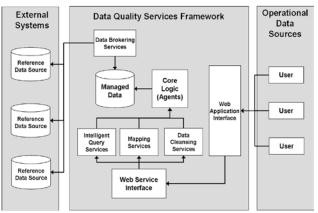


## Defense Distribution Semantic Technology Investigation (D2STI)

Project Summary: The D2 Semantic Technology Investigation will make available to USTRANSCOM more accurate and reliable data bv providing a suite of intelligent. adaptive data cleansing tools and services that provide automated reasoning capabilities. The objective of this research is to apply semantic technologies and inferencing techniques for the purpose of data validation and correction. This



**Data Validation and Cleansing Architecture** 

research includes the use of intelligent agent services to automatically detect anomalies in data such as missing, incomplete or incorrect data. Based on certain factors, either automatically implement corrections or alert the human with a possible list of corrections. This approach will provide the TCJ5/4, TCJ3, and Fused Operations Center key support to process issues that are currently not addressed through legacy IT data quality solutions. These data quality services will be designed for rapid, seamless integration and use by the JDDE and in alignment with the corporate services vision.

**Return on Investment**: The ROI is apparent in time and cost savings associated with the design, development and testing of a data validation and cleansing service. A service available to validate and correct data throughout the enterprise will result in time savings associated with reduced data errors and positively impact the requirement for utilizing system analysts to manually correct invalid data. Operators, data analysts and decision makers will regain valuable time to focus on assessment and resolutions instead of spending time on data that is incorrect or incomplete.

Duration of project: FY11-FY12

Participants: USTRANSCOM J6 /J3

## Project advocacy (funding or otherwise): USTRANSCOM

**Transition:** Project will support J5/4, J3 and Fused Operations Center information management operations

USTRANSCOM POC office code: TCJ5/4-TT/618-229-1109