Step	Procedure	Notes	Pass/Fail
1	Create an event in SunGuide.  Choose a location that has nearby DMS and at least two travel lanes and two shoulders.  Block all lanes and shoulders.  Generate a response plan.		



Step	Procedure	Notes	Pass/Fail
	If no DMS is included in the response, accept the response and add a DMS.		
2	Verify that both the email and the DMS show lanes are CLOSED.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Terminate the response plan from step 1.  Unblock one shoulder.  Generate a response plan.  If no DMS is included in the response, accept the response and add a DMS.		
4	Verify that both the email and the DMS show lanes are BLOCKED.	Email and FI-Atis show BLOCKED, but DMS and HAR say CLOSED.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.2.66 FP 2579 – Response Plan Generator

#### 2.2.66.1 Test Description

The email messages generated by the response plan generator is not more descriptive than using a single word, “closed” or “blocked” for the lane blockage. The objective of this test is to verify that

#### 2.2.66.2 Test Resources and Setup Conditions

Run through the various lane blockage scenarios and record what terminology is produced for each closure scenario. Show the existing behavior reported as an issue in Release 6.0 Patch 3, and show the desired behavior in Release 6.0 Patch 3 Hotfix 1 and the Release 6.1 candidate build. Start with the typical scenario using a lane map of Left Shoulder, Travel Lane, Travel Lane, Right Shoulder to see what specific scenarios show the issue, then spot check additional lane maps for various shoulder blockages with travel lanes closed to also explore that the blockage description correctly and precisely identifies those scenarios as well.

- TERL Network Environment
- Application Server running Release 6.0 Patch 3
- Application Server running Release 6.0 Patch 3 Hotfix 1
- Two operator workstations running Windows 7 with various network and system utilities installed

#### 2.2.66.3 Test Script

Test Start Date and Time	
--------------------------	--


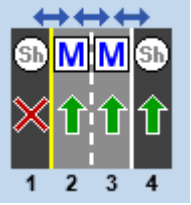
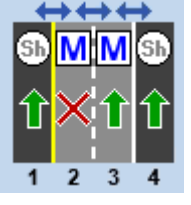

Step	Requirement	Procedure	Notes	Pass/Fail
1		Repeat the following steps for each version of the SunGuide software under test.		
2		Log into SunGuide operator map.		


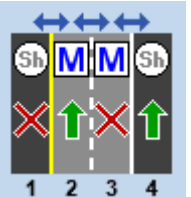
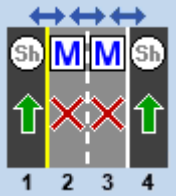
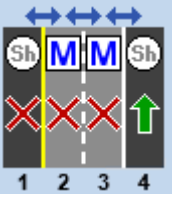
SunGuide® Software System  
 SunGuide Software Release 6.1 IV&V Test Procedures

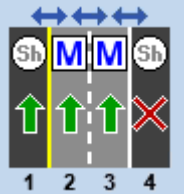
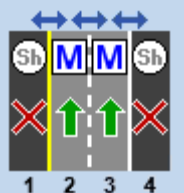


---

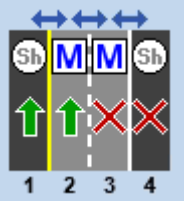
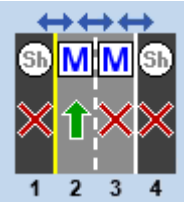
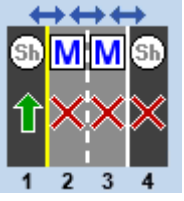
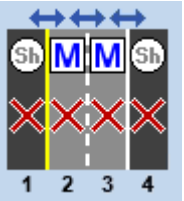
Step	Requirement	Procedure	Notes	Pass/Fail
3		Create an active, crash event.		
4		For each scenario in Table 2.1 below, run steps 4-9 below, recording the lane blockage description from the email in the appropriate column in the table, repeating for all versions of the software		
5		In the Event Details window, expand the Lane Blockage section of the If needed, use the Insert Lane button, quantity, and lane type the lane map of the event to match the scenario		
6		Change the lane blockage of the event to match the scenario		
7		Click the "Save, Get Response" button to launch the suggested response plan		
8		View the email item		
9		Record the lane blockage description into the appropriate field in the table		
10		Repeat for each scenario in Table 2.1		
11	FP 2579	Verify that each lane blockage description clearly describes the lane blockage scenario	May want to send the table to the originator of the footprint to help with the verification that the lane blockage descriptions are sufficient	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

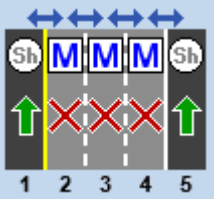
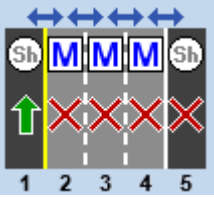
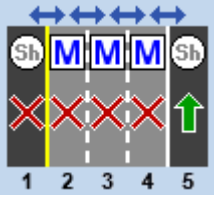
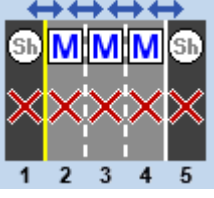
**Table 2.1 Lane Blockage Scenarios and Descriptions**

Scenario	Lane Map and Blockage	Email Blockage Description Release 6.0 Patch 3	Email Blockage Description Release 6.1
1		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> No Lanes Blocked.</p>	
2		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> Left Shoulder Blocked</p>	
3		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> 1 Left Lane (of 2 Lanes) Blocked</p>	
4		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V Mail List, IVV Gr</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> 1 Left Lane (of 2 Lanes) Blocked, Left Shoulder Blocked</p>	

Scenario	Lane Map and Blockage	Email Blockage Description Release 6.0 Patch 3	Email Blockage Description Release 6.1
5		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V M</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> 1 Right Lane (of 2 Lanes) Blocked</p>	
6		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V M:</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> 1 Right Lane (of 2 Lanes) Blocked, Left Shoulder Blocked</p>	
7		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V M</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> Closed.</p>	
8		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V M</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> Closed.</p>	

Scenario	Lane Map and Blockage	Email Blockage Description Release 6.0 Patch 3	Email Blockage Description Release 6.1
9		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V I</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> Right Shoulder Blocked</p>	
10		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> Left Shoulder Blocked, Right Shoulder Blocked</p>	
11		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V N</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> 1 Left Lane (of 2 Lanes) Blocked, Right Shoulder Blocked</p>	
12		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V Mai</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> 1 Left Lane (of 2 Lanes) Blocked, Left Shoulder Blocked, Right Shoulder Blocked</p>	

Scenario	Lane Map and Blockage	Email Blockage Description Release 6.0 Patch 3	Email Blockage Description Release 6.1
13		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V Ma</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b>                      1 Right Lane (of 2 Lanes) Blocked, Right Shoulder Blocked</p>	
14		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V Ma</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b>                      1 Right Lane (of 2 Lanes) Blocked, Left Shoulder Blocked, Right Shoulder Blocked</p>	
15		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b>                      Closed.</p>	
16		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V M</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b>                      Closed.</p>	

Scenario	Lane Map and Blockage	Email Blockage Description Release 6.0 Patch 3	Email Blockage Description Release 6.1
17		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V Mai</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> Closed.</p>	
18		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> Closed.</p>	
19		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> Closed.</p>	
20		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b> Closed.</p>	



Scenario	Lane Map and Blockage	Email Blockage Description Release 6.0 Patch 3	Email Blockage Description Release 6.1
21		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V Mai</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b>                  2 Left Lanes (of 3 Lanes) Blocked, Left Shoulder Blocked, Right Shoulder Blocked</p>	
22		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V'</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b>                  2 Left Lanes (of 3 Lanes) Blocked</p>	
23		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V M</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b>                  2 Lanes (of 3 Lanes) Blocked</p>	
24		<p><b>Email Groups:</b> 4.2.2 IVV Mail list, IV&amp;V Mai</p> <p><b>Subject:</b></p> <p><b>Title:</b> Crash:</p> <p><b>Location:</b> Leon I-10 WB At MM 206</p> <p><b>Body:</b>                  2 Lanes (of 3 Lanes) Blocked, Left Shoulder Blocked, Right Shoulder Blocked</p>	

Test End Date and Time	
Tester	
Witness	

**2.2.67 FP 2580 – Video Switching has started to report Video Sources not found**

**2.2.67.1 Test Description**

The objective of this test is to verify that new sources can be added to a video switching destination.

**2.2.67.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.67.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Attempt to add a source to a video switching destination.		
2	Verify that the source is added.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.68 FP 2581 – Corrected mapping of link data**

**2.2.68.1 Test Description**

The objective of this test is to verify that the code that controls the rendering of Nokia links creates smooth continuous links.

**2.2.68.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.68.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Enable Nokia data on the operator map. Examine SR-202 in Jacksonville.		
2	Verify that link data is continuous for the roadway.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.69 FP 2583 – Improved disconnect/reconnect logging**

**2.2.69.1 Test Description**

The objective of this test is to verify that cameras handle a loss of communication gracefully.

**2.2.69.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.69.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Disable the port for the camera connection.  Send a P/T/Z command to the camera.  Wait for the camera to enter the failed state.  Enable the port for the camera connection  Send a P/T/Z command to the camera.		
2	Verify no error message appears upon reconnect.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.70 FP 2583 – Limited use of auto-focus by desktop video wall**

**2.2.70.1 Test Description**

The objective of this test is to verify that only one auto-focus request is sent when a camera is opened in a video on desktop window.

**2.2.70.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.70.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open a video on desktop window with a single camera source.		
2	Verify using the status logger that only one auto-focus request is made to the camera.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.71 FP 2586 – Fixed issue with auditing duplicate responder timestamps**

**2.2.71.1 Test Description**

The objective of this test is to verify that responder timestamps can be deleted through the use of event auditing.

**2.2.71.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.71.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Audit an event with responder timestamps.  Attempt to delete a timestamp.		
2	Verify that the timestamp was successfully deleted.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



### 2.2.72 FP 2588 – Improved handling of MAS blanking

#### 2.2.72.1 Test Description

The objective of this test is to verify that TvT is able to send new messages to the sign after the MAS queue is blanked.

#### 2.2.72.2 Test Resources and Setup Conditions

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

#### 2.2.72.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		This test is verified as part of FP 2545	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.73 FP 2589 – Fixed missing dependency of driver**

**2.2.73.1 Test Description**

The objective of this test is to verify that the basic functions of adding, editing, and deleting an RWIS from SunGuide work as intended.

**2.2.73.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.73.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Start the RWIS subsystem.  Attempt to add, edit, and delete an RWIS through admin editor.		
2	Verify that all operations complete successfully.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.74 FP 2590 – Fixed issue with display of BlueTOAD links**

**2.2.74.1 Test Description**

The objective of this test is to verify that BlueTOAD data is rendered properly on the SunGuide operator map.

**2.2.74.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.74.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Enable BlueTOAD data on the operator map.		
2	Verify that data is displayed with no exceptions.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.75 FP 2591 – Removed unnecessary error report on successful action**

**2.2.75.1 Test Description**

The objective of this test is to verify that the basic function of changing a source is completed without extraneous error messages.

**2.2.75.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.75.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Change a source on the video wall.		
2	Verify that no error message appears and that the actions completes successfully.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.76 FP 2592 – Fixed issues with updated Activu driver**

**2.2.76.1 Test Description**

The objective of this test is to verify that sources can be added to an Activu video wall without errors.

**2.2.76.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.76.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Set up an Activu video wall.  Place at least two new sources into the layout.		
2	Verify that all operations complete without error.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.77 FP 2598 – Event chronology not showing primary/secondary entries**

**2.2.77.1 Test Description**

The objective of this test is to verify that the event chronology shows an entry when an event is set as primary or secondary. This functionality existed in 5.1.1, but was mistakenly lost in the transition to 6.0.

**2.2.77.2 Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.77.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create two events in SunGuide.  Set the second event as a secondary to the first event.  Run the event chronology report for both events.		
2	Verify that both event chronology reports have an appropriate entry at the time when they were connected. This chronology entry should include the event Id.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.78 FP 2605 – Response plans not generating if operator uses "Response Plan" button on EM list**

**2.2.78.1 Test Description**

The objective of this test is to verify that the response plan link in the event list opens the RPG with the default values for DMS, HAR, and TAM inclusion radius.

**2.2.78.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.78.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event in SunGuide.  Set the location.  Save and get response.  Accept the suggestion.  Activate the plan.		



Step	Procedure	Notes	Pass/Fail
	Close the response plan window.  Click the response plan link from the event list.		
2	Verify that the default distance is used for DMS, HAR, and TAMS.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.79 FP 2609 – Investigating issues reported in SunGuide 6.0 patch 2**

**2.2.79.1 Test Description**

The objective of this test is to verify that camera blocking and unblocking works as expected.

**2.2.79.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.79.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the CCTV tab of the tabbed GUI. Block a camera.		
2	Verify that the camera is blocked.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Unblock the camera.		
4	Verify that the camera is unblocked.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Test End Date and Time	
Tester	
Witness	

**2.2.80 FP 2612 – TSS Lagging & TSS Alerts Not Resolving**

**2.2.80.1 Test Description**

The objective of this test is to verify that TSS alerts do not lag behind when in high quantity.

**2.2.80.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.80.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		Defer to district.  The environmental conditions of this test are unique to District 5.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.81 FP 2613 – License Plate matching appears to be case-sensitive**

**2.2.81.1 Test Description**

The objective of this test is to verify that license plate matching is no longer case sensitive.

**2.2.81.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.81.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create two events.  Set locations in both.  Add a vehicle to the first event with the following tag.  "ABC123"  Add a vehicle to the second even with the following tag.  "abc123"		

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
2	Verify that both events show the other as a matching vehicle.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.82 FP 2617 – VDD Platform Requirements update - SQL Server requires RS to run Native Client 11.0 which requires Windows Server 2008**

**2.2.82.1 Test Description**

The objective of this test is to verify that the VDD states that Windows Server 2008 is required.

**2.2.82.2 Test Resources and Setup Conditions**

Requires access to:

- SunGuide 6.1 Version Description Document

**2.2.82.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open up the VDD.		
2	Verify that the following information is contained within.  Native Client requires Windows Server 2008. So, only RS requires Native Client 11.0 and thus Windows Server 2008, and RS could be run on the database server (which already requires Server 2008) as a workaround if a user has Server 2003 in place for other application services in a pinch.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.83 FP 2618 – Event showing NULL for responder timestamps despite having chronology entries**

**2.2.83.1 Test Description**

The objective of this test is to verify that timestamps are tracked as expected.

**2.2.83.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.83.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		Defer to district.  The environmental conditions of this issue are unique to D2.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.2.84 FP 2623 – County Information Missing in C2C data to FL-ATIS

#### 2.2.84.1 Test Description

The objective of this test is to verify that an a message is logged to status logger and an email is sent to the configured address when c2c publisher fails to read the navteq map data.

#### 2.2.84.2 Test Resources and Setup Conditions

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

#### 2.2.84.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Stop c2c publisher.  Open the SunGuide config file.  Set the email address in the c2c publisher section to an email address that you can access.  Set the address for the navteq map data to a bogus server name to simulate an unknown network name.		

Step	Procedure	Notes	Pass/Fail
	Ensure that the smtp server is on for your environment.  Start c2c publisher.		
2	Verify that the status logger contains a message stating that the publisher cannot find the map data.  Verify that an email was sent to the configured email address describing the same problem.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>  Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.85 FP 2624 – Connectivity issues with MCP Manager**

**2.2.85.1 Test Description**

The objective of this test is verify that connectivity issues observed in District 6 with the MCP manager are resolved.

**2.2.85.2 Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.85.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		The environmental conditions for this footprint are unique to District 6. Defer to district.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.86 FP 2626 – User Authenticated to Some Subsystems and not Others**

**2.2.86.1 Test Description**

The objective of this test to verify that user authentication is working as intended.

