

ETC Minutes - 7/7/2009

Tuesday, July 07, 2009
3:00 PM

Attendees

- Matt Cechini (ECHO Ops)
- Alex Lai (ECHO Ops)
- Linnette Quick (ECHO Ops)
- Frank Corprew (ECHO Ops)
- Dan Pilone (ECHO)
- Frank Schaffer (NSIDC)
- Renea Ericson (NSIDC)
- Doug Fowler (NSIDC)
- Amanda Leon (NSIDC)
- Todd Edmands (NSIDC)
- Matt Martens (LPDAAC)
- Dawn Siemonsma (LPDAAC)
- Ed Seiler (GSFCS4PA)
- Merlie Hanson (SEDAC)
- Marilyn Drewry (GHRC)
- Ben McMurry (ORNL)
- Lindsay Parker (LARC)
- Greg Cates (LARC)
- Rosy Cordova (GCMD)
- Chris Finch (PODAAC)
- Evelyn Nakamura (ECS)
- Jon Pals (ECS)

Agenda

1. ECHO Operations Status
2. ECHO & WIST 10.13 & 10.14 Plans
3. Additional Attribute Order Preservation
4. Internal vs. External ECHO Status List
5. Upcoming Events
6. Other Questions/Issues

1. ECHO Operational Status

The ECHO Operational Performance/Activity Metrics for the past week are as follows. These metrics are for the week of 6/21 - 7/4

- Total # Queries (end-user) - 64 480
- Average Query Time - 14.03s
- Query Time Std. Dev - 70.08s
- Total # Orders - 5687
- Total # ECHO Users - 11418 (+4186)

ECHO has seen a significant increase in throughput since 6/30 due to the release of the ASTER GDEM product at LPDAAC. The increase load experienced since 6/30 is as follows. A "normal" week's throughput is also listed.

- Query Metrics
 - Total - 63 183
 - "Normal" - ~12 000
- Order Metrics
 - Total - 5410
 - LPDAAC - 5191
 - "Normal" = ~1300
- User Registration
 - Total - 4597

- "Normal" - 110

Since the last ETC, the anniversary for the official beginning of the EDG 2 WIST transition on 6/25/09.

Between 6/21 and 6/29 issues were experienced with regards to order delivery. It appears that the issues coincided with LPDAAC network connectivity issues. When these problems occurred, order would get stuck in a submitting state while attempting to transmit to LPDAAC, and other active orders would queue behind the stuck orders. Since 6/29, LPDAAC and ECHO have not experienced a reoccurrence of this issue. ECHO is investigating some additional mitigation strategies which can be made in the custom code to work around the issue were it to happen again. ECHO operations is monitoring each provider's order fulfillment endpoint and the number of stuck orders in ECHO to detect the situation as soon as possible. Resolution and recovery procedures are known and can be used when necessary.

2. ECHO & WIST 10.13 & 10.14 Plans

ECHO 10.13 contains the results sorting functionality discussed previously during the ETC. There have been some performance issues identified incident to these changes, which ECHO is addressing in 10.14. Due to these performance concerns, ECHO has pushed 10.13 to Partner Test for functional testing, but will not release it into the Operational system. 10.14 will be the next Operational release. There is not a firm target for release of 10.14 into Partner Test or Ops at this time, but one will be announced when it is known.

Also note that 10.13 contains changes associated with the TwoDCoordinateSystem operations concept reviewed previously during at ETC. This functionality will not be made Operational now until 10.14.

3. Additional Attribute Order Preservation

In ECHO 10.12, the internal ECHO data model was modified in order to preserve the ordering of multi-valued additional attributes (aka PSAs). This would ensure that if an additional attribute specific more than one value during ingest, the same order would be presented to users when querying the data. This was of specific importance to NSIDC regarding NOSE PSAs. ECHO Ops is working with those providers who have multi-valued additional attributes to ensure that there are not any other situations where order needs to be preserved.

Related to this is the ordering of the additional attributes (not the values) themselves. For instance, if a granule with attributes A, B, and C is ingested with the attributes in alphabetical order, there is no guarantee that the attributes will be in the same order when viewed as a part of a granule query. ECHO would like to know if providers are concerned about this matter and if it is something that ECHO should address in a future release.

- LPDAAC - Order of attributes does matter and they would like to see it consistent.
- NSIDC - Does not have an interest in the ordering of the attributes
- LARC - Will talk to USO and report back to ECHO.
- ORNL - Not a concern.
- GSFC - Not a concern.
- GHRC - Not a concern.

Note that the ECS does preserve order from ingest to BMGT export.

ECHO will discuss this further internally and review the topic at a future ETC and with the provider's offline.

4. Internal & External ECHO Status List

ECHO is looking into creating an "internal" or privileged ECHO status list. The current list would be repurposed to facilitate announcements about the operations system only, and would also include notification to end users who would like to be aware of WIST and ECHO availability. The new list will be used to send more specific notifications regarding the Operations, Partner Test, and Testbed systems allowing for more detailed notifications without sending that information to individuals who don't need to be notified. Any questions or concerns are welcome.

There was general agreement that this is an approved item. ECHO will work with its partners to create the list of privileged individuals and create the new list.

5. Upcoming Events

- None at this time

6. Questions

- Matt will be out of town from 7/15 - 7/17. Please ensure that all questions are directed to the appropriate ECHO mailing list so that the Operations team will be able to address the request.