

AE IV&V Test Case TO8_8003

Revision History

Rev. No.	Date	By	Description of Changes
1.0	4/18/08	Tom Kretz	Initial Release.

1. TEST CASE IDENTIFIER

TO8_8003

2. NARRATIVE

The test verifies that all data ingested in EDEX is correctly stored in the metadata and hdf5 repositories.

3. REFERENCES

AWIPS II TO8 Software Installation instructions and Quick Start Admin Guide (NWS)

4. FEATURES TO BE TESTED

Performance of the ESB and Data Access Layers services to store products

5. SETUP INSTRUCTIONS

Assumptions about the system configuration and status: The baseline TO8 software is installed as described in the TO8 Software Installation procedures for a standalone workstation, the canned KOAX test data collected by NWS/OST/SEC is used for the tests, and the system is operational as shown in the TO8 Quick Start Admin Guide. The SEC Data Validation Test Service is installed in the plugins directory. The Tester understand the use of the archive service and how to archive products and reply the data.

The SEC Data Validation Test Service application has to be installed. This is a NWS developed EDEX Plugin service that retrieves messages from the ArchiveSrv service in the cp/ queues of the Mule/ESB layer. The data validation service queries the repositories to verify that the products are stored in the metadata tables and the hdf5 repository.

Step	Setup Procedure	Result
1	Install the SEC Data Validation Test Service plugin running in EDEX	
2	Configure the Mule/ESB layer to use the ArchiveSrv to archive ingested data	
3	Purge metadata and hdf5 repositories	
4	Ingest canned test data with archive service on	

6. ACCEPTANCE CRITERIA

The tests are intended to document the performance of the TO8 release running in Linux for normal data volumes. These tests are meant to verify that the ingested data products are being stored correctly. The acceptable criteria for the test are as follows: all the products are stored and the test service is able to retrieve the products metadata from the Postgres metadata tables and the hdf5 repository. The test does not verify that the data is stored and retrieved in a viewable format. This needs to be verified in ad hoc user testing in real user scenarios.

7. TESTING PROCEDURE

Using the SEC Data Validation Test service plugin running in EDEX, replay the archived products from the ArchiveSrv and send the messages to the Data Validation Test Service to verify the products exists in the repositories. The Data Validation Service will log the products that were stored correctly and the products that were not in the repositories.

The ActiveMQ Broker, and Mule ESB servers were shutdown and restarted before the test, so any memory caches and queues were cleared for test. This is about as close to the same initial conditions that we can get for each test.

The following statistics are captured by the service and put in the mule log file:

*Data Validation SUCCESS: dataURI for the product and product name or
Data Validation FAILURE: dataURI for the product and product name*

Step	Procedure	Expected Result	Actual Result
1	Stop edex_activemq, and edex_mule services	Services stop	
2	Configure Mule to use the Data Validation service		
3	Configure system to replay the archived products		
4	Clear the mule log file		
5	Start edex_activemq, and edex_mule services	Services start	
6	Note any Data Validation Failure entries in the mule log file	All data validation log entries show success	
	End of test		