Executive Summary

AIMSonScene MU is software for incident command staff located within the command post or area command center, who must actively manage incident strategy, incident tactics, and incident hazards. FieldSoft’s commercial-off-the-shelf (COTS) software in fact, is the ideal choice for any agency that wishes to deploy a field tested, field proven, and interface friendly solution.

The software is a networked application used real time by incident workgroups of two or more members to manage people, resources, and events in the field. The software is NIMS (National Incident Management System) compatible and includes a number of “ICS Forms” which are automatically generated and automatically updated throughout the incident.

FieldSoft has designed AIMSOnScene MU to still be useful even if computer aided dispatching (CAD) systems, web servers, database servers or even computer networks fail or are intentionally “taken out”.

AIMSonScene is not fire service only software. Rather, law enforcement, emergency medical service, school districts, hospitals, public works, corrections, civil support teams, and any other organization with first responders can effectively use AIMSOnScene for any type of incident. Moreover, first response command staff personally use AIMSOnScene routinely from the time they first arrive on the scene through incident termination.

FieldSoft’s optional application programming interface (API) software development kit (SDK), as well as the optional FieldSoft Interface Application (FSIA) to CAD, open up AIMSOnScene to other software applications whether they be new or legacy, and locally or remotely installed and used. AIMSOnScene is for example the “command terminal software” integrated into the Motorola® Fireground Communication System™. Grace Industries created an interface between their In Command™ accountability system and AIMSOnScene. Northrop Grumman Public Safety coded an interface between their Altaris CAD and AIMSOnScene. Zoll Data Systems staff has even interfaced their RescueNet FireRMS and AIMSOnScene via the recently released RescueNet Mobile Dashboard. Last, but by no means least, TeraHop Networks has elected to build the end user interface of its new Bluetooth based first responder presence and monitoring system around AIMSOnScene ICS software.

AIMSonScene MU Operational Features And Benefits

<table>
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<tr>
<th>Feature</th>
<th>Benefits</th>
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<td>Faster, simpler and easier than paper and pencil, tactical marker boards or magnet boards</td>
<td>Allows command staff to better focus on first responder safety and survival.</td>
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<td>Automates many of the processes required for</td>
<td>Reduces command post workload and stress levels thereby allowing command staff to better focus on incident strategy,</td>
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an effective ICS system incident tactics, and incident hazards.

A networked application Any one member of the incident work group located locally or remotely, can interact with any other -- or all other -- work group members.

Works real time Enhances cooperation between work group members on the scene, and can provide up to the minute information to others off the scene such as support staff in the EOC.

Computer aided dispatching (CAD) system interface available Incident location, incident type, individual resource and crew members assigned to individual resources can be automatically loaded into AIMSonScene further minimizing command post workload while enhancing “Command” focus on safety and survival.

Can be integrated with other computer systems Leverage your technology investment, reduce command post workload, and increase command team effectiveness by rationally integrating systems for faster, simpler and easier use in the field.

Works connected to, or disconnected, from the network and server Mobile computers are worthless when “thin client” applications in-the-field cannot connect to the server. Continue working through network or server losses with AIMSonScene.

Designed by, and for, first response command staff Computer programmers working directly for a public safety incident commander (e.g. – he signed their paychecks) were consistently directed to write more comprehensive code to address usability features, rather than accept the budget driven “that can be handled by end user training” excuse.

Effective use day in and day out A military saying is “train the way you’ll fight and you’ll fight the way you train”. Regular (e.g. – every day) use of AIMSonScene, means that it will be quickly, simply, and effectively used at the infrequent “big” incident when software benefits are especially needed to better manage responder safety and survival.

NIMS compatible Simplifies working within the federally mandated NIMS environment.

Automatically generates filled out ICS Forms The benefit is obvious to anyone who has ever had to generate ICS forms by hand or keyboard, in the middle of an incident, when ICS staffing is inadequate.

Field tested and field proven COTS software Substantial amounts of money, time, and frustration can be invested in a custom solution that will achieve 98% of your requirements sometime in the future. Alternatively, you can invest far less in a proven system that can be rolled out and effectively used in three days or less. Stated simply, more bang for the buck.

Personally used by incident commanders (ICs) Reality is that most ICs implement command without having any help in the command post, and it may take many minutes before help arrives. The software can help almost any IC (working alone or not) more effectively get ahead, and stay ahead, of incident challenges.

