LACDPW

Department of Public Works

October 20th, 2006

Los Angeles

Countywide Information Exchange Network

SITE INTEGRATION

SITE SERVER TEST PROCEDURES

Release 1

Prepared by:

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LOS ANGELES COUNTYWIDE

INFORMATION EXCHANGE NETWORK

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FINAL

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REVISION HISTORY

VERSION	DATE	IEN RELEASE	DESCRIPTION
Draft	1/30/06	1.08	Initial Draft
Final	10/20/06	1.07	Final

1. INTRODUCTION

1.1 PURPOSE

This document presents the LA County Information Exchange Network (IEN) Site Integration Site Server Test Procedures. The purpose of this test is to verify the functionality of an IEN Site Server as installed at a participating agency.

1.2 SCOPE

The test procedures contained within this document verify the configuration and operation of IEN Site Server components.

These components include, but are not limited to, the following:

- IEN Site Server integration with other IEN components
- Synchronization of shared ATMS Explorer Diagrams

These procedures are intended to certify that a new IEN Site Server has been installed and configured correctly. They are not intended to test the full functionality of the IEN Site Server software.

IEN Site Server software functionality is described in the *San Gabriel Valley Pilot Project Phase III Scope of Work* and tested in the *San Gabriel Valley Pilot Project Acceptance Test Procedures*.

1.3 AUDIENCE

This document is intended for City/Agency personnel who are installing an IEN Site Server at their location.

1.4 REFERENCES

This document references the following materials:

- *San Gabriel Valley Pilot Project Phase III Scope of Work*
- *San Gabriel Valley Pilot Project Acceptance Test Procedures*
- *IEN System Technical Reference Manual*

1.5 DOCUMENT CONVENTIONS

The following conventions are used within this document:

CONVENTION	EXAMPLE
A mono-spaced font is used to indicate prompts and commands typed in at a computer. The bold text is text that must be typed in.	C:> **NSLOOKUP**
Text enclosed in “greater-than” and “less-than” characters indicates keystrokes.	<TAB>
Text enclosed in brackets indicates a user-supplied value. Do not enter the brackets.	C:> **PING** [IP Address]
A plus sign indicates that two keys are to be pressed simultaneously; the first key is held down while the second key is pressed.	<SHIFT>+<F1>
A capitalized word represents a command button or menu option.	SHOW DIAGRAM
Italic typeface indicates document titles or emphasis.	*Scope of Work*

2. APPROACH

The following approach will be used for the test cases within this document.

2.1 TEST STEP FORMAT

The IEN Site Integration Site Server Test Procedures is comprised of a series of test cases. Each test case contains multiple steps, where each step exercises a discrete aspect of the system. The test steps in this document contain the following fields:

Table 2-1: Test Step Fields

FIELD	DESCRIPTION
Step	Identifier for the test step within the test case.
Description	A description of the function or component that is being tested.
Precondition	Any preconditions that must be met before the test can be performed.
Input	One or more actions to be performed by the Test Conductor as part of the test.
Expected Output	One or more operations or events that the system must return as a result of the input for the test to pass.
Notes/Comments	An open field in which the Test Engineer and/or witnesses can log comments or information related to the test step.
Pass/Fail	The result of the test (to be entered during testing).

2.2 ROLES AND RESPONSIBILITIES

The following roles are used in the Site Server Test Procedures:

- **Test Conductor**: The Test Conductor is responsible for performing the test procedures and logging the results. The Test Conductor should be familiar with IEN Workstation, Site Server, and TCS CDI components. The Test Conductor should also be familiar with the Windows Server 2003 Operating System, including how to view and change values in the Registry.
- **Test Witness**: Test Witnesses are responsible for observing the performance of the test and certifying the documented results. Test Witnesses can record additional notes and comments for the Test Report.

The Test Conductor and Test Witnesses are members of the stakeholder agencies and/or their representatives. At least one representative must be present from the LA County Department of Public Works or Metro.

2.3 TEST PERFORMANCE

The Site Server Test Procedures test cases and steps are described in Section 4 of this document. The test cases have been developed such that each test case may be run independently.

Prior to the start of the test, the Test Conductor will ensure that all test environment specifications are met and that Site-specific configuration has been recorded in the Site Server Configuration Values Table (see Section 3).

