FORCEnet Science & Technology Roadmap

The Challenge

CSCI, as an Honest Broker and Trusted Partner, assists a customer to achieve its mission to foster, plan, facilitate, and transition scientific research in order to more efficiently and effectively enable naval power and the preservation of national security. As part of this working relationship, the customer requested that CSCI develop a plan for organizing all of the FORCEnet Science and Technology (S&T) programs under the cognizance of Office of Naval Research (ONR) Code 31 that would show how they apply to specific Naval war fighting areas, such as command and control, anti-submarine warfare, anti-aircraft warfare, and so on. The customer wanted a Roadmapping process that would do the following: visualize S&T investment opportunities for trade-off capabilities, assess the status of S&T programs and their applicability to Naval warfare required capabilities, and map transition paths from basic and applied research to capability demonstrations and, ultimately, to Fleet implementations.

The Strategy

CSCI determined that the best method for accomplishing this task of organization and distribution was to use a software tool with robust and flexible display capabilities that could be hosted on a web-accessible server in order to permit the greatest level of availability and maximize the timely dissemination of information. After researching a number of options, from developing a product in-house to subcontracting for a Roadmapping service to purchasing existing software and customizing it to the task at hand, CSCI selected a highly flexible, interactive software tool called Milestones Professional® 2002 from which to build the expanded product. Marketed by Kidasa, Milestones has the ability to display multiple tasks and symbols on a single line and can hyperlink to various databases. Having chosen the base product CSCI, using corporate resources, customized the Milestones 2002 application to produce a unique Roadmap product that could effectively address the client’s needs.

The FORCEnet environment was created to share information across a broad spectrum of users in order to enable war fighters to access and utilize data to support their mission objectives. The relational information being shared is vast and includes the following: hyperlinks to key performance parameters; quad charts and transition agreements related to FORCEnet capabilities and gaps for each FORCEnet S&T enabling program; clickable embedded notes that provide additional information on programs and points of contact; color-coded timelines that identify major events, transitions, and demonstrations; transition information for all S&T enabling programs indicating when and where technology is scheduled for insertion into applicable Programs of Record; and a complete classification description of technologies necessary to fully implement Network Centric Operations, as well as the known deficiencies that could inhibit that implementation.

Along with facilitating the dissemination of organized information to end users, CSCI took the progressive step of producing Roadmap products that provide additional functionalities designed to address future requirements, expanding the range of views and organization tools available to users.

The Results

In developing the S&T Roadmap product, CSCI addressed the current and future requirements of its customer’s S&T mission and firmly established a process by which data is made available in an environment that facilitates interaction and analysis among a wide audience of common stakeholders. S&T Roadmaps are used daily to relate specific war fighting data to appropriate S&T program areas. Currently, the FORCEnet S&T Roadmap contains 68 Naval Platforms, 269 systems, 15 Naval Capability Gaps, 37 Enabling Capabilities, 48 Advanced Concept Technology Demonstration programs, 130 Exploitation and Deployment (E&D) programs, 157 Discovery and Invention (D&I) programs, and includes over 1,150 hyperlinks. More than 25 filtering schemes have been created for refining data, allowing users to narrow down almost 50 pages of data to as little as one page of targeted, pertinent information. As the customer’s Citrix server now hosts the S&T Roadmap in Milestones Professional 2006 format, anyone with a user account has the ability to view the Roadmap at any time, greatly expanding the knowledge base of scientists and technologists regarding the future application of technologies to provide war fighting capability improvements.

Copyright © 2006 – 2008 Computer Systems Center Incorporated (CSCI™) – All rights reserved.
6225 Brandon Avenue, Suite 520, Springfield, VA 22150-2519.
CSCI™ is a trademark of Computer Systems Center Incorporated. Milestones Professional® is a registered trademark of KIDASA Software, Inc. All other trademarks and registered trademarks are owned by their respective companies.

September 26, 2008