STEP Evaluation Report

911CAD Version 8.21

August 2011

Table of Contents

List of Figures

List of Tables

Executive Summary

The Federal Emergency Management Agency (FEMA), National Preparedness Directorate (NPD) offers a project to assist the response community with interoperability Test and Evaluation (T&E). The Preparedness-Technology, Analysis, and Coordination (P-TAC) Center manages the Supporting Technology Evaluation Project (STEP), which conducts T&E of technologies relating to incident management and response. This report presents the results from an interoperability evaluation of RAD Software's product[1] 911CAD version 8.21. The 911CAD evaluation was conducted from 6-7 June 2011. STEP uses an accredited testing laboratory located in Somerset, KY (Incident Management Test and Evaluation Laboratory [IMTEL[2]]) for conducting evaluations.

The type of evaluation performed for a system is dependent on the system's incorporation of National Incident Management System (NIMS) concepts and principles and/or NIMS recommended technical standards. This was a Comprehensive NIMS Evaluation; and therefore, it specifically addresses adherence to NIMS concepts and principles as well as support to core target capabilities found in the Target Capabilities List (TCL). The evaluation does not address NIMS recommended technical standards. This evaluation had 2 objectives:

- **Objective 1** was to evaluate the product's incorporation of NIMS concepts and principles.

- **Objective 2** was to identify the applicability of core capabilities recognized by the TCL.

911CAD is a 'Call-Taking/Radio Dispatching' software application designed for '911 Centers' of public-safety related agencies/organizations. The product is intended for use primarily in small to medium sized organizations. 911CAD can be run on a single computer or on a network of computers. In a networked configuration, the screens content is updated in near real-time. In addition to creating and maintaining incidents as 'Call Cards', it is also capable of analyzing and summarizing data over time.

End-user installation was accomplished using a single comprehensive setup executable file on IMTEL computer workstations. To facilitate interoperability, all workstations were configured to access a common location for data. The vendor conducted two hours of training via telephone for STEP participants. An illustrated manual and setup guide were downloaded from the vendor's website. Assessors with experience as an emergency manager, emergency responder, and/or first receiver[3] conducted an evaluation of the system, and provided qualitative analysis and feedback on 911 CAD based on concepts and principles from the NIMS document (December 2008). Assessors also identified which of the core capabilities from the TCL (September 2007) apply to the product.

---

[1] The terms product, system, and technology are used interchangeably throughout this report.

[2] The laboratory is located within Science Applications International Corporation's (SAIC) Somerset, Kentucky facility.

[3] First receivers typically include personnel in the following roles: clinicians and other hospital staff who have a role in receiving and treating injured or contaminated victims (e.g., triage, decontamination, medical treatment, and security) and those whose roles support these functions (e.g., set up and patient tracking). References to emergency response personnel throughout this document are intended to include first receivers.

NIMS Concepts and Principles

Table 1: NIMS Criteria Rating Summary provides a summary of findings for NIMS criteria. Key elements identified within each NIMS criterion are cited as Minimum Product Requirements. These requirements were derived from the NIMS document and impact the overall rating of the product's adherence to NIMS concepts and principles. The numbers provided below summarize ratings (Agree, Disagree, Not Applicable) for Minimum Product Requirements within each NIMS criterion.

Table 1: NIMS Criteria Rating Summary

NIMS Criteria (Number of Minimum Product Requirements)	# Agree	# Disagree	# Not Applicable
Emergency Support (**1**)	1	0	0
Hazards (**1**)	1	0	0
Preparedness (**1**)	1	0	0
Communications and Information Management (**9**)	8	0	1
Resource Management (**10**)	2	0	8
Command and Management (**2**)	1	0	1

Note: NIMS criteria and Minimum Product Requirements are described in the STEP Guide.

911CAD is consistent with all NIMS criteria (Emergency Support, Hazards, Preparedness, Communications and Information Management, Resource Management, Command and Management). Overall, 911CAD applies to 14 of 24 Minimum Product Requirements; of which 14 are consistent with NIMS concepts and principles. An overview for each NIMS criterion is provided below; explanations of all findings are provided in Section 3.0 Results.

Target Capabilities List

911CAD applies to core capabilities that address: prevention, response, and common capabilities. See the STEP Guide for a list of the core capabilities recognized by the TCL and Section 3.0 Results for those capabilities that apply to the system.

1.0   Introduction

This report presents the results from an evaluation of 911CAD version 8.21, a product marketed by RAD Software. FEMA's National Preparedness Directorate (NPD) provides strategy, policy, and planning guidance to build prevention, protection, response, and recovery capabilities among all levels of government throughout the nation. In support of this effort, the P-TAC Center assists the responder stakeholder community with standards and technology integration, evaluations, exercises, and training activities relating to NIMS and preparedness. The P-TAC Center is funded through the NIMS General Support Contract (NGSC) and managed by the NPD within FEMA. The project includes operation of a simulated Emergency Operations Center (EOC) with supporting technologies located at SAIC's facility in Somerset, KY.

As part of the P-TAC Center, STEP provides evaluations of supporting technologies relating to incident management and response. Evaluation activities are designed to verify interoperability and provide the response community with reports to support purchasing decisions. Products evaluated by STEP vary in system capabilities; therefore, STEP scales their evaluations as needed. For more information on the evaluation project and types of evaluations performed, visit the STEP website or contact the STEP team.

