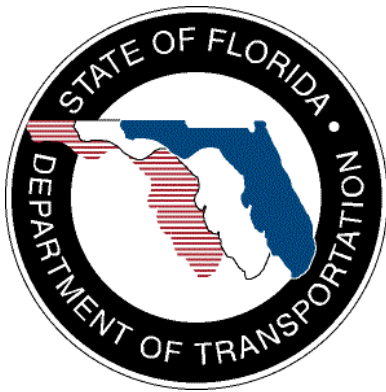


**SunGuide®:**

## **Release 4.2.2 Installation Notes**

**SunGuide-IN-4.2.2**



Prepared for:

Florida Department of Transportation  
Traffic Engineering and Operations Office  
605 Suwannee Street, M.S. 90  
Tallahassee, Florida 32399-0450  
(850) 410-5600

June 25, 2009

<b>Document Control Panel</b>			
File Name:	SunGuide-IN-4.2.2		
File Location:	SunGuide CM Repository		
CDRL:	n/a		
	<b>Name</b>	<b>Initial</b>	<b>Date</b>
Created By:	Adam Clauss, SwRI	ASC	09/04/08
Reviewed By:	Steve Dellenback, SwRI	SWD	10/24/08
	Steve Dellenback, SwRI	SWD	01/08/09
	Steve Dellenback, SwRI	SWD	03/06/09
	Steve Dellenback, SwRI	SWD	04/13/09
	Steve Dellenback, SwRI	SWD	05/15/09
	Robert Heller, SwRI	RWH	06/25/09
Modified By:	Adam Clauss, SwRI	ASC	10/24/08
	Adam Clauss, SwRI	ASC	11/17/08
	John Brisco, SwRI	JSB	01/08/09
	Adam Clauss, SwRI	ASC	03/06/09
	Adam Clauss, SwRI	ASC	04/13/09
	Adam Clauss, SwRI	ASC	05/15/09
	John Brisco, SwRI	JSB	06/22/09
Completed By:			



## Table of Contents

	Page
List of Figures .....	ii
Acronyms.....	iii
Revision History.....	iv
<b>1. Scope.....</b>	<b>1</b>
1.1 <i>Document Identification</i> .....	1
1.2 <i>Project Overview</i> .....	1
1.3 <i>Related Documents</i> .....	2
1.4 <i>Contacts</i> .....	2
<b>2. Installation Notes.....</b>	<b>4</b>
2.1 <i>Upgrade Procedure</i> .....	4
2.2 <i>Configuration Files Backup List</i> .....	6

## List of Figures

	Page
Figure 1.1 - High-Level Architectural Concept.....	1

## **List of Acronyms**

CCTV .....	Closed Circuit Television
COTS .....	Commercial-Off-The-Shelf
DLL.....	Dynamics Link Library
DMS .....	Dynamic Message Sign
DOT .....	Department of Transportation
FDOT .....	Florida Department of Transportation
GUI .....	Graphical User Interface
IN .....	Installation Notes
ITN.....	Invitation to Negotiate
ITS.....	Intelligent Transportation Systems
SwRI .....	Southwest Research Institute <sup>®</sup>
TSS.....	Transportation Sensor Subsystem
VDD.....	Version Description Document
XML.....	Extensible Markup Language

### Revision History

<b>Revision</b>	<b>Date</b>	<b>Changes</b>
4.0.0	September 10, 2008	Initial release
4.0.1	September 29, 2008	Updated based on IV&V results as well as new instructions for updating the event type table
4.0.2	October 3, 2008	Updated with CMB revised Event Lists, SAE codes and change of “Accident to Crash” terminology
4.1.0	October 24, 2008	Updated for release 4.1.0.
4.1.1	November 17, 2008	Updated for release 4.1.1.
4.1.2	January 8, 2009	Updated for release 4.1.2.
4.1.3	March 6, 2009	Updated for release 4.1.3.
4.2.0	May 15, 2009	Updated for release 4.2.0.
4.2.2	June 25, 2009	Updated for release 4.2.2.