**2.2.86.2 Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.86.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		Defer to District	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.87 FP 2627 – Errors with SAS subsystem schedules**

**2.2.87.1 Test Description**

The objective of this test is to verify that the creation of DMS scheduled actions works as intended.

**2.2.87.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.87.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create new Schedule  Add new item to schedule  Set the time to some time in the near future.  Select DMS  Select text from message library  Activate schedule.		

Step	Procedure	Notes	Pass/Fail
2	Verify that the message appears on the sign at the scheduled time		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.88 FP 2634 – Failure to disassociate Video Source from Camera**

**2.2.88.1 Test Description**

The objective of this test is verify that existing cameras can be saved with the video source checkbox unchecked.

**2.2.88.2 Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.88.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the admin editor and navigate to the edit camera page.  Attach a video device to a camera and save it.  Edit the same camera and uncheck the associate to video device checkbox.  Click “Save”.		
2	Verify that the camera is saved successfully.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>



Test End Date and Time	
Tester	
Witness	

**2.2.89 FP 2635 – Saved open windows not working for WPF windows**

**2.2.89.1 Test Description**

The objective of this test is to verify that the locations and sizes of WPF windows can be saved between browser sessions.

**2.2.89.2 Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.89.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Close all SunGuide windows except the operator map.  Open the DMS device status dialog.  Right click the map and select preferences > save current window positions.  Log out of the operator map.  Log in to the operator map.		
2	Verify that the DMS device status dialog appears in its saved location.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.90 FP 2636 – VSL Plans are not sorted**

**2.2.90.1 Test Description**

The objective of this test is to verify that the drop down of VSL group plans is sorted alphanumerically.

**2.2.90.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.90.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the VSL tab of the tabbed GUI.  Click the drop down for VSL group plans.		
2	Verify that the list is in alphanumeric order.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.91 FP 2637 – Resend TSS configuration nightly through DAR**

**2.2.91.1 Test Description**

The objective of this test is to verify that TSS configuration is sent every night at 3AM through the DAR.

**2.2.91.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.91.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Allow the DAR to run over night.		
2	Verify that at 3AM the TSS configuration was sent.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.92 FP 2638 – DMS NTCIP issue with SES America signs**

**2.2.92.1 Test Description**

The objective of this test is to verify that SES America signs continue to be compatible with SunGuide.

**2.2.92.2 Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- SES America sign

**2.2.92.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the DMS detail status. Send a test message to the SES America sign.		
2	Verify that the test message is posted successfully.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.93 FP 2646 – FHP Alerts flooding in after IDF FHP Incident Driver restart**

**2.2.93.1 Test Description**

The objective of this test is to verify that FHP alerts stay removed after the IDS FHP incident driver is restarted. Duplicate alerts in the data were creating a situation where alerts would not stay deleted after restart.

**2.2.93.2 Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.93.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Log into the operator map.  Handle all existing FHP alerts.  Restart IDS FHP incident driver.		
2	Verify that alerts handled prior to the restart do not reappear.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.94 FP 2647 – IDS Dialogs throw error and show no alerts**

**2.2.94.1 Test Description**

The objective of this test is to verify that the IDS subsystem no longer has a dependency on the safety barrier section of the config.xml file.

**2.2.94.2 Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.94.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Stop the IDS subsystem and all IDS drivers.  Open the config.xml.  Cut out everything between the <sb> </sb> tags.  Save the file.  Start the IDS subsystem and drivers.  Open the operator map.  Right click the map and open the event list.		

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
2	Verify that the alerts dialog shows any alerts in the system and that the event list opens without error.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.95 FP 2648 – Reporting subsystem uses item ID instead of short name for AVLRR vehicles and drivers**

**2.2.95.1 Test Description**

The objective of this test is verify that reporting uses strings for vehicle and drivers filters rather than numeric IDs.

**2.2.95.2 Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.95.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the tabbed gui to the reporting tab.  Select one of the road ranger reports with vehicle and driver filters.		
2	Verify that the filters have the names of drivers and vehicles rather than numeric IDs.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.96 FP 2649 – Short Status Option**

**2.2.96.1 Test Description**

The objective of this test is to verify that there is now an button to bring the user from the dms detailed status to the stort status.

**2.2.96.2 Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.96.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the dms detailed status window from the operator map.		
2	Verify that there is a method to open the short status for a sign directly from the detailed status window.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.97 FP 2652 – Update SPARR Driver to allow Event to be changed to "Unresolved"**

**2.2.97.1 Test Description**

The objective of this test is to verify that the SPARR Driver can set events to the unresolved status.

**2.2.97.2 Test Resources and Setup Conditions**

Requires access to:

- SPARR PC Test Application

**2.2.97.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event in SunGuide with a status of "Active".  Using the SPARR PC Test Application, change the status of that event to "Unresolved".		
2	Verify that the event status changed in the event details dialog.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.98 FP 2653 – Event audit reporting "no dispatch records"**

**2.2.98.1 Test Description**

The objective of this test is to verify that there are no longer concurrency issues with road ranger arrival or departure events.

**2.2.98.2 Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.98.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		Defer to district.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.99 FP 2658 – Small errors detected during testing**

**2.2.99.1 Test Description**

The objective of this test is to verify that operator map exceptions were fixed.

**2.2.99.2 Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.99.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		This footprint is a special case. SwRI found errors internally and fixed them.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.100 FP 2660 – FHP Incidents Not Resolving Correctly**

**2.2.100.1 Test Description**

The objective of this test is to verify that FHP incidents are resolved when the user selects a resolution for them and IDS is restarted.

**2.2.100.2 Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.100.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Resolve an existing FHP incident alarm.  Restart IDS subsystem and the IDS FHP driver.		
2	Verify that the resolved incident no longer appears in the list of unresolved alerts.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.101**      *FP 2663 – C2C linkData.link.name contains old roadway ID instead of new numeric roadway ID*

**2.2.101.1**    **Test Description**

The objective of this test is to verify that C2C link name is using the new numeric IDs rather than 5.1.1 style IDs. Also, if a roadway is not set for a link, then it will show <name>unknown</name>.

**2.2.101.2**    **Test Resources and Setup Conditions**

Requires access to:

- RTMS Simulator
- C2C Test Client

**2.2.101.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	View the C2C output with the C2C test client.		
2	Verify that roadways use numeric IDs.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Add a link with no associated roadway and simulate data to that link.  View the C2C output with the C2C test client.		
4	Verify that the roadway name displays as “unknown”.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Test End Date and Time	
Tester	
Witness	

**2.2.102**      *FP 2664 – RS Filtering Not Working Correctly*

**2.2.102.1**    **Test Description**

The objective of this test is to verify that reporting now uses vehicle and driver names when selecting a filter rather than numeric IDs.

**2.2.102.2**    **Test Resources and Setup Conditions**

Requires access to:

- Road Ranger Activity Details report

**2.2.102.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Navigate to the reporting tab of the tabbed GUI.  Select the Road Ranger Activity Details report.		
2	Verify that the vehicles and drivers use names rather than numeric IDs.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Invoke the report using a date filter	This is the “control” to show that the filter works not because there’s no other data in the system	
4	Verify the report contains multiple vehicles and drivers	Failing this step does not indicate a system failure, but insufficient data in the system to properly verify the test	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Step	Procedure	Notes	Pass/Fail
5	Invoke the report using a vehicle filter		
6	Verify the report output only contains the vehicle selected by the filter	The report is empty when using a vehicle filter. The database was used to verify that data should be present.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
7	Invoke the report using a driver filter		
8	Verify the report output only contains the driver selected by the filter	The report is empty when using a driver filter. The database was used to verify that data should be present.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.103**      *FP 2665 – Thresholds Dropping Out*

**2.2.103.1**    **Test Description**

The objective of this test is to verify that thresholds are maintained overnight. Previously, the thresholds would disappear from all lanes at midnight.

**2.2.103.2**    **Test Resources and Setup Conditions**

Requires access to:

- Configure a TSS detector with thresholds

**2.2.103.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Leave TSS running overnight.		
2	Verify that the previously configured thresholds are still valid and represented in the detailed status of the lanes.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.104**      *FP 2668 – EM wouldn't start up and was behaving slowly*

**2.2.104.1**    **Test Description**

The objective of this test is to verify that EM start up is no longer delayed by the presence of a large quantity of events with large chronology logs. The loading of events is now in a separate thread, so it doesn't block other start up activities from occurring.

**2.2.104.2**    **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.104.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create several events with lengthy chronologies.  Stop EM.  Put EM into detail mode in the SunGuide config file.  Start EM.		
2	Verify that EM starts quickly and does not hang on the handler that loads events.	The only true test will be on the District production system due to their unique production environment.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.105**      *FP 2671 – Unable to edit predefined response plans*

**2.2.105.1**    **Test Description**

The objective of this test is to verify that the predefined response plans dialogue can now be opened from the operator map context menu.

**2.2.105.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.105.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the SunGuide operator map.  Right click the map and select Event Management > Predefined Response Plans		
2	Verify that the dialogue opens.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.106**      *FP 2675 – FHP CAD driver filtering out Arrival notifications*

**2.2.106.1**    **Test Description**

The objective of this test is to verify that filter settings for FHP CAD alerts work as intended. More specifically, the objective is to show that alerts with only an arrival time show up when the filter is selected.

**2.2.106.2**    **Test Resources and Setup Conditions**

Requires access to:

- Several existing FHP alerts including at least one with only an arrival time

**2.2.106.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Modify config.xml to include FHP alerts with only an arrival time.  Restart IDS.		
2	Verify that alerts with only an arrival time appear in the alert list.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.107**      *FP 2676 – Compatibility with Externally-Generated DMS Messaging with Color Images*

**2.2.107.1**    **Test Description**

The objective of this test is to verify that external systems can now dictate the desired travel time format. A flag has been added to the DMS output to enable this functionality.

**2.2.107.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.107.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		This test requires an environmental setup unique to OOCEA. Defer to OOCEA.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.108**      *FP 2678 – Audit-deleted responders still appear in event chronology*

**2.2.108.1**    **Test Description**

The objective of this test is to verify that responders deleted through event auditing no longer appear in the event chronology.

**2.2.108.2**    **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.108.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event.  Add some responder timestamps to the event after configuring the required fields (such as location).  Close the event.  Audit the event and remove the responder.  Run an event chronology report on the closed event.		

Step	Procedure	Notes	Pass/Fail
2	Verify that the audited responder timestamps do not appear in the chronology.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.109**      *FP 2680 – Incorrect/confusing floodgate user assignment in FLOODGATE\_HISTORY*

**2.2.109.1**    **Test Description**

The objective of this test is to verify that adding and deleting Spanish and English floodgates is properly recorded in the SunGuide database. Each action (adding/deleting) should have a corresponding entry that communicates what action occurred.

**2.2.109.2**    **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.109.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an English only floodgate.  Add a Spanish version of the floodgate  Delete the Spanish version under a different user.  Delete the English version of the floodgate to delete it entirely.  Run the Regional Floodgates Messages report for the time span of the above actions.		



Step	Procedure	Notes	Pass/Fail
2	Verify that all of the actions are recorded in the report with the proper user assigned to each action.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.110**      *FP 2683 – EM “Lane Blockage Description” incorrect; expected ‘closed’, showing shoulder closed*

**2.2.110.1**    **Test Description**

The objective of this test is to verify that when the only travel lane is an exit ramp, and it is closed, the appropriate lane blockage description is displayed.

**2.2.110.2**    **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.110.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event with a location that’s only travel lane is an exit ramp.  Block the travel lane.  Save and get response.		
2	Verify that the response plan showed the blockage status as “blocked”.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Unblock the travel lane and block the left shoulder.		

Step	Procedure	Notes	Pass/Fail
	Save and get response.		
4	Verify the response plan suggestion messages shows the correct message	Footprint describes system as always considering blockage to be on the right	Pass <input type="checkbox"/> Fail <input type="checkbox"/>
5	Add a Gore lane, if necessary, in between two travel lanes.  Block the gore and unblock all other lanes  Save and get response		
6	Verify the response plan suggestion messages show the correct message		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.111**      *FP 2684 – The REPORT\_TIME column in the VW\_RS\_EVENT\_RPET view differs between Oracle and SQL Server*

**2.2.111.1**      **Test Description**

The objective of this test is to verify that the report\_time column in the vw\_rs\_event\_rpet view is in the same format between Oracle and SQL Server.

**2.2.111.2**      **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.111.3**      **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the VW_RS_EVENT_RPET view in SQL Server Management Studio.		
2	Verify that the REPORT_TIME column is in the following format – “HH24MI”.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Run the Event Level Report in SunGuide.		
4	Verify the report runs without error and the output is reasonable.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.112**      *FP 2685 – AVL would not start; issues with handling road rangers' statuses*

**2.2.112.1**    **Test Description**

The objective of this test is to verify that the locate software no longer conflicts with internal AVL commands.

**2.2.112.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.112.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		Due to the requirement for the LOCATE software and an extremely large volume of test data this will be deferred to District 5.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.113**      *FP 2686 – FHP Incident ID not being populated in events*

**2.2.113.1**    **Test Description**

The objective of this test is to verify that events created from fhp incident alerts have their fhp incident Id populated automatically.

**2.2.113.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.113.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the event list.  Click an FHP incident alert.  Create a new event.		
2	Verify that the FHP incident ID field is automatically populated for the new event.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.114**      *FP 2688 – FHP CAD event assigns incorrect camera automatically*

**2.2.114.1**    **Test Description**

The objective of this test is to verify that the nearest camera field is populated first by cameras on the same roadway before going to other roadways that may be geographically closer.

**2.2.114.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.114.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Configure two cameras in SunGuide; One on I-10 and one with two miles of the first on an arterial.  Create an event that is closer geographically to the arterial camera, but is within 3 miles of the I-10 camera.		
2	Verify that the nearest cctv camera field for the newly created event is set to the I-10 camera.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.115**      *FP 2690 – Involved Vehicle Data will not copy to Cloned Event*

**2.2.115.1**    **Test Description**

The objective of this test is to verify that involved vehicle data is also copied when an event is cloned.

**2.2.115.2**    **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.115.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create a disabled vehicle event and add an involved vehicle.  Clone the event.		
2	Verify that the involved vehicle from the first event appears in the cloned event		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.116**      *FP 2691 – Event Details fails to save when Primary Event Id is set to "N/A"*

**2.2.116.1**    **Test Description**

The objective of this test is to verify that the event details save properly after the primary event ID is set from some value to “N/a”.

**2.2.116.2**    **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.116.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event.  Give the event a primary event and save.  Set the primary event back to “N/a” and save.		
2	Verify that the change is committed by restarting EM and checking that the changes applied prior to the restart are still present in the event details.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.117**      *FP 2692 – Response Plan Chronology Entries not showing Device Names*

**2.2.117.1**    **Test Description**

The objective of this test is to verify that chronology entries for devices such as DMS\_POSTED use the device name rather than numeric ID.

**2.2.117.2**    **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.117.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event. Save the event and get response. Accept the suggested response plan. Manually add two DMS to the event. Activate the response plan.		

Step	Procedure	Notes	Pass/Fail
2	Verify that all messages involving the signs (such as DMS_POSTED) use the sign name rather than numeric ID.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.118**      *FP 2694 – Sorting on AVLRR Operators*

**2.2.118.1**    **Test Description**

The objective of this test is to verify that AVLRR operators appear in alphabetical order in the tabbed GUI.

**2.2.118.2**    **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.118.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the tabbed GUI to the AVLRR tab.  Click the drop down box labelled “driver name”.		
2	Verify that road ranger driver names appear in alphabetical order in the driver name drop down.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.119**      *FP 2695 – Default email group is not being selected*

**2.2.119.1**    **Test Description**

The objective of this test is to verify that

**2.2.119.2**    **Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.119.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the admin editor.  Navigate to Event Management > Mailing Lists  Check which lists are set for “System Use”  Create an event in SunGuide.  Set the location.  Click save and get response.		