A Tier IV – Emergency Support Systems Evaluation was conducted for 911CAD. The intent of this evaluation was to determine the system's ability to incorporate NIMS concepts and principles and support core target capabilities found in the TCL.

Vendor participation in STEP is voluntary and the use of trade names and evaluation results in this document do not constitute a Department of Homeland Security (DHS) or FEMA endorsement or certification of the use of such commercial hardware or software. Evaluations do not constitute a determination of NIMS compliance.

1.1   Project Summary

NIMS provides a framework and sets forth, among others, the requirement for interoperability and compatibility to enable a diverse set of public and private organizations to conduct well-integrated and effective incident management operations. Systems operating in an incident management environment must be able to interact smoothly across disciplines and jurisdictions. Interoperability and compatibility are achieved through the use of tools such as common communications and data standards. Establishing and maintaining a common operating picture and ensuring accessibility and interoperability are the principal goals of the Communications and Information Management criterion of NIMS.

STEP evaluations primarily take place in a controlled, simulated EOC-based environment. However, some systems may require an additional or alternate environment, such as a limited field setting. In these cases, the field setting is considered an extension of the laboratory environment. Evaluations take place usually over the course of four days during which the evaluation team, known as the STEP team, gains hands-on experience with the systems. The STEP team typically consists of one test engineer, one test analyst, and assessors for each system under evaluation. The STEP team is scaled appropriately based on the complexity and type of evaluation. Participants adhere to a non-disclosure agreement, which ensures objectivity and the protection of the vendor's sensitive information.

The evaluation took place at the IMTEL which is accredited through the American Association for Laboratory Accreditation (A2LA). To achieve and maintain accreditation status, the laboratory was required to meet general requirements for the competencies of testing and calibration laboratories, as

provided in International Organization for Standardization (ISO)/International Electrotechnical Commission (IEC) 17025:2005. The current scope of accreditation and associated certification is available on A2LA's website for ISO/IEC 17025:2005. Results presented in Section 3.1 NIMS Concepts and Principles are within IMTEL's ISO/IEC 17025:2005 scope of accreditation. In the event that any individual findings fall outside the scope of accreditation, they will be clearly annotated as such.

1.2   System Description[4]

911CAD is a computer-assisted call-taking and radio-dispatching program designed primarily for law enforcement and other public safety agencies**. Figure 1: Main User Interface Window,** below depicts the 911CAD Main User Interface screen. The Main Window is the primary desktop display of the software where users will spend most of their time performing their main tasks (call-taking and radio dispatching). It also provides access to related forms and assisting windows. This window is a three-tabbed form, with each tab providing a primary service. The tabs consist of an Incident Board, a Unit Board, and Contact Management.

The Incident Board displays a current, color-coded, row-by-row listing of all incidents. The Unit Board is meant to be used as an interactive roster of all units, whether on- or off-duty, for an entire organization. Listing a unit on the Unit Board complements and enhances the functions of the Incident Board and Call Cards. 911CAD provides a free-form Contact Management text pad dedicated to maintaining a list of important contact information that needs to be quickly available to dispatchers.

Figure 1: Main User Interface Window

---

[4] The vendor provided the majority of information within this section. Participants did not verify all of the system's capabilities during the evaluation, only those associated with the standards and criteria under test.

1.2.1   Unique Database Record Identification

Each 911CAD record entry is assigned a permanent and unique control number by the program that reflects the time that a particular record was created. Thus, it guarantees a unique identifier that will not be repeated. This feature is intended to provide information integrity and credibility that meets demanding verification standards in the courtroom.

1.2.2   Networking Capability

911CAD can be used as a single workstation application, but it has also been designed for use in a cooperative networked configuration of any number of computers, by any number of users. The configuration is subject to the licensing agreement governing the authorized number of concurrent users for the particular agency/organization.

1.2.3   Full-screen Option

911CAD provides the 911CAD Administrator the option of displaying the Main Window as either a vertically resizable form, or as a 'Full-screen Only' form. This option can be set in the Administrative Window only by the 911CAD Administrator.

1.2.4   Activity Logging

911CAD automatically creates and maintains several Activity Logs that record significant events performed by users of the software. These logs are available only to the 911CAD Administrator, and the vendor indicated file security software methods are used to protect these logs from tampering.

1.2.5   Data Analysis

911CAD has a suite of searching, summarizing, and reporting abilities. It includes options for searching over any time range from an interval of minutes to a span of years allowing users to assemble periodic report summaries (shift, daily, weekly, monthly, quarterly, and/or annual).

1.3   Objectives

The STEP team developed a set of objectives to provide the foundation for this evaluation.

Objective 1 addresses the incorporation of NIMS concepts and principles.[5] This included a determination of how the system applies to the criteria for Emergency Support, Hazards, Preparedness, Communications and Information Management, Resource Management, and Command and Management. General questions on the system, including implementation considerations of the product were also addressed.

---

[5] All products are evaluated for NIMS concepts and principles. The depth at which products are evaluated for NIMS criteria depends on the type of evaluation conducted (e.g. a Comprehensive NIMS Evaluation [Tier III] or a Comprehensive NIMS Evaluation with a Technical Component [Tier I] is evaluated in more detail for applicability to NIMS concepts and principles than is a Technically Focused Evaluation [Tier II]).

