Web-Based Security Assistance Automated Resource Management System

By

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[This paper represents the views of the author and does not necessarily reflect the views or opinions of the Department of Defense, Component Services, Air University, or the College for Professional Development.]

“We are seeing a tremendous amount of interest in e-government initiatives . . . Local and state governments alike can now see the many advantages in using the Internet and web technologies to deliver what we call ‘e-applications’: web-based software that has the power to transform the way government does business. The Internet is the perfect medium to bring together the general public and government agencies to promote user convenience, efficiency, cost savings, and improved information flow.

Tim Knox,
President and CEO, Digital Graphiti, Inc.

In this same spirit, The Defense Security Cooperation Agency (DSCA) must convert the Security Assistance Automated Resource Management System (SAARMS) software from a stand-alone software system to a web-based database to provide for improved overall financial management of the SAARMS program. The specific improvements will include improved analysis of accounting information, improved transaction timeliness, and conversion to a web-based SAARMS eases the fielding of software updates.

The Security Assistance Automated Resource Management System is a memorandum accounting system developed by DSCA. Over 105 security assistance offices around the world use it at their geographically separated offices usually collocated at an American Embassy. Security Assistance Offices use SAARMS to perform day-to-day financial and procurement operations, purchasing, budgeting and reconciliation. These SAARMS-generated financial transactions are electronically transmitted into the official Air Force accounting systems via an Internet data network where they pass through an interface application, which validates the data for accuracy and passes the accounting data to an accounts payable module for obligation and processing. As a stand-alone system, SAARMS has worked well since 1995 but Internet technology is fast making SAARMS outdated.

As Internet technology makes advances, so must the SAARMS software. A web-based SAARMS platform would provide for improved analysis of accounting information and comprehension of its value, uses, and limitations - quicker than a stand-alone system. By providing instant access to the accounting data and all the tools available from the Internet, a web-based SAARMS program helps upgrade the knowledge, nature, and source of accounting information necessary to analyze accounting data for decision-makers. As a result, senior decision-makers will no longer have to wait for end of month financial data. Web-based SAARMS helps the accountant work more intelligently with the financial executive to maximize the usefulness of the accounting information received and to recognize whether the accounting function is providing all of the relevant accounting information necessary for sound decision-making.
Another advantage to the web-based SAARMS is that Unified Commands would be able to instantly load funding authorizations for their Security Assistance Offices. Currently, a funding document, in the form of an AF Form 616, *Fund Cite Authorization*, must be prepared and mailed (or faxed) to the organization that requires the funds and followed up with an official message. With a properly written program, a web-based SAARMS system would take advantage of a PKI or public key infrastructure as a tool for securing net-based communications and transactions. These PKI or “electronic” signatures on an electronic funding document would eliminate the hard copy documents just as it does with other government financial programs such as the Automated Business Service System.

Like other online professional accounting systems, users could work anytime, anywhere, with anyone. A web-based SAARMS would improve transaction timeliness, allowing timely accounting record maintenance and user conveniences. As with any online accounting system, senior financial managers and their staff have secure, real-time access to their accounting system and data from any internet connected computer—at their office, at home, at a customer’s office, or on the road at any time, day or night.

Users have greater flexibility in obtaining assistance on the Internet and the ability to work from any computer. When data is entered into the web-based SAARMS system, from whatever office or location, it can be instantly disseminated to all relevant accounts and ledgers, without the need for further human intervention. Thereafter, it can be securely viewed and manipulated from any Internet-connected computer, allowing users to know everything they need to know about the financial state of the security assistance office in real-time.

A web-based SAARMS system would allow linking to web pages that provide regulatory guidance, research, and checklists. Budget analysts at the Unified Command as well as the SAO fiscal officer could work on web-based SAARMS while assigned temporary duty, leave or evacuations - anytime when a SAO needs support.

Deeper levels of integration are possible through co-development ventures. As an example, web-based SAARMS could provide a link to the Defense Travel System (DTS) which is the new paperless travel system that allows the traveler to coordinate and arrange temporary duty (business) travel quicker and easier. All transactions will be made from the convenience of the desktop or even laptop computer. No standing in lines to process paperwork and no aggravation with preparing the six-page travel claim. If the web-based SAARMS is linked to the DTS, SAARMS would not need a travel module of its own.