Step	Procedure	Notes	Pass/Fail
	Accept the suggested plan.  Edit the mail item.		
2	Verify that the groups designated for system use are included by default.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.120**      *FP 2696 – Incident Duration Full Detail is only showing Severity 1.*

**2.2.120.1**    **Test Description**

The objective of this test is to verify that the incident duration full detail report once again shows events of all severities.

**2.2.120.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.120.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the reporting tab of the SunGuide tabbed GUI.  Run the Incident Duration Full Detail report for a time period containing at least one performance measured event of each severity level.		
2	Verify that the report displays all performance measured events regardless of severity.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.121**      *FP 2698 – Functionality issue with the joystick*

**2.2.121.1**    **Test Description**

The objective of this test is to verify that the MCP joystick behaves as expected for all functions. Previously, joysticks would behave erratically or cease communicating with SunGuide entirely.

**2.2.121.2**    **Test Resources and Setup Conditions**

Requires access to:

- SunGuide software system
- American Dynamics joystick configured into the system
- Any camera configured into the system with presets

**2.2.121.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Use the joystick to pan tilt and zoom the selected camera.		
2	Verify that the camera responds to all commands with the correct behaviour.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Use the controller to view at least two presets on the camera.		
4	Verify that the camera goes to the preset locations.	The only true test of this footprint will be a test by the District as it seems to be highly dependent on their production environment and hardware.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.122**      *FP 2699 – Searching in DMS Library*

**2.2.122.1**    **Test Description**

The objective of this test is to verify that the DMS message library search function looks through the message names first. If it cannot find an appropriately named message, then looks through the list of messages for message text that matches. In either case, once it finds a message with the matching text, it will automatically expand any parent folders that are not already expanded and select the message.

Another objective of the test is to verify the list of DMS messages does not expand beyond the size of the dialog such that the scrollbar is usable and allows the user to scroll to the top and bottom of the list.

**2.2.122.2**    **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.122.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the DMS message library.  Search for a message template by name.		
2	Verify that the search results return messages by title first and by text second.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>

Step	Procedure	Notes	Pass/Fail
3	Ensure the DMS message library contains so many items that all of the items will not fit within the dialog window. Add additional items if necessary.		
4	Verify the scrollbar allows the list to be scrolled from the top to the bottom of the list		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.123**      *FP 2708 – Not able to edit predefined response plans*

**2.2.123.1**    **Test Description**

The objective of this test is that predefined response plans can be edited and saved.

**2.2.123.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.123.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the predefined response plans dialogue.  Edit a plan.  Attempt to save it.		
2	Verify that the changes to the plan were saved.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Test End Date and Time	
Tester	
Witness	

**2.2.124 FP 2710 – VW\_DEVICE**

**2.2.124.1 Test Description**

The objective of this test is to verify that the VW\_DEVICE view is now fixed.

**2.2.124.2 Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database

**2.2.124.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the VW_DEVICE view in SQL Server Management Studio.		
2	Verify that view now uses the numeric ID for unioning the tables rather than string identifier.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Run the DMS report in SunGuide.		
4	Verify that the report runs without error and has reasonable output.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.125**      *FP 2712 – Email body for full closure is incorrect*

**2.2.125.1**    **Test Description**

The objective of this test is to verify that the lane description in the response plan email will now only call out left or right exit/entry ramps when there are ramps defined on both sides of the highway.

**2.2.125.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.125.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create a new SunGuide event at a position along the roadway where there is an exit ramp on only one side.  Block all lanes.  Generate a response plan.		
2	Verify that the ramp blocked message does not include information about which side of the road the ramp is on.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Step	Procedure	Notes	Pass/Fail
3	Create a new SunGuide event at a position along the roadway where there is an exit ramp on both sides of the roadway.  Block all lanes.  Generate a response plan.		
4	Verify that the ramp blocked message includes information about which side of the road the each ramp is on.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.126**      *FP 2713 – Creating Geofence – Unable to add mid points*

**2.2.126.1**    **Test Description**

The objective of this test is to verify that the geofence editor behaves as expected when adding new geofences. More specifically, the editor must be able to construct a new geofence by first creating the start and end points and then adding midpoints.

**2.2.126.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.126.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Right click the map and navigate to Responders > Edit Geofences...  Click “Add New”  Add the start and end point.  Add a midpoint.  Save the new geofence.		

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
2	Verify that the new geofence saved successfully.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.127**      *FP 2717 – EM Issues after 6.0p2 Hotfixes 06 & 09*

**2.2.127.1**    **Test Description**

The objective of this test is to verify that EM is not crashing or becoming unusably slow.

**2.2.127.2**    **Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.127.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		Defer to district.  The set up conditions for this test are unique to District 2.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.128**      *FP 2718 – Safety Barrier Stations selection snaps back to first listed station when EM is updated*

**2.2.128.1**    **Test Description**

The objective of this test is to verify that the safety barriers stations drop down does not reset when a user is scrolling through the large list. This was accomplished by changing the dialogue from IE to WPF.

**2.2.128.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.128.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create enough safety barriers in SunGuide to add a scroll bar to the safety barrier selection box.  Open the safety barriers window from the operator map.  Scroll to the bottom of the safety barrier section.  Create a new event to force an EM update.		
2	Verify that the selection box for the safety barrier stays in its current position.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.129**      *FP 2719 – SAS needs safeguard to prevent end date from occurring prior to start date*

**2.2.129.1**    **Test Description**

The objective of this test is end time for a scheduled item cannot precede the start time.

**2.2.129.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.129.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create a new scheduled item.  Attempt to set the end time prior to the start time.		
2	Verify that SAS does not allow you to set the end time prior to the start time.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Add recurrence to the scheduled item.		
4	Verify that the recurrence end time can not be set prior to the recurrence start time.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.130**      *FP 2724 – Unable to extend index – Large table needing manual purge*

**2.2.130.1**    **Test Description**

The objective of this test is that the purging scripts for the ODS table are completing properly.

**2.2.130.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.130.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		Unable to reproduce test environment. Defer to District.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.131**      *FP 2726 – Unable to release ownership of events*

**2.2.131.1**    **Test Description**

The objective of this test is to verify that users can release ownership of events without error.

**2.2.131.2**    **Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.131.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event.  Attempt to release ownership of the event.		
2	Verify that the event goes to a state of having no owner without error.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.132**      *FP 2731 – Text is garbled in the body of the email*

**2.2.132.1**    **Test Description**

The objective of this test is to verify that the email text no longer contains the surrounding xml tags that are meant to be hidden.

**2.2.132.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.132.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event in SunGuide.  Set the event type to silver alert.  Generate a response plan.		
2	Verify that the <original> and <current> tags do not appear in the email body.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>



Test End Date and Time	
Tester	
Witness	

**2.2.133**      *FP 2742 – ERWIN Models lost Sync*

**2.2.133.1**    **Test Description**

This footprint describes how SwRI repaired an issue with the ERWIN model.

**2.2.133.2**    **Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.133.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		No test required	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.134**      *FP 2749 – Response Plan Dialog does not show priority of currently active message*

**2.2.134.1**    **Test Description**

The objective of this test is that the response plan dialog accurately displays the priority of the currently active message.

**2.2.134.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.134.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event.  Generate a response plan.  Accept the automatic plan.  Add at least one DMS with a message to the plan.		
2	Verify that the priority of the currently displayed message is displayed in the response plan window.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.135**      *FP 2753 – VW\_RS\_EVENT\_PERFMEASD view shows that every event is a secondary event*

**2.2.135.1**    **Test Description**

The objective of this test is to verify that the VW\_RS\_EVENT\_PERFMEASD view only shows an event as “secondary” if it has a related primary event ID. This view error affected the Incident Management Monthly report specifically and it will also be verified.

**2.2.135.2**    **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database
- SQL Server Management Studio
- SunGuide 6.0 Patch 2 SQL Server database

**2.2.135.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the database.  Navigate to the VW_RS_EVENT_PERFMEASD view.	All four steps need to be executed on both Oracle 6.0 and SQL Server 6.0 databases.	
2	Verify that events only show as “secondary” if they have an associated primary event id.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
3	Open the SunGuide instance associated with the database above.		

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
	Run the Incident Management Monthly report.		
4	Verify that the report accurately reflects the number of secondary events for the given time period.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.136 FP 2754 – VW\_RS\_DMS\_MESSAGE**

**2.2.136.1 Test Description**

The objective of this test is to verify that the VW\_RS\_DMS\_MESSAGE view now returns the DMS name in the DMS name field instead of the numeric ID. Also, the DMS Usage report will be verified since the issue was discovered while diagnosing an issue with that report.

**2.2.136.2 Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database
- SQL Server Management Studio
- SunGuide 6.0 Patch 2 SQL Server database

**2.2.136.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the database.  Navigate to the VW_RS_DMS_MESSAGE view.	All four steps need to be executed on both Oracle 6.0 and SQL Server 6.0 databases.	
2	Verify that the dms_name column contains the name of the DMS and not the numeric ID.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
3	Open the SunGuide instance associated with the database above.  Run the DMS Usage report.		
4	Verify that the report displays the names of reported DMS instead of numeric IDs.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.137**      *FP 2758 – c2c command receiver returning errors after v6 upgrade*

**2.2.137.1**    **Test Description**

The objective of this test is verify that several CCTV related C2C commands now use numeric device ids.

**2.2.137.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.137.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Put C2C Publisher in detail mode.  Connect two SunGuide instances together through C2C.  Attempt to control a remote CCTV by changing its preset.		
2	Verify that the camera moves to the new preset.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.138**      *FP 2759 – Email body is incorrect for center lane.*

**2.2.138.1**    **Test Description**

The objective of this test is to verify that the email body of a response plan email displays the proper text when the center lane of a three lane exit ramp is blocked.

**2.2.138.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.138.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Find or configure an EM location that has a mainline with at least one lane and an exit with three lanes.  Block the center exit lane.  Generate a response plan.		
2	Verify that the email correctly displays the blockage information.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.139**      *FP 2763 – BlueTOAD Subsystem Authentication*

**2.2.139.1**    **Test Description**

The objective of this test is to verify that users can authenticate to the blueTOAD subsystem without a subsystem restart.

**2.2.139.2**    **Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.139.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Ensure the blueTOAD subsystem is off.  Add a new user in SunGuide and give them any permissions related to blueTOAD.  Start the blueTOAD subsystem.  Log in to the operator map with the new user.  Ensure the user is logged into the blueTOAD subsystem.  Log out of the operator map.		

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
	Change the new users password using an administrator account.  Log in to the operator map with the new user using the new password.		
2	Verify that the user is logged into the blueTOAD subsystem.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.140**      *FP 2764 – Events being discarded from performance measures if responder Departure is null*

Footprint 2764 is an issue where the last responder date is being set to Jan-1-0001 instead of NULL when there is a responder left on scene when the event is closed.

**2.2.140.1**      **Test Objectives**

To recreate the issue on Release 6.0 Patch 3 Official Release and verify the issue was removed on the system under test.

**2.2.140.2**      **Test Resources and Setup Conditions**

- SunGuide 6.0 Patch 3 systems for recreating the issue
- 2 SunGuide 6.0 Patch 3 systems, Oracle and SQL Server, with the hotfix installed
- Oracle Database Client such as Oracle Developer or TOAD for Oracle
- SQL Server Database Client such as Microsoft SQL Management Studio or TOAD for SQL Server

**2.2.140.3**      **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Execute the following steps on each system.		
2	Create an event and record the Event ID.	Release 6.0 Patch 3's Event ID: _____  Candidate hotfix 2 on Oracle Event ID: _____  Candidate hotfix 2 on SQL Server Event ID: _____	

SunGuide® Software System  
 SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
3	Add a Responder with an arrival timestamp, but without a departure timestamp.		
4	Close the event without departing the responder.		
5	Execute the following query in each of the databases using a database client.	<pre>Select EVENT_ID, LAST_RESPONDER_DEPARTURE_DATE, EVENT_CLOSED_DATE, FROM EM_EVENT_PERFMEASD WHERE EVENT_ID &gt;= &lt;EVENT_ID_RECORDED_IN_STEP_2&gt;</pre>	
6	Verify the issue was recreated on Release 6.0 Patch 3 having a LAST_RESPONDER_DEPARTURE_DATE of 01-01-0001 and corrected on both Candidate hotfix 2 systems having a NULL value for that date field.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.141**      *FP 2769 – Road Ranger reporting views*

**2.2.141.1**    **Test Description**

The objective of this test is to verify that the VW\_RS\_AVL and VW\_RS\_EVENT\_DISPATCH\_ACTIVITY views now contain a numeric ID for vehicle and driver. Also, the vehicle and driver parameters will be verified using the Road Ranger reports.

**2.2.141.2**    **Test Resources and Setup Conditions**

Requires access to:

- Oracle SQL Developer
- SunGuide 6.0 Patch 2 Oracle database
- SQL Server Management Studio
- SunGuide 6.0 Patch 2 SQL Server database

**2.2.141.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the database.  Navigate to the VW_RS_AVL view.	All four steps need to be executed on both Oracle 6.0 and SQL Server 6.0 databases.	
2	Verify that the view contains a numeric ID for both driver and vehicle.		<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>
3	Open the database.		

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
	Navigate to the VW_RS_EVENT_DISPATCH_ACTIVITY view.		
4	Verify that the view contains a numeric ID for both driver and vehicle.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
5	Open the SunGuide instance associated with the database above.  Run the all road ranger reports with vehicle and driver filters.		
6	Verify that the vehicle and driver filters work as expected.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.142**      *FP 2770 – When Terminating a Response Plan, message pop up has a typo*

**2.2.142.1**    **Test Description**

The objective of this test is to verify that the message window popup that appears when closing a response plan no longer has a typo.

**2.2.142.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.142.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event.  Generate a response plan from the event.  Accept the automatically generated response.  Activate the plan.  Terminate the plan.		
2	Verify that popup that appears is free of typos. (Terminate used to say Terimate)		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.143**      *FP 2776 – C2C showing events as type "unknown"*

**2.2.143.1**    **Test Description**

The objective of this test is to verify that C2C event typeDesc field is used to display event type.

**2.2.143.2**    **Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- Waze data

**2.2.143.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Send Waze data to the test system.  Open the operator map.  Open the details for a Waze event.  Put C2C Subscriber in detail mode.  Open the status logger and view the output of C2C Subscriber.		

Step	Procedure	Notes	Pass/Fail
2	Verify that the typeDesc field in the XML and the event type in the C2C event details dialog match.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.144**      *FP 2785 – EM Locking up*

**2.2.144.1**    **Test Description**

The objective of this test is to verify that EM no longer locks up under that specific conditions in FTE.

**2.2.144.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.144.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		This was never reproduced off of the FTE SunGuide system. It is unique to their installation. Defer to district.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.145**      *FP 2788 – Reports don't work if you filter by Road Ranger or Vehicle Detector*

**2.2.145.1**    **Test Description**

The objective of this test is to verify that Road Ranger and Vehicle Detector reports can be filtered by Road Ranger and Vehicle Detectors.

**2.2.145.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.145.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Run the following reports using both vehicle and driver filters.  Speeds at Detector Traffic Volumes Report Vehicle GPS Location Vehicle Location report Road Ranger Status Report		
2	Verify that the reports run and return the correct data.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>



Test End Date and Time	
Tester	
Witness	

**2.2.146**      *FP 2797 – C2C Subscriber not receiving data after C2C connection interruption*

**2.2.146.1**    **Test Description**

The objective of this test is to verify that C2C Subscriber reconnects to the C2C feed after recycling the C2C Extractor’s App Pool.