Objective 2 addresses the applicability of core capabilities recognized by the TCL. This included identification of capabilities that address: prevention, protection, response, and recovery, as well as common capabilities such as planning and communications that support all missions.

1.4   Evaluation Setup

The evaluation was conducted on site at IMTEL. The vendor provided training, User Guide, and Setup Manual. The 911CAD application was used in trial mode during the evaluation which allowed multiple installations for the STEP team. End-user installation was accomplished using a single comprehensive setup executable file on computer workstations. A test engineer managed and documented the test environment, and was available to assist the vendor in resolving any technical issues.

1.5   Evaluation Schedule

On 27 May, in preparation for the evaluation, the STEP team conducted an Evaluation Readiness Review to ensure logistic and technical preparations were complete. The vendor provided participants with remote training on 6 June. The participants evaluated the system on 6 and 7 June.

1.6   Scope and Limitations

Table 2: Scope and Limitations identifies issues that impacted the evaluation of 911CAD and the STEP team's approach to mitigating them.

Table 2: Scope and Limitations

Limitation	Impact	Mitigation Strategy
None identified.		

2.0   Execution

2.1   Participant Credentials

Table 3: Participant Credentials summarizes the STEP team's areas of expertise, role during the evaluation, and years of experience. In addition to personnel identified below, Information Technology (IT) personnel provide technical support during evaluations as necessary and they maintain IMTEL computer hardware and software.

Table 3: Participant Credentials

Title	Role	Years of Experience
Senior Security Analyst	Lead Emergency Response Assessor, NIMS Evaluation (Experience: Law Enforcement, Emergency Management)	33
Emergency Manager	Emergency Response Assessor, NIMS Evaluation (Experience: Emergency Management, Preparedness, Fire Fighter, Dispatch Operator, and Emergency Medical)	25
Senior Systems Analyst	Test Engineer	3
Systems Engineer	Test Analyst	17

2.2   Methodology Overview

Assessors with knowledge in the areas of emergency response and management performed an evaluation for NIMS concepts and principles in a simulated operational environment. They also identified which of the core capabilities within the TCL apply to the product. A detailed methodology is provided in the STEP Guide. Assessors selected a tornado scenario for this evaluation.

For further information about the procedures used by assessors when reviewing this product, see the STEP Guide available at this website, https://www.nimsstep.org/. The STEP Guide contains complete information about NIMS Criteria and the TCL.

2.3   Post-Assessment Activities

A test analyst was present during the evaluation and collected required data from all participants; the test analyst ensured data integrity and Quality Control (QC). The data collected during this evaluation included a collective STEP Worksheet, a collective TCL – Core Capabilities Form, electronically submitted observation logs and spot reports, and screenshots. Data analysis began during the evaluation and resulted in the development of this evaluation report. After the evaluation was concluded, the P-TAC Center staff conducted internal reviews of the report to ensure accuracy and completeness.

3.0 Results

Results presented in Section 3.1 NIMS Concepts and Principles are within IMTEL's ISO/IEC 17025:2005 scope of accreditation. In the event that any individual findings fall outside the scope of accreditation, they will be clearly annotated as such.

3.1 NIMS Concepts and Principles

3.1.1 Objective 1: Evaluate Incorporation of NIMS Concepts and Principles

Assessors evaluated 911CAD to determine if the system incorporates NIMS concepts and principles, and documented results as identified in the following sections for Objective 1. 911CAD is consistent with all NIMS criteria; it is consistent with Emergency Support; Hazards; Preparedness; Communications and Information Management; Resource Management; and Command and Management. The sections below summarize evaluation results for NIMS concepts and principles. Refer to Appendix A: Detailed Results for NIMS Concepts and Principles for additional details.

3.1.1.1 Emergency Support

911CAD applies to 11 of 15 Emergency Support Functions (ESF)s (Transportation; Communications; Public Works and Engineering; Firefighting; Emergency Management; Emergency Assistance, Housing, and Human Services; Logistics Management and Resource Support; Public Health and Medical Services; Search and Rescue; Oil and Hazardous Materials Response; Agriculture and Natural Resources; Public Safety and Security;). 911CAD applies to 6 of 9 Incident Command functions (Incident Command, Operations, Planning, Logistics, Intelligence/Investigations, and Safety).

3.1.1.2 Hazards

The system applies to all hazard types including natural hazards, human- and technological-caused events.

3.1.1.3 Preparedness

911CAD can be used to effectively support the preparedness activities for planning; training and exercises; and evaluation and revision.

3.1.1.4 Communications and Information Management

Common Operating Picture:

911CAD provides access to critical information. The system allows for on- and off- scene personnel who have network access to shared data files; to have the same information about the incident. It offers an incident overview by collating and gathering information that enables users to make effective decisions. To maintain a common operating picture in a networked environment, the evaluation team had to manually refresh their system, but there is an automatic update option.. The system is not web-based.

Interoperability:

911CAD does not incorporate ICS forms into the product. Users have the ability to email a call card[6] from the system. 911CAD meets the SAFECOM Interoperability Continuum for data sharing via swapping files, common applications and custom-interfaces. The system is not applicable to the SAFECOM Interoperability Continuum for data sharing via one-way standards-based sharing or two-way standards-based sharing. Customers are provided the products data file structure to develop their own custom interfaces.