# 1. Scope

## 1.1 Document Identification

This document serves as the Installation Notes (IN) for the SunGuide® Release 4.2.2 software.

## 1.2 Project Overview

The Florida Department of Transportation (FDOT) is conducting a program that is developing SunGuide software. The SunGuide software is a set of Intelligent Transportation System (ITS) software that allows the control of roadway devices as well as information exchange across a variety of transportation agencies. The goal of the SunGuide software is to have a common software base that can be deployed throughout the state of Florida. The SunGuide software development effort was based on ITS software available from the state of Texas. In addition to the reuse of software (along with customization of this software), a number of new software modules are being developed. The following figure provides a graphical view of the software.

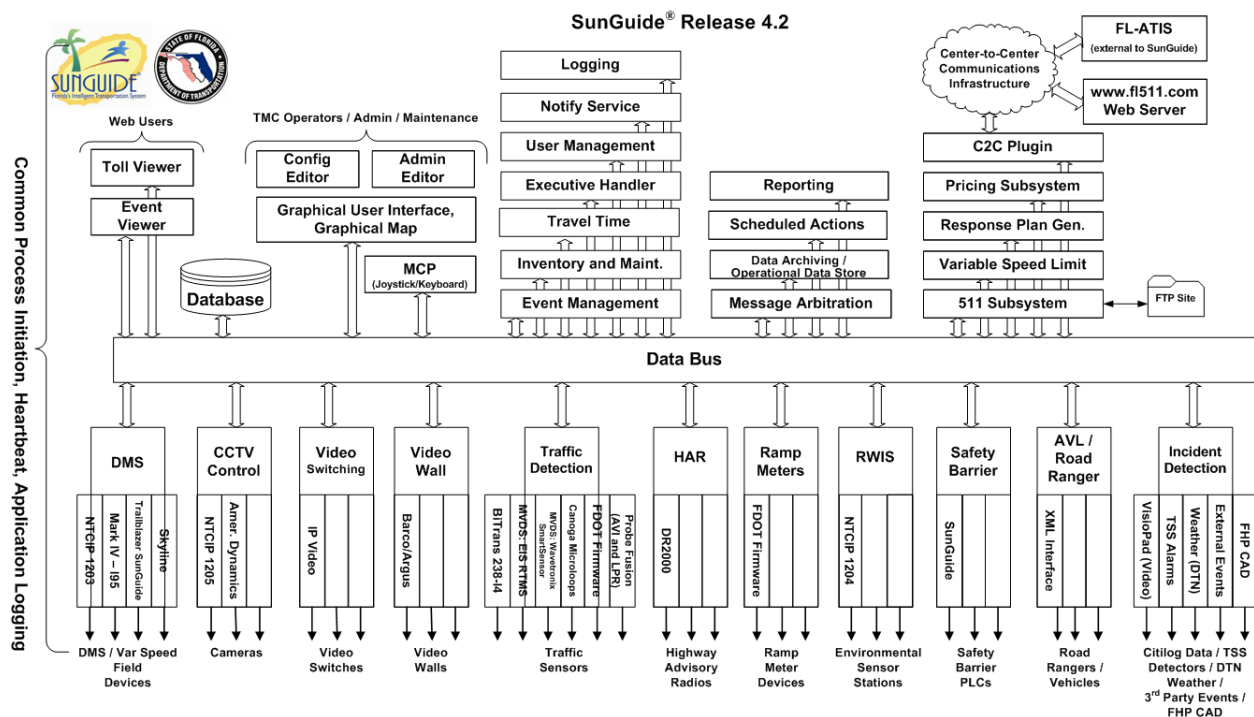


Figure 1.1 - High-Level Architectural Concept

The SunGuide development effort began in October 2003, three major releases have been developed and this document is addressing the fourth major release of the software. After the development, the software will be deployed to a number of Districts and Expressway Authorities throughout Florida and support activities will be performed.