The Test Conductor will manipulate the test environment to satisfy all preconditions for a particular step. The Test Conductor is to perform the actions specified in the Input field of each test step and then observes the behavior of the system for the criteria specified in the Expected Output fields. A test passes if the actual output meets the expected output criteria; otherwise the test fails. Additional information can be recorded in the Notes/Comments field, as needed.

Each step shall be documented as being completed with either a check mark ("√") or "P" for pass or an "X" or "F" for fail. At the conclusion of each test case, the Test Conductor, as well as any other Test Witnesses, shall log the test case results in both the Test Case Specifications and the Test Results Summary Table (see Section 5). A test case fails if any of the test steps fail. All failed test steps will be noted and System Problem/Change Request form(s) (SPCRs) (Appendix B) completed. Additional comments may be entered to document anomalies, detailed results, or redlined changes to the test steps. The Test Results Summary Table must contain an entry for each test case. The Test Case Specifications and the Test Results Summary Table are the written record of all activities that are performed as part of this integration test.

2.4 SEVERITY LEVELS

In the event that the actual results of a test step does not exactly match the stated expected results (i.e., a test step fails), the Test Conductor must rate and document the severity of the failure. Table 2.2 should be used as the guideline in this appraisal.

Table 2-2: Failure Severity

#	SEVERITY	DESCRIPTION
1	CRITICAL	Causes a system to crash.
2	SEVERE	Causes an application or user to crash and no work around is available.
3	MODERATE	Affects required functionality but a work around is available to proceed.
4	INCONVENIENCE	Inconvenient or an annoying but does not affect functionality. Documentation errors.
5	SUGGESTION	Improvement or enhancement that is outside the scope of required work.

3. TEST ENVIRONMENT SPECIFICATIONS

The Site Server Test Environment consists of the following components.

Table 3-1: Test Environment Components

COMPONENT	DESCRIPTION
Command/Data Interface	Software that connects an IEN Site Server to the local TCS. This component is only required for Sites that are connecting a TCS.
IEN Corridor Server	A Windows-based PC on which the IEN Corridor Server software is installed and configured to connect with the local IEN Site Server.
IEN LANs	COTS networking components that interconnect IEN systems at a Site using 100Mbps or better network links.
IEN Site Server	A Windows-based PC on which the IEN Site Server software is installed.
IEN Routers	COTS networking components that interconnect IEN Sites and their IEN Corridor Server over 384Kbps (or better) network links.
IEN Workstation	A Windows-based PC on which the IEN Workstation software is installed.
IEN Utility Server	Provides various network services that support the IEN.
TCS Server	A Traffic Control System that connects to an IEN Site Server through a Command/Data Interface. This component may not be available at all Sites.

The terms *local* and *remote* are used to differentiate between components installed at the Site where the IEN Site Server is located as opposed to components installed at other Sites within the IEN.