Scalability:

911CAD can be used during small- and large-scale events and is flexible and scalable to support the full spectrum of multi-agency and multi-discipline incidents and events. Even though the system could be used for large-scale events, it is designed for smaller events. The system is designed for small to medium jurisdictions with populations less than 100,000. The system applies to multiple levels of the government and to the public and private sector.

Plain Language:

The system adheres to the principle of plain language (clear text). It is the responsibility of the user to ensure that information entered into the system uses plain language.

Information Security:

The system requires usernames and passwords to login and users are assigned roles/permissions. The customer would be responsible for encrypted servers and backups that are deemed necessary. The product does not provide a method to hide sensitive officer safety/responder contact information (i.e. personal cell phone) from other users.

3.1.1.5   Resource Management

911CAD addresses the need to manage and mobilize resources. The system was not designed to be a resource management tool. However, the product can display the resources that are available to assign to a 911 call.

3.1.1.6   Command and Management

911CAD is consistent with 7 of 14 management characteristics of the Incident Command System (ICS): Common Terminology; Incident Action Planning; Incident Facilities and Locations; Integrated Communications; Accountability; Dispatch/Deployment; Information and Intelligence Management. The product tracks the accountability of the units dispatched, and the personnel assigned to the units. It would be the dispatcher's responsibility to keep the shift personnel assigned to the units current (i.e. fire trucks staffed by which personnel).

---

[6] The following information is included in the emailed call card: the case incident number; call address location; business name; beat/area; type call; additional call information; complainant; contact information; unit assigned; received, dispatched, arrived, and finished date and time; disposition; and incident notes.

3.1.1.7 *Implementation and Product Overview*

It should take less than two weeks for a department/agency to implement this system (from acquiring and installation to user proficiency). The system's user guide is comprehensive. The 911CAD integrated help tool opens the User Manual. The vendor offers hands-on training and will demonstrate the product and review the User Manual with the customer. If additional training is required it would be handled on a case-by-case basis with the vendor. Training provided by the vendor is comprehensive and it allows recipients to proficiently use the system. The vendor states customer support is available 24 hours a day, seven days a week (24/7) by telephone and email.

The primary capability of 911CAD is its ability to allow a dispatcher to take in calls and dispatch personnel. 911CAD is intuitive and easy to use. The product makes efficient use of colors throughout the system to relate similar tasks. 911CAD was reliable during the evaluation.

3.2 TCL

3.2.1 Objective 2: Identify Applicable TCL Core Capabilities[7]

Assessors identified the following core capabilities as being applicable to 911CAD:

Table 4: TCL Core Capabilities

Common Capabilities	Prevent Mission Capabilities
- Planning - Communications - Intelligence and Information Sharing and Dissemination	- Information Gathering and Recognition of Indicators and Warning - Intelligence Analysis and Production
Protect Mission Capabilities	**Recover Mission Capabilities**
Not Applicable	Not Applicable
Respond Mission Capabilities	
- On-Site Incident Management - EOC Management - Responder Safety and Health - Emergency Public Safety and Security - Environmental Health	- Explosive Device Response Operations - Fire Incident Response Support - Weapons of Mass Destruction (WMD) and Hazardous Materials Response and Decontamination - Search and Rescue (Land-Based)

3.3 Participant Observations

Participants noted the following observations during the evaluation:

---

[7] Objective 2 is not covered under the requirements outlined in ISO/IEC 17025:2005.

System Capabilities

- 911CAD provides the user different search capabilities. **Figure 2: Call Cards on 'Main'** is an example of an address search for all the Call Cards that have occurred on 'Main'.

Displayed calls that match 'Main' - Matches found: 10

Received	Type Call	Location	Unit
06/06/11 15:03:40	Tornado	300 West Main St.	Fire1
06/06/11 15:07:18	*Backup* for Fire1	300 West Main St.	Fire4
06/06/11 15:07:36	*Backup* for Fire1	300 West Main St.	EMS3
06/06/11 15:11:23	Structure Fire	300 West Main St.	Fire12
06/06/11 15:08:05	Tornado	300 West Main St	FD 1
06/06/11 15:16:12	Shooting	832 Main St	Fire11
06/06/11 15:24:13	Train Wreck	300 West Main St.	EMS9
06/06/11 15:36:30	*Backup* for Fire1	300 West Main St.	NA
06/07/11 09:15:06	Robbery, Bank	330 West Main St	P1
06/07/11 10:01:55	Auto fire	330 West Main St	Fire11

Figure 2: Call Cards on 'Main'

System Setup and Access

- Prospective customers have the opportunity to download a 30-day trial version of the software from the vendor's website.

- The system allows for users to define the Type Call for their jurisdiction. This Type Call list can be edited in a word processing program then copied into 911CAD. This feature permits the user to sort the types in the manner that suits their needs. The **Type Call** figure below shows the list sorted by frequency of use.

Figure 3: Type Call

- The system does not have a built in feature to upload all the addresses for a jurisdiction in a bulk update format or process. Since customers are provided the file structures on 911CAD, this could be done with a custom interface. An example of the **Address Management** screen is shown below. Users can manually enter this information.