AIMSonSceneMU Software Features

All AIMSonSceneSU or AIMSonSceneP2P Features Are Available To Each User

AIMSonSceneSU or AIMSonSceneP2P act as client software to the networked AIMSonSceneMU system. SU features include: fully configurable terminology, incident types, incident goals, incident objectives, and incident tasks; configurable “run cards” for automatic loading of incident resources of any type; five user configurable event timers including elapsed time, strategy or rule of engagement mode, welfare (AKA – PAR) checks, unit/crew events, and a general free form reminder; “pass command” data and “take command” data via portable media; the Organization table.
to view and manage your individual resources including the assignment of operational objectives to divisions or groups as well as assignments of tasks to resources; the incident whiteboard with user configurable icons to view, mark up, and print tactical survey or pre-fire plan drawings with dynamic "drag and drop" of individual resources; the integrated tactical web browser to view local or remote information; the automated personnel accountability report (PAR) and roll call feature; the User Applications feature to integrate external applications into the user interface, the incident report log of all events, and generation of a current summary status report or ICS Form 201 report.

**AIMSonSceneP2P** includes all of the SU features described above, plus the ability to transfer one or more resources from one computer with **AIMSonSceneP2P** to another computer with **AIMSonSceneP2P**. Transfers can take place across either a wired or wireless local subnet. The software can even transfer resources across a wide area network such as EV-DO or Edge; provided **AIMSonSceneMU** server software is installed and available to the computer network.

**AIMSonSceneMU Features Take Advantage Of Your Computer Network**

**AIMSonSceneMU** includes all **AIMSonSceneSU** or **AIMSonSceneP2P** features, plus all of the following network oriented ones: automatically replicate SU or P2P client data to the server; exchange messages and attachments with other **AIMSonSceneMU** workgroup members; view a consolidated Report Log that presents merged event data from every connected workgroup member; receive automatic notifications whenever incident strategy is changed, and receive automatic notifications when other workgroup members connect to the server.

Keep in mind however, that **AIMSonSceneMU** has none of the disadvantages associated with use of thin client applications in the field. Rather, **AIMSonSceneMU** clients continue to operate during network or server losses.

**AIMSonSceneMU Automates NIMS And ICS Processes**

Use **AIMSonSceneMU** to automatically generate ICS 201 Incident Summary, ICS 207 Incident Organization, ICS 213 Messages, and ICS 214 Resource Log Forms; in either soft copy or hardcopy and do so with but two clicks of your mouse. An incident workgroup member can even use **AIMSonSceneMU** to drill down to view Benchmarks, Operational Objectives, Task Assignments, individual resources, resource crewmembers, and resource timers for any workgroup connected ICS position.
Never again fill out an ICS 201, 207, 213 or 214 by hand, since the software automatically fills the data in for you.

**AIMSonScene**MU In Use

Start **AIMSonScene** When You First Arrive On Scene

Start an incident using the **AIMSonScene**SU or **AIMSonScene**P2P Command Module in stand alone mode (e.g. - the software is not connected to any other software). Manage incident resources and events by simply pointing and clicking. Start your AIMS client to server interface when needed to transition into multi-user mode, and your data will be replicated on the server.

Continue to operate **AIMSonScene**SU or **AIMSonScene**P2P even if the server or network "goes down" or otherwise becomes unavailable.

Other **AIMSonScene**SU or **AIMSonScene**P2P users may later arrive at the incident scene as part of "greater alarm" or "second call" units. They can start their SU or P2P software and "join" the incident as different members (AKA – Positions) of the command team workgroup, if so. Here again their data is shared with the server.

"Command" could even call for emergency operations center (EOC) activation as the incident escalates. EOC staff could then start one or more copies of **AIMSonScene**SU, join the incident via the multi-user capability, and interact with the incident scene as needed; via a wired or wireless high bandwidth TCP/IP network connection. Moreover, EOC staff and other remote users could monitor and interact with multiple incident scenes when, and if, community wide events take place.

Use **AIMSonScene** To Plan Future Operational Periods

Pre-assign divisions and individual resources in **AIMSonScene**. Assign objectives, tasks, and radio channels, make resource task assignments, and then save them all. You’re "good to go" for the next operational period or special event once the data has been saved as an **AIMSonScene** "Planned Response".

Connect **AIMSonScene** To Other Systems Via The FSIA To CAD Or The API SDK

Automatically load CAD originated incident type, incident location, resources assigned, and resource crewmembers into **AIMSonScene** upon arrival with the FSIA, work the incident, connect to the **AIMSonScene**MU server, and share the CAD loaded data with later arriving **AIMSonScene** users who join the incident.