### **1.3 Related Documents**

The following documents were used to develop this document:

- SwRI Qualification Response: *Response to the Invitation to Negotiate (ITN): Statewide Transportation Management Center Software Library System, Negotiation Number: ITN-DOT-02/03-9025-RR*, SwRI Proposal No. 10-35924, dated: November 18, 2002.
- SwRI Technical Proposal: *Technical Proposal for Invitation to Negotiate (ITN): Statewide Transportation Management Center Software Library System, Negotiation Number: ITN-DOT-02/03-9025-RR*, SwRI Proposal No. 10-35924, dated: January 31, 2003.
- SwRI Cost Proposal: *Cost Proposal for Invitation to Negotiate (ITN): Statewide Transportation Management Center Software Library System, Negotiation Number: ITN-DOT-02/03-9025-RR*, SwRI Proposal No. 10-35924, dated: January 31, 2003.
- SwRI BAFO letter: *Southwest Research Institute<sup>®</sup> Proposal No. 10-35924, “Invitation to Negotiate (ITN): Statewide Transportation Management Center Software Library System”, Reference: Negotiation Number: ITN-DOT-02/03-9025-RR*, dated: May 5, 2003.
- FDOT procurement document: *Invitation To Negotiate (ITN), Negotiation Number: ITN-DOT-02/03-9025-RR, Statewide Transportation Management Center Software Library System*, dated: October 21, 2002.
- FDOT Scope of Services: *Statewide Transportation Management Center Software Library System: Scope of Services*, September 22, 2003.
- FDOT Requirements Document: *Statewide Transportation Management Center Software Library System: Requirements Specification*, June 3, 2003.
- Southwest Research Institute, *TMC Software Study*, November 15, 2001.
- Southwest Research Institute, *Introduction to an Operational Concept For the Florida Statewide Library*, FDOT – OCD – 1.0, March 31, 2002.
- Southwest Research Institute, *Statewide Transportation Management Center Software Library System: Software Requirements Specification, STMCSLS-SRS-1.0.2*, April 2, 2003.
- *Standard Written Agreement Modification #17 for SunGuide<sup>TM</sup> Software Release 3.1.2, and 4.0*, July 7, 2008
- *Standard Written Agreement Modification #18 for SunGuide<sup>TM</sup> Software Release 4.0, 4.1 and 4.2*, November 4, 2008
- *Standard Written Agreement Modification #19 for SunGuide<sup>TM</sup> Software Release 4.2*, January 16, 2009.
- World Wide Web Consortium (W3) website: <http://www.w3.org>.
- SunGuide Project website: <http://sunguide.datasys.swri.edu>.

### **1.4 Contacts**

The following are contact persons for the SunGuide software project:

- Elizabeth Birriel, ITS Central Office, [elizabeth.birriel@dot.state.fl.us](mailto:elizabeth.birriel@dot.state.fl.us), 850-410-5606
- Arun Krishnamurthy, FDOT SunGuide Project Manager, [Arun.Krishnamurthy@dot.state.fl.us](mailto:Arun.Krishnamurthy@dot.state.fl.us), 850-410-5615
- David Chang, PBS&J Project Manager, [David.Chang@dot.state.fl.us](mailto:David.Chang@dot.state.fl.us), 850-410-5622
- Khue Ngo, Senior ITS Analyst, [khue.ngo@dot.state.fl.us](mailto:khue.ngo@dot.state.fl.us), 850-410-5579
- Steve Dellenback, SwRI Project Manager, [sdellenback@swri.org](mailto:sdellenback@swri.org), 210-522-3914
- Robert Heller, SwRI Software Project Manager, [rheller@swri.org](mailto:rheller@swri.org), 210-522-3824

## **2. Installation Notes**

This document is intended to be a “companion” document to the SunGuide Version Description Document (VDD). This document will provide detailed notes and tips on how to upgrade the SunGuide software to version 4.2.2 from 4.1.3 Patch 3.

