

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 successfully accomplish diverse Federal and State missions. It provides a consistent enterprise-wide view of ARNG information assets and is easily accessible over the web through Guard Knowledge Online (GKO). The EDW contains a mature Financial (G8) data mart, with limited Manning (G1), Training and Sourcing (G3), and Equipping (G4) data marts.

What has the ARNG done?

In FY10, users of the Enterprise Data Warehouse (EDW) increased more than 100%. Users from the 54 States and Territories and nearly every division in the ARNG Readiness Center utilized improved Real Property, Comptroller, Equipment Reset, and G1{Personnel} reports that support ARNG manning, equipping, sourcing and resourcing efforts. The Information Technology (IT) team enhanced several operational data marts and a groundbreaking pilot project. The team delivered an EDW/Geographic Information System (GIS) Data Service pilot that leverages certain existing EDW Real Property Reports to graphically display data on user-interactive maps. It combines EDW data with commercially-provided web mapping services such as Google Earth and MapQuest. The EDW data is then displayed on the commercially-provided web map.

The Finance team supported 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 incorporating them into the existing Comptroller Data mart. The Finance team worked proactively to begin FY11 Program Realignment well in advance of the new fiscal year. FY11 initiatives include the Strategic Management System-Army (SMS-A) Data mart that automates and displays strategic level metrics for ARNG and the States, the Financial Data mart redesign, and the Mobilization Tracking Data mart. Both the EDW and Classified Enterprise Data Warehouses (CEDWs) benefit the ARNG by providing easy central access to critical information through a single source of integrated and authoritative data. The EDW and CEDW provide a consistent enterprise-wide view of ARNG information assets and are easily accessible over the web through Guard Knowledge Online (GKO) and Guard Knowledge Online Secure (GKO-S). 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:

- Easy central access to more and better information
- 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
- Secure web-based access; Network protection via network firewalls; Intrusion protection via application firewall; User authentication through Microsoft Active Directory; Single sign-on from GKO to EDW and GKO-S to CEDW

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 G1 and G4 data mart expansions to achieve COP functionality in the EDW.

Enterprise Data Warehouse Process