If DSCA decides to web-base SAARMS, users could immediately report obligations and back up data, as it is created, instead of at the end of each month. No longer would users have to “remember” to perform these complex but critical user-generated commands during the month. A web-based SAARMS system could be programmed to report and backup these transactions as they occur. As an example, DFAS currently requires Security Assistance Offices to send their backups via the Internet once a month. This occurred as a result of a bomb that exploded near the United States Embassy in Nairobi, Kenya. Among the 212 people killed were twelve Americans and thirty-one Foreign Service Nationals employed at the Embassy. Among the dead was the fiscal officer within the backup data disk. The Embassy, which was located in the congested downtown area, was extensively damaged, as the blast ripped through each floor and gutted the building. The entire Embassy compound, as well as the surrounding buildings in the

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crowded downtown location, suffered severe damage.\textsuperscript{3} The survivors found that the SAARMS backup data was stored on a disk located in a box next to the SAARMS computer. However the office was completely destroyed, as was the disk. As the events of the bombing unfolded, the entire Kenya Embassy Budget and Fiscal Office (where the original vouchers were stored) was completely destroyed, making reconstruction of the data impossible. As a result, off-site data storage is loaded onto the internet but requires a backup file to be generated “in country” and then transmitted. If another tragedy hits, the data will be only as good as the last backup. In a web-based SAARMS environment, data would be transmitted on a transaction by transaction basis negating the requirement to back up the data.

Currently, users must wait up to a year for the software to be updated. A web-based SAARMS eases and speeds up the fielding of software updates. Web-based software generally can be installed quicker; with only a single change to the web page. Because of this fact, software “bugs” could be fixed instantly. Users would no longer need to wait six months to a year for the next regularly scheduled software update cycle.

Web-based applications require no licensing, thus reducing costs and expanding access beyond SAOs. Because web-based SAARMS online accounting system would be a web-shared service, users simply “plug in and go,” almost as easily as users would plug into a communications network or electric power grid.

There are no new computers or servers to purchase, no software to install or configure, and no dedicated IT networks to build. Plus, web-based SAARMS operates and maintains the entire accounting infrastructure, freeing users (and their management) to spend less time on routine technical minutiae and more on actually running their funding programs.

A web-based platform also saves the cost of CD ROM development and reproduction and the costly process of distributing the software. In the past, several releases of SAARMS necessitated a complex conversion of data and a trip to each SAO by a programmer to install it.

A web-based SAARMS would have fewer hardware and software problems. Past experience found power surges caused corrupted files and non-standard equipment caused hardware and software conflicts. Because the data would not reside on any local non-standard systems, but would reside on a web page, these hardware and software conflicts would become less important with a web-based SAARMS program.

Speed and security are issues with all of the online accounting services but as technology improves these issues will pale in comparison to the convenience, level of service, and low cost. Still, DSCA would need to have a solid set of contingency plans in cases where a local Internet Service Provider became unavailable or illegal for some reason.

“Web-based SAARMS is a very compelling offering,” explained Mr. Charles Kulhem of the Defense Finance and Accounting Service. “With the ability to download directly from the Internet, web-based SAARMS will not only save time by eliminating the manual data input process, but we will also save money for our clients. It’s a win-win situation”.\textsuperscript{4}

Because converting to a web-based SAARMS is a win-win situation, the Defense Security Cooperation Agency must rapidly convert the Security Assistance Automated Resource


\textsuperscript{4} Kullhem, Charles A. Telephone interview with author. Montgomery Ala, April 8, 2002.
Management System (SAARMS) software from a stand-alone software system to a web-based database to provide for improved overall financial management of the SAARMS program. The specific improvement will include management analysis, improved transaction timeliness, and eases the fielding of software updates.

It is clear these SAARMS-generated financial transactions are already electronically transmitted into the official Air Force accounting systems via an Internet data network. It is also clear these transactions are reported as well as backed up on the web. It would not be a stretch of the imagination to take SAARMS from a stand-alone system to a more advanced web-based SAARMS system.