Alternatively, software engineers can use FieldSoft’s API SDK to create custom interfaces to CAD as well as other local or remote systems.
AIMSonScene History

FDOnScene and PDOnScene (legacy software since replaced by AIMSonScene) were originally coded as stand alone applications. Many customers however, asked for a "networked" version of the product so that information residing within one "copy" of FD/PDONScene could be "shared" with other FD/PDONScene users on-the-scene via computer NIC cards, CAT 5 cable, and a basic network hub. FieldSoft was asked to refrain however, from making any changes whatsoever to the end user interface. AIMSonScene version 1 was created and released as a result of the customer input described above.

AIMSonScene version 2 development was undertaken in response to purchases by federal and local government organizations that had asked for a more secure and robust system than version 1 that could scale as needed to meet emergency response needs at the local, regional, state, and national levels. Once again however, customers mandated that FieldSoft maintain the fast, simple, and easy user interface that the company pioneered in the legacy FDOnScene and PDOnScene applications.

Development resulted in the current version of the AIMSonScene multi-user software bundle that now includes intra-workgroup messaging and automated ICS form generation features.

AIMSonScene Does Not “Compete” With CIMS Software

Note that FieldSoft does not view AIMSonSceneMU as a replacement for typical CIMS (critical incident management system) software used, or contemplated for use, in emergency operations centers (EOC’s). Rather, AIMSonSceneMU is seen primarily as a first responder tool that aids in the proactive management of strategy, tactics, and hazards on-the-scene.

AIMSonSceneMU features do however, facilitate product use as a fast, simple, and easy software tool that can link in-the-field forces with the EOC and which complement CIMS software in the EOC. Moreover, AIMSonSceneMU can keep off site officials "in the loop" via an amazingly simple point and click interface. In fact, AIMSonSceneMU is now seen as an interoperability support tool for information, since use of it is nearly second nature to almost any first responder who regularly uses some
type of tactical worksheet or magnet board to manage resources on the incident scene.

**AIMS on Scene Software Technology**

The standard **AIMS on Scene** MU system is actually a software “bundle” comprised of:

- **AIMS on Scene** MU web server code (AKA – **AIMS** Server Software), Apache Tomcat web server, and the Firebird database
- **AIMS on Scene** Client to Server interface software which is a separate pure Java application running on client computers
- **AIMS on Scene**SU or **AIMS on Scene**P2P software for each client computer
- Openfire, an XMPP messaging server if the system includes **AIMS on Scene**P2P client software

**AIMS** Server software is coded in Java using the Sun Microsystems Java Software Development Kit (JSDK). **AIMS** Java Servlets also residing on server hardware interact with **AIMS** Client to Server software. The code that allows selection and viewing of various aspects of an incident from FieldSoft’s **AIMS on Scene** Tactical Browser (or any industry standard browser for that matter) is developed as JavaServer Pages.

**AIMS** Server software is designed to run with Apache Tomcat. Apache Tomcat is a free, open-source implementation of Java Servlet and JavaServer Page technologies developed under the Jakarta project at the Apache Software Foundation.

Incident data is stored by default on the server in a Firebird database. Firebird is an open source version of Borland’s Interbase and offers many ANSI SQL-92 features, excellent concurrency, high performance, and powerful language support for stored procedures and triggers. The application communicates with the database using a Native-Protocol All-Java (Type 4) Driver.

Resource transfer by **AIMS on Scene**P2P software over wide area networks is made possible with the GPL open source version of Openfire messaging server software. Openfire is a cross-platform and real-time collaboration server application based on the XMPP (AKA – Jabber) protocol.

Apache Tomcat, Firebird and Openfire are distributed with the **AIMS on Scene**MU software bundle for no additional charge.

**AIMS** Server software is currently compatible with multiple platforms because of Java portability, and the fact that both Tomcat and Firebird are available for Linux, Microsoft Windows, and many Unix platforms. **AIMS** Server software is also compatible with the Microsoft SQL Server and Oracle database systems as well.

**AIMS** Client to Server software is a client computer Java application using Swing technology to provide a flexible and interactive GUI. The Java Client can run within the **AIMS on Scene**SU or **AIMS on Scene**P2P “User Apps” feature. The Client software, in combination with Apache Tomcat, makes secure log-in and secure socket layer (SSL) protected communication between **AIMS on Scene** client computers and the **AIMS on Scene** Server both possible and feasible.

Note that secure log-in and SSL capabilities described above can be “turned on” or “turned off” by the system administrator.
Can Your Agency Afford AIMSOnScene

Let’s review some of typical agency dichotomies before answering the question regarding system affordability.

You’ve obtained hundreds of thousands to millions of dollars in support infrastructure and the individual resources used on emergency scenes, and yet you ask incident command staff to manage the infrastructure and resources with a 50 cent investment in tactical worksheets and pencils or a few dollars worth of crayons and command boards.

