FEMA

Summary

Supporting Technology Evaluation Project (STEP) activities are managed by the National Preparedness Directorate (NPD) within the Federal Emergency Management Agency (FEMA). The purpose of STEP is to provide an objective evaluation 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.

STEP objectives include:

- Conducting practitioner-relevant assessments of emergency responder software and supporting hardware.
- Providing information that enables responders and emergency management staff to better select, procure, use, and maintain emergency responder software and supporting hardware.
- Inspecting products for their incorporation of National Incident Management System (NIMS) concepts and principles.
- Identifying products applicability of the core capabilities recognized by the Target Capabilities List (TCL).
- Determining product's adherence to applicable NIMS recommended technical standards - the Organization for the Advancement of Structured Information Standards (OASIS) Emergency Data Exchange Language (EDXL) suite of standards including Common Alerting Protocol (CAP).

DISCLAIMER: The evaluation results and use of trade names in this document do not constitute a DHS or FEMA certification or endorsement of the use of such commercial hardware or software.

Amatra SmartSource for Mass Notification 3.0

This summary presents an evaluation of Amatra's system - Amatra SmartSource for Mass Notification version 3.0. The evaluation was conducted from 1 through 3 June 2011 as part of STEP. The objectives of this evaluation were to determine the incorporation of NIMS concepts and principles; identify the applicability of core capabilities recognized by the TCL; and determine the system's adherence to the OASIS CAP 1.1 standard.

System Description

According to the vendor, Amatra SmartSource is a Smart Communications Platform built on open architecture and the CAP 1.1 standard. Amatra SmartSource provides an integrated environment for planning, sending, tracking and analyzing communications to tens of thousands of users using multiple communication channels. Amatra SmartSource supports communications via Voice Notification, Text Short Message Service (SMS) messaging, Email, and Social Media outlets. The platform architecture is flexible to easily add new communication media based on business needs. The platform's Analytics and Reporting capabilities track communications and responses real-time and quickly compile the results in a dashboard for informed decision making. Amatra SmartSource integrates with the Integrated Public Alert and Warning System Open Platform for Emergency Networks (IPAWS-OPEN). Amatra SmartSource can integrate with any solution requiring a communications framework to serve as a citizen of a much larger solution. The figure below depicts the Amatra SmartSource solution offerings.

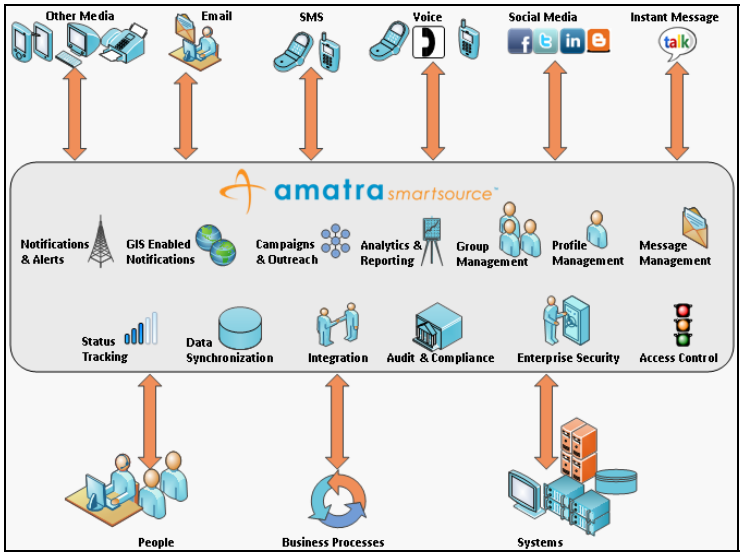

Figure 1: Amatra SmartSource System Flow Diagram

Evaluation Results

MINIMUM PRODUCT REQUIREMENTS

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 in the NIMS Criteria Summary Rating table summarize ratings (Agree, Disagree, Not Applicable) for the Minimum Product Requirements within each NIMS criterion.

NIMS CRITERIA DEFINITIONS

Emergency Support: This category groups criteria related to the applicability of the system to Emergency Support Functions (ESF) and/or the Incident Command System (ICS).

