



Knowledge Management: Web Search Capture Tool (WeSCaT)



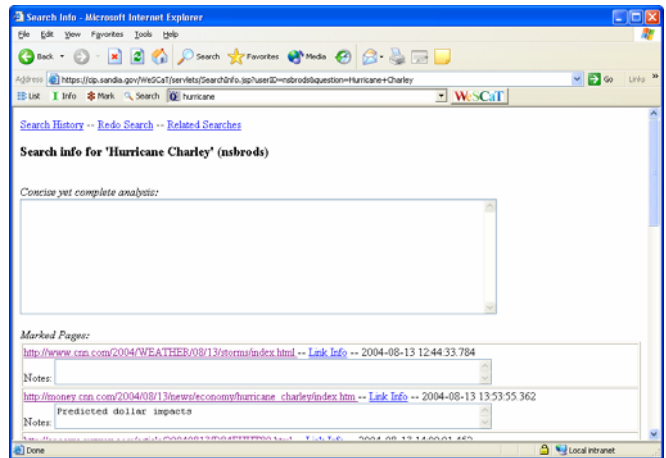
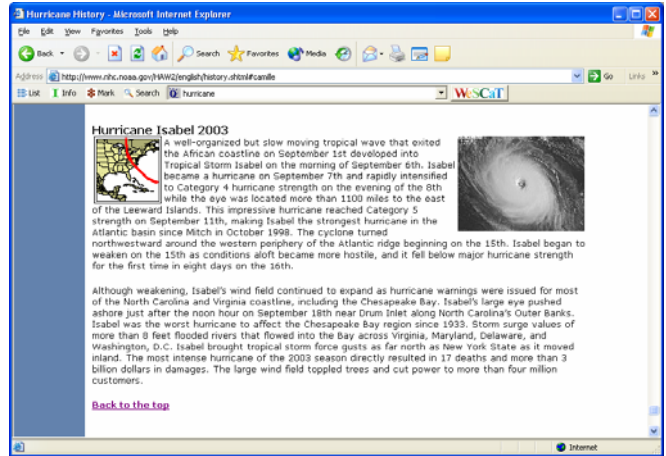
The National Infrastructure Simulation and Analysis Center (NISAC), a program under the Department of Homeland Security's (DHS) Infrastructure Protection/ Risk Management Division (IP/RMD), provides advanced modeling and simulation capabilities for the analysis of critical infrastructures, their interdependencies, vulnerabilities, and complexities. These capabilities help improve the robustness of our nation's critical infrastructures by aiding decision makers in the areas of policy analysis, investment and mitigation planning, education and training, and near real-time assistance to crisis response organizations.

Knowledge Management

NISAC analysts and modelers require vast amounts of data and information for their critical infrastructure interdependency work. Knowledge management provides an access-controlled, organized, and searchable view on the data for rapid retrieval and update through a suite of web-based tools and programmatic interfaces. The suite of tools currently under development include the Knowledge Management (KM) Portal, the Simulation Library, the Event Library, the Web Search Capture Tool, and the Critical Infrastructure Protection Metadata Database.

Web Search Capture Tool (WeSCaT)

In addition to data researched in support of model building, information gathered in the intensity of short turn-around Rapid Response and Emergency Scenario analyses needs to be effectively managed and preserved. NISAC's Web Search Capture Tool (WeSCaT) has been developed to automate the process of documenting data sources and preserving knowledge. By encapsulating the search process, WeSCaT also provides an effective mechanism for disseminating the resulting knowledge. Deployed as a toolbar (shown above) within the browser, WeSCaT is initiated by the user to start searching for needed information.



Upon finding interesting or relevant pages (upper screenshot), the user can preserve and publish the interesting link by pressing the Mark button. The Info button in the WeSCaT toolbar opens a status page for the search where marked pages are listed and may be annotated (shown in the lower screenshot). WeSCaT is already being used by NISAC analysts in rapid turnaround exercises, such as the 2004 wave of hurricanes. In the future, WeSCaT will support various forms of data mining on search information.

Contacts:

Jon MacLaren
DHS-IP
(202) 282-8719; e-mail:
jon.m.maclaren@dhs.gov

Theresa Brown
Sandia National Laboratories,
(505) 844-5247; email:
tjbrown@sandia.gov