Figure 4: Address Management

- The search capability for the **Contact Management** information is shown below. In this example the user searched for the word 'STATE'. 911CAD provides the user the option to search for the next occurrence of the searched for content, or to finish searching.
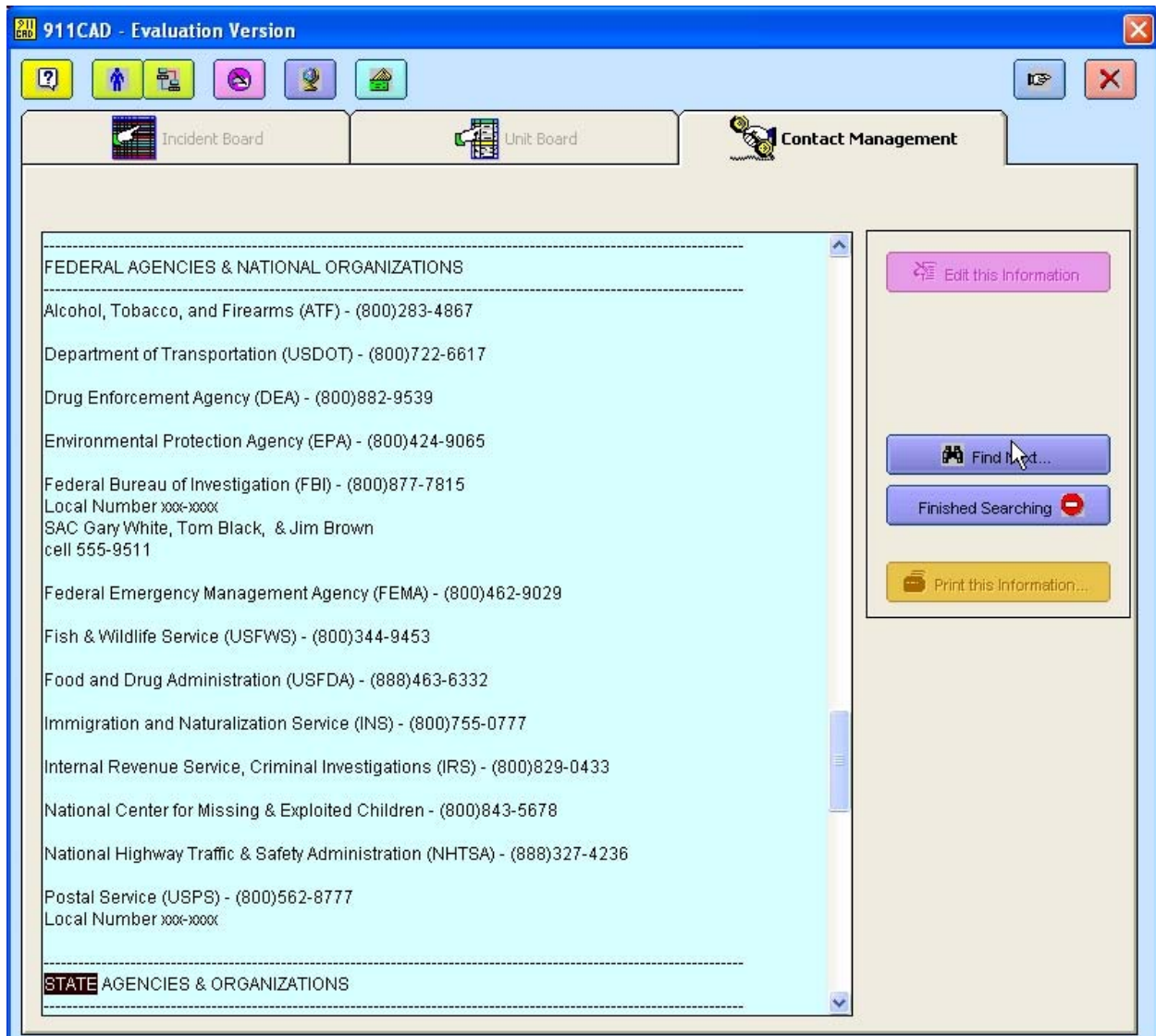
Figure 5: Contact Management

Appendix A: Detailed Results for NIMS Concepts and Principles

Table 5: STEP Worksheet Results provides specific details of the evaluation results.

Table 5: STEP Worksheet Results

EMERGENCY SUPPORT	
Criteria and Question	**Result**
EMERGENCY SUPPORT FUNCTIONS	
1. This product supports the following ESFs:	Agree/Disagree/Not Applicable
a. ESF #1 - Transportation	Agree
b. ESF #2 - Communications	Agree
c. ESF #3 - Public Works and Engineering	Agree
d. ESF #4 - Firefighting	Agree
e. ESF #5 - Emergency Management	Agree
f. ESF #6 - Mass Care, Emergency Assistance, Housing, and Human Services	Not Applicable
g. ESF #7 - Logistics Management and Resource Support	Agree
h. ESF #8 - Public Health and Medical Services	Agree
i. ESF #9 - Search and Rescue	Agree
j. ESF #10 - Oil and Hazardous Materials Response	Agree
k. ESF #11 - Agriculture and Natural Resources	Agree
l. ESF #12 - Energy	Not Applicable
m. ESF #13 - Public Safety and Security	Agree
n. ESF #14 - Long-Term Community Recovery	Not Applicable
o. ESF #15 - External Affairs	Not Applicable
2. There are no obstacles to ESF(s) implementing this product (i.e., from acquiring and installation to user proficiency).	Agree
3. Provide comments on ESF(s) implementing this product, including direct and indirect support.	None identified.
INCIDENT COMMAND	
4. This product supports the following Incident Command functions:	Agree/Disagree/Not Applicable
a. Incident Command	Agree
b. Operations	Agree
c. Planning	Agree
d. Logistics	Agree

e. *Finance/Administration*	Not Applicable
f. *Intelligence/Investigations*	Agree
g. *Public Information*	Not Applicable
h. *Safety*	Agree
i. *Liaison*	Not Applicable
5. There are no obstacles to Incident Command functions implementing this product (i.e., from acquiring and installation to user proficiency).	Agree
6. Provide comments on Incident Command functions implementing this product, including direct and indirect support.	None identified.
7. This product is consistent with the applicable ESFs and core functions of Incident Command System (ICS). **(Minimum Product Requirement 1)**	Agree

