

THE

NMCI



ERA

As with other elements within the U.S. military, the Department of the Navy greeted the 21st century supported by myriad information systems. In many cases, the Navy's networks had severe compatibility problems. Worse yet, the incompatible systems were tied to more than 200 electronically vulnerable gateways.

After studying similar situations and potential solutions implemented by private industry, Navy planners decided to consolidate their information systems into a single servicewide intranet, providing seamless voice, video and data services linking all shore installations and forward-based forces. In addition to establishing the intranet, the service decided to mirror the industry approach of buying the network as a utility service, in essence letting private contractors run and update the network.

Designated the Navy/Marine Corps Intranet (NMCI), the ongoing program has tremendous implications across the entire spectrum of information technologies, including the expanding role of e-learning. Initial activities focus on NMCI's e-learning capabilities for training users across the initial spectrum of network applications. These underlying features could revolutionize future training and distance learning across the fleet and force.

The Navy and Marine Corps awarded the NMCI contract to Plano, TX-based Electronic Data Systems (EDS) in October 2000. With a contract value of up to \$6.9 billion (\$4.1 billion for five years and an additional three-year option), the award marked the largest federal information technology (IT) contract in history. EDS leads a team known as the Information Strike Force, supported by

THE NAVY/MARINE CORPS INTRANET HERALDS CHANGE ACROSS THE SERVICES AND HOLDS GREAT PROMISE AS A WAY TO DELIVER E-LEARNING QUICKLY AND EFFICIENTLY TO SAILORS AND MARINES. BY SCOTT R. GOURLEY

its principal partners: Raytheon Co., Lexington, MA; WorldCom Inc., Clinton, MS; and WAM/NET, Eagan, MN.

In announcing the contract award, EDS Chairman and CEO Dick Brown noted, "The Navy and Marine Corps will receive world-class voice, video and data services through a Department of the Navy-EDS partnership that will improve their information technology abilities and overall readiness. The services also will be secure, as a result of implementing cutting-edge information assurance tools and processes. In addition, the American taxpayer will see greater productivity and reduced costs."

A significant program milestone was achieved Feb. 11, when the Department of the Navy formed the Navy/Marine Corps Intranet Program Office, the central point of authority and accountability for the ongoing effort.

COMPETITIVE PROCESS

Nick Chandler, director of systems support for EDS, joined the company in December 2000. His first year was spent seeking a learning management system (LMS) that would work in a secure intranet environment. "An [Internet-based] applications service provider solution was not in the cards, so we went about obtaining an LMS," he told *MT2*. "We went through a competitive process and selected mGen."

EDS is using mGen Enterprise learning management technology to deploy and manage the network's media training assets. Since 1995, mGen Inc.,

Foxborough, MA, has successfully deployed mGen Enterprise and helped large organizations such as the Army and the Department of Agriculture meet their e-learning goals. Through its Web-based client server and distributed networked architecture, mGen Enterprise supports rich media assets like video and audio; minimizes network, bandwidth, IT support and organizational firewall issues; and scales to hundreds of thousands of users.

"The mGen Enterprise [solution] is an innovative, dynamic and robust technology that can serve the Department of the Navy's needs today, and can scale to meet a variety of their distance learning requirements in the future," said Bill Koziar, program manager for NMCI training at EDS. "It allows us to develop a strong technical solution to distributing training across the intranet and launch a variety of content to NMCI users."

The evolving Information Strike Force used a multiphase process in its selection of an e-learning team member, beginning with an initial evaluation of more than 50 systems. Through subsequent down-selects, it made its final choice: mGen. In addition, Chandler noted, EDS went through a similar selection process to select SmartForce, Redwood City, CA, as content provider.

ADHERING TO STANDARDS

Jack Battersby, mGen CEO, president and co-founder, described his company as "kind of content-agnostic. As long as

you adhere to any number of three or four standards that we support, we don't care who the content provider is. And we should not be in the business of telling the customer, 'You must use this particular content.' That's not our job."

EDS's Chandler refers to the mGen-SmartForce combination as "the marriage that we have created to train, potentially, in excess of 400,000 NMCI end users."

"And that may grow," he continued. "They're projecting something like 360,000 or 380,000 'seats.' But there are a couple of account holders per seat, so that number of end users could go way, way up. I'm required ... to provide eight hours of end-user training on NMCI hardware and application software per user per year, plus eight hours of information assurance or security training per user per year.

"That's a total of 16 hours of end-user training that we're required to provide each user yearly for the life of the contract. That obviously says that the way you're going to do this is with 'e-learning,' and that, of course, is the route that we've taken since day one," Chandler said.

Besides supporting the e-learning component of NMCI, mGen provides all of the Army's Classroom 21 activities at 15 Training and Doctrine Command (TRADOC) locations and at the Inspector General University, Fort Belvoir, VA. The Army is modernizing the way it creates and distributes training programs through the Classroom 21 initiative. The effort calls for the development of a technologically advanced, network-based interactive classroom that could be accessed by any number of soldiers stationed worldwide.

"We might run 350,000 people a year through TRADOC alone," Battersby explained. "The difference between NMCI and everything else that's going on in the military is that NMCI specifies, 'You will train 350,000 desktops or some number of users; and you will train these people in how to use their new operating system, their new application tools and information security.'