**2.2.146.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.146.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
<b>1</b>	Set a C2C Subscriber connection to an Extractor such that you can see event or tss or other data on the operator map. Nokia or 3rd party data would be ideal.  Restart the C2C Extractor that the C2C Subscriber is connected to.		
<b>2</b>	Verify that the data continues to display after a brief interruption when the app pool is restarted for at least 5 minutes.	Unable to recreate in Patch 3 system. Defer to District 2.	<b>Pass</b> <input type="checkbox"/> <b>Fail</b> <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.147**      *FP 2803 – Unable to post floodgate messages*

**2.2.147.1**    **Test Description**

The objective of this test is to verify that the user is able to save a floodgate.

**2.2.147.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.147.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Add a floodgate with any, arbitrary values.		
2	Verify the Floodgate does not produce database errors in status logger from C2CSubscriber and that it appears in the database properly.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.148**      *FP 2804 – Errors when adding new TSS links to roadway geometry*

**2.2.148.1**    **Test Description**

The objective of this test is to verify the user is able to map new TSS links without restarting TSS.

**2.2.148.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.148.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Add new detector from Admin Editor > TSS > Detectors.  Add a new link with 3 lanes from Admin Editor > TSS > Detector Maps to the new detector.  Enter the map editor mode.		
2	Verify the new detector link exists in the Links list once.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Click Place Points on Map and click on the map.		
4	Verify the link is able to be placed on the map, and has the correct number of lanes.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

SunGuide® Software System  
 SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
5	Click Edit TSS Link, set the roadway and direction, and click save.		
6	Verify that the roadway and direction for the TSS link were set.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
7	Close the Edit Link Placement dialog to exit the map editor mode.		
8	Verify the link is placed on the map with the correct number of lanes.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.149**      *FP 2806 – DMS Details Window Is Not Launched within the Bounds of the Monitor*

**2.2.149.1**    **Test Description**

The objective of this test is to verify that when the DMS details dialog is saved on a second monitor and the user logs in on a workstation with one monitor, the window opens within the viewable area.

**2.2.149.2**    **Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed and two monitors

**2.2.149.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the DMS details dialog on the workstation with two monitors.  Move the dialog to the second monitor.  Save the window positions.  Log out.		

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
	Log in with the same user on the system with only one monitor.		
2	Verify that the DMS details dialog opens within the viewing area.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



**2.2.150**      *FP 2809 – Not able to edit Layout*

**2.2.150.1**    **Test Description**

The objective of this test is to verify the user is able to open the virtual wall layout and retrieve layouts.

**2.2.150.2**    **Test Resources and Setup Conditions**

Requires access to:

- SQL Server Management Studio
- SunGuide 6.0 Patch 3 SQL Server database

**2.2.150.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Log into the map, launch the virtual wall layout control from context menu > Video Switching > Virtual Wall Layout.		
2	Verify the wall layout can be retrieved and displayed in the dialog.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.151**      *FP 2810 – Add rs database configuration to VDD (related to Footprint 2444)*

**2.2.151.1**    **Test Description**

The objective of this test is to verify that the VDD contains information explaining how to configure the reporting database.

**2.2.151.2**    **Test Resources and Setup Conditions**

- SunGuide Software 6.1 VDD

**2.2.151.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the VDD.  Go to the config file section and find the reporting subsection.		
2	Verify that the VDD contains information explaining how to configure the reporting database.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.152**      *FP 2822 – Unable to edit messages in the DMS Message Library*

**2.2.152.1**    **Test Description**

The objective of this test is to verify that messages in the DMS message library can be edited.

**2.2.152.2**    **Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.152.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the DMS Message Library Management dialog.  Add a new message with the name "TEST MESSAGE " with three spaces at the end.  Set the message text to "TESTING".  Save the new message.  Edit the message text of the new message to "TESTING CHANGED".  Save the change to the new message.		

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
2	Verify that the message text was saved successfully.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.153**      *FP 2826 – EM not responding*

**2.2.153.1**    **Test Description**

The objective of this test is to verify that EM does not become unresponsive during normal operations.

**2.2.153.2**    **Test Resources and Setup Conditions**

Requires access to:

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.153.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		This test is verified as part of 2785.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.154**      *FP 2841 – DMS "Reset Controller" action appears to be reliant on "Resolve spelling conflicts" permission*

**2.2.154.1**      **Test Description**

The objective of this test is to verify that the permissions have been corrected so that the reset controller permission affects the ability to reset the controller.

**2.2.154.2**      **Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- Skyline DMS Simulator

**2.2.154.3**      **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Remove the "Resolve spelling conflicts" permission from a user in the Administrator group.  Log in to the operator map using that user.  Open the DMS details dialog.  Select a DMS with a configured simulator.  Click "Other Controls".		

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
2	Verify that the “Reset Controller” option is not greyed out and can be clicked.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Log in to the map from a second workstation with a user who has “Resolve spelling conflicts” permission.  Send a message to the sign with an unapproved word using the first user’s workstation.		
4	Verify that the user without the permission cannot resolve the conflict and that the user with the permission can.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.155**      *FP 2848 – Mysterious Lack of Severity 2 Events in EM\_EVENT\_PERFMEASD*

Footprint 2848 is an issue where severity 2 events would appear in the database as severity 1 events.

**2.2.155.1**      **Test Objectives**

To recreate the issue on Release 6.0 Patch 3 Official Release and verify the issue was removed on the system under test.

**2.2.155.2**      **Test Resources and Setup Conditions**

- SunGuide 6.0 Patch 3 systems for recreating the issue
- 2 SunGuide 6.0 Patch 3 systems, Oracle and SQL Server, with the hotfix installed
- Oracle Database Client such as Oracle Developer or TOAD for Oracle
- SQL Server Database Client such as Microsoft SQL Management Studio or TOAD for SQL Server

**2.2.155.3**      **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Requirement	Procedure	Notes	Pass/Fail
1		Using Release 6.0 Patch 3 Official Release, create 3 events at a location with multiple travel lanes, and one of the travel lanes blocked. Record the event IDs and the blockage times in the table below.		
2		After 5 minutes, unblock the lane and close the <u>first</u> event. Record the Clearance time in the table below.		



Step	Requirement	Procedure	Notes	Pass/Fail
3		After 35 minutes, unblock the lane and close the <u>second</u> event. Record the Clearance time in the table below.		
4		Unblock the lane and close the <u>third</u> event the event that had its lane blocked for <u>125</u> minutes. Record the Clearance time in the table below.		
5		Create an event at a location with multiple travel lanes, and <u>all</u> of the travel lanes blocked. Record the event in the table below.		
6		Unblock the lanes and close the event that had all travel lanes blocked.		
7		Repeat all above steps for the other database product.		
8		View the most recent records in the FDOT_OWN.EM_PERF_MEASD table in the database using the appropriate database management client tool. Record the severity in the table below for each event.	<pre>Select EVENT_ID, SEVERITY_ID, FROM EM_EVENT_PERFMEASD WHERE EVENT_ID &gt;= _____</pre>	
9		For each event, click Find on Map for each event and view the icon on the Operator map. Record the number in the icon that indicates the severity of the event in the table below.		
10		Verify the issue was recreated with incorrect severity in the database on the 6.0 patch 3 system and verify all Actual Severity values are consistent with expected values for both of the release 6.0 patch 3 hotfix 2 candidate systems.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

**Event Severity Results Table**

System Version	Blockage Scenario	Event ID	Blockage Date/Time	Clearance Date/Time	Expected Severity	Operator Map Icon Severity	Database EM Perfmeasd Severity
6.0 Patch 3 Official Release	5 minutes				1		
	35 minutes				2		
	125 minutes				3		
	All travel lanes		N/A	N/A	3		
6.0 Patch 3 hotfix 2 candidate SQL Server System under test	5 minutes				1		
	35 minutes				2		
	125 minutes				3		
	All travel lanes		N/A	N/A	3		
6.0 Patch 3 hotfix 2 candidate Oracle System under test	5 minutes				1		
	35 minutes				2		
	125 minutes				3		
	All travel lanes		N/A	N/A	3		

Test End Date and Time	
Tester	
Witness	

**2.2.156**      *FP 2851 – AVLRR throwing Warnings after new SPARR deployment*

**2.2.156.1**    **Test Description**

The objective of this test is to verify that the SPARR no longer causes AVLRR to run out of memory from receiving XML too large to handle.

**2.2.156.2**    **Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.156.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		Defer to district.	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.157**      *FP 2852 – DMS Subsystem exceeding maximum open cursors*

**2.2.157.1**    **Test Description**

The objective of this test is to verify that the maximum size of content for DMS has been increased.

**2.2.157.2**    **Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed

**2.2.157.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1		Defer to district	
2			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.2.158**      *FP 2862 – Event Chronology for the DMS is not working properly*

**2.2.158.1**    **Test Description**

The objective of this test is to verify that DMS entries are being properly added to the event chronology.

**2.2.158.2**    **Test Resources and Setup Conditions**

- Application server running SunGuide 6.1
- Workstation with Internet Explorer 9 or 10 and .NET 4.0 installed
- Skyline DMS Simulators

**2.2.158.3**    **Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an Event in SunGuide.  Save the event and get response.  Accept the recommended plan.  Add a DMS to the response.  Activate the modified plan.  Create a second event.  Save the event and get response.		

Step	Procedure	Notes	Pass/Fail
	Accept the recommended plan.  Add the same DMS that you added to the first response plan.  Activate the modified plan.  Check the chronology of the second event.		
2	Verify that the entries for the DMS posting are associated with the second event's event id.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3 Release 6.1 FAT Modifications Test Cases

#### 2.3.1 FAT Issue 1

##### 2.3.1.1 Test Description

Multiple login dialogs when password expired. Maybe triggered by entering incorrect password

##### 2.3.1.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

##### 2.3.1.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
3	In the Manage Users dialog, select the Settings tab.  Enable the option for password expiration for normal user types.  Set the expiration threshold to one day.  Log out of Operator Map.		

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
	Attempt to log in to Operator Map with a user whose password has not been changed in > 2 days.  When the prompt for a password change appears, enter an incorrect password.  Attempt to log in again.		
4	Verify that only one change password dialog appears on the second attempt.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



### 2.3.2 FAT Issue 2

#### 2.3.2.1 Test Description

Modifying sign type of beacon did not change the GUI row from unmodified to modified.

#### 2.3.2.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.2.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the beacon configuration dialog  Select a beacon configured in the system.  Modify the sign type by clicking the box and changing its value.		
2	Verify that the row of the modified beacon is marked as modified in the GUI.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.3 FAT Issue 3

#### 2.3.3.1 Test Description

Pavement Treatment Amount and Width labels are reversed in the RWIS status dialog.

#### 2.3.3.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.3.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the RWIS status dialog.		
2	Verify that the pavement treatment amount and width labels appear at the head of their respective columns.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.4 FAT Issue 4

#### 2.3.4.1 Test Description

Hover label for Pressure shows mg instead of hg.

#### 2.3.4.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.4.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the RWIS status dialog.  Hover the cursor over the pressure column header.		
2	Verify that the unit displayed is “hg”.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.5 FAT Issue 5

#### 2.3.5.1 Test Description

Investigate some presets unable to be overridden; could be device issue.

#### 2.3.5.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.5.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open a camera using the ONVIF protocol in Video on Desktop window.  If the camera does not have any existing presets, create a camera preset.  Move the camera to view a new location.  Store the new location as a camera preset by overwriting the first preset.		
2	Verify that the camera preset is saved.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.6 FAT Issue 6

#### 2.3.6.1 Test Description

Map in IE froze and was unresponsive when user clicked Find on Map from a closed event on the event list. If the "click on closed event find on map" specifically triggered the IE crash, then this button should be grayed out when the event is closed. The cause was a misconfigured location with an invalid lat/lon.

#### 2.3.6.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.6.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Create an event.  Set and save a location for the event.  Close the event.  Attempt to use the find on map button from the event list for the closed event.		

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
2	Verify that the operator map focuses on the location of the closed event.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



### 2.3.7 FAT Issue 7

#### 2.3.7.1 Test Description

Current Plan tab failed to show response plan. Roger believes this is due to SAA permissions.

#### 2.3.7.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.7.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open a response plan for an event.  Activate the response plan if it is not activated.		
2	Verify that the current plan tab shows the activated response plan.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.8 FAT Issue 8

#### 2.3.8.1 Test Description

Deleting a custom report did not remove entry from list of reports.

#### 2.3.8.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.8.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Add a custom report through the reporting dialog.  Delete the custom report that was added.		
2	Verify that the custom report is removed from the list of reports.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.9 FAT Issue 9

#### 2.3.9.1 Test Description

Add Time to DateTimeStamp of last poll of the Wrong Way Device on Hoffman's system. Could be based on initial column width. Will look into forcing the display format to always include time.

#### 2.3.9.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.9.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the wrong way status dialog. View the last poll field for any device.		
2	Verify that the timestamp for the last poll includes both date and time.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.10 FAT Issue 10

#### 2.3.10.1 Test Description

Admin Editor not showing correct message template for Wrong Way Event Type's (Default DMS) Device Template.

#### 2.3.10.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.10.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Review the template configured for the Wrong Way Driving event type.	Notate about something.	
2	Verify that the device templates table in Admin does loads the correct template.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.11 FAT Enhancement 1

#### 2.3.11.1 Test Description

Auto-check Required Components by default for items containing the string “required”.

#### 2.3.11.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.11.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Begin the Sunguide installation.  Continue through the installation process until the installation tab is reached.		
2	Verify that any items containing the word “required” are checked by default.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.12 FAT Enhancement 2

#### 2.3.12.1 Test Description

Add checkbox for check all/none to header of checkbox column device selection dialogue. Remove checkbox next to DMS groups filter and add empty option to dropdown. DMS groups should apply filter upon selection after this change.

#### 2.3.12.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.12.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the predefined response plan dialog. Click the checkbox at the head of the checkbox column.		
2	Verify that all checkboxes go from unchecked to checked.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Click the checkbox at the head of the checkbox column a second time.		
4	Verify that all checkboxes go from checked to unchecked.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
5	Click the DMS groups dropdown.		



**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
6	Verify that the options include all configured DMS groups and one empty option.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.13 FAT Enhancement 3

#### 2.3.13.1 Test Description

Make modified rows italics and new rows underlined (for colorblind accessibility) (not for drop downs).

#### 2.3.13.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.13.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open each WPF dialog with modifiable lists.  Make a change to an existing row in the list.		
2	Verify that when an item is modified its row is changed to italic.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Add a new item to the list.		
4	Verify that when a new item is added its row is underlined.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Test End Date and Time	
Tester	
Witness	

### 2.3.14 FAT Enhancement 4

#### 2.3.14.1 Test Description

Make default visibility column the numeric value not the enumerated text value for display on the RWIS status list.

#### 2.3.14.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.14.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the RWIS status dialog.		
2	Verify that the visibility column displays a numeric value by default.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.15 FAT Enhancement 5

#### 2.3.15.1 Test Description

Auto-filter to DMS and HAR devices when accessing a device's status as happens when accessing a beacon device.

#### 2.3.15.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.15.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Right click a DMS icon on the operator map.  View the status dialog.		
2	Verify that the status dialog auto filters to the selected DMS.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Right click a HAR icon on the operator map.  View the status dialog.		
4	Verify that the status dialog auto filters to the selected HAR.		

Test End Date and Time	
Tester	
Witness	

**2.3.16 FAT Enhancement 6**

**2.3.16.1 Test Description**

Error message shown on login box, not just in system messages; and it could be shown as red text near the input text box. Messages could include – "Invalid username or password", "Databus disconnected", etc.

**2.3.16.2 Test Resources and Setup Conditions**

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

**2.3.16.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Attempt to log in to the operator map with incorrect credentials.		
2	Verify that the user sees an error message described the reason for the failed login.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.3.17 FAT Enhancement 7**

**2.3.17.1 Test Description**

Colorblind friendly indication that the user does not have permission to the subsystem.

