

## Heartland Emergency Response Exchange

### *A Need for the Network*

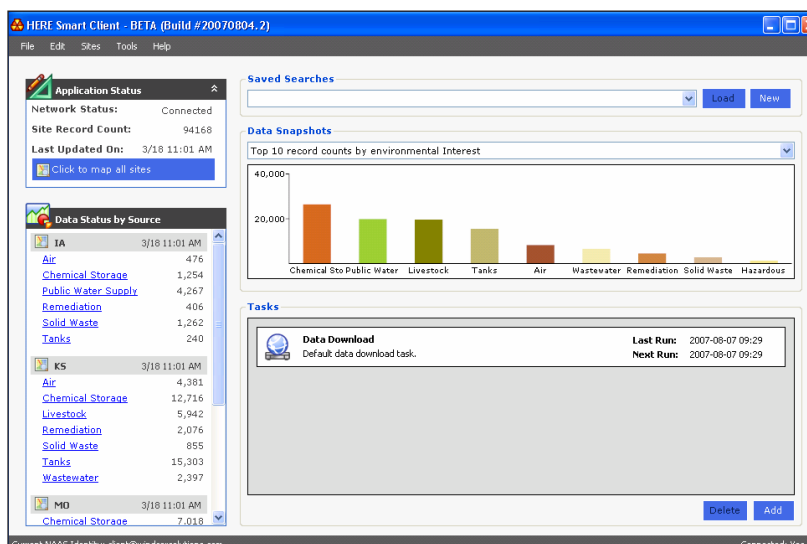
During the Great Midwest Flood of 1993, the rising waters of the Missouri River threatened to inundate industrial sites in Kansas City on both the Kansas and Missouri sides of the river. Emergency responders in each state scrambled to assess the environmental and health dangers posed by substances housed in facilities that lay in the path of the floodwaters. While response personnel were aware of environmental concerns in their respective states, they had no easy means of determining the potential threat posed by sites on the opposite bank. Each state jurisdiction maintained its own information systems that were inaccessible to their neighbors just across the river.

The 1993 flood is but one example of the importance of information in emergency response situations. The need for timely access to quality data extends across many other response scenarios brought on by events such as tornados, earthquakes, or fire. Without the ability to reach across state and agency boundaries, emergency responders are forced to work with incomplete information. Oftentimes, this prevents them from developing comprehensive response plans, leaving populations vulnerable to unknown dangers.

### *An Exchange Network Solution*

As stewards of critical data on facilities and environmental interests, environmental agencies from Nebraska, Iowa, Kansas, and Missouri sought a means of efficiently and securely sharing reliable information with state Emergency Operations Centers (EOCs), U.S. EPA, and local emergency responders and planners. These partners are now using the Exchange Network to create the Heartland Emergency Response Exchange (HERE).

The participating states agreed to publish data useful to emergency planners and responders on their secure Exchange Network Nodes. HERE uses an intuitive yet powerful data retrieval tool to gather and display this information in a format that can easily be queried or analyzed. With HERE and the Exchange Network, the latest data is quickly delivered to emergency personnel, so they can most effectively plan for and respond to situations that threaten public safety or the environment.

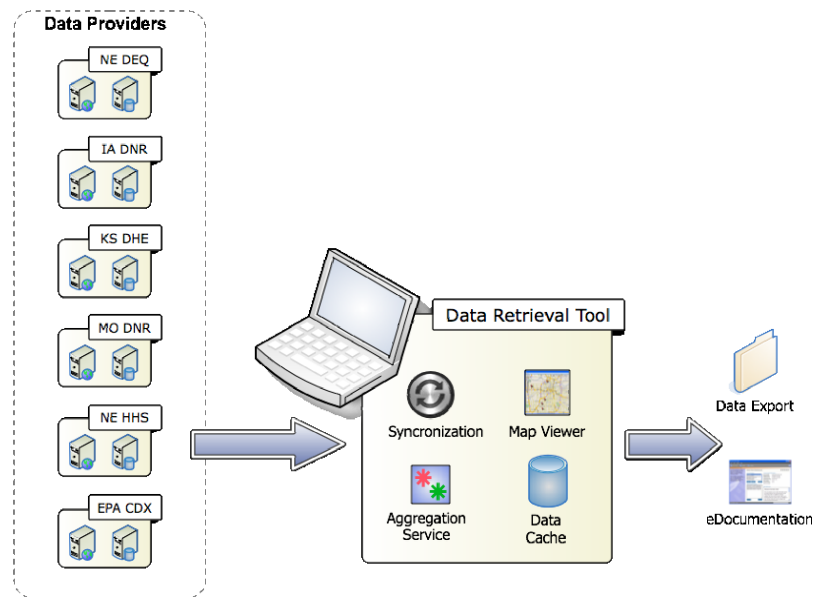


## Better Information for Better Decisions

In a high-stakes line of work that routinely requires quick decisions, emergency managers rely heavily on access to quality data. However, technological and jurisdictional barriers can stymie their best efforts to anticipate and react to many crises. Thanks to the technology of the Exchange Network, users of the Heartland Emergency Response Exchange can reach across organizational lines to retrieve integrated environmental and natural resource data from agencies in partner states. Emergency planners can quickly identify potential dangers posed by chemical inventories or hazardous waste storage. In minutes, response teams can assess threats to drinking water infrastructure or other environmental interests. In short, better information will offer opportunities for more comprehensive planning and more informed responses.

Users retrieve information through the HERE client, which is designed to provide seamless, robust, and intuitive access to environmental data across organizations and localities. Its features include:

- **Data Aggregation** – This service combines data from multiple Exchange Network Nodes into a single merged view used for generating queries, spatial views, and reports.
- **Local Data Storage** – Users can store local copies of data for use when an internet connection is unavailable. Data are synchronized when a connection is present.
- **Map Viewer** – This interface allows users to perform queries based on spatial parameters or display data on a map for a more robust spatial representation.
- **Data Export** – Users can export data in multiple formats to augment external systems or perform more detailed analysis.



The HERE project also adheres to the principles of reuse and sharing—two foundations of the Exchange Network. HERE uses several existing Network data exchanges and is designed to be easily expandable to include other partners involved in homeland security or emergency response planning.

### Learn More

To learn more about the Heartland Emergency Response Exchange and opportunities for participation, please visit the Exchange Network website at: <http://www.exchangenetwork.net/exchanges/cross/here.htm>