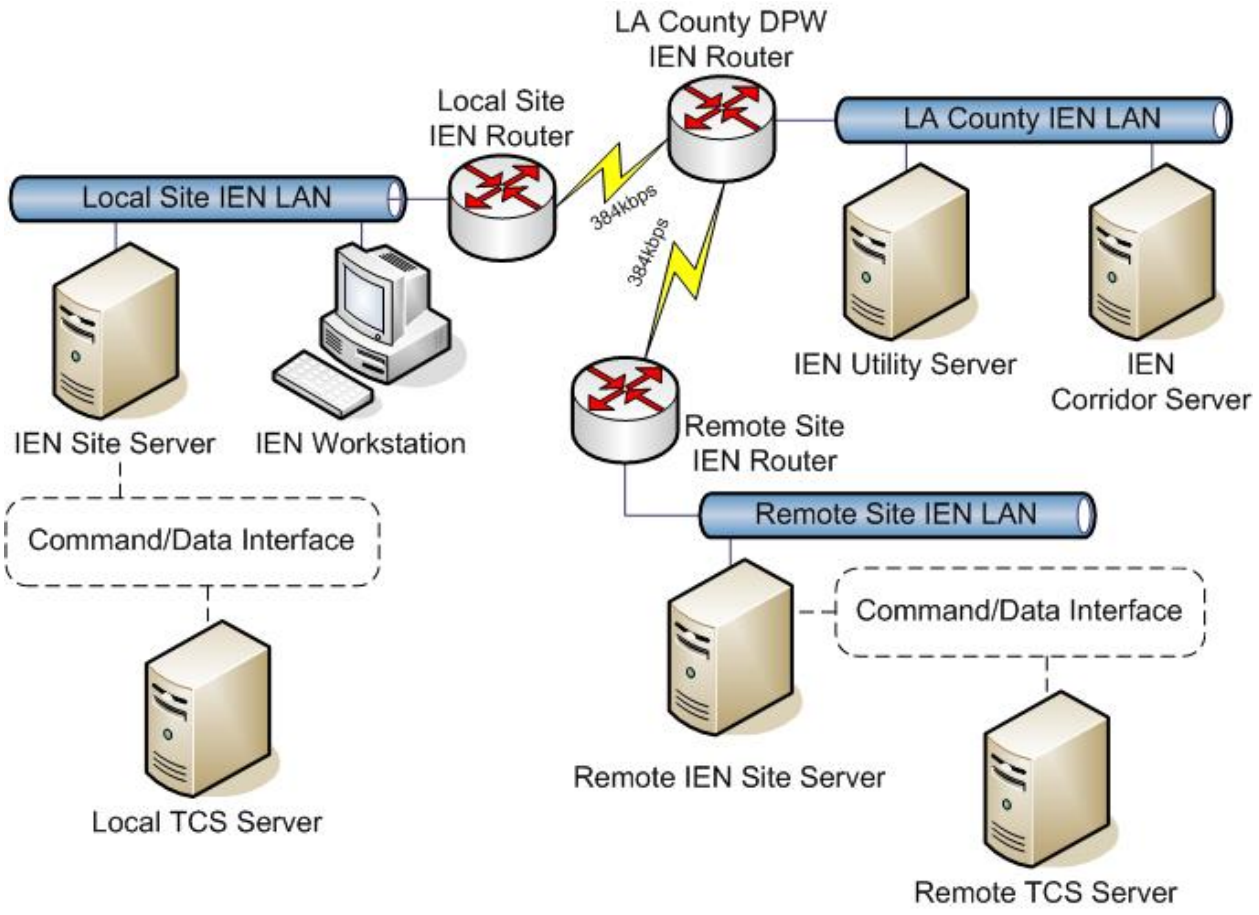
The IEN Site Server is the component being tested herein. The other components listed above support the Site Server's operation. The IEN Site Server being tested must be configured as specified in the *IEN System Technical Reference Manual*, meaning that the following actions have been performed:

- All required COTS software has been installed on the Site Server
- The Site Server has network connectivity to local IEN Workstation(s) and to the appropriate IEN Corridor Server for the Site
- The Site Server has network connectivity to a local Traffic Control System (if one is being connected at this Site)
- IEN Site Server software has been installed and configured appropriately for the Site
- The IEN Site Server has been joined to the IEN Windows domain and registered in the IEN DNS
- The IEN Site Server is synchronized to the IEN Time Server

The Site Server Test Procedures rely on the availability of TCS data from local and remote Sites. Local TCS data originates from a local Traffic Control System that has been connected to the IEN Site Server through a Command/Data Interface. Local TCS data will not be available if no TCS is connected to the Site Server.

The Test Environment is depicted below.

Figure 3-1: Test Environment



Each Site Server must be configured for the Site at which it is located. In Table 3-2 below, record the appropriate values for the Site Server being tested.

Table 3-2: Site Server Configuration Values

PARAMETER	VALUE
Corridor ID Number	
Corridor Name	
Corridor Server Host Name	
Corridor Server IP Address	
Site ID Number	
Site Name	
Site Server Host Name	
Site Server IP Address	
Workstation Host Names/IP Addresses	

The tests may be run with any valid IEN user account that has logon rights for the IEN Site Server. Additional user requirements are noted in the test step preconditions.

4. TEST CASES

The following sections contain the test cases of the IEN Site Integration Site Server Test Procedures. Each test case is written to be a stand-alone test and the test cases may be performed in any order.

The Site Server being tested must be in the default test environment configuration (as specified in Section 3) prior to the start of the test, unless otherwise noted within the specifications of the test case.

It is the responsibility of the Test Conductor to insure that the test results are logged for each test case and test step. It is the responsibility of Test Witness(es) to sign the test results verifying Test Case completion(s) as documented. All witnesses must be listed on the Test Results Form.