HAZARDS	
Criteria and Question	**Result**
8. This product can be used to plan for or respond to the following hazard types:	Agree/Disagree/Not Applicable
a. *Natural hazards*	Agree
b. *Human-caused events*	Agree
c. *Technological-caused events*	Agree
9. Provide comments on hazards applicability.	None identified.
10. This product can be used to plan for or respond to at least one hazard. **(Minimum Product Requirement 2)**	Agree

PREPAREDNESS	
Criteria and Question	**Result**
11. This product can be used to effectively support the following preparedness activities:	Agree/Disagree/Not Applicable
a. *Planning*	Agree
b. *Procedures and Protocols*	Not Applicable
c. *Training and Exercises*	Agree
d. *Personnel Qualifications, Licensure, and Certification*	Not Applicable
e. *Equipment Certification*	Not Applicable
f. *Evaluation and Revision*	Agree
12. Provide comments on the product's support to preparedness activities.	None identified.

Criteria and Question	Result
13. This product can be used to support one or more core preparedness activities: a, b, or c above. **(Minimum Product Requirement 3)**	Agree

<table>
<tr><td colspan="2" align="center">**COMMUNICATIONS AND INFORMATION MANAGEMENT**</td></tr>
<tr><td align="center">**Criteria and Question**</td><td align="center">**Result**</td></tr>
<tr><td colspan="2" align="center">**COMMON OPERATING PICTURE**</td></tr>
<tr><td></td><td>Agree/Disagree/Not Applicable</td></tr>
<tr><td>14. This product supports user access to critical information.</td><td>Agree</td></tr>
<tr><td>15. This product allows on-scene and off-scene personnel to have the same information about the incident (e.g., situational awareness).</td><td>Agree</td></tr>
<tr><td>16. This product offers an incident overview by collating and gathering information that enables the Incident Commander (IC), Unified Command (UC), and supporting agencies and organizations to make effective, consistent, and timely decisions.</td><td>Agree</td></tr>
<tr><td>17. This product has the capability to be updated continually in order to maintain situational awareness.</td><td>Agree</td></tr>
<tr><td>18. This product uses or interacts with geospatial information to portray the incident.</td><td>Agree</td></tr>
<tr><td>19. Provide comments on the common operating picture.</td><td>To maintain a common operating picture in a networked environment, the evaluation team was required to manually refresh their system, but the vendor states there is an automatic update option.</td></tr>
<tr><td colspan="2" align="center">**INTEROPERABILITY**</td></tr>
<tr><td></td><td>Agree/Disagree/Not Applicable</td></tr>
<tr><td>20. Incident reporting and documentation procedures are standardized to ensure situational awareness.</td><td>Agree</td></tr>
<tr><td>21. Comment on incident reporting and documentation procedures.</td><td>The product provides a standardized template for incident reporting and recording and allows for department customization.</td></tr>
<tr><td>22. This product allows NIMS ICS forms to be completed.</td><td>Not Applicable</td></tr>
</table>

23. If the product uses ICS forms, they remain consistent with the ICS form numbers and purpose of the specific type of form as identified by NIMS. **(Minimum Product Requirement 4)**	Not Applicable
24. Provide comments on ICS forms.	The product is not designed to implement ICS forms.
25. This product provides a method for data sharing or is interoperable with other incident management systems via voice, data, or video, etc. Identify the applicable level(s) of Data Elements interoperability on the SAFECOM Interoperability Continuum:	Agree/Disagree/Not Applicable
a. Swap Files	Agree
b. Common Applications	Agree
c. Custom-Interfaced Applications	Agree
d. One-Way Standards-Based Sharing	Not Applicable
e. Two-Way Standards-Based Sharing	Not Applicable
26. Provide comments on data sharing.	Call cards can be emailed from the system using the user's email software. The vendor provides the customer data file structures for the development of custom interfaces.
27. This product is interoperable with other systems at the level of c, d, or e above. **(Minimum Product Requirement 5)**	Agree
SCALABILITY	
	Agree/Disagree/Not Applicable
28. This product can be used to respond to small scale incidents and events. **(Minimum Product Requirement 6)**	Agree
29. This product can be used to respond to large scale incidents and events. **(Minimum Product Requirement 7)**	Agree
30. This product can be used by a single jurisdiction during incidents and events. **(Minimum Product Requirement 8)**	Agree
31. This product can be used across the full spectrum of multi-agency incidents and events. **(Minimum Product Requirement 9)**	Agree
32. This product can be used across the full spectrum of multi-discipline incidents and events. **(Minimum Product Requirement 10)**	Agree
33. This product allows responders to increase the number of users on a system.	Agree