**2.3.17.2 Test Resources and Setup Conditions**

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

**2.3.17.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Stop the DMS subsystem.  Open the subsystem status window.		
2	Verify that the colors used for representing connected and disconnected systems do not include red or green.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



### 2.3.18 FAT Enhancement 8

#### 2.3.18.1 Test Description

Group column checkbox should be grey-ed out to indicated to the user that it is read-only.

#### 2.3.18.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.18.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Do something		
2	Verify something		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.19 FAT Enhancement 9

#### 2.3.19.1 Test Description

Hover graph and list item should have same precision as tabbed detail pane. This includes visibility but others should be checked as well.

#### 2.3.19.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.19.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the RWIS status dialog.  Hover over a value in the visibility column.		
2	Verify that the precision in the graph is the same as in the data column		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.20 FAT Enhancement 10

#### 2.3.20.1 Test Description

For elements pointing to a network resource including files, folders, or other URL's, have a "Browse" button that launches a file/folder chooser. May need an attribute to indicate the configuration element is of what type – file, folder, URL, or combination. Also, the configuration file editor should validate the resource is available, else, put a warning to the user (not an error).

#### 2.3.20.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.20.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open a 6.1 config.xml file in the config file editor tool.  Attempt to edit the map path tag.		
2	Verify that the map path can be chosen using a standard browse window.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.21 FAT Enhancement 11

#### 2.3.21.1 Test Description

Add reminder with brief instructions to uninstall the old Nokia Standalone Publisher.

#### 2.3.21.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.21.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the installation notes.		
2	Verify that the installation instructions include a note that the old Nokia Standalone publisher must be uninstalled before installing the new version.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.22 FAT Enhancement 12

#### 2.3.22.1 Test Description

Add Find on Map context button for selected Camera.

#### 2.3.22.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.22.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open a camera in Video on Desktop.  Move the map away from the selected camera.  Right click the camera in the video on desktop window.  Select the find on map action.		
2	Verify that the map focuses on the selected camera and is surrounded by a blue circle.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



### 2.3.23 FAT Enhancement 13

#### 2.3.23.1 Test Description

Updated Reports Parameter File.

#### 2.3.23.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.23.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Navigate to the report templates folder.  Open the report parameters file.		
2	Verify that the file contains an updated list of available report parameters.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.3.24 FAT Enhancement 14**

**2.3.24.1 Test Description**

Will retrieve updated report templates from Brian.

**2.3.24.2 Test Resources and Setup Conditions**

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

**2.3.24.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	In the reporting tab of SunGuide, run the secondary crash report and secondary event reports.		
2	Verify that the version number of both reports is 1.2.	This is a spot check. A complete test would involve checking the version of every template against the version stored in the SVN.	Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.25 FAT Enhancement 15

#### 2.3.25.1 Test Description

Use global reference to navtech data and update config.xml file.

#### 2.3.25.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.25.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open a 6.1 config file in the config file editor.		
2	Verify that the nokia section of the config file does not enforce the usage of separate navteq path.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.26 FAT Enhancement 16

#### 2.3.26.1 Test Description

Examine the new tileset for visual bugs.

#### 2.3.26.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.26.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Examine the SunGuide operator map at each zoom level.		
2	Verify that there are no visual bugs such as county names or road signs being cut off.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.3.27 FAT Enhancement 17**

**2.3.27.1 Test Description**

Add zoom in right click option for digital zoom.

**2.3.27.2 Test Resources and Setup Conditions**

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

**2.3.27.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open a camera in Video on Desktop.  Right click the viewer area.  Select zoom in.		
2	Verify that the the camera zooms in using digital zoom.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Open a camera in Video on Desktop.  Right click the viewer area.		

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
	Select zoom out.		
4	Verify that the the camera zooms out using digital zoom.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.28 FAT Enhancement 18

#### 2.3.28.1 Test Description

Move report queue as a pane on the bottom of the generate reports dialog – combine ribbon buttons and grey out if not a valid report is selected.

#### 2.3.28.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.28.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the generate reports dialog. Run a report.		
2	Verify that the report appears in the queue at the bottom of the generate reports dialog.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	



### 2.3.29 FAT Enhancement 19

#### 2.3.29.1 Test Description

Add right-click and toolbar to email report in the report queue.

#### 2.3.29.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.29.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the generate reports dialog.  Run the secondary event report.  After the report completes, right click the report in the queue.  Select email report.  Send the report to an email to which you have access.		

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
2	Verify that the report is received at the target email address.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.30 FAT Enhancement 20

#### 2.3.30.1 Test Description

If size is greater than configurable amount, only include a link to the report output in the email rather than attaching it.

#### 2.3.30.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.30.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the config file editor tool.  Change the configured file size for reports being sent as attachments to zero.  Open the generate report dialog in SunGuide.  Produce a secondary event report and send it by email to an address you have access to.		
2	Verify that a link to the report is all that is sent with the email.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

**SunGuide® Software System**  
**SunGuide Software Release 6.1 IV&V Test Procedures**

---

Step	Procedure	Notes	Pass/Fail
3	Verify that the report link in the email opens the report.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
4	Change the configured file size for reports being sent as attachments to five megabytes.  Open the generate report dialog in SunGuide.  Produce a secondary event report and send it by email to an address you have access to.		
5	Verify that the report is included with the email as an attachment.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

**2.3.31 FAT Enhancement 21**

**2.3.31.1 Test Description**

Add context menu to match the toolbars in WPF dialogs.

**2.3.31.2 Test Resources and Setup Conditions**

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

**2.3.31.3 Test Script**

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open each WPF window.		
2	Verify that all ribbon menu items are also doubled as context menu options.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.32 FAT Enhancement 22

#### 2.3.32.1 Test Description

Add conflict resolution behavior to beacons just like DMS. Make the blanking behavior, and the status reporting match DMS.

#### 2.3.32.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.
- Beacon simulator

#### 2.3.32.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the device status dialog for Beacons.  Set the beacon to on for the configured simulator.  Set the beacon to off from the simulator.		
2	Verify at the next poll cycle that the GUI shows the current status of the beacon and then the MAS queue asserts itself and sets the beacon back to on.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>
3	Blank the MAS queue in SunGuide for the beacon.		

SunGuide® Software System  
SunGuide Software Release 6.1 IV&V Test Procedures

---

Step	Procedure	Notes	Pass/Fail
	Set the beacon to on in the simulator.		
4	Verify that at the next poll cycle that the GUI shows the current status of the beacon and then the MAS queue asserts itself and sets the beacon back to off.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.33 FAT Enhancement 23

#### 2.3.33.1 Test Description

Ability to add multiple email addresses to reporting queue dialog.

#### 2.3.33.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.33.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the report generation dialog. Generate a secondary event report. Send the report to two email addresses simultaeniously.		
2	Verify that the report is sent to both addresses.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>



Test End Date and Time	
Tester	
Witness	

### 2.3.34 FAT Enhancement 24

#### 2.3.34.1 Test Description

Remove user requirement to "find" scripts in the Database Utility.

#### 2.3.34.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.34.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the SunGuide tool kit.  Navigate to the database utility.		
2	Verify that the user is no longer required to browse to the individual database scripts.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.35 FAT Enhancement 25

#### 2.3.35.1 Test Description

Documentation for how to use the Database Utility, i.e., how to specify multiple files on the Importer.

#### 2.3.35.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.35.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the SunGuide tool kit.  Navigate to the database utility.		
2	Verify that there are now instructions describing how to use the utility.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.36 FAT Enhancement 26

#### 2.3.36.1 Test Description

Add ability to add backup files (using a file picker pop-up) without hand-editing master XML config.

#### 2.3.36.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.36.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the SunGuide Installer tool.  Add to the backup file list.  Run the SunGuide installer.		
2	Verify that all of the files in the edited backup file list are backed up during the installation process.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

### 2.3.37 FAT Enhancement 27

#### 2.3.37.1 Test Description

Make the Import/Export drop down chooser a single, global button.

#### 2.3.37.2 Test Resources and Setup Conditions

- SunGuide 6.1 Installation Media
- Version 6.0 SunGuide config.xml file
- 2 application servers running Microsoft Windows 2008 with no additional software configured in the network. Server may have anti-virus installed as required by network policy.

#### 2.3.37.3 Test Script

Test Start Date and Time	
--------------------------	--

Step	Procedure	Notes	Pass/Fail
1	Open the installer tool.		
2	Verify that the import/export drop down chooser is a single globally accessible button.		Pass <input type="checkbox"/> Fail <input type="checkbox"/>

Test End Date and Time	
Tester	
Witness	

## Appendix A – Requirements Reference

## SunGuide Release 6.1 FEAT and SUB Requirements Reference

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT62	Installer	The release package shall include an installer and an installer manager to configure application servers to execute the SunGuide software.	INS-1	6.1
FEAT62.1	Other software packages	The installer shall install software packages which are required for execution of the selected components.	INS-1A	6.1
FEAT62.2	Disallow web site component without web server	The installer shall disallow installation of web site components on servers which do not have a compatible web server installed.	INS-1B	6.1
FEAT62.3	Verify valid configuration file	The installer shall verify the configuration file is valid prior to performing an installation of the software.	INS-1C	6.1
FEAT62.4	Deployment enviroment description file	The installer manager shall use a deployment environment description file that describes the target environment in which to deploy the software.	INS-1D	6.1
FEAT62.4.1	Deployment file	The deployment environment description file shall contain installation templates and server information.	INS-1D1	6.1
FEAT62.4.1.1	Deployment file contents	Installation templates shall describe the target machine architecture, modules to install, and configuration information.	INS-1D1A	6.1
FEAT62.4.1.2	Template and user credentials	Server information shall specify an installation template and optionally user credentials for use during installation.	INS-1D1B	6.1
FEAT62.4.2	Load Deployment Description File	The installer manager shall load information about the deployment environment from a user specified deployment environment description file.	INS-1D2	6.1
FEAT62.5	Command line execution	The installer manager shall allow command line execution of the SunGuide installer without using a standard installation GUI.	INS-1E	6.1
FEAT62.5.1	Read Deployment Configuration File	The command line installation tool shall read installation parameters from a system deployment configuration file.	INS-1E1	6.1
FEAT62.5.2	No Human Interaction	The command line installation tool shall run the SunGuide installer without requiring human intervention when launched with parameters specifying an installation template and a system deployment environment configuration file.	INS-1E2	6.1



**SunGuide® Software System**  
**SunGuide Software Release 6.0 IV&V Test Procedures**

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT62.5.3	Remote Installation	The command line installation tool shall deploy the software to a target application server which is remote to the computer the tool runs on.	INS-1E3	6.1
FEAT62.5.3.1	Remote Installation via command line	The command line installation tool shall allow a remote application server to be specified as a command line option.	INS-1E3A	6.1
FEAT62.5.3.2	Remote installation via GUI	The installer manager shall deploy the software to a set of selected target application servers which are remote to the computer the GUI runs on.	INS-1E3B	6.1
FEAT62.6	GUI Installation Tool	The installer manager shall provide a GUI tool to assist users with the installation of the SunGuide software.	INS-1F	6.1
FEAT62.6.1	Installation templates	The installer manager shall allow a user to configure the installation templates.	INS-1F1	6.1
FEAT62.6.2	Write deployment configuration file	The installer manager shall provide the ability to write the installation configuration into a system deployment configuration file.	INS-1F2	6.1
FEAT62.6.3	Target Application Servers	The installer manager shall allow the user to manage a list of possible target application servers.	INS-1F3	6.1
FEAT62.6.4	Deployment Servers entry	The installer manager shall allow the user to manually enter one or more hostnames or IP addresses on which to deploy the software.	INS-1F4	6.1
FEAT62.7	GUI Config file verification Tool	The software shall provide a GUI tool that allows users to modify the SunGuide configuration file.	INS-1G	6.1
FEAT62.7.1	Validate the Config File	The SunGuide configuration editor will validate the SunGuide configuration file.	INS-1G1	6.1
FEAT62.7.1.1	Correcting the configuration	If the user specified configuration file is not valid, the installer shall allow the user to correct the file using the configuration file editor tool.	INS-1G1A	6.1
FEAT62.7.2	Present valid options for configuration	The SunGuide configuration editor shall present to the user valid options for missing or invalid configuration values.	INS-1G2	6.1
FEAT62.7.3	Default Values	The SunGuide configuration editor shall suggest default values for missing or invalid configuration values when presenting the options to the user if appropriate default values exist.	INS-1G3	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT62.8	Centrally maintained reports	The installer shall deploy a set of centrally maintained reports.	INS-1H	6.1
FEAT62.8.1	Execute Centrally Maintained reports	The software shall allow the user to execute reports from the set of centrally maintained reports provided by the installer.	INS-1H1	6.1
FEAT62.8.2	Execute Deployment Specific Reports	The software shall allow the user to execute reports from the set of deployment specific reports that are configured by the system administrator post installation.	INS-1H2	6.1
FEAT62.9	Configuration data hosting	The configuration and operational data that is dynamic or deployment specific shall all be contained in the SunGuide database or capable of being hosted on the deployment's application network shared folder	INS-1J	6.1
FEAT63	Toolset	The release package shall include custom (non-OTS) tools necessary to maintain a SunGuide Software deployment.	TOOLS000	6.1
FEAT63.1	Log Messages	The software shall log message within the application with an option for a user to save to log for later review.	TOOLS001	6.1
FEAT63.2	Database Management Tool	The software shall include a database management tool.	TOOLS002	6.1
FEAT63.3	Backup Tool	The software shall include a deployment configuration backup tool.	TOOLS003	6.1
FEAT63.4	Restore Tool	The software shall include a deployment configuration restore tool.	TOOLS004	6.1
FEAT63.5	Migration Tool	The software shall include a tool to migrate operational data between two databases.	TOOLS005	6.1
FEAT63.6	Bulk Modification Tool	The software shall include a tool to import, update, delete, and export multiple devices in the same time.	TOOLS006	6.1
FEAT63.2.1	Perform backups	The database management tool shall perform backups of a database.	TOOLS002A	6.1
FEAT63.2.2	Restore Backups	The database management tool shall perform a restore of a database.	TOOLS002B	6.1
FEAT63.2.1.1	Oracle Database Backup	The database management tool shall provide a method of performing a backup of an Oracle database.	TOOLS002A1	6.1