It will take two to four hours to set-up, perform, document, and wrap-up these site server test cases.

4.1 VERIFY SITE SERVER SYSTEM CONFIGURATION

TEST CASE SPECIFICATION	
ID	SS-1
Name	Verify Site Server System Configuration
Version	1.0.0
Description	Verifies that the Site Server uses a supported platform and is properly configured for the IEN software.
Prerequisites	The IEN Site Server being tested is configured as specified in the *IEN System Technical Reference Manual* and connected to the other Test Environment components.
Environment	Default
Number of Steps	9
TEST CASE ACCEPTANCE	
Acceptance Targets	n/a
Acceptance Criteria	All test steps must pass
TEST CASE EXECUTION	
Software version/date	
Test start date/time	
Test end date/time	
Total Pass/Fail	

STEP	DESCRIPTION				P/F
	PRECONDITION	INPUT	EXPECTED OUTPUT	NOTES/COMMENTS	
1	Verify that the system is a member of the IEN domain.				
		Log onto the system with an IEN domain account.	The IEN domain account is able to log onto the Site Server.		
2	Verify that the system has network connectivity to the Corridor Server.				
		Open a command prompt on the Site Server and run the command **PING** [IP ADDRESS OF THE CORRIDOR SERVER].	The Corridor Server responds to the Site Server's pings.		
3	Verify that the system has network connectivity to the IEN Utility Server.				
		Open a command prompt on the Site Server and run the command **PING 10.10.2.10**.	The Utility Server responds to the Site Server's pings.		
4	Verify that the system has network connectivity to local Workstations.				
		Open a command prompt on the Site Server and run the command **PING** [IP ADDRESS OF LOCAL IEN WORKSTATION].	Local workstations respond to the Site Server's pings.		
5	Verify that the system has network connectivity to the local TCS CDI (if one is being connected at the Site).				
	ICMP network traffic is permitted between the Site Server and CDI.	Open a command prompt on the Site Server and run the command **PING** [IP ADDRESS OF THE CDI HOST SYSTEM].	The CDI host system responds to the Site Server's pings.		

STEP	DESCRIPTION				P/F
	PRECONDITION	INPUT	EXPECTED OUTPUT	NOTES/COMMENTS	
6	Verify that the system can connect to the IEN DNS and resolve IEN hostnames.				
		Open a command prompt and run the following commands: 1. **NSLOOKUP** [HOSTNAME OF THE CORRIDOR SERVER] 2. **NSLOOKUP** [HOSTNAME OF LOCAL WORKSTATION]	The system is able to resolve IP addresses from the given hostnames		
7	Verify that the system is registered in the IEN DNS.				
		Open a command prompt and run the commands: 1. **NSLOOKUP** [THE SYSTEM'S HOSTNAME] 2. **NSLOOKUP** [THE SYSTEM'S IP ADDRESS]	The DNS resolves the system's hostname and IP address correctly.		
8	Verify that the system is synchronized to the IEN Time Server.				
		Open a command prompt and run the commands: 1. C:> **NTPQ** 2. NTPQ> **PEERS** 3. NTPQ> <CTRL> + C	(1) The peers list contains IENUTILSVR1.IEN.LOCAL (the IEN time server). (2) The time server listing is annotated with an asterisk.		
9	Verify that the system is running Windows 2003.				
		Right-click the MY COMPUTERS icon and select PROPERTIES.	The Properties dialog shows that the operating system is Microsoft Windows 2003.		

COMMENTS:

4.2 VERIFY IEN SITE SERVER SOFTWARE CONFIGURATION

TEST CASE SPECIFICATION	
ID	SS-2
Name	Verify IEN Site Server Software Configuration
Version	1.0.0
Description	Verifies that IEN Site Server software is installed and configured properly.
Prerequisites	The IEN Site Server being tested is configured as specified in the *IEN System Technical Reference Manual* and connected to the other Test Environment components.
Environment	Default
Number of Steps	11
TEST CASE ACCEPTANCE	
Acceptance Targets	n/a
Acceptance Criteria	All test steps must pass
TEST CASE EXECUTION	
Software version/date	
Test start date/time	
Test end date/time	
Total Pass/Fail	

STEP	DESCRIPTION				P/F
	PRECONDITION	INPUT	EXPECTED OUTPUT	NOTES/COMMENTS	
1	Verify that IEN software version 1.07 has been installed.				
		Open Add/Remove Programs and examine the installed programs list.	IEN v1.07 is listed as a currently installed program.		
2	Verify that the IEN software has been configured correctly.				
		Select START > PROGRAMS > INFORMATION EXCHANGE NETWORK > ADMINISTRATIVE TOOLS > SET IEN ENVIRONMENT.	(1) The Name Server Name field is set to the system's hostname. (2) The Corridor Server Name and ID are set to the appropriate values for the Site. (3) The Site Server Name and ID are set to the system's hostname and assigned site number.		

