

BY PAUL DeGROOT

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Flood of Paper Ends and Useful Information Flows at Disaster Response Agency

Staff at the Federal Emergency Management Agency (FEMA), a U.S. federal agency that coordinates disaster response when the president declares a national disaster, always got two floods at once. First, water covered the land. Next, a flood of paper, required to administer the National Flood Insurance Program (NFIP), covered their desks—pallets and pallets of green-striped reports poured off a mainframe printer and into their offices. Individual reports were sometimes 18 inches thick, with a nugget of information about insurance claims, premiums or payments buried in them somewhere.

They can't control the weather, but Computer Sciences Corporation (CSC) Project Manager Bill Barton and Computer Scientist Mike Miles have used WebFOCUS software from Information Builders to turn back the flood of paper generated by the NFIP—a program in which the government works with national insurance companies to collect flood insurance premiums and pay claims for flooding in communities that adopt flood control measures.

SNAPSHOT

Organization: The Federal Emergency Management Agency (FEMA), a U.S. federal agency that coordinates disaster response when the president declares a national disaster.

The Challenge: Insurance data required when responding to major floods was buried in greenbar reports printed monthly from a mainframe. FEMA's National Flood Insurance Program needed to generate reports faster, and wanted to reduce huge printing costs by putting data online.

The Strategy: Build an intranet site to give FEMA staff rapid access to online electronic reports that eliminated large volumes of printing and allow them to work with online reports right at the disaster scene.

The Results: Elimination of virtually all paper reports in less than two months, while providing higher-quality reports and faster response to disasters. Using WebFOCUS saved more than 90 percent of the development cost and development time that conventional solutions would have required.

Information Builders Solution: WebFOCUS and iWay Software in partnership with Computer Sciences Corporation (CSC)



KEEPING THEIR HEADS ABOVE WATER

Tim Scoville, CSC corporate tech manager; Bonnie Shepard, FEMA NFIP Bureau Program Officer; and Michael Miles, CSC computer scientist

As a result of CSC's work, FEMA staff no longer leaf through paper reports to find the data they need. Instead, they browse insurance data posted on NFIP's BureauNet intranet site, select just the information they want to see, and get an onscreen report or download the data as a spreadsheet.

And that's only the start of the savings that WebFOCUS has provided. The number of times that NFIP staff ask CSC for special reports has dropped in half, because NFIP staff can generate many of the special reports they need without calling on a programmer to develop them.

Then there's the cost of creating BureauNet in the first place. Barton estimates that using conventional Web and database software to export data from FEMA's mainframe, store it in a new database and link that to a Web server would have cost about 100 times as much—more than \$500,000—and taken about two years to complete, compared with the few weeks Miles spent on the WebFOCUS solution.

"We were able to skip lots of steps. The resources we needed to do this were very small," says Barton.

And without the rapid WebFOCUS solution, FEMA staff would still have been leafing through mountains of paper when Tropical Storm Allison ripped through Texas in June 2001.

The storm was the first major test of BureauNet. Some time earlier, Miles had moved mainframe reports online by developing software that allowed FEMA staff to look at static mainframe reports over a wide-area network. While this saved a lot of paper and some time, the reports were still the same old static reports that poured off the mainframe each month, and more frequently during a flooding disaster. Managing all that paper was literally a full-time job for one FEMA staffer. If a special report was required, it had to be specially programmed, and even then the desired data was often buried in rows and rows of other numbers.

FEMA staff who wanted to look only at claims in a particular zip code, claims above a certain amount, or claims from a specific insurance company had to fish through those reports for the data they wanted, then re-enter it into a spreadsheet or charting program to analyze it further.

Miles was already familiar with Information Builders' technology, because it's used on FEMA mainframes to manage four million flood insurance policies and \$1.5 billion annually in flood insurance premiums. Miles decided in late 1999 to investigate using WebFOCUS as an alternative to static reports and, partly on the strength of a commitment to put reports online, CSC won the contract to manage the NFIB Bureau, the "information factory" that processes all NFIP data.

"When we realized what WebFOCUS could do, it gave us

the confidence to put it into the winning proposal. The only place we went wrong was that we thought it would take a long time to do," Barton says.

Because WebFOCUS uses the same programming terms and concepts as other Information Builders technology, writing the new Web interface went faster than anticipated. Miles built BureauNet over about two months of part-time work, while he continued his other responsibilities.

BureauNet was an immediate hit with FEMA, says Barton. "The prototype became the product, which they used steadily from day one." They also saw many more ways to use this powerful tool, and the CSC team improved it over the next year, giving the FEMA team more analytical power—and a lot less paper—than ever before.

"The prototype became the product—they were using it steadily from the first day they saw it"

— Bill Barton,
Project Manager, Computer
Sciences Corporation (CSC)



When Allison hit, President George Bush declared 28 Texas counties disaster areas, and FEMA moved in to help.

By then, BureauNet had become so important to FEMA that staff took portable computers to disaster areas and accessed BureauNet over wireless Internet connections. Although insurance data is normally moved only monthly from the mainframe to the Windows server that hosts BureauNet, the field disaster staff needed faster response, so the CSC team developed QuickClaim, which put new insurance and claims data on BureauNet within days.

This first test of BureauNet resulted in FEMA field staff asking for many new types of reports. Fortunately, Miles and WebFOCUS were up to the task—thanks to the speed with which he could create new reports in WebFOCUS.

The sudden demand on the system had little impact on its performance, notes Barton. "It handled the demand just fine. We had no problems with it at all."

"And it made a huge difference to FEMA, and the job they had to do. They had never had that level of access before, never had been able to just click on their desktop and generate such detailed and specific reports." ●