### **2.1 Upgrade Procedure**

1. SG Database
  - a. Shutdown all SunGuide applications on all application servers.
  - b. Backup the database using scripts that use Oracle’s exp utility.
  - c. Run the 4.2.2 Database Upgrade Scripts found on the distribution media, following the included instruction document.
2. SG Application Servers
  - a. Backup the various configuration files (plural) according to the list in the Backup List section below.
  - b. Uninstall SunGuide via the Control Panel -> Add/Remove Programs on all Application Servers. Reboot if prompted.
  - c. Locally on each server (not via fileshare), open the c:\windows\assembly folder.
    - i. Look for the following entries:
      1. FDOT.ExecClientLib
      2. FDOT.ItsGenericLibrary
      3. FDOT.StatusLogClientLib
    - ii. If any versions of these libraries are listed, right click on them and select “Uninstall”.
  - d. Ensure that the following folders were deleted on each SunGuide Application Server:
    - i. c:\inetpub\wwwroot\OperatorMapAx (this path may be located on a shared location if running in a clustered environment)
    - ii. c:\inetpub\wwwroot\SunGuideAdmin (this path may be located on a shared location if running in a clustered environment)
    - iii. c:\Program Files\Florida Department of Transportation
  - e. Install SG via the installer on all application servers. Reboot if asked.
  - f. Restore the various configuration files according to the list below.
3. SunGuide share data
  - a. Upgrade config.xml file according to configuration upgrades in distribution media for the 4.2.2 version.

- b. Report files:
    - i. Verify the locations and permissions of the report templates and exported reports folder as specified in the <RS> section of the config file.
    - ii. Copy the newly installed reports to the configured location on the share (see <RS> section in config file). By default these files are installed to C:\Report Templates.
    - iii. Copy the Performance Measures updated reports over the ones in the configured location. SwRI support staff will directly coordinate with the district system administrators to provide the updated reports that will be specific to the database from which they will extract data.
  - c. Copy the XML schema files to the share.
  - d. Give NETWORK\_SERVICE and the sunguide account full access to the operatorMap folder propagating this (rather than inheriting only) to all subfiles and subfolders using the Advanced Tab in the file security dialog.
4. IIS Configuration performed on each server hosting the web apps / S: drive:
- a. MOVE the GROUP containing the network name used to access the operator map if in clustered configuration via cluster administrator to the appropriate server.
  - b. VERIFY the correct version of ASP.NET (2.0) for SunGuide admin.
  - c. VERIFY the Event Viewer, Toll Viewer, etc. come up; else, reconfigure in IIS appropriately.
    - i. Check the ASP.NET version of IIS,
    - ii. database location in the TollViewerSvc's web.config file
    - iii. default documents in the Event Viewer website properties,

- iv. host string in the web site listener that allows the Event Viewer website to listen on port 80 for that string while all other strings are accepted by the default website.
    - v. The default.htm file in the root should contain correct links to point to the Event Viewer and TollViewer if necessary.
  - d. Lock down the admin editor and operator map editors (details in VDD).
  - e. Repeat this IIS Configuration step if in a cluster for all servers that will be hosting the web applications.
5. Full System Test: Test the system in its entirety to verify that everything is functioning properly in order to identify and resolve any configuration/deployment issues.

## **2.2 Configuration Files Backup List**

If the installation to be performed is on servers currently configured to execute SunGuide, the following files should be backed up prior to installation so that they can be reused once the new installation is performed:

- config.xml – primary configuration file that contains the settings for all of the SunGuide subsystems and drivers
- ipvideodevices.xml – provides model specific settings for video devices
- SnapshotDevices.xml – defines video capture devices and corresponding IP video decoder devices
- floridashields.xml - provides the map with the location of highway shield icons
- deviceLinking.xml – provides device sequencing for auto-generated response plans
- OMInterface.dll.config – operator map client configuration settings
- Commlink.php – specifies location of Connection Manager
- ProcessList.xml – Executive Handler Server’s list of installed services  
Note: This is only necessary if the system is not operating in a clustered environment. The Installer will auto-generate a ProcessList.xml for all installed SunGuide application processes