34. Provide comments on scalability.	The system is designed for small to medium jurisdictions with populations less than 100,000.
35. The product can be used at the following:	Agree/Disagree/Not Applicable
a. *On scene as a portable or static device.*	Not Applicable
b. *On scene at the Incident Command Post (ICP).*	Agree
c. *At a Staging Area, Base, or Camp.*	Agree
d. *At a local EOC.*	Agree
e. *At a state EOC.*	Agree
f. *At a Federal Joint Field Office (JFO) or EOC.*	Agree
36. Provide comments on Command and Coordination levels.	The product is not internet based, and is not intended to be used on a portable device; however if the user has a means to assess the shared networked data repository they can access the system.
37. This product can be used by the following levels of government:	Agree/Disagree/Not Applicable
a. *Municipality*	Agree
b. *County*	Agree
c. *Regional*	Agree
d. *Tribal*	Agree
e. *State*	Not Applicable
f. *Federal*	Not Applicable
g. *Special District*	Agree
h. *Agency*	Agree
i. *Other*	Agree
38. This product can be used to support communications among multiple levels of government(s).	Agree
39. Provide comments on levels of government.	The product can be used for commercial entities such as shopping centers, hospitals, casinos, etc.
40. This product is flexible enough to be used by the public and private sectors.	Agree
41. Provide comments on use by the public and private sectors.	None identified.
PLAIN LANGUAGE	
	Agree/Disagree/Not Applicable
42. This product adheres to the principle of plain language (clear text). (**Minimum Product Requirement 11**)	Agree
43. Provide comments on the use of plain language.	None identified.

INFORMATION SECURITY	
	Agree/Disagree/Not Applicable
44. This product has redundancy capabilities as a part of its functionality.	Not Applicable
45. The product provides a means to properly authenticate and certify users for security purposes.	Agree
46. This product provides controls to restrict access to sensitive information. (**Minimum Product Requirement 12**)	Agree
47. This product does not introduce any unique security or vulnerability concerns.	Agree
48. Describe any safeguards integrated to minimize security and/or vulnerability concerns.	The system provides role-based security with usernames and passwords.
49. Provide comments on Information Security.	The product does not provide a method to hide sensitive officer safety/responder information from other users.
Minimum Product Requirement Summary: Rating for the Communications and Information Management category.	**Agree:** 8 of 9 **Disagree:** 0 of 9 **Not Applicable:** 1 of 9

RESOURCE MANAGEMENT	
Criteria and Question	**Result**
	Agree/Disagree/Not Applicable
50. This product addresses the need to manage resources.	Agree
51. This product provides for requirements identification.	Not Applicable
52. This product provides for mobilizing resources.	Agree
53. This product addresses the use of Mutual Aid Agreements and resources. (**Minimum Product Requirement 13**)	Not Applicable
54. This product provides an integrated means for resource typing definitions. (**Minimum Product Requirement 14**)	Not Applicable
55. This product provides a means for inventorying Federal Emergency Management Agency (FEMA) typed resources. (**Minimum Product Requirement 15**)	Not Applicable
56. This product provides a means for inventorying non-FEMA typed resources. (**Minimum Product Requirement 16**)	Not Applicable
57. This product provides a record of credentialed and other personnel. (**Minimum Product Requirement 17**)	Not Applicable

Criteria and Question	Result
58. This product provides a means for performing personnel and equipment accountability. **(Minimum Product Requirement 18)**	Not Applicable
59. This product provides a means for resource requesting/ordering. **(Minimum Product Requirement 19)**	Not Applicable
60. This product provides a means for resource tracking/reporting. **(Minimum Product Requirement 20)**	Agree
61. This product provides a means for resource recovery and demobilization. **(Minimum Product Requirement 21)**	Agree
62. This product assists in the reimbursement process. **(Minimum Product Requirement 22)**	Not Applicable
63. Provide comments on resource management.	The product is not designed to be a resource management tool. However, the product can display the resources that are available to assign to a call.
Minimum Product Requirement Summary: Ratings for the Resource Management category.	**Agree:** 2 of 10 **Disagree:** 0 of 10 **Not Applicable:** 8 of 10

COMMAND AND MANAGEMENT	
Criteria and Question	**Result**
	Agree/Disagree/Not Applicable
64. This product assists users in the management of an incident.	Agree
65. This product supports (or is consistent with) the following management characteristics of ICS:	Agree/Disagree/Not Applicable
a. *Common Terminology*	Agree
b. *Modular Organization*	Not Applicable
c. *Management by Objectives*	Not Applicable
d. *Incident Action Planning*	Agree
e. *Manageable Span of Control*	Not Applicable
f. *Incident Facilities and Locations*	Agree
g. *Comprehensive Resource Management*	Not Applicable
h. *Integrated Communications*	Agree
i. *Establishment and Transfer of Command*	Not Applicable
j. *Chain of Command and Unity of Command*	Not Applicable
k. *Unified Command*	Not Applicable
l. *Accountability*	Agree
m. *Dispatch/Deployment*	Agree
n. *Information and Intelligence Management*	Agree

Criteria and Question	Result
66. Overall, this product is consistent with the applicable 14 ICS management characteristics. **(Minimum Product Requirement 23)**	Agree
67. If the product references ICS, the organization charts and/or terminology are consistent with it. **(Minimum Product Requirement 24)**	Not Applicable
68. Comment on the product's integration of management characteristics of ICS.	65 – l The product tracks the accountability of the units dispatched, and the personnel assigned to the units. It would be the dispatcher's responsibility to keep the shift personnel assigned to the units current – i.e. fire trucks staffed by which personnel.
Minimum Product Requirement Summary: Ratings for the Command and Management category.	**Agree:** 1 of 2 **Disagree:** 0 of 2 **Not Applicable:** 1 of 2

