
The SAN International Military Student Officer Web Site: Student Management with a Web Browser

By

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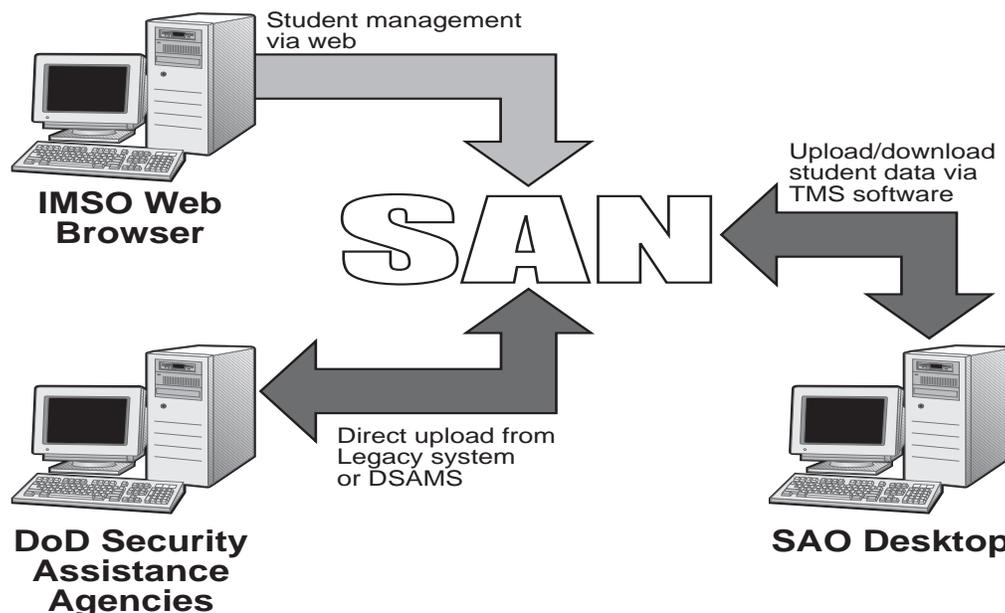
and

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The Security Assistance Network (SAN) International Military Student Officer (IMSO) web is a database driven; browser based web site running on the SAN that is designed to assist the IMSO with the management of training international students. Working in concert with the Defense Security Cooperation Agency (DSCA), Defense Institute of Security Assistance Management (DISAM) and Institute for Defense Analysis (IDA), the SAN IMSO web effort was spun from the fundamentals of the Naval Education and Training Security Assistance Field Activity (NETSAFA) IMSO web site. The authors of this article were chartered in the summer of 2001 by DSCA to develop a multi-service IMSO web site to manage international students at training activities around the country.

Figure 1 SAN Web Student Information Flow



First Web Browser Based IMSO Student Management Tool

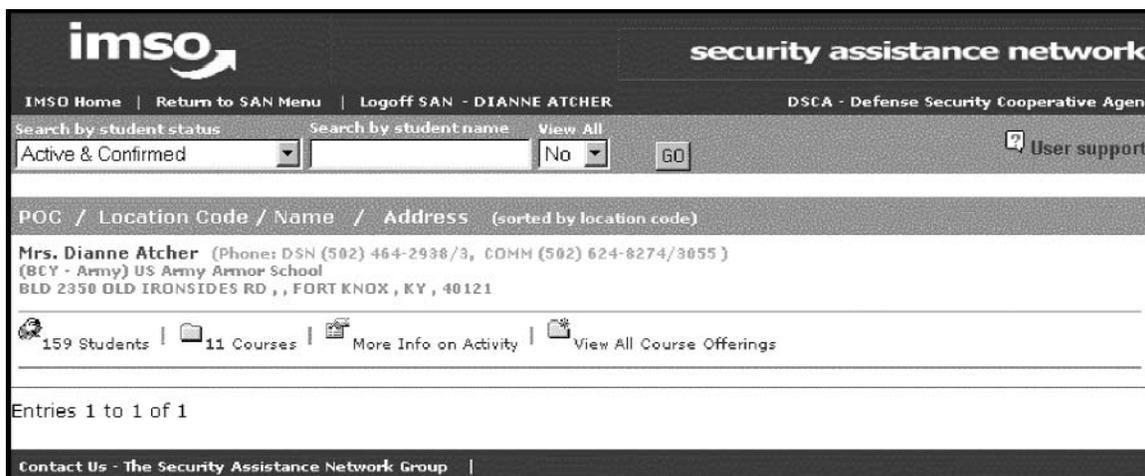
The IMSO web site is set to interface with the DSCA (SAN) and the release of TMS v6.0, DISAM's Training Management System (TMS) software. The SAN IMSO web was brought on-line October 30, 2001 and has entered a testing and review phase. It is the first web browser based IMSO student management tool on the SAN. The application allows the IMSO to view activity/country security assistance contact information, review projected student throughput, review course information and submit student status reports. The IMSO web will standardize