STEP	DESCRIPTION				P/F
	PRECONDITION	INPUT	EXPECTED OUTPUT	NOTES/COMMENTS	
3	Verify the Site Server configuration file.				
		Examine the Site Server configuration file in a text editor (the configuration file is specified in the registry by the value [HKLM\SOFTWARE\TransCore\LACDPW\IEN] SiteServerCfgFile).	(1) The Corridor and Site IDs are set to the proper values for the Site. (2) The System ID number is set to 1 for Site Servers that connect to a TCS CDI; otherwise the number is set to 0. (3) The Update Interval and Update Cycle values are set to 1 and 60 respectively. (4) For Sites that connect to a TCS CDI, the initial data request list contains all supported TCS intersections, detectors, and sections. (5) For Sites that connect to a TCS CDI, the initial data request list contains all Sites in the Corridor.		
4	Verify that the IEN software starts properly.				
	Site Server powered off.	(1) Boot the Site Server. (2) Open the Windows Services console and check the status of the following services: • IEN Component Service • IEN Site Server Service • omniNotifyDaemon • TAO NT Naming Service	The specified services have all been started automatically by the system.		

STEP	DESCRIPTION				P/F
	PRECONDITION	INPUT	EXPECTED OUTPUT	NOTES/COMMENTS	
5	Verify that Site Server object references are registered in the Site Server's TAO Naming Service.				
		(1) Select START > PROGRAMS > INFORMATION EXCHANGE NETWORK > ADMINISTRATIVE TOOLS > TAO NT NAMING VIEWER. (2) Double-click each of the following references: • EventChannel • ChannelFactory • IEN/Site/ RealTimeDataChannel • IEN/Site/CommandManager	(1) The specified object references are listed in the Site Server's Naming Service. (2) The View IOR dialogs show an IIOP address in the format [Site Server IP Address]:[Port].		
6	Verify that Corridor Server object references are registered in the Site Server's TAO Naming Service.				
		(1) Select START > PROGRAMS > INFORMATION EXCHANGE NETWORK > ADMINISTRATIVE TOOLS > TAO NT NAMING VIEWER. (2) Expand the ROOT > IEN > CORRIDOR node and double-click the following references: • CorridorEC0 • ECStructured/CorridorEC[siteid] • CommandManager	(1) The specified object references are listed in the Site Server's Naming Service. (2) The View IOR dialogs show an IIOP address in the format [Corridor Server IP Address]:[Port].		

STEP	DESCRIPTION				P/F
	PRECONDITION	INPUT	EXPECTED OUTPUT	NOTES/COMMENTS	
7	Verify that Site Server software naming contexts are registered in the Corridor Server's TAO Naming Service.				
		(1) Select START > PROGRAMS > INFORMATION EXCHANGE NETWORK > ADMINISTRATIVE TOOLS > TAO NT NAMING VIEWER. (2) Expand the ROOT > IEN > CORRIDOR/SITE[SITEID] node and double-click each of the following references: • RealTimeDataChannel • CommandManager	(1) The specified object references are listed in the Corridor Server's Naming Service. (2) The View IOR dialogs show an IIOP address in the format [Site Server IP Address]:[Port].		
8	Verify that CDI object references are registered in the Site Server's TAO Naming Service (if one is being connected to the Site Server).				
	CDI software started.	(1) Select START > PROGRAMS > INFORMATION EXCHANGE NETWORK > ADMINISTRATIVE TOOLS > TAO NT NAMING VIEWER. (2) Double-click each of the following references: • TCSCDI|Cmd|Site[SITEID] • TCSCDI|Data|Site[SITEID]	(1) The specified object references are listed in the Site Server's Naming Service. (2) The View IOR dialogs show an IIOP address in the format [CDI IP Address]:[Port].		
9	Verify that the ATMS Explorer Diagram Synchronization task is run nightly on the Site Server.				
		(1) Open Scheduled Tasks from the Control Panel. (2) Examine the parameters of the "Synchronize ATMS Explorer Diagrams" task.	The event is scheduled to run nightly.		