**SunGuide® Software System**  
**SunGuide Software Release 6.0 IV&V Test Procedures**

<b>FEAT Number</b>	<b>Requirement Name</b>	<b>Requirement text</b>	<b>SunGuide ID</b>	<b>Version</b>
FEAT63.2.1.2	SQL database backups	The database management tool shall provide a method of performing a backup on a SQL database.	TOOLS002A2	6.1
FEAT63.2.1.3	Command line options	The database management tool shall allow a backup for Oracle or SQL to be performed via the command line using the same options available to the user via the GUI Interface.	TOOLS002A3	6.1
FEAT63.2.2.1	Restore Oracle database	The database management tool shall provide a method of performing a restore of an Oracle database.	TOOLS002B1	6.1
FEAT63.2.2.2	Restore SQL Database	The database management tool shall provide a method of performing a restore on a SQL database.	TOOLS002B2	6.1
FEAT63.2.2.3	Command line options	The database management tool shall allow a restore for Oracle or SQL to be performed via the command line using the same options available to the user via the GUI Interface.	TOOLS002B3	6.1
FEAT63.3.1	Backup File List	A deployment configuration file shall contain a list of files on which the configuration backup tool shall perform a backup.	TOOLS003A	6.1
FEAT63.3.2	Zip Files	The configuration backup tool shall create a zip file containing the files defined in the deployment configuration file and store the output in a user defined directory.	TOOLS003B	6.1
FEAT63.3.3	Command Line Option	The configuration backup tool shall allow a backup of the file specified in a deployment configuration file to be performed via the command line using the same options available to the user via the GUI Interface.	TOOLS003C	6.1
FEAT63.4.1	Restore Configuration Files	The configuration restore tool shall restore the files in a zip file created using the configuration backup tool to their original location on the file system.	TOOLS004A	6.1
FEAT63.5.1	Database Connection Information	The migration tool shall allow a user to input connection information for a source database and connection information for a target database.	TOOLS005A	6.1
FEAT63.5.2	Migrated Data Types	The migration tool shall support the migration of the following data types; AVLRR Vehicle History, CCTV Lock History, CVS Archive, Device Status Archive, Event Data, Process State Archive Data, TSS Archive Data, Travel Time Archive Data, and Video Switching Source Blockage History.	TOOLS005B	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT63.5.1.1	Supported Databases	The migration tool shall support both Oracle 11G and SQL Server 2012 and above.	TOOLS005A1	6.1
FEAT63.5.2.1	Migrating a range of data	For each data type, the user may select between migrating all data in the database and migrating data between a specific date range.	TOOLS005B1	6.1
FEAT63.6.1	Bulk Insertion Data Types	The import/update/delete tool shall provide a spreadsheet that will allow the user to input the necessary information to configure the following device types; Cameras, DMS Fonts, DMS Signs, HARs, RWIS, Safety Barriers, TSS Detectors, TSS Links, and TSS Lanes.	TOOLS006A	6.1
FEAT63.6.2	Version Selection	The import/update/delete tool shall allow the user to select the version of SunGuide in which to import, the current SunGuide configuration file for that installation, and the import spreadsheet.	TOOLS006B	6.1
FEAT63.6.3	Selectable Data Types	The import/update/delete tool shall allow the user to select data types to import into their SunGuide installation.	TOOLS006C	6.1
FEAT63.6.4	Export File Location	The export tool shall allow a user to select a file location and choose a name of the Excel file that will be generated for the export.	TOOLS006D	6.1
FEAT63.6.5	Exportable Types	The export tool shall allow the user to export the following data types to an Excel file; Cameras, DMS Fonts, DMS Signs, HARs, RWIS, Safety Barriers, TSS Detectors, TSS Links, and TSS Lanes.	TOOLS006E	6.1
FEAT64	Nokia	SunGuide shall support the use of Nokia traffic data.	NOK007	6.1
FEAT64.1	Interface Specification	SunGuide shall provide an interface to Nokia traffic data source that provides data that conforms to the Navteq Realtime Flow Feed Specification Version 2.1.0 September 20th, 2012.	NOK007I	6.1
FEAT64.1.1	Publish Nokia Data	An Nokia C2C Publisher component shall publish Nokia traffic data to the C2C infrastructure, thus making it available to SunGuide and FL-ATIS.	NOK007I1	6.1
FEAT64.1.2	County List	The Nokia C2C Publisher component shall only publish data from links within a configurable list of counties.	NOK007I2	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT64.1.3	Traffic Condition Data	The Nokia C2C Publisher component shall publish C2C Traffic Condition data.	NOK00713	6.1
FEAT64.1.4	Speed Data	The Nokia C2C Publisher component shall publish C2C Speed data.	NOK00714	6.1
FEAT64.1.5	Link and Node Data	The Nokia C2C Publisher component shall publish C2C Link and Node data relevant to the Traffic Condition and Speed links being published.	NOK00715	6.1
FEAT64.1.6	NAVTEQ Source Data	The Nokia C2C Publisher component shall publish link midpoints based on known map information in a NAVTEQ map source.	NOK00716	6.1
FEAT64.1.7	Comm Failures	The Nokia C2C Publisher component shall notify SunGuide of Nokia data source communication failures.	NOK00717	6.1
FEAT64.1.1.1	Mark as Non-distribution	When publishing TSS traffic condition data records, the Nokia C2C Publisher component shall mark such data records as not for redistribution to third parties.	NOK00711A	6.1
FEAT64.1.1.2	Network and Center Id	The Nokia C2C Publisher component shall include as the network or center ID of each record a configurable value specified in the SunGuide configuration file.	NOK00711B	6.1
FEAT64.1.1.3	Confidence Value	If the confidence value received from the Nokia data source for a C2C link is below a minimum confidence level specified in the SunGuide configuration file, the Nokia C2C Publisher will not publish a update for that C2C link.	NOK00711C	6.1
FEAT64.1.1.4	Configurable Level	The Nokia C2C Publisher component shall retrieve data from the Nokia traffic data source at a configurable interval determined in the SunGuide configuration file.	NOK00711D	6.1
FEAT64.1.2.1	Retrieve County List	The Nokia C2C Publisher component shall retrieve the list of counties from which to publish data from the SunGuide configuration file.	NOK00712A	6.1
FEAT64.1.2.2	Publish Configured Counties	The Nokia C2C Publisher component shall publish link data for each link provided by the Nokia traffic data source which is identified as belonging to a county included in the list of counties from which to publish data.	NOK00712B	6.1

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT64.1.3.1	Publish Most Recent Mean Speed	While the connection to the Nokia traffic data source is established, the Nokia C2C Publisher component shall publish the most recently provided averaged speed data from the Nokia traffic data source for each published link.	NOK007I3A	6.1
FEAT64.1.4.1	Periodic Publish of Data	While the connection to the Nokia traffic data source is established, the Nokia C2C Publisher component shall periodically publish the averaged speed data from the Nokia traffic data source for each published link.	NOK007I4A	6.1
FEAT64.1.5.1	Publish C2C Nodes	The Nokia C2C Publisher component shall publish a list of C2C Nodes containing the start and end locations of each Nokia link being published.	NOK007I5A	6.1
FEAT64.1.5.2	Unique Node Ids	The Nokia C2C Publisher component shall assign each published node an identifier unique to that instance of the Publisher.	NOK007I5B	6.1
FEAT64.1.5.3	Publish Lat Lon Data	The Nokia C2C Publisher component shall publish the latitude and longitude from the Nokia traffic data source for each published node.	NOK007I5C	6.1
FEAT64.1.5.4	Link Identifier	The Nokia C2C Publisher component shall assign each published link a unique identifier based on the Nokia link identifier, roadway, direction, county, or other identifying information.	NOK007I5D	6.1
FEAT64.1.5.5	Required Link Data	The Nokia C2C Publisher component shall publish the most recently provided roadway name, direction, county, distance, start node, and end node from the Nokia traffic data source for each published link.	NOK007I5E	6.1
FEAT64.1.5.6	Midpoint Data	The Nokia C2C Publisher component shall publish link midpoints for each published link where midpoints could be determined.	NOK007I5F	6.1
FEAT64.1.6.1	Matching TMC Ids	The Nokia C2C Publisher component shall publish midpoints for any published links which have a TMC Path ID that can be accurately matched to a link in the SunGuide map source.	NOK007I6A	6.1
FEAT64.1.6.2	Minimum Midpoint Spacing	The Nokia C2C Publisher component shall read a minimum midpoint spacing parameter from the SunGuide configuration file.	NOK007I6B	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT64.1.6.3	Publish All Midpoints	When publishing midpoints for a published link, the Nokia C2C Publisher shall publish each midpoint defined by the SunGuide map source for the link, unless that midpoint violates the spacing requirements of NOK007I6D and NOK007I6E.	NOK007I6C	6.1
FEAT64.1.6.4	Sequential Midpoint evaluation	When determining which midpoints may be published, the Nokia C2C Publisher shall sequentially evaluate each midpoint, beginning with the midpoint nearest the start node of the link.	NOK007I6D	6.1
FEAT64.1.6.5	Midpoint Exclusion Criteria	When determining which midpoints may be published, the Nokia C2C Publisher shall publish the midpoint if and only if it is at least the minimum midpoint spacing parameter from the start node, the end node, and all other midpoints already selected for publication.	NOK007I6E	6.1
FEAT64.1.7.1	Databus Connection	The Nokia C2C Publisher component shall connect to Databus as other SunGuide providers do.	NOK007I7A	6.1
FEAT64.1.7.2	Nokia Permissions	The Nokia C2C Publisher shall allow a client with appropriate permissions to subscribe to communication alert notifications.	NOK007I7B	6.1
FEAT64.1.7.4	Alert Frequency	While the connection to the Nokia data source is lost, the Nokia C2C Publisher shall send additional alert messages to all subscribed clients indicating the ongoing loss of communication at a frequency specified in the SunGuide configuration file.	NOK007I7D	6.1
FEAT64.1.7.3	Disconnection Alert	If the connection to the Nokia data source is determined to be lost, the Nokia C2C Publisher shall send an alert message to all subscribed clients indicating a loss of communication to the Nokia data source.	NOK007I7C	6.1
FEAT8.1.6	Interface to portable CCTV	The SunGuide system shall provide an interface to portable CCTVs that support work zone management through drivers with the following protocols — NTCIP, Florida MIB, ONVIF	TV003	1
FEAT8.2.2	Camera system types	The CCTV function shall be capable of controlling cameras (e.g., pan/tilt/zoom). The following protocols will be used to issue command/control requests to the cameras.· NTCIP·ONVIF SunGuide	TV002D	1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT8.2.5	Device driver types	At a minimum the CCTV function shall provide device drivers for the following camera types – NTCIP compliant cameras, ONVIF compliant cameras, · Sunguide protocol	TV001	1
FEAT8.5	ONVIF	The SunGuide software shall provide the capability to control (e.g. pan, tilt, zoom, focus, iris) any ONVIF compliant camera as certified by the ONVIF organization, i.e. an ONVIF Network Video Client.	TV018D	6.1
FEAT8.5.1	Functionality	Functionality will be provided through the ONVIF driver for services that are available through ONVIF and implemented by the device	TV019D	6.1
FEAT8.5.2	Range Objects	The CCTV range objects shall be implemented in the ONVIF device driver and shall include all of the following information if available – A maximum number of presets parameters; Pan left limit parameters; Pan right limit parameters; Pan home position parameters; Tilt up limit parameters; Tilt down limit parameters; Zoom limit parameters; Focus limit parameters; Iris limit parameters; Maximum pan step angle parameters; and Maximum tilt step angle parameters.	TV020D	6.1
FEAT8.5.3	Timeout Objects	The ONVIF device driver shall contain the CCTV timeout objects and shall include all of the following information if available – Pan timeout parameter; Tilt timeout parameter; Zoom timeout parameter.	TV021D	6.1
FEAT8.5.4	Preset Objects	The ONVIF device driver shall contain CCTV preset objects and shall include all of the following information if available – Go to preset position parameters; Store preset position parameters; Pan position parameters; Tilt position parameters; Lens zoom position parameter.	TV022D	6.1
FEAT8.5.5	System feature control objects	The ONVIF device driver shall contain CCTV system feature control objects and shall include all of the following information if available – System lens feature control parameter; System lens feature status parameter; and System lens equipment availability parameter.	TV023D	6.1



SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT65	System Administration Application (SAA)			6.1
FEAT65.1	Protocol	SAA shall communicate with clients via Transmission Control Protocol/Internet Protocol (TCP/IP)	SAA-SYS-1	6.1
FEAT65.2	Logging	SAA shall use Status Logger to log activity messages.	SAA-SYS-2	6.1
FEAT65.3	Process Control	SAA shall interface with Executive Handler to provide process control and monitoring.	SAA-SYS-3	6.1
FEAT65.4	Service	SAA shall run as a windows service.	SAA-SYS-4	6.1
FEAT65.5	Manage User Information	SAA shall manage user information.	SAA-UC-1	6.1
FEAT65.5.1	Add Users	SAA shall allow an authorized user to add users to the system.	SAA-UC-1.1	6.1
FEAT65.5.2	Modify Users	SAA shall allow an authorized user to modify users in the system.	SAA-UC-1.2	6.1
FEAT65.5.3	Delete Users	SAA shall allow an authorized user to delete a user from the system.	SAA-UC-1.3	6.1
FEAT65.5.4	Retrieve Users	SAA shall allow a user to be retrieved.	SAA-UC-1.4	6.1
FEAT65.5.5	Change Password	A user shall be able to change his/her own password.	SAA-UC-1.5	6.1
FEAT65.5.5.1	Password Expiration Notification	Upon login, SAA shall notify users of whether or not a password change is required.	SAA-UC-1.5.1	6.1
FEAT65.5.6	Admin Password Reset	SAA shall allow an authorized user to reset another user's password.	SAA-UC-1.6	6.1
FEAT65.5.7	Store User Credentials	SAA shall store user credentials.	SAA-UC-1.7	6.1
FEAT65.5.7.1	User Permission Storage	SAA shall be able to store an application or subsystem's true/false permissions for a user.	SAA-UC-1.7.1	6.1
FEAT65.5.7.2	Equipment Permissions	SAA shall be able to store a subsystem's equipment permissions for a user.	SAA-UC-1.7.2	6.1
FEAT65.5.7.3	Metadata Information	SAA shall be able to store subsystem or application's metadata information for a user.	SAA-UC-1.7.3	6.1
FEAT65.5.7.4	IDB Schema	SAA shall use the IDB user schema to store and retrieve user credentials.	SAA-UC-1.7.4	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT65.5.7.5	Combined group and user permissions	SAA shall provide a mode of operation where a user's group and individual permissions are combined to obtain permissions.	SAA-UC-1.7.6	6.1
FEAT65.5.7.6	Group Membership permissions	SAA shall provide a mode of operation where only a user's group membership is used to obtain permissions.	SAA-UC-1.7.7	6.1
FEAT65.5.7.7	Authorized User Changes	SAA shall allow authorized users to subscribe to changes in user credentials.	SAA-UC-1.7.8	6.1
FEAT65.5.8	Manage User Groups	SAA shall be able to manage user groups	SAA-UC -1.9	6.1
FEAT65.5.8.1	List of Group Permissions	User groups shall contain a list of the permissions for users in the group	SAA-UC -1.9.1	6.1
FEAT65.5.8.2	Unlimited Group Membership	Users shall be allowed to be members of any number of groups.	SAA-UC -1.9.2	6.1
FEAT65.5.8.3	Add Users	SAA shall allow a user group to be added.	SAA-UC -1.9.3	6.1
FEAT65.5.8.4	Modify Users	SAA shall allow a user group to be modified.	SAA-UC -1.9.4	6.1
FEAT65.5.8.5	Delete Users	SAA shall allow a user group to be deleted.	SAA-UC -1.9.5	6.1
FEAT65.5.8.6	Retrieve Users	SAA shall allow a user group to be retrieved.	SAA-UC -1.9.6	6.1
FEAT65.5.8.7	Retrieve Group Users	SAA shall allow a list of users to be retrieved for a group.	SAA-UC -1.9.7	6.1
FEAT65.5.9	Retrieve Permissions	SAA shall allow the list of permissions for a process to be retrieved.	SAA-UC -1.10	6.1
FEAT65.5.10	Retrieve All Users	SAA shall allow a list of all users in the system to be retrieved.	SAA-UC -1.11	6.1
FEAT65.5.11	Retrieve User Groups	SAA shall allow a list of all user groups in the system to be retrieved.	SAA-UC -1.12	6.1
FEAT65.5.12	User Types	SAA shall associate a user type (normal, system, remote) with each user.	SAA-UC -1.13	6.1
FEAT65.5.13	Optional Email	The email field for users shall be optional.	SAA-UC -1.14	6.1
FEAT65.5.14	Bulk Equipment Permissions	SAA shall allow equipment permissions for multiple users to be sent as one operation.	SAA-UC -1.15	6.1
FEAT65.5.15	First Name Field	The first name field for users shall be optional.	SAA-UC -1.16	6.1
FEAT65.5.16	Last Name Field	The last name field for users shall be optional.	SAA-UC -1.17	6.1
FEAT65.5.17	Description Field	The description field for users shall be optional.	SAA-UC -1.18	6.1
FEAT65.6	See Users Logged In	SAA shall allow a user to view all users currently logged into the system.	SAA-UC-3	6.1