business practices and reduce the cost of developing and maintaining multiple IMSO versions of TMS. The web interface will ultimately decrease the time, cost and effort involved in transmitting “Official Messages” related to routine student progress reporting. Figure 1 illustrates the flow of student information between the SAN, TMS v6.0, and SAN IMSO web. The next phase of the project will enable the IMSOs to manage the Department of Defense Informational Program (DoD IP) at their respective activity. The DoD IP interface is targeted for March 2002.

The first screen presented to the user upon accessing the IMSO web function on the SAN is the student projection view see Figure 2 for the IMSOs activity (or activities as the user can manage more than one training activity). In a drop down selection, the user can shift the view of students to students confirmed, students arriving in the next thirty days and if applicable, any fiscal year/quarter with students projected. The IMSO views information on students and courses by clicking on that selection. When the IMSO is viewing active or confirmed students, he/she can submit class convening reports, completion reports or update the student status. The statuses of the student include leave taken, warning status, disciplinary actions, etc. The next release will include DoD IP management functions to include creating the event, assigning actions to the event and ultimately assigning students and associated information to the action.

IMSOs can update their respective activity information and ‘behind the scenes’ updates are delivered to the appropriate military department (MILDEP). An IMSO can also view course description information and submit change requests to the MILDEP as needed. Typically this is done with e-mail, however for Army, special programming modules were written to allow the updating of a course information database hosted at Security Assistance Training Field Activity (SATFA). The database at SATFA is automatically updated at the same time the IMSO updates the SAN database. Additionally, the user can view projected students via FY/QTR and can update selected items, like student name, invitational travel order (ITO), student control number (SCN), etc. When an update occurs the modification is delivered to the MILDEP to ensure the country desk officer is aware of the change. Student convening reports and completion reports are also maintained by the IMSO with updates to the MILDEP country program manager (CPM). Exporting student information to an Excel spreadsheet is available should a user need to store the information offline or perhaps import the data into another application. We have learned that some large activities have automated various IMSO duties using in-house information technology staff. So, exporting to Excel from the browser is an easy way to import SAN IMSO data into an already existing local application.

Figure 2 View of IMSO First Web Screen



Get the Groundwork Set for the Initial Release of the IMSO Web

In addition to developing the heart of the SAN IMSO Web which is the delivery of international training course information and student information to the IMSO, a great deal of effort was focused on the interface with the existing SAN. Each SAN user had to be assigned a “user role” that allowed system privileges. User administration functions permit ‘super users’ to grant or deny IMSO access and manage IMSO profiles. Similar administrative functions are used to manage MILDEP country program manager contact lists and record change notification lists.

As work progressed, MILDEP functional users and seasoned IMSOs came online to brainstorm ideas and offer suggestions. This phase of development was vital as this is their tool and it needs to meet as many of their needs as possible. Each offered great ideas and additional features such as, expanded Excel spreadsheet downloads to assist Army Training Requirements & Resources System (ATRRS) data entry concerns, expanded activity profile, projected student FY/QTR counts on the fly and course international notes and prerequisites. The latter two features permit the SAN IMSO Web and the SATFA Green Book to stay in agreement as IMSOs modify course notes and prerequisites.

We have attempted to incorporate the majority of requirements in the initial phase and want to say, ‘Thanks’ to those in the Security Assistance community that assisted us in this endeavor.