STEP	DESCRIPTION				P/F
	PRECONDITION	INPUT	EXPECTED OUTPUT	NOTES/COMMENTS	
10	Verify that the ATMS Explorer Diagram Synchronization task runs correctly.				
		(1) Add a new diagram to the ATMSExplorerDiagrams share on the Corridor Server. (2) Right-click the "Synchronize ATMS Explorer Diagrams" task and select RUN. (3) Examine the contents of the ATMSExplorerDiagrams directory on the Site Server.	(1) The task runs without error. (2) The new diagram has been copied to the ATMSExplorerDiagrams directory on the Site Server.		
11	Verify that the ATMSExplorerDiagrams directory on the Site Server is shared out to Site's IEN Workstations.				
		(1) Log onto a local IEN Workstation and browse to the ATMSExplorerDiagrams share on the Site Server. (2) Open a diagram in the share.	(1) The Site Server's ATMSExplorerDiagrams directory has been shared. (2) Users are able to access shared diagrams from the local Workstation.		

COMMENTS:

4.3 VERIFY SITE SERVER SOFTWARE FUNCTIONALITY

TEST CASE SPECIFICATION	
ID	SS-3
Name	Verify Basic Site Server Software Functionality
Version	1.0.0
Description	Verifies basic Site Server functionality
Prerequisites	The IEN Site Server being tested is configured as specified in the *IEN System Technical Reference Manual* and connected to the other Test Environment components.
Environment	Default Set the Site Server software logging level to 4 for this test case by changing the [HKLM\SOFTWARE\TransCore\LACDPW\IEN] SiteServerLogLevel value in the Registry and restarting the IEN Site Server Windows Service. Set the Site Server logging level back to 1 after the test and restart the IEN Site Server Windows Service. ***Warning: Incorrectly editing the registry may severely damage your system. Be very careful to change only the value identified above.***
Number of Steps	3
TEST CASE ACCEPTANCE	
Acceptance Targets	n/a
Acceptance Criteria	All test steps must pass
TEST CASE EXECUTION	
Software version/date	
Test start date/time	
Test end date/time	
Total Pass/Fail	

STEP	DESCRIPTION				P/F
	PRECONDITION	INPUT	EXPECTED OUTPUT	NOTES/COMMENTS	
1	Verify that the Site Server software can connect to the CORBA Naming Service.				
		Open the Site Server Log (C:\Program Files\TransCore\SiteServer.log) and search for a “Resolved CORBA Naming Service” message.	The log file contains the specified message.		
2	Verify that the Site Server software can connect to the Site Event Channel.				
		Open the Site Server Log (C:\Program Files\TransCore\SiteServer.log) and search for a “Site EvtCh Connect attempt succeeded” message.	The log file contains the specified message.		
3	Verify that the Site Server software can connect to the Corridor Event Channel.				
		Open the Site Server Log (C:\Program Files\TransCore\SiteServer.log) and search for a “Corridor EvtCh Connect attempt succeeded” message.	The log file contains the specified message.		

COMMENTS:

4.4 VERIFY SITE SERVER INTEGRATION WITH CDI

TEST CASE SPECIFICATION	
ID	SS-4
Name	Verify Site Server Integration With CDI
Version	1.0.0
Description	Verifies Site Server integration with CDI
Prerequisites	The IEN Site Server being tested is configured as specified in the *IEN System Technical Reference Manual* and connected to the other Test Environment components. A Traffic Control System is connected to the Site Server.
Environment	Default Set the Site Server software logging level to 4 for this test case by changing the [HKLM\SOFTWARE\TransCore\LACDPW\IEN] SiteServerLogLevel value in the Registry and restarting the IEN Site Server Windows Service. Set the Site Server logging level back to 1 after the test and restart the IEN Site Server Windows Service. ***Warning: Incorrectly editing the registry may severely damage your system. Be very careful to change only the value identified above.***
Number of Steps	5
TEST CASE ACCEPTANCE	
Acceptance Targets	n/a
Acceptance Criteria	All test steps must pass
TEST CASE EXECUTION	
Software version/date	
Test start date/time	
Test end date/time	
Total Pass/Fail	