**SunGuide® Software System**  
**SunGuide Software Release 6.0 IV&V Test Procedures**

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT65.7	Allow config data to be retrieved	SAA shall allow SAA configuration data to be retrieved.	SAA-AC-1	6.1
FEAT65.8	Permission Model	An authorized user shall be able to configure the permission model used to determine user permissions.	SAA-AC-4	6.1
FEAT65.9	Password Expiration	An authorized user shall be able to configure the duration for expiring passwords.	SAA-AC-5	6.1
FEAT3.1	Executive handler function	The SunGuide system shall have an executive function that handles all monitoring and reporting of the status of internal processes.	S008	1
FEAT3.3	Start, stop, and restart processes	The executive handler shall be capable of automatic and manual initiation, manual termination and automatic re-initiation of system processes.	EX002	1
FEAT3.8	Initialize individual components	The executive handler shall have the ability to initialize individual process.	EX005	1
FEAT3.9	Monitor, report and display status	The executive handler shall be capable of monitoring, reporting, and displaying the status of all SunGuide processes.	EX006	1
FEAT3.11	Monitor key data	Monitoring shall include pertinent system information such as the current system state, system performance, uptime, and error logs.	EX001M	1
FEAT3.13	Status log query multiple databases	Status log viewer shall support queries across multiple databases	EX004L	1
FEAT3.14	Status log delete aged databases	The system shall delete databases when they age beyond a configurable number of days.	EX005L	1
FEAT12.11	NTCIP v2	The RWIS interface shall support the NTCIP 1204 v02.18 – NTCIP Object Definitions for Environmental Sensor Stations (ESS) Interface Protocol.	RW006	6.1
FEAT12.12	NTCIP v3	The RWIS interface shall support the NTCIP 1204 v03 – NTCIP Object Definitions for Environmental Sensor Stations (ESS) Interface Protocol, available from <a href="http://www.ntcip.org">www.ntcip.org</a> with filename – 1204v0308r2.pdf, released October, 2009.	RW007	6.1
FEAT12.13	RWIS alarms	The software shall produce RWIS alarms based on RWIS data exceeding thresholds.	RW008	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT12.13.1	Thresholds	The software shall allow the user to set alarm thresholds for each RWIS device configured in the system for each RWIS data type available in the software.	RW008A	6.1
FEAT12.13.1.1	Supported Types	The software shall support the following RWIS data types; Atmospheric Pressure in inches of Mercury, Average Wind Sped in miles per hour, Current Wind Speed in miles per hour, Max Wind Gusts Speed for the last 10 minutes in miles per hour, Temperature in Fahrenheit, Dew Point in Fahrenheit, Water Depth in inches, Relative Humidity in percentage, Adjacent Snow Depth in inches, Roadway Snow Depth in inches, Roadway Packed Snow Depth in inches, Precipitation Rate inches per hour, Snow Accumulation Rate in inches per hour, Ice Deposit in inches, Visibility in miles, Exposure in percentage, Surface Temperature in Fahrenheit, Salinity in parts per thousand, Pavement Freezing Point in Fahrenheit, Conductivity in mhos, and Pavement Ice/Water Depth in inches.	RW008A1	6.1
FEAT12.13.2	Recovery Thresholds	The software shall allow the user to set recovery thresholds for each device configured in the system for each RWIS data type available in the software.	RW008B	6.1
FEAT12.14	Beacon Distance Threshold	The software shall allow the user to configure the distance radius away from each RWIS device for determining which beacons will be included in a response plan suggestion.	RW009	6.1
FEAT12.13.3	Thresholds Disabled by Default	The software shall originally set thresholds to be disabled by default.	RW008C	6.1
FEAT12.13.4	Alarm Direction	The software shall allow the user to define if the greater than numeric direction or lesser than numeric direction exceeds an alarm threshold.	RW008D	6.1
FEAT12.13.5	Enforce Correct Threshold Recovery	The software shall require a recovery threshold value to be set that is in the opposite numeric direction of the corresponding alarm threshold's configured numeric direction.	RW008E	6.1
FEAT12.13.6	Show Threshold Direction	The software shall present to the user the numeric direction of the thresholds in each place the thresholds are presented to the user.	RW008F	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT12.13.7	Generate Alerts	The software shall generate an RWIS alarm for any data received that exceeds the alarm threshold.	RW008G	6.1
FEAT12.13.8	Remove Recovered Alerts	The software shall automatically recover/remove an alarm when the data that had exceeded the alarm threshold exceeds the recovery threshold in the opposite numeric direction.	RW008H	6.1
FEAT23.2.4	RWIS Alerts	The software shall produce an operator alert with the RWIS alarm information when the RWIS data produces an alarm.	IDS001	6.1
FEAT23.2.4.1	Associate Alerts	The software shall automatically dismiss an alert by associating the alert to an active event if the event was created on behalf of an earlier alert from the same RWIS device for the same data type.	IDS001A	6.1
FEAT23.2.4.2	Response Plan Activation	The software shall allow the user to configure the software to use a pre-defined response plan or an automatically suggested response plan for each data type on the RWIS device to be automatically activated when that event is automatically created due to an alert.	IDS001B	6.1
FEAT23.2.4.3	Optionally Use Beacons	The software shall allow the user to configure the software to include beacons in an automatically activated response plan with a system-wide setting.	IDS001C	6.1
FEAT23.2.4.4	Event Association	If an operator resolves an event by associating the alert to an existing event, the new alarm will be resolved in the database with the existing event associated to the alert.	IDS001D	6.1
FEAT23.2.4.2.1	Message Does Not Fit	The software shall remove DMS signs from the response plan before automatically activating the response plan if the message is too large for the sign.	IDS001B1	6.1
FEAT23.2.4.2.2	Beacons In Response Plans	The software shall include a set of beacons in an automatically activated response plan suggestion for an event triggered by an RWIS alarm where the event type matches the beacon operational purpose.	IDS001B2	6.1
FEAT12.15	RWIS Simulator	The software shall include an RWIS simulator.	RW0010	6.1
FEAT12.15.1	NTCIP v3	The simulator shall be capable of simulating the NTCIP1204v03 protocol.	RW0011	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT12.15.2	Multiple Devices	The RWIS driver XML protocol simulator shall be capable of simulating multiple devices concurrently.	RW0012	6.1
FEAT12.15.3	API	The simulator shall have an application programmable interface	RW0013	6.1
FEAT12.15.4	GUI	The simulator shall have a graphical user interface.	RW0014	6.1
FEAT66.1	Web Relay Protocol	The software shall support the web relay device protocol to control beacons described by the X-301-Manual located here – <a href="http://www.controlbyweb.com/x301/X-301_Manual-v1.4.pdf">http://www.controlbyweb.com/x301/X-301_Manual-v1.4.pdf</a> .	BMS001	6.1
FEAT66	Beacon Management Subsystem (BMS)			6.1
FEAT66.2	Manage Devices	The software shall allow a user to add, modify, and delete beacons.	BMS002	6.1
FEAT66.2.1	Configuration Information	Configuration information for a beacon shall include display name, IP address, port, latitude/longitude, roadway, direction, and The objective of this test is to verify that	BMS002A	6.1
FEAT66.3	Static Sign Message	The software shall allow the operator to associate beacons to a static sign message	BMS003	6.1
FEAT66.3.1	Map to Event Type	The software shall allow the operator to associate beacons to an operational purpose that can be mapped to an event type. The only currently supported type will be Visibility.	BMS003A	6.1
FEAT66.4	Activation Request	The software shall allow a user to create a beacon activation request.	BMS004	6.1
FEAT66.5	Termination Request	The software shall allow a user to terminate a beacon activation request.	BMS005	6.1
FEAT66.6	Terminate All Activation Requests	The software shall allow a user to terminate all beacon activation requests for a beacon.	BMS006	6.1
FEAT66.7	Multiple Beacon Activations	The beacon shall activate when there are one or more activation requests for the beacon.	BMS007	6.1
FEAT66.8	Beacon Deactivation Condition	The beacon shall deactivate when there are zero activation requests for the beacon.	BMS008	6.1
FEAT31.2.4	Archived data for ODS	SunGuide shall archive link data, travel times, raw weather, raw traffic data, beacon, and operator-entered event data.	DW004D	3

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT7.29	RWIS			6.1
FEAT7.30	BMS			6.1
FEAT7.28.1	RWIS Alerts			6.1
FEAT7.28.1.1	DMS Message Length Warnings	The software shall indicate to the operator when presenting the operator with alert handling options if there were signs that were removed from the response plan due to message length exceeding sign capacity.	RWISUI001	6.1
FEAT7.28.1.2	Event Hyperlink	If an event was automatically created based on an RWIS alarm, the user shall have the option of opening the event from the alert dialog.	RWISUI002	6.1
FEAT7.28.1.3	Automatic Event Alert Options	If an event was automatically created based on an RWIS alarm, the software shall present the operator with the following options in order for the alert to be removed from the alert box – 1. Acknowledge the alarm and take ownership; 2. Dismiss as already detected, associate to an existing event, and terminate the new response plan and close the automatically created event; 3. Dismiss as false alarm and terminate the new response plan and close the automatically created event.	RWISUI003	6.1
FEAT7.28.1.4	No Automatic Event Alert Options	If no event was automatically created based on an RWIS alarm, the software shall present the operator with the following options in order for the alert to be removed from the alert box – 1. create new event and associate the alert to the event, 2. Dismiss as already detected, associate to an existing event; 3. Dismiss as false alarm.	RWISUI004	6.1
FEAT7.29.1	Status List	The software shall display a list of RWIS devices with their status.	RWISUI006	6.1
FEAT7.29.2	RWIS Icons	The software shall display RWIS devices on the operator map.	RWISUI005	6.1
FEAT7.29.2.1	Icons with Alerts	The software shall indicate on the RWIS icon if the RWIS device is in an alarm state.	RWISUI005A	6.1
FEAT7.30.1	Beacon Status	The software shall display a list of beacons and their status.	RWISUI007	6.1
FEAT7.30.2	Beacon Icons	The software shall display beacons on the operator map.	RWISUI008	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT7.30.2.1	Active Beacon Icons	The software shall indicate on the beacon icon if the beacon is in an activated state.	RWISUI008A	6.1
FEAT7.30.2.2	Beacon Mouse Hover	The software shall display the beacon name, operational status, activation status, and operational purpose on mouse hover.	RWISUI008B	6.1
FEAT7.28	IDS			6.1
FEAT26.5.4	BMS			6.1
FEAT26.5.5	Visibility Message Template	The software shall use the "Visibility" message template for events with the event type "Visibility."	RWISEM001	6.1
FEAT26.5.4.1	Beacons in Response Plans	The software shall include a set of beacons in an automatically activated response plan suggestion for an event triggered by an RWIS alarm where the event type matches the beacon operational purpose.	RWISEM002	6.1
FEAT26.5.4.2	Selectable Beacons	The software shall select the set of beacons to be included in the response plan suggestion that are located within the configurable radius distance from the RWIS device which produced the alarm	RWISEM003	6.1
FEAT26.5.4.3	Beacons Activations	The software shall invoke a beacon activation request for a beacon when a response plan containing that beacon is activated.	RWISEM004	6.1
FEAT26.5.4.4	Beacons Terminations	The software shall remove the activation request of the set of beacons in a response plan when the response plan is terminated.	RWISEM005	6.1
FEAT23.3	Wrong Way Driving (WWD)			6.1
FEAT23.3.1	Click!512	The software shall interface with the Wavetronix Click!512 module	WWD-001	6.1
FEAT23.3.1.1	Click!512 Protocol	The software shall interpret a wrong way driving detection event from the Click!512 module using the protocol defined by TBD.	WWD-001A	6.1
FEAT23.3.1.1.1	WWD Timestamp	The software shall interpret the time at which the wrong way driver was detected according to the timestamp reported by the device	WWD-001A1	6.1



SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT23.3.1.1.2	Heartbeat	The software shall interpret a heartbeat message from the Click!512 module	WWD-001A2	6.1
FEAT23.3.2	Device Configuration	The software shall allow a user to add, modify, and delete wrong way detection devices in the system	WWD-002	6.1
FEAT23.3.3	Email Addresses	The software shall allow a user to configure a list of email addresses for notification of wrong way driving detection alarms	WWD-003	6.1
FEAT23.3.4	Status Change Logging	The software shall log operational status changes of the device in the database.	WWD-004	6.1
FEAT23.3.4.1	Status Change Report	The software shall provide a device report that outputs the operational status log of the wrong way driving detection devices	WWD-004A	6.1
FEAT23.3.5	Detect Status Changes	The software shall detect the operational status of the wrong way driving detection device	WWD-006	6.1
FEAT23.3.5.1	Comm Loss	The software shall detect when communication is lost from the wrong way driving detection device	WWD-006A	6.1
FEAT23.3.5.2	No Heartbeat	The software shall detect when a heartbeat is not received from the wrong way driving detection device within a configured time period	WWD-006B	6.1
FEAT23.3.6	Device Response Option	The software shall respond to wrong way driving detection events from the wrong way detection devices	WWD-007	6.1
FEAT23.3.6.1	Email On Alert	When a detection is recieved from a wrong way driving detection device, the software shall immediately email the configured list of email notification recipients.	WWD-007A	6.1
FEAT23.3.6.1.1	Email Contents	The email shall contain the location and direction of travel configured for the roadway segment or TSS link instrumented by the wrong way driving detection device, and the timestamp reported by the device of the wrong way driving detection alarm	WWD-007A1	6.1
FEAT23.3.7	Store Alerts In Database	The software shall store the location, direction, timestamp, and associated event ID (if applicable) of the wrong way driving detection alert in the database	WWD-007C	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT23.3.7.1	WWD Alerts Report	The software shall provide reports listing wrong way driving alerts that include the wrong way driving detection device, direction, timestamp reported by the device, and associated event ID	WWD-007C1	6.1
FEAT7.28.2	WWD Devices			6.1
FEAT7.28.3	WWD Alerts			6.1
FEAT7.28.2.1	WWD Alerts on Map	The software shall present wrong way driving detection devices to the operator in the GUI	WWD-005	6.1
FEAT7.28.2.2	WWD Device Icon	The software shall display a wrong way driving detection device icon on the operator map	WWD-005A	6.1
FEAT7.28.2.2.1	Icon Coloring for Status	The icon for a wrong way driving detection device shall be colored to indicate operational status	WWD-005A1	6.1
FEAT7.28.2.3	WWD Device List	The software shall display a list of all wrong way driving detection devices	WWD-005B	6.1
FEAT7.28.2.3.1	Device Operational Status Display	The list of wrong way driving detection devices shall contain the operational status for each device	WWD-005B1	6.1
FEAT7.28.3.1	Present WWD Alerts	When an alert is received from a wrong way detection device, the software shall present a wrong way driving detection alert to the operator.	WWD-007B	6.1
FEAT7.28.3.1.1	Icon Shows Unresolved Alerts	The wrong way driving device icon shall indicate if there is an unresolved alert pending for the device and allow the user access the alert handling dialog.	WWD-007B1	6.1
FEAT7.28.3.1.2	Alert List	When an alert is received from a wrong way detection device, a wrong way driving alert shall be added to the alert list.	WWD-007B2	6.1
FEAT7.28.3.1.3	WWD Alert Popup	When an alert is received from a wrong way detection device, a dialog shall be presented to all users capable of receiving alerts.	WWD-007B3	6.1
FEAT7.28.3.1.4	Alert Handling Options	The wrong way driving detection alert shall present alert handling dialog with options for the user to handle the alert	WWD-007B4	6.1
FEAT7.28.3.1.4.1	New Event	The user will be presented an option to create a new event	WWD-007B4A	6.1
FEAT7.28.3.1.4.1.1	Create Event	The system will create a wrong way driving detection event when the user invokes the option to create a new event	WWD-007B4A1	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT7.28.3.1.4.1.2	Set Location Based on Device	The system will automatically set the location of the event to the Event Management location nearest to the the wrong way driving detection device on the same roadway and direction as the detected alarm	WWD-007B4A2	6.1
FEAT7.28.3.1.4.1.3	Event Owner	The software will automatically set the event owner to the user handling the alert	WWD-007B4A3	6.1
FEAT7.28.3.1.4.1.4	WWD Details in Chronology	The system will automatically populate the event chronology with details of the wrong way driving detection alert	WWD-007B4A4	6.1
FEAT7.28.3.1.4.2	Dismiss as Unable to Confirm	The user will be presented an option to dismiss the alert as unable to confirm	WWD-007B4B	6.1
FEAT26.2.10	Wrong Way Driving Event Type	The software shall support a Wrong Way Driving Detection event type	WWD-008	6.1
FEAT26.5.6	Wrong Way Driving Message Template	The Wrong Way Driving Detection event type shall have a DMS message template specific to the event type for generating response plan suggestion messages.	WWD-008A	6.1
FEAT20.10	Scheduled Response Plans	The software shall allow response plans from an open event to be activated on a schedule.		6.1
FEAT26.5.7	Terminate Response Plan from Event Details	The software shall allow the user to terminate the response plan from the event details dialog.	SE001	6.1
FEAT26.5.8	Response Plan Activation Status on Response Plan Dialog	The software shall indicate if the current response plan is active from the response plan dialog.	SE002	6.1
FEAT26.5.9	Active Response Plan Prompt on Close	When a user attempts to close an event with an active response plan, the software shall present the user with the following options – 1) Terminate the response plan and close the event 2) Cancel and do not close the event.	SE003	6.1
FEAT26.3.9	Automatic Response Plan Activation Chronology Entry	The software shall include an event chronology entry of automatic response plan activations.	SE006	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
FEAT26.3.10	Automatic Response Plan Terminate Chronology Entry	The software shall include an event chronology entry of automatic response plan terminations.	SE007	6.1
FEAT7.15.7	Populate Event Selection Lists with Open Events	When re-publishing an event to the FLATIS system, the list of events to select from shall only contain events which are currently active.	SE004	6.1
FEAT7.21.23	Login and Subsystem Dialog	The software shall embed the user login and the list of currently connected subsystems into the operator map.	SE008	6.1
FEAT7.21.24	Subsystem Stand Alone	The software shall allow the list of currently connected subsystems to be launched as a stand-alone dialog.	SE009	6.1
FEAT7.21.25	Logion Dialog Functionality	The login to subsystems control will include the ability to login to the system, logout of the system, login to specific subsystems, log out of specific subsystems, display login status to each subsystem, display subsystem availability status, and save default behavior to login to specific subsystems for the current user.	SE010	6.1
FEAT7.27.43	Video on Desktop for Remote Centers	The Video on Desktop shall allow streaming of video streams from C2C remote centers.	SE011	6.1
FEAT7.27.44	Local and Remote URL Configuration	The software shall allow each video stream to be configured with a local and a remote URL.	SE012	6.1
FEAT7.5.8	DMS Group Locations	The software shall present DMS groups as selectable items in schedules, predefined plans, response plans, and manual messaging.	SE014	6.1
FEAT9.18	Archival of Color DMS	The software shall support the archival of the transmission of color DMS messages in the database	DM018	6
FEAT9.17	Color DMS through C2C	The software shall support the transmission of the color DMS status via Center to Center.	DM017	6
FEAT9.19	DMS Groups	When a DMS group is updated, the software shall use the updated group.	SE013	6.1
FEAT12.13.9	Automatic Events	An option shall be provided to determine if the software should automatically create events and activate response plans when a new RWIS alert is generated.	RW008J	6.1

