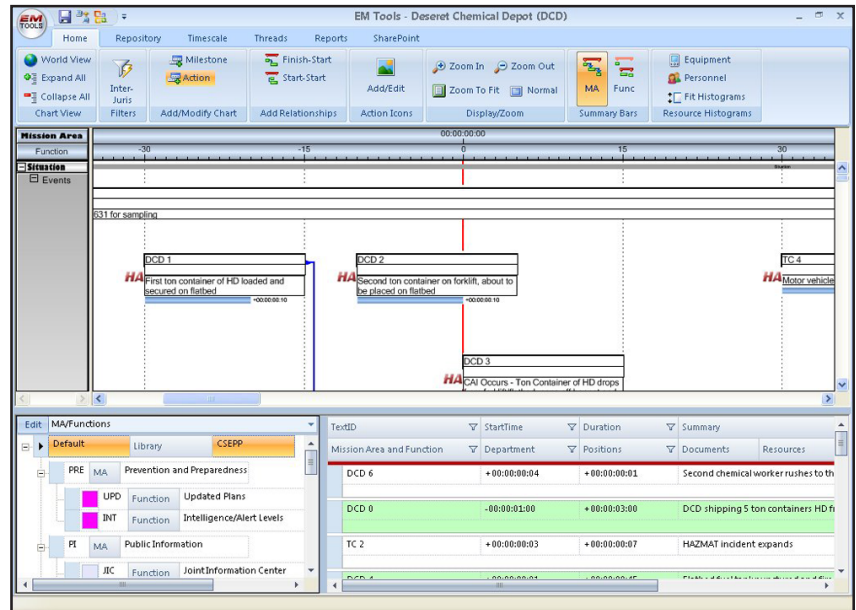# Argonne National Laboratory

Introducing EMTools
The Complete Emergency Management Lifecycle Solution

Experienced emergency managers know that coordinated preparedness planning leads to successful emergency response. Effective emergency plans are developed using a systems-based approach that anticipates all aspects of response and emphasizes relationships between the actions of responders at all levels, while including all responding organizations and jurisdictions. Testing emergency plans regularly in structured exercises enables managers to evaluate how well the simulated emergency response conforms to expectations.

Argonne National Laboratory, developer of the successful Synchronization Matrix Planning Process approach to emergency planning, introduces the next generation of its emergency planning and exercise tool: EMTools. EMTools integrates the functionality of Argonne's previous-generation emergency management software applications (Sync Matrix, Exercise Management Tool [XMT], and WatchBoard) into a unified software platform that addresses the entire emergency management lifecycle (planning, training, and exercising) with an improved user interface and more robust client-server architecture.

EMTools' plan designer uses color-coded action cards to designate jurisdictional responsibilities and depict relationships.

Feature-Rich Functionality

EMTools' features include:
- Inter-jurisdictional, relationship-driven planning.
- Coordinated resource, personnel, and schedule management.
- Response framework compliance (CSEPP, HSEEP, UTL, and NIMS).
- Centralized database structure.
- Collaborative workspace to facilitate team communication.
- Graphical and tabular depiction of resources and actions.
- "Knowledge-at-a-Glance" action cards tell users which jurisdiction, department, or response position is responsible for task completion.
- Centralized repository for supporting documentation.
- Thread-builder capability allows saving of common action/relationship sequences for reuse.
- Intuitive user interface incorporates familiar software look and feel.
- Charts and reports can be printed to portable document format (PDF) files or printer.
- Microsoft Windows SharePoint Services backbone integrates with Microsoft Office products for easy data transfer between applications and enhanced project planning and coordination.

An Integrated Suite of Tools

EMTools' integrated components include Sync Matrix, XMT, and Watchboard. Sync Matrix is a graphical planning tool for emergency planning. It allows you to define the jurisdictions, actions, and resources that various scenarios would require, and to create relationships between actions. XMT is an exercise-building tool that will take the plan you created in Sync Matrix mode and bring it to life as a playable exercise, incorporating staff positions assigned to participate in the action. Watchboard is a tool that allows interested observers to view an EMTools exercise in real-time as it unfolds.

Innovative Architecture

EMTools implements the innovative approach of hosting its data in a customized Windows SharePoint Services (WSS) 3.0 site, and uses a Microsoft WinForms front-end technology as to access the back-end SharePoint list data as a client-server application. The WinForms technology gives plan and exercise designers powerful, visual charting tools. WSS 3.0 allows for a compact application with the power of project, data, document, and user management tools that can link with everyday applications such as Microsoft Office products, especially Outlook.

EMTools is built around three levels of users:

- **Administrators,** who can assume logistical and management responsibilities for the planning process by supervising the meeting schedule, maintaining records of users/contacts, assigning tasks, and controlling documents;

- **Planners,** who can use the visual charting tools to portray existing emergency plans and exercises graphically or develop new ones. Any of the plans can be disseminated to players with responsibilities in the emergency response;

- **Emergency Managers,** who can use the tool not only to develop or portray plans, but also as a comparative tool among coordinating jurisdictions to examine interoperability and identify gaps and inconsistencies; and

- **Players,** who can track administrative actions and receive system notifications of updates.

Deployed throughout the United States

The emergency response planning component of EMTools (Sync Matrix) has been adopted by the U.S. Department of Homeland Security's (DHS) Urban Areas Security Initiative (UASI) Program, and is currently being used in the following U.S. cities, counties, and agencies:

- Fredrick County, MD
- Denver, CO
- Memphis, TN
- Delmarva, PA
- Richmond, VA
- New York, NY
- Springfield, MA
- Providence, RI
- County of Hawaii, HI
- Cleveland, OH
- Chicago Department of Public Health, IL

EMTools' response planning component has also been used to prepare six multi-jurisidictional communities surrounding U.S. Army chemical weapons storage installations in conjunction with the Federal Emergency Management Agency under the Chemical Stockpile Emergency Preparedness Program (CSEPP).