Technical System Details in the Development of SAN IMSO Web

The SAN IMSO web is a team-based project established in conjunction with the DSCA, DISAM and IDA. Under the tutelage of the DSCA chief information officer and DISAM, LCDR Jamel Weatherspoon and Ronald Elliott at the Naval Education and Training Security Assistance Field Activity (NETSAFA) fulfilled the programming and development effort.

The browser-based SAN IMSO web eliminates the need to install software on the client personal computer and no distribution updates of software are needed; all is done on the web server. The application uses the weekly MILDEP uploads to the SAN as its primary source of data. This primary source of data is then complemented with additional tables that support various student status reports, course descriptions, country holidays and informational program management tables. It should be noted that this phase of the IMSO Web uses the current SAN database architecture, however future releases will incorporate changes necessary for DSAMS integration.

The SAN IMSO web runs on an Intel based sever and is built on Microsoft’s Active Server Page (ASP) technology. The ASP provides the capability to generate web pages fast and easily through Microsoft’s popular VBSCRIPT programming language that incorporates many components found in the Microsoft VB programming language. VBSCRIPT is used to ultimately produce HTML that is then shipped to the user’s browser (Netscape or Microsoft IE) where the information is presented. Additionally, VBSCRIPT data access components provide convenient tools to query local or remote databases, which is exactly how the SAN IMSO web operates. Through the use of these components the IMSO web extracts data from locally maintained databases and presents the user with information based on user role business practices or user options selected in the browser. In addition to updating local databases, the IMSO web also delivers information to databases maintained by NETSAFA and SATFA where each site then processes the data for further integration into their respective applications. Tools used to bring the SAN IMSO web into existence include, Microsoft Visual Interdev, Microsoft Windows NT/2000 Server, Microsoft Internet Information Server (IIS4/IIS5), ASP, VBSCRIPT, JAVASCRIPT, FOXPRO databases, SQL SERVER (MILDEP use) and SQL. Using today’s off the shelf tools and the current SAN database structure; the SAN IMSO web delivers information

to existing MILDEPS, the Security Assistance Network (SAN) and the future application of DSAMS.

The Changing Landscape of the Security Assistance Community

It would be easy to say that the work on the SAN IMSO web is done but the reality is web sites are never really complete. The web browser and the Internet are great tools to use in the security assistance community. Some ideas for the way ahead for the IMSO web include DSAMS interfaces, reports in PDF format and perhaps even XML based technology for easy data sharing. In a nutshell, we are only limited by our vision for the future when it comes to delivering international training information to the Security Assistance community. Additionally, the way ahead includes quality training for IMSOs. Training and suggestions for enhancements will take place at DISAM and MILDEP IMSO conferences. However, IMSO conferences are not regularly scheduled events, due to timing or lack of funding.

The relationship between the IMSO, the security assistance office (SAO), and the MILDEP training agencies is a close one. They are all responsible for tracking international students. The enhancements in TMS v6.0 combined with the SAN IMSO web will bring these parts of the security assistance community closer together. This was a lesson learned in the implementation and development of NETSAFA's IMSO and SAO web site application, WEB STATIS. WEB STATIS takes full advantage of the internet, but only supports the maritime database hosted at NETSAFA. Using the SAN database now allows the IMSO and SAO to go to one system and track all of the students receiving training under the security assistance program. In the future the security assistance community should build on the flexibility that the internet provides and complement the desktop TMS application with a browser-based SAO interface similar in nature to the IMSO interface. The SAO still needs a desktop database application. The desktop application TMS is not subject to internet blockages that may result from changes in information security conditions or poor internet connectivity. Providing a complementing product available with a web browser would be taking a step in the direction of corporate business. TMS could be made lighter thus easier to maintain and deploy. The SAO could manage significant amounts of daily business via a browser in real-time. There are a few countries that do not have reliable internet connectivity but everyday that number dwindles. Likewise, training program management reviews (TPMRs) could be administered in the same manner. Imagine, a direct internet connection to the SAN and then push the gathered information to the MILDEP or DSAMS. The continuous improvements in technology will eventually change the landscape of the security assistance community.

About the Authors

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