"At any one time, if just 1 percent of these people are using the network, that's 3,500 people hitting one central database. One content repository isn't going to cut the mustard. We've got to talk about some more advanced things like advanced content distribution throughout your network and content versioning, so the master systems know what's going on out on the



Above: Help Desk Agent Clarence Hayes and Information Technician First Class (surface warfare/airwarfare) Kyrrha Meadows work the NMCI Help Desk. Lower left: EDS Chairman and CEO Dick Brown; lower right: mGen CEO, President and Co-founder Jack Battersby. Photos courtesy of EDS and mGen.



edges of the network. So we addressed those things and how our technology specifically interoperates with content delivery-networking technology, versioning and version management."

SmartForce is supporting NMCI e-learning in two ways: supplying content to NMCI end users, and providing customer service and information technology training for Information Strike Force workers. "The desktop applications running in the mGen learning management environment center on Microsoft Office applications like Word and Outlook," said Kevin Duffer, director of federal sales for SmartForce. Decisions will be made throughout the NMCI process about adding other content.

Work on user content began in mid-2001 and included certifying the content to meet NMCI's stringent security requirements. SmartForce also developed an NMCI orientation course that can be accessed on the intranet's desktops. "The course gives a 20-minute overview of NMCI. It's meant to welcome users to NMCI, to tell them about the new environment," he added.

"EDS is also managing rigorous classroom training," Duffer continued. "EDS and the Information Strike Force are going to great pains to make sure that training alternatives exist, and that everyone is familiar with the tools that are now at his disposal."

The Strike Force's own workers can learn electronically via SmartForce's Internet-based platform. "We have more than 200 courses available on information technology, certification-related training, as well as Microsoft, Oracle and Cisco products," Duffer said. "It is used by a smaller audience, but it has a richer level of content. Our hosted platform provides mentoring 24 hours a day, seven days a week. It is very much oriented toward help desk and IT professionals."

An initiative is under way that would offer tailored curricula for each of the IT and help desk occupations. "When it is all in place, persons joining the work force would have their skills and backgrounds assessed, then appropriate learning would be targeted to them based on what they need to do their jobs," he added. "They would be provided with a blend of classroom and online training experiences."

For Duffer, who served in the Navy and currently serves as a naval reservist, the e-learning possibilities created by NMCI seem nearly limitless. "There are some exciting things in store for the Navy," he remarked.

'WELL-INTEGRATED SYSTEM'

Battersby called mGen's portion of the overall effort "the most well-integrated system that we have ever done. There will be 350,000 desktops logging in each morning, and, in order for us to be successful out of the gate, we have to be fully implemented with that whole system.

"So if they are coming from the portal, their e-mail or anywhere else, we won't make them log in again. That means we have to fully tie into their domain structure so that we're authenticating through the rest of their system. It's very seamless."

Although the program holds the potential for greatly expanded training applications, both government and industry representatives are extremely cautious in providing specifics. "I expect that there will be other requirements that are levied on us as we go along," Chandler said.

"For instance," he added, "most of the training that we're delivering is pretty

straightforward stuff: it's e-learning, it's commercial off-the-shelf—on the operating system, on the browser, and on the Microsoft suite. It includes some basic IT hardware training for someone who is new to this. When dealing with this wide an audience, you're going to get the full range of skills and knowledge coming in."

The Information Strike Team is prepared to handle that wide audience and its diverse needs. "As new applications are added to the NMCI software suite, we're providing training," Chandler affirmed. "For instance, we're doing records management content development right now."

Any specific extensions of NMCI to encompass fleet training requirements are still under discussion. "No plans have been made yet," he noted. "The closest that I'm coming to that right now is a draft plan for taking deployable hardware in and out of the NMCI 'cloud.'"

"We have some language in a draft plan floating around right now about training Navy and Marine Corps system administra-

tors when they move their deployable hardware—laptops essentially—in and out of the NMCI cloud," Chandler reported. "Right now that's all there is. I think that in the future there will be other things, but they're just so squishy at this point that I don't think it serves anyone's purpose to talk about them."

ENDLESS POSSIBILITIES

Although stressing that he does not speak in any way for the NMCI program, Battersby expounded on his vision, which includes a range of expanded "possibilities" that could be facilitated through the network's e-learning processes. Choosing his words carefully, he noted, "From our perspective, in order for us to win the [e-learning] request for proposal, we had to address satellite and microwave communication systems and how we would interact and interoperate with those to do both batch and real-time processing of deployed assets."

He continued, "There are a lot of addi-

tional capabilities in the system, should they decide to use them. If they want to, they can even manage instructors, for example. But that's completely between EDS and the customer. Now it's all about getting them to where they want to be in the future, making sure that we're a good partner, and getting everything done that they need done."

Another mGen company spokesman succinctly summarized the company's e-learning approach by observing, "Our role in this is enabling NMCI to avoid looking at the technology as an obstacle to fulfilling their training mission—whatever, ultimately, that turns out to be."

"It's been an unbelievable experience," Battersby concluded. "Not too many companies have the opportunity to do something at this level. We've enjoyed working with EDS, and we're looking forward to making this as successful as we possibly can. It's certainly off to a ripping start." ★