SunGuide® Software System  
SunGuide Software Release 6.0 IV&V Test Procedures

FEAT Number	Requirement Name	Requirement text	SunGuide ID	Version
SUB14.1.1	Configurable parameters	The following shall be configurable parameters of the logging process -- Host name· TCP port number· Database directory location · Log rollover interval· File reuse.		1
SUB14.1.2	Message level	The status logger shall support the following four message types -- SLINFO – Informational message· SLWARN – Warning message· SLERROR – Error message· SLDEBUG – Debugging message· SLDETAIL – Detail message		1
SUB14.3.1	View files	The log viewer shall be capable of viewing in a scrollable window any of the logs generated by the logging process.		1
SUB14.3.3	ASCII export	The log viewer shall be capable of exporting a log file to UTF-8, tab-delimited file.		1
SUB12.3.10	Beacon archives	The software shall archive operational data from the beacon subsystem.	RWISDA001	6.1
SUB12.3.6.1	Configurable days of archive data	The SunGuide configuration file shall contain a parameter indicating the number of days raw RWIS data shall be stored in the database.	RWISDA003	6.1
SUB12.3.6.2	Purge old data	The software shall keep a configured number of days worth of raw RWIS data in the database and nightly purge data outside the configured range from the database.	RWISDA004	6.1

## Appendix B: Driver Setup Supplement

# ONVIF Camera

Administrative Editor



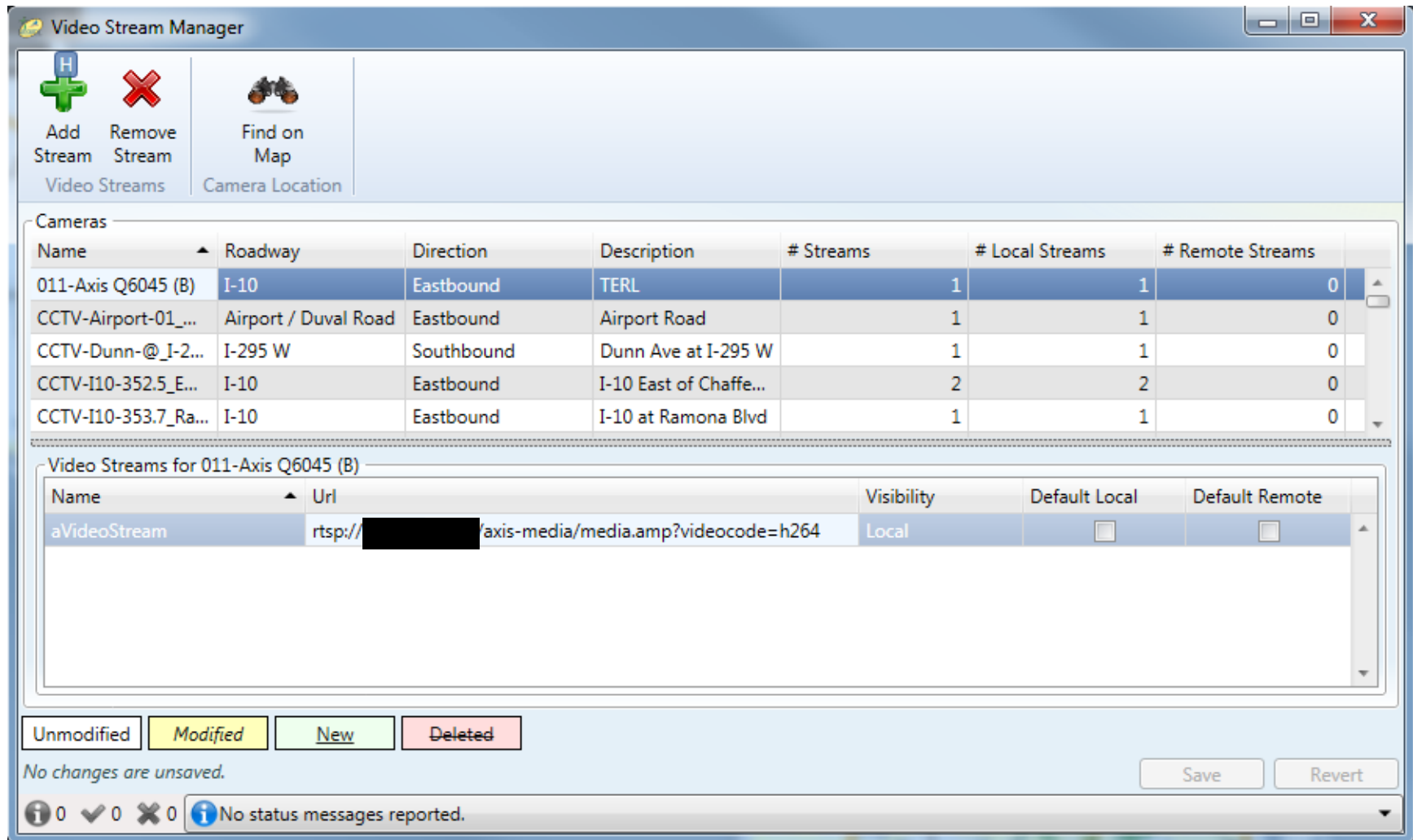
## SunGuide® Administrative Editor

- ⊕-AVL/RR
- ⊖-CCTV / VS
  - Cameras
  - Video Destinations
  - Video Sources
- ⊕-Data Archive
- ⊕-DMS
- ⊕-Event Management
- ⊕-Express Lanes
- ⊕-HAR
- ⊕-Incident Detection
- ⊕-Inventory/Maintenance
- ⊕-Reporting
- ⊕-RMS
- ⊕-RWIS
- ⊕-Safety Barrier
- ⊕-TSS
- ⊕-TVT
- ⊕-VSL
- ⊕-Miscellaneous
- ⊕-User Management

### Edit Camera

Camera Name	<input type="text" value="011-Axis Q6045 (B)"/>	Attach to Video Device <input type="checkbox"/>
Center ID	<input type="text" value="District 1"/>	
Protocol	<input type="text" value="SNMP"/>	
Poll Process	<input type="text" value="ONVIF_Driver"/>	
Manufacturer	<input type="text" value="Unknown"/>	
Location Description	<input type="text" value="TERL"/>	
Roadway	<input type="text" value="I-10"/>	
Direction	<input type="text" value="Eastbound"/>	
Latitude	<input type="text" value="30414100"/>	
Longitude	<input type="text" value="-84321233"/>	
Op Status	<input type="text" value="Active"/>	
Address Type 1	<input type="text" value="HTTP Address"/>	
Address Type 2	<input type="text" value="SOAP"/>	
Address	<input type="text" value="1"/>	<input type="checkbox"/> Publish to FL511 Website
URL	<input type="text" value="http://[redacted]/onvif/"/>	<input type="checkbox"/> Disable PTZ
User Name	<input type="text" value="[redacted]"/>	
Password	<input type="text" value="[redacted]"/>	

Sunguide Operator Map – Video Streams



**Cameras**

Name	Roadway	Direction	Description	# Streams	# Local Streams	# Remote Streams
011-Axis Q6045 (B)	I-10	Eastbound	TERL	1	1	0
CCTV-Airport-01_...	Airport / Duval Road	Eastbound	Airport Road	1	1	0
CCTV-Dunn-@_I-2...	I-295 W	Southbound	Dunn Ave at I-295 W	1	1	0
CCTV-I10-352.5_E...	I-10	Eastbound	I-10 East of Chaffe...	2	2	0
CCTV-I10-353.7_Ra...	I-10	Eastbound	I-10 at Ramona Blvd	1	1	0

**Video Streams for 011-Axis Q6045 (B)**

Name	Url	Visibility	Default Local	Default Remote
aVideoStream	rtsp://[REDACTED]/axis-media/media.amp?videocode=h264	Local	<input type="checkbox"/>	<input type="checkbox"/>

Unmodified Modified New Deleted

No changes are unsaved. Save Revert

0 0 0 No status messages reported.



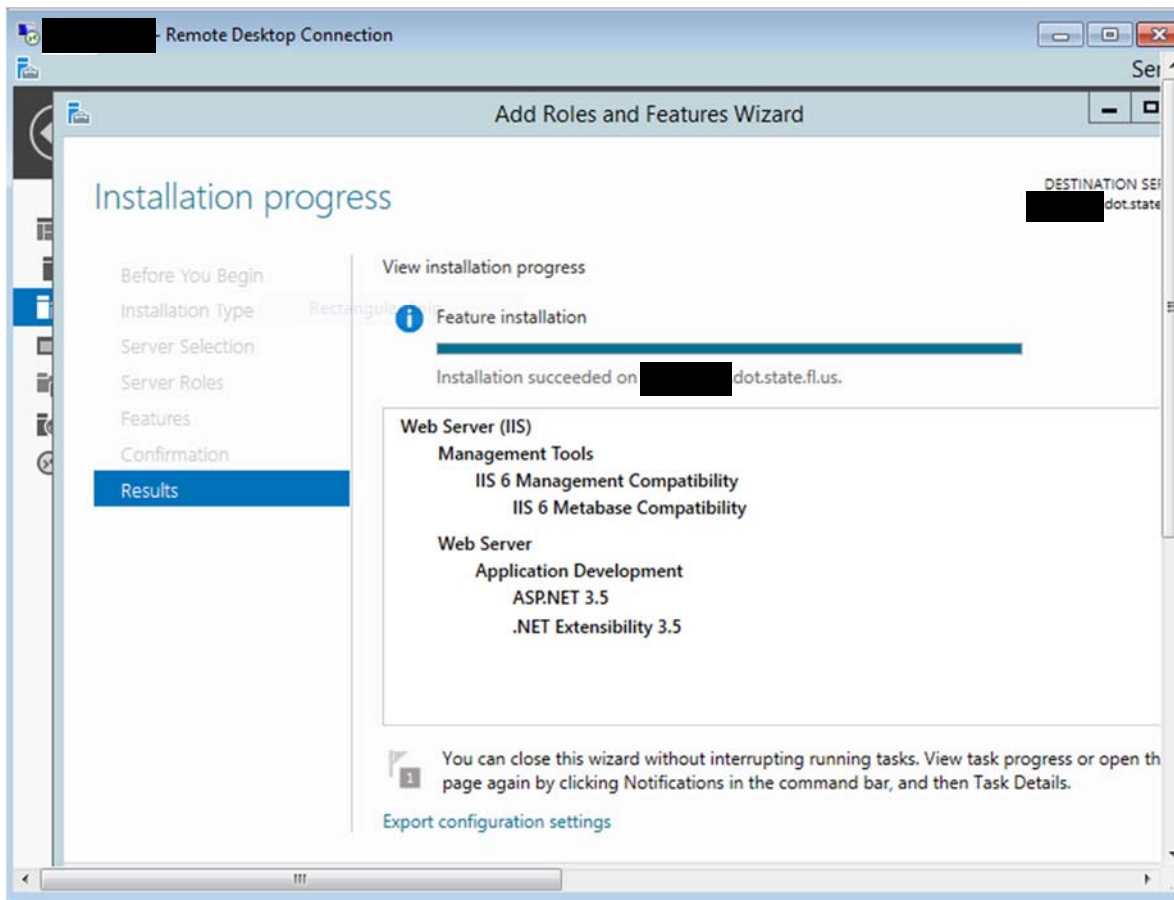
## Computer to Computer

Install Provider/Collector/Subscriber from here:

[\[redacted\]\NetAdmin\SunGuide\Software\\_Releases\SG\\_6.1\SGV6.1.0.480\\_IVV1\Misc\Setup\\_C2CI-V6.1.0.exe](http://[redacted]\NetAdmin\SunGuide\Software_Releases\SG_6.1\SGV6.1.0.480_IVV1\Misc\Setup_C2CI-V6.1.0.exe)

(Skip the “Command” portions).

Configure IIS server roles:



In config.xml, set <nokia> <c2cProviderPath> to Nokia/Provider. Similarly for BlueToad.

Edit config files:

C:\inetpub\wwwroot\C2C\Extractor\Web.config

C:\inetpub\wwwroot\C2C\Collector\Web.config -- configure IP addresses, serverlist, URLs as needed

Repeat [\\\[REDACTED\]\NetAdmin\SunGuide\Software\\_Releases\SG\\_6.1\SGV6.1.0.480\\_IVV1\Misc\Setup\\_C2CI-V6.1.0.exe](#) for just a “Provider” instance for Nokia or Bluetoad. Check the config file for those Providers as well.