Army National Guard Enterprise Data Warehousing

What is it?

The Army National Guard (ARNG) Enterprise Data Warehouse (EDW) is a key strategic asset in the ARNG transformation initiative. It serves as the cross-functional Common Operating Picture (COP) decision support system platform for ARNG business intelligence. Decision makers use it daily to accomplish diverse Federal and State missions. EDW provides a consistent enterprise-wide view of ARNG information assets and is easily accessible over the web through Guard Knowledge Online (GKO). EDW contains a mature Financial (G8) data mart, with Manning (G1), Training and Sourcing (G3), and Equipping & Real Property (G4) data marts.

The EDW architecture involves Data Sources such as operational systems and transactional systems, Data Acquisition involving extraction, transformation, and loading, Data Warehousing involving a central repository, subject-based data marts, and metadata (data describing data), Data Delivery with user applications, report generation, and data mining, and Data Consumption described as business intelligence, decision-support, query response, reporting, and dashboards.

What has the ARNG done?

In FY11, users of the Enterprise Data Warehouse (EDW) ran an average of 5,818 reports per month for a total of 72,789 reports for the FY, a 15% increase over the previous FY. Users from the 54 States and Territories and nearly every division in the ARNG Readiness Center utilized improved Finance, Real Property, Comptroller, Equal Opportunity, and G1 reports that support ARNG manning, equipping, sourcing and resourcing efforts. The EDW team enhanced several operational data marts and embarked on a project to support the ARNG Campaign Plan and the Business Transformation Office. The team created an interface between the EDW and Strategic Management System-Army (SMS-A).   The interface takes selected automated metrics from the EDW and transmits them to the SMS-A system used to track the Army's Strategic Performance metrics.

The EDW Finance team continues to support the Defense Finance and Accounting Service (DFAS)-Operational Data Store (ODS) interface expansion for General Fund Enterprise Business System (GFEBS) data. The ARNG team worked closely with DFAS to define and track ARNG GFEBS transactions, eventually incorporate them into the existing Finance data mart. The Finance team worked proactively to begin FY12 Program Realignment well in advance of the new fiscal year. FY12 initiatives include final deployment of the Strategic Management System-Army (SMS-A) data mart, which automates and displays strategic level metrics for ARNG and the States. The EDW benefits the ARNG by providing easy central access to critical information through a single source of integrated and authoritative data. The EDW provides a consistent enterprise-wide view of ARNG information assets and are easily accessible over the

web through Guard Knowledge Online (GKO). Decision makers use both systems daily to successfully accomplish diverse Federal and State missions.

Why is this important to the ARNG?

The benefits of the ARNG Enterprise Data Warehousing include:

- Facilitates easy central access to more and better information

- Assembles single source of integrated, authoritative data

- Provides users with better understanding of the business

- Collects 'intellectual capital' from knowledgeable people

- Identifies source system data integrity issues

- Identifies integration issues between source systems

Some additional benefits include secure web-based access; network protection via network firewalls; intrusion protection via application firewall; user authentication through Microsoft Active Directory; and single sign-on from GKO.

What continued efforts does the ARNG have in the future?

The ARNG continues to improve and expand upon existing capabilities until the EDW can serve up a complete cross-functional Common Operating Picture (COP) decision support system for business intelligence. At the ARNG, the EDW needs to see an Executive Level sponsorship of G4 data mart expansions to achieve COP functionality in the EDW for equipping data.