Hazards: This category groups criteria related to the product's applicability to natural, manmade, and technological-caused hazards.

Preparedness: This category groups criteria related to a continuous cycle of planning, organizing, training, equipping, exercising, evaluating, and/or taking corrective action.

Communications and Information Management: This category groups criteria related to common operating picture, interoperability, scalability, plain language, and information security.

Resource Management: This category groups criteria related to the product's capabilities to manage resources including personnel, equipment, supplies, and facilities.

Command and Management: This category groups criteria related to the product's applicability to each of the 14 management characteristics of ICS.

The STEP team also evaluates each product against Implementation criteria, including time and training impacts on governmental entities.

NIMS Concepts and Principles

Amatra SmartSource supports NIMS concepts and principles. The product supports establishing and maintaining a common operating picture. Amatra SmartSource could be used for preparing for and responding to all types of incidents and planned events.

The primary capability of Amatra SmartSource is to receive and dispatch calls. The product is a communication distribution tool to multiple device types (i.e. telephone, SMS, email, etc.). 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, but the integrated help tool is confusing since the default setting connects the user to IBM's support pages. According to the vendor the default help tool can be customized to the Amatra SmartSource documentation during system setup. The vendor offers online, train-the-trainer, on-site presentation and hands-on training. Assessors determined vendor provided training is comprehensive and it allows recipients to proficiently use the system. Customer support is available 24 hours a day, 7 days a week (24/7) by telephone and email. The size and make up of a department or agency impacts time, resources, and funding associated with implementing the system.

Target Capabilities List

TCL – CORE CAPABILITIES

The DHS TCL comprises 37 capabilities that address prevention, protection, response, and recovery, as well as, common capabilities such as planning and communications that support all missions.

For more information about target capabilities visit the TCL section on the Responder Knowledge Base (RKB) website.

Amatra is applicable to the following core capabilities identified in the TCL:

- Common Capabilities: Communications; Community Preparedness and Participation
- Prevent Mission Capabilities: Information Gathering and Recognition of Indicators and Warning; Intelligence Analysis and Production; Counter-Terror Investigation and Law Enforcement; Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE) Detection
- Protect Mission Capabilities: Food and Agriculture Safety and Defense

- Respond Mission Capabilities: Emergency Operations Center (EOC) Management; Volunteer Management and Donations; Emergency Public Safety and Security; Animal Disease Emergency Support; Environmental Health; Citizen Evacuation and Shelter-in-Place; Isolation and Quarantine; Emergency Public Information and Warning; Medical Surge; Mass Prophylaxis; Mass Care (Sheltering, Feeding, and Related Services); Fatality Management

NIMS Technical Standards

RESULTS SUMMARY LEGEND:

 Meets requirements; no issues identified.

 Partially meets requirements; minor issues identified.

 Partially meets requirements; major issues identified.

 Does not meet requirements.

 No rating or not applicable to the system.

Common Alerting Protocol

The test engineer determined that the system adheres with all mandatory elements for the CAP 1.1 standard. The test engineer successfully generated and received, well formed and valid CAP alerts. Amatra SmartSource implements all four segments of the CAP alert, including all mandatory elements and all optional elements.

Table 1: Common Alerting Protocol Results Summary

Criteria	Rating	Description
Generate CAP Alert Message		The user can generate a message utilizing all the mandatory and optional fields.
Extensible Markup Language (XML)/Schema Validation		The message conforms to the standard.
CAP Conformance		The system uses all the mandatory and optional fields. All fields with associated acceptable values have drop downs with all of the allowed values. An 'Add' button is available to add multiple values for fields that permit multiple values.
Transaction (send)		The system sends messages directly to IPAWS-OPEN.
Transaction (receive)		The system takes an incoming message from IPAWS-OPEN.

For Further Information

The vendor may have updated the product after the evaluation. Summaries and evaluation reports of products in this series are available through the RKB website at: https://www.rkb.us.

STEP activities are managed by the NPD within FEMA.

For more information on this evaluation project, please visit:

www.nimsstep.org

www.fema.gov/nims

or contact STEP staff at nimsstep@nimssc.net