Department management staff constantly reinforces the safety concept within the ranks. On the other hand you actually allow yourself and other incident command staff to use marginally effective (if that) paper and pencil or marker boards to manage safety and survival on the scene.

You equip each first responder with thousands of dollars of personal protective equipment to increase their effectiveness and facilitate their safety and survival. You go even further and devote substantial training time and training materials to enhance the survival skills of your first responders so each one can act quickly, confidently, effectively, and safely on the scene. Yet here again, your agency invests in outmoded command board technology.

Time after time “after action” investigations reveal deficiencies in how the command post managed the incident scene; especially in response to atypical events. Time after time so called corrective action taken has included purchase of an even bigger “command board”. Bigger command boards have yet however, to solve the reoccurring problems and first responders are still injured or killed when “Command” can’t keep up with incident events or react quickly enough when an incident goes bad.

Now what do you believe is the most honest answer to the affordability question?

AIMSonSceneMU Licensing

AIMSonSceneMU Software Bundles

Licenses for two different types of software bundles are available. Server software for one bundle is capable of receiving and consolidating incident data from multiple incident workgroups located at multiple incident scenes. The other type of bundle license is for AIMS server software which is functionally limited to receipt and consolidation of incident data from a single workgroup only. Multiple incident server software may be appropriate when the server will be installed in a central location and network bandwidth exists so that workgroups from multiple incident scenes can connect to the server software simultaneously. Single incident server software on the other hand may be most appropriate if the server will be installed in a mobile command vehicle and there will be no data link between the van and some other remote incident scene.

Multiple incident server bundles come with either five AIMSOnSceneSU or five AIMSOnSceneP2P client software licenses included. Single incident server bundles come with either two AIMSOnSceneSU or five AIMSOnSceneP2P client software licenses included. Additional AIMSOnSceneSU or AIMSOnSceneP2P licenses can be purchased.

One AIMS server license is required for each single server computer (with up to 2 CPU’s) on which the software will be installed. There is however, an exception in that AIMS server software may also be installed on one additional “hot standby” only computer server (with up to 2 CPU’s) for no additional charge.

AIMSonSceneMU Network, Operating System And Hardware Requirements
Network Requirements

The most basic requirement is for a wired or wireless high bandwidth TCP/IP network. One simple wired network example is a basic local area network comprised of computer NIC cards, CAT 5 cable, and a hub. Local wireless networks using 802.11x standards, and wide area wireless networks utilizing EV-DO technology have proved compatible as well.

Operating System Requirements

Server. AIMS server software is known to be compatible with Microsoft Windows 2000, Microsoft Windows XP (Pro or Tablet editions), Microsoft Vista Business edition, Microsoft 2000 Server, and Microsoft 2003 Server operating system software. AIMS server software should be compatible with the Linux operating system, but has not been currently tested for compatibility.

Clients. AIMSOnSceneSU/P2P software is compatible with Microsoft Windows 2000, Microsoft Windows XP (Pro or Tablet editions), and Microsoft Vista (???? Versions) operating system software.

Hardware Requirements

Server. AIMSOnScene software has been successfully run on hardware ranging from dual use laptop computers (e.g. – serving as both a server and a client computer) to dedicated computers in a server farm. With that said the CPU and RAM should be sufficient for the intended use, load, and operating system. Hard disk drive (HDD) space required is at least 225MB. RAM required is at least 128MB. Mouse and keyboard access for installation and maintenance is needed. The software is delivered on a CD-ROM.

Clients. AIMSOnSceneSU and AIMSOnSceneP2P software requires Wintel PC’s with 166MHZ or faster central processor units, 128 MB of RAM, and a 600MB HDD Software is delivered on a CD-ROM. Also required is a pointing device such as a touch screen, mouse, or trackball.

Optional Software Training, Software Support, And Software Upgrades

Training

Customers can select either one day train-the-trainer courses or a three day Deployment Assistance Program (DAP). Customers who select train-the-trainer classes will need to practice for proficiency following the class. Likewise, customers will need to tactically configure the software following instruction.

Customers who select DAP will be able to roll out software that is ready for use at the end of the third training day. Moreover, the customer will have a cadre able to effectively use the software at the end of day three.

Support and Upgrades

A twelve month software support and software enhancement (SSSE) subscription is available. The subscription entitles customers to 8 X 5 telephone and email support with prioritized response goals. Software upgrades are available to customers with a current subscription for no additional charge.

Faster    Simpler    Easier

FieldSoft

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