

Objective Supply Capability Adaptive Redesign (OSCAR)

Army National Guard Issues and Technology Impact

The National Guard Bureau (NGB) requires capabilities beyond the scope of standard army systems in order to increase the efficiency and cost-effectiveness of its operations. The NGB has limited control over the process of enhancing standard army systems; therefore, changing these systems to introduce new capabilities for NGB can require a great deal of time and money. It is a significant achievement to leverage standard army systems to enhance NGB capabilities even when changes to these systems are not permitted, or the cost of changes is prohibitive.

A software technology called OSCAR achieves this goal by interfacing with the standard army systems without changing them. It allows the Army National Guard (ARNG) to effectively deal with changing priorities, a changing world and military environment, and decreasing military budgets. Some areas currently benefiting from OSCAR technology are

- weapons,
- electronic equipment,
- trucks,
- track vehicles,
- wheeled vehicles,
- aviation, and
- medical equipment.



OSCAR improves readiness and reduces excess for the Army National Guard by redistributing equipment, including aviation, communication, engineering, wheel/track vehicle, and medical.

Technical Concept

The technical concept is to use ORNL-developed software to enable rapid movement of assets to locations where they are needed, thus reducing excess on hand and eliminating the need to procure additional items. The result is to significantly improve the readiness of the ARNG while reducing excess assets.

ORNL's objective supply capability adaptive redesign (OSCAR) project identifies and develops programs to automate requirements that are not a part of standard army systems. For example, OSCAR software programs can provide automated interfaces between standard army systems at the bureau level and at the state/territory level.

OSCAR is a client/server system. The OSCAR client software is written in Visual FoxPro 6.0 and runs on a Windows platform. The OSCAR server software is written in C++ and utilizes a class library to achieve RDBMS independent data access. The server platform consists of a Sun Ultra 5 with RAID storage. It runs the Solaris 7 operating system and the Oracle 8i database engine.

Development Approach

OSCAR has become the recognized name for excess management within the ARNG since its first NGB installation in 1997. OSCAR provides the knowledge base necessary for redistribution of assets, including vehicles, weapons, and medical and electronic equipment. The Army National Guard can improve readiness while saving storage and maintenance cost by moving excess assets faster than was previously possible.

A new software module known as State/Territory Asset Redistribution (STAR) expanded the development of OSCAR to redistribute additional types of assets. After only one year of operation, STAR provided customers with over \$8 million in cost savings by moving assets between states to fill requisitions.

Since its initial installation, the OSCAR system has processed over \$8.6 billion in equipment and has allowed NGB to successfully increase readiness of the Army National Guard nationwide. Continued development of OSCAR could increase savings through innovative applications of this proven technology.

ORNL Facilities

By applying experience gained in OSCAR and other military logistics systems, ORNL is able to quickly provide NGB with leading-edge software development technology that dramatically increases efficiency and readiness. Integrated systems of hardware and software have been developed from the ground up by ORNL and installed at NGB at a fraction of the cost of changing standard army systems.

Related Programs

ORNL has over 30 years of experience developing military logistics systems for the Department of Defense, including the creation of the Joint Flow and Analysis System for Transportation (JFAST) and the Air Mobility Command (AMC) Deployment Analysis System (ADANS). JFAST is distributed to 80 military command centers and planning organizations worldwide and has been selected by the Defense Information Systems Agency (DISA) as the migration system to carry the Joint Planning Community into the future. ADANS is used by AMC to plan airlift and air refueling operations. It scheduled and routed more than 25,000 airlift missions during Desert Storm and was key to the success of the massive deployment of troops and equipment in Saudi Arabia.

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