IMPLEMENTATION AND PRODUCT OVERVIEW

Criteria and Question	Result
IMPLEMENTATION	
	Agree/Disagree/Not Applicable
69. This product can be easily implemented.	Agree
70. Comment on implementation.	None identified.
71. System documentation (including training materials and user's guides) is comprehensive.	Agree
72. The vendor provides the following types of practitioner training:	Agree/Disagree/Not Applicable
a. Online	Not Applicable
b. Train the trainer	Not Applicable
c. On-site presentation	Not Applicable
d. Hands-on training	Agree
73. Comment on practitioner training.	The training consisted of reviewing the User Manual and hands-on training. The vendor will demonstrate the product and review the User Manual with the customer. If additional training is required it would be handled on a case-by-case basis with the vendor.
74. Training provided allows recipients to proficiently use this product.	Agree

75. There are no unique obstacles introduced by this product that would prohibit a department or agency from providing product training.	Agree
76. Describe any unique obstacles to training.	None identified.
77. This product has an integrated help tool that is comprehensive.	Agree
78. Comment on the help tool.	The online help tool opens the User's Manual. The user must navigate through the User's Manual to find the information related to the user's query.
79. Is customer support available? If so, what is its availability and what medium is used (e.g., e-mail, phone, live-chat)?	The vendor states that there is 24/7 telephone and e-mail support.
80. How long would it take a department, agency, or jurisdiction to implement this product?	Less than two weeks.
81. Comment on how the size or make up of a department, agency, or jurisdiction can impact the implementation of this product.	The product is targeted for jurisdictions with a population less than 100,000.
82. Comment on any identified impacts.	None identified.
83. Federal, state, or local laws or regulations will not hinder the implementation of this product.	Agree
84. Comment on any laws that may hinder this implementation.	None identified.
85. Identify any issues with urban or rural implementation.	The product is targeted for jurisdictions with a population less than 100,000.
86. Identify any issues with paid, combination, or volunteer departments.	The dispatcher would be responsible to keep the shift personnel assigned to the units current – i.e. fire trucks staffed by which personnel.
87. Identify associated expenditures that may be incurred in addition to the initial procurement of this product.	None identified.
PRODUCT OVERVIEW	
88. Overall, this product is consistent with the concepts and principles of NIMS. To receive an agree in this category, this product must be consistent with all of the applicable supporting Minimum Product Requirements.	Agree
89. Identify any issues with NIMS consistency.	None identified.
90. This product will enhance the user's ability to do his/her job.	Agree

91. Comment on how this product will impact the job performance for the user.	None identified.
92. This product was easy to use and intuitive.	Agree
93. Comment on the products ease of use.	The product makes efficient use of colors to relate similar tasks. The product provides keystroke and mouse click options to accomplish the same function.
94. This product was reliable during the evaluation.	Agree
95. Describe any issues with reliability.	None identified.
96. Comment on the primary capability/features provided by this product.	This product is a call intake and dispatch tool.
97. Provide any other observations.	There is no way to view the incident history for an address when the user is entering a new incident. The information contained on the Contact Management tab is a free form text field.

Appendix B: References

1. American Association for Laboratory Accreditation (A2LA), http://www.a2la.org/.
2. National Incident Management System (NIMS), December 2008, http://www.fema.gov/emergency/nims/.
3. National Response Framework (NRF), January 2008, http://www.fema.gov/emergency/nrf/.
4. http://www.fema.gov/pdf/emergency/nims/FY09_Recommend_Standards_List_121708.pdf.
5. RAD Software, http://radsoftware.org/, accessed May 2011.
6. SAFECOM Interoperability Continuum, accessed October 2009, http://www.safecomprogram.gov/NR/rdonlyres/54F0C2DE-FA70-48DD-A56E-3A72A8F35066/0/Interoperability_Continuum_Brochure_2.pdf.
7. Supporting Technology Evaluation Project (STEP) Guide, September 2010, https://www.nimsstep.org/files/NIMS_STEP-Guide.pdf.
8. Target Capabilities List (TCL), September 2007, http://www.fema.gov/pdf/government/training/tcl.pdf.

Appendix C: Acronyms and Abbreviations

24/7	24 hours a day, seven days a week
A2LA	American Association for Laboratory Accreditation
DHS	Department of Homeland Security
EOC	Emergency Operations Center
ESF	Emergency Support Function
FEMA	Federal Emergency Management Agency
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
IEC	International Electrotechnical Commission
IMTEL	Incident Management Test and Evaluation Laboratory
ISO	International Organization for Standardization
IT	Information Technology
JFO	Joint Field Office
NGSC	NIMS General Support Contract
NIMS	National Incident Management System
NPD	National Preparedness Directorate
NRF	National Response Framework
P-TAC	Preparedness-Technology, Analysis, and Coordination
QC	Quality Control
SAIC	Science Applications International Corporation
STEP	Supporting Technology Evaluation Project
T&E	Test and Evaluation
TCL	Target Capabilities List

UC   Unified Command

WMD   Weapons of Mass Destruction