STEP	DESCRIPTION				P/F
	PRECONDITION	INPUT	EXPECTED OUTPUT	NOTES/COMMENTS	
1	Verify that the Site Server Service can connect to the local TCS CDI.				
		Open the Site Server Log (C:\Program Files\TransCore\SiteServer.log) and search for a "TCSCDI Connect attempt succeeded" message.	The log file contains the specified message.		
2	Verify that the Site Server Service is sending data requests to the local TCS CDI.				
		Open the Site Server Log (C:\Program Files\TransCore\SiteServer.log) and search for "Send Request for… Devices" messages.	(1) The log file contains the specified messages. (2) The messages were logged at a rate of once-per-second.		
3	Verify that the TCS CDI is responding to the Site Server's data requests.				
		Open the Site Server Log (C:\Program Files\TransCore\SiteServer.log) and search for "CDI returned data list in… milliseconds." messages.	The log file contains the specified messages.		
4	Verify that the Site Server sends data to the Local Event Channel.				
		Open the Site Server Log (C:\Program Files\TransCore\SiteServer.log) and search for "Snd… EvtDta … to Local Event Channel" messages.	(1) The log file contains the specified messages. (2) The messages were logged at a rate of once-per-second.		

STEP	DESCRIPTION				P/F
	PRECONDITION	INPUT	EXPECTED OUTPUT	NOTES/COMMENTS	
5	Verify that the Site Server sends data to the Corridor Event Channel.				
		Open the Site Server Log (C:\Program Files\TransCore\SiteServer.log) and search for "Snd… EvtDta … to Corridor EventChannel" messages.	(1) The log file contains the specified messages. (2) The messages were logged at a rate of once-per-second.		

COMMENTS:

5. TEST RESULTS FORM

Test Date _____

Test Location _____

Test Name/ID _____

The undersigned verify that this test was conducted as redlined in the test cases and/or documented in the Test Result Summary Table (see Table 5-2).

Table 5-1: Test Witness Signatures

	Name (Printed)	Signature	Date
Test Conductor			
Test Recorder			
Client Witness			
Other Witness			

Table 5-2: Test Results Summary Table

TEST CASE	DATE	START TIME	END TIME	PASS/FAIL	FAILED STEPS	SPCR ID #'S	REMARKS

6. APPENDICES

6.1 APPENDIX A – ACRONYMS AND DEFINITIONS

TERM	DEFINITION
ATMS	Advanced Traffic Management System
COTS	Commercial Off the Shelf Software
CDI	Command and Data Interface. Software that connects an IEN Site Server to a Traffic Control System.
DNS	Domain Name Service
DPW	(Los Angeles County) Department of Public Works
ICMP	Internet Control Message Protocol
IEN	Information Exchange Network
IMS	Incident Management System
IP	Internet Protocol
LAN	Local Area Network
MTA (Metro)	(Los Angeles County) Metropolitan Transportation Authority
SPCR	System Problem/Change Request form
TCS	Traffic Control System

6.2 APPENDIX B – SOFTWARE PROBLEM/CHANGE REQUEST FORM

SPCR Report Identifier: _____ Suggested Priority (1-5) _____

Reported By: _____ Date _____
Organization: _____ Phone _____

Problem Title: _____
Project _____
Component/Program Unit _____ Version _____

Description (Be concise, include equipment involved and location. Attach additional sheets or supporting information as necessary)

_____
_____
_____
_____
_____
_____
_____

Test Step/Scenario _____
Repeatable (Check One) Always ( ) Frequently ( ) Rarely ( ) Unable to Repeat ( )

Phase Found _____
Requirement(s) Affected (Reference Document and Paragraph) _____
_____

Initially Assign To _____

Priority Legend

#	PRIORITY	DESCRIPTION
1	CRITICAL	Causes a system to crash.
2	SEVERE	Causes an application or user to crash and no work around is available.
3	MODERATE	Affects required functionality but a work around is available to proceed.
4	INCONVENIENCE	Inconvenient or an annoying but does not affect functionality. Documentation errors.
5	SUGGESTION	Improvement or enhancement